



JESSICA: Evaluation Study for Catalonia, Spain (2014-2020)

Final report

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Acronyms and abbreviations

Acronym	Definition
AC	Ahorro Corporación
ACM	Asociación Catalana de Municipios (<i>Catalan Association of Municipalities</i>)
ACT	Agencia Catalana de Turismo (<i>Catalan Tourism Promotion Agency</i>)
CAREC	Consejo Asesor para la Reactivación de la Economía (<i>Advisory Council for Economic Development</i>)
CEB	Council of Europe Development Bank
CLLD	Community-Led Local Development
CPR	Common Provisions Regulation
CSF	Common Strategic Framework
DG REGIO	Directorate General for Regional and Urban Policy
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
ESC(s)	Energy Service Company(ies)
ESACC	Catalan Strategy for adapting to Climate Change
ECAT2020	Catalonia 2020 Strategy
ERDF	European Regional Development Fund
EMFF	European Maritime and Fisheries Fund
ESF	European Social Fund
ESI Funds	European Structural and Investment Funds
EV	Electric Vehicle
FI(s)	Financial Instrument(s)
FPSHCS	Fundación Privada Hospital de la Santa Creu i Sant Pau (<i>Santa Creu i Sant Pau Hospital Private Foundation</i>)
FROB	Fondo de Reestructuración Ordenada Bancaria (<i>Fund for Orderly Bank Restructuring</i>)
FTA	Functional Territorial Areas
GTP	General Territorial Plan
ICAEN	Instituto Catalán de la Energía (<i>Catalan Energy Institute</i>)
ICO	Instituto de Crédito Oficial (<i>Official Credit Institute</i>)
ICF	Instituto Catalán de Finanzas (<i>Catalan Institute of Finance</i>)
ICT(s)	Information and Communication Technology(ies)
IDAE	Instituto para la Diversificación y Ahorro de la Energía (<i>Institute for Energy Diversification and Saving</i>)
IFEM	Instrumentos Financieros para Empresas Innovadoras (<i>Financial Instruments for Innovative Enterprises</i>)
INCASOL	Instituto Catalán del Suelo (<i>Catalan Land Institute</i>)
ITI	Integrated Territorial Investment
M	Millions
MA(s)	Managing Authority(ies)
NPU(s)	Norma(s) de Planeamiento Urbano (<i>Urban Planning Regulation(s)</i>)
OP(s)	Operational Programme(s)
PDU(s)	Plan(es) Director(es) Urbanístico(s) (<i>Urban Development Master Plan(s)</i>)
PITC	Plan de Infraestructuras de Transporte de Cataluña (<i>Catalan Transport Infrastructure Plan</i>)
POUM(s)	Plan(es) de Ordenación Urbanística Municipal (<i>Municipal Planning Organisation Programme(s)</i>)
PPP	Public Private Partnership
PTP	Partial Territorial Plans

RIS3	Research and Innovation Strategies for Smart Specialisation
SAREB	Sociedad de Gestión de Activos Inmobiliarios procedentes de la Reestructuración Bancaria (<i>Bank Restructuring Asset Management Company</i>)
SB(s)	Small Business(es)
STP	Sectoral Territorial Plans
SF	Structural Funds
SEAP	Sustainable Energy Action Plans
TES	Departamento de Territorio y Sostenibilidad de la Generalitat de Catalunya (<i>Generalitat de Catalunya Sustainability and Territorial Planning Department</i>)
TO(s)	Thematic Objective(s)
UDF(s)	Urban Development Fund(s)

Executive Summary

JESSICA – Joint European Support for Sustainable Investment in City Areas – is a technical assistance initiative developed jointly with the European Commission and European Investment Bank (EIB) in conjunction with the Council of Europe Development Bank (CEB) with the aim of supporting sustainable urban development and regeneration through the use of Financial Instruments (FI). The initiative aims at assisting Managing Authorities (MAs) to use part of their Structural Funds allocation to set up FIs in order to make viable investments in urban development projects which otherwise would not be feasible due to market failures and sub-optimal performance. JESSICA is an investment tool, not a grant, for stimulating private sector investment in integrated urban development through the use of market-driven instruments to mitigate some of the risks associated with complex urban development projects.

In March 2013, this study was commissioned by the European Investment Bank and co-financed by the European Commission following a request made by the MA of the European Regional Development Fund (ERDF) Operational Programme (OP) for Catalonia. The primary aim of the study is to assist the MAs in Catalonia in preparing the programming period 2014-2020 OP in relation to the use of FIs for urban development, and determine how, and to what extent FIs in this area could strengthen, facilitate, accelerate and/or extend the deployment of European Structural and Investment (ESI) Funds resources through FIs within the Catalonia region.

Analysis of the current environment and recent experiences

To set the analysis in the appropriate context, firstly the main **fundamental strategic plans and instruments for territorial development** were considered. This review includes a description of the instruments and legislation related to territorial and urban organisation in Catalonia. It also includes an analysis of strategic plans developed by Generalitat de Catalunya that have an impact on territorial development including in areas of economic competitiveness, housing, infrastructures and transportation, environment, urban regeneration and tourism. The conclusions from the in-depth policy analysis indicate considerable opportunities for Catalonia to deploy FIs to support a range of strategic objectives. In particular,

1. Catalonia has a well-developed and integrated territorial and urban planning system which provides an excellent starting point for implementing FIs for urban development. The policy framework includes the General Territorial Plan of Catalonia; Partial Territorial Plans; Sector Territorial Plans; and the Municipal Planning Organisation Programmes (POUMs).
2. Among its relevant strategic policy areas, Catalonia has identified the use of FIs as a priority for the region. These include urban regeneration, housing, infrastructure and mobility, environment, energy efficiency and tourism. Catalonia also has strategic plans in place to support the low carbon economy, namely through the Catalan 2012-2020 Energy and Climate Change Plan and 2011-2014 Generalitat de Catalunya Building and Services Energy Saving and Efficiency Plan and Catalan Energy Plan for 2016-2015. In addition there is strong support to improve the transportation infrastructure detailed in the Catalan Transport Infrastructure Plan; as well as a strong economic strategic plan through the Catalonia 2020 Strategy (ECAT 2020) which seeks to promote social and economic policies based on smart, sustainable, and inclusive growth.

3. Catalonia has benefited from a positive experience from various successive URBAN programmes since the 1990s focusing on integrated, partnership-based approach interventions. During the 1994-1999 and 2000-2006 programming periods, 41 cities in Spain benefited from URBAN I and URBAN II for implementing urban regeneration projects. The key success factors which were later identified as best practices, were the following: an integrated approach with strong partnership collaboration; flexibility in designing and implementing activities to achieve added value and impacts on the local economy; and created a catalytic effect on new investments.
4. Catalonia has considerable experience in using FIs through the implementation of JEREMIE in the 2007-2013 programming period. This has enabled the region to identify key learned lessons, which will be integrated into the design and implementation of future FIs during the 2014-2020 programming period. The key learning points include: the importance of capitalising on existing know-how and expertise in managing and monitoring FIs; having strong support on the regional and national level for the implementation of FIs; and embedding flexibility in the implementation to allow for modifications, if required, to reflect the changes in the economy. These lessons should be incorporated into the design and management of future FIs.

Supply and Demand Analysis

The inclusion of FIs in the Catalan OP during the 2014-2020 programming period should be based on the existence of market failures and suboptimal performance and investments needs within specific market segments in Catalonia. In terms of the demand for financing, the analysis of the financing requirements for urban projects in the region of Catalonia should take into account the region's recent economic, financial and social context, as this has implications on the financial and business sector in both Spain and in Catalonia. In particular, the analysis needs to consider the recent economic downturn, decrease in business activities, and declining consumer confidence, as well as the increasing levels of debt on households, businesses, and the government.

Given the current economic crisis, there appears to be limited capacity in both the private and public sector to finance large-scale projects in the region. There are a number of interrelated reasons for the current situation, including the following three main events:

- Reduction in the number of financial institutions in Spain and Catalonia since 2008: In the past five years a restructuring of assets and the write-down process has taken place in the banking sector across Spain. As a result of the bank restructuring, there is now only a handful of major financial institutions. As of 2013, the six largest financial institutions held almost 85% of all assets in Spain. Consequently in Catalonia the following banks could potentially be a source of financing: Caixabank and Banco Sabadell, Banco Santander, BBVA, BANKIA (transferred to the FROB) and Banco Popular.
- Difficulties in the housing and property market: There is no doubt that the real estate industry was the one most severely affected by the crisis in Spain and many projects (residential, commercial and industrial projects) have not yet been completed due to a shortage of finance or inability to lease or sell the property. Consequently, financing

projects related to urban development with a real estate component or a high construction component is not among the main priorities of the financial sector due to the recent experience. Furthermore, banks are not willing to take on development risks and extra due diligence is undertaken prior to financing major real estate projects.

- Rising government debt: Another factor that has a direct effect on the capacity to finance projects is the financial situation of central, region and municipal governments. The total debt of governments in Spain amounted to €884,416 million at the end of 2012, equivalent to 84.1% of the GNP, according to the Bank of Spain.

Despite a certain degree of complexity associated with the use of FIs perceived by some Autonomous Communities who are accustomed to implementing grant schemes and have limited experience with revolving funds such as FIs, generally, the Spanish public sector is extremely interested in using FIs. In Catalonia, following interviews with different local actors,¹ there is strong support for using FIs based on the stakeholder consultations. There is a high degree of knowledge about the existence of these FIs, especially in relation to the project eligibility and requirements, although to date most of the finance used for urban development or regeneration projects has been channelled through grants.

The current situation and the difficulty in accessing credit due to the local debt levels and the shortage of funds, makes the use of FIs attractive to interested stakeholders due to favourable term conditions (i.e. interest rates and repayments). In addition, consulted public stakeholders noted that assessing projects that have economic return or “indirect return” in terms of promoting the local economy, improving employment levels, promoting innovation, and reduction in CO₂ is welcomed as it contributes to the region’s strategic objectives.

The study also reveals that the public sector sees many possibilities and advantages in using FIs to support urban development. Firstly, the possibility of securing financing at favourable conditions (interest rates and term conditions)² is considered a major benefit of FIs for its potential beneficiaries. Moreover, broadly speaking, the use of FIs instead of non-reimbursable funding may contribute to improvements in public finance management. With respect to the final recipient, the need to pursue a commercial return on projects and the obligation to repay the loan should lead to a more rational and effective use of the funds and a deeper sense of responsibility from all stakeholders involved, including the sharing of risk.

With respect to the potential demand for FIs in Catalonia, the projects compiled in this study³, specifically 51 projects proposed by 22 regional and local government bodies, resulted in the identification of a series of relevant key sectors and market segments in which they could be applied.

The objective of analysing these projects using eligibility criteria as set out in the Common Strategic Framework (CSF) was to understand the suboptimal performance as well as to identify market segments which could be particularly relevant within the scope of application of FIs.

¹ Catalan Association of Municipalities, Barcelona Provincial Council, Terrassa and Figueres Municipalities and others

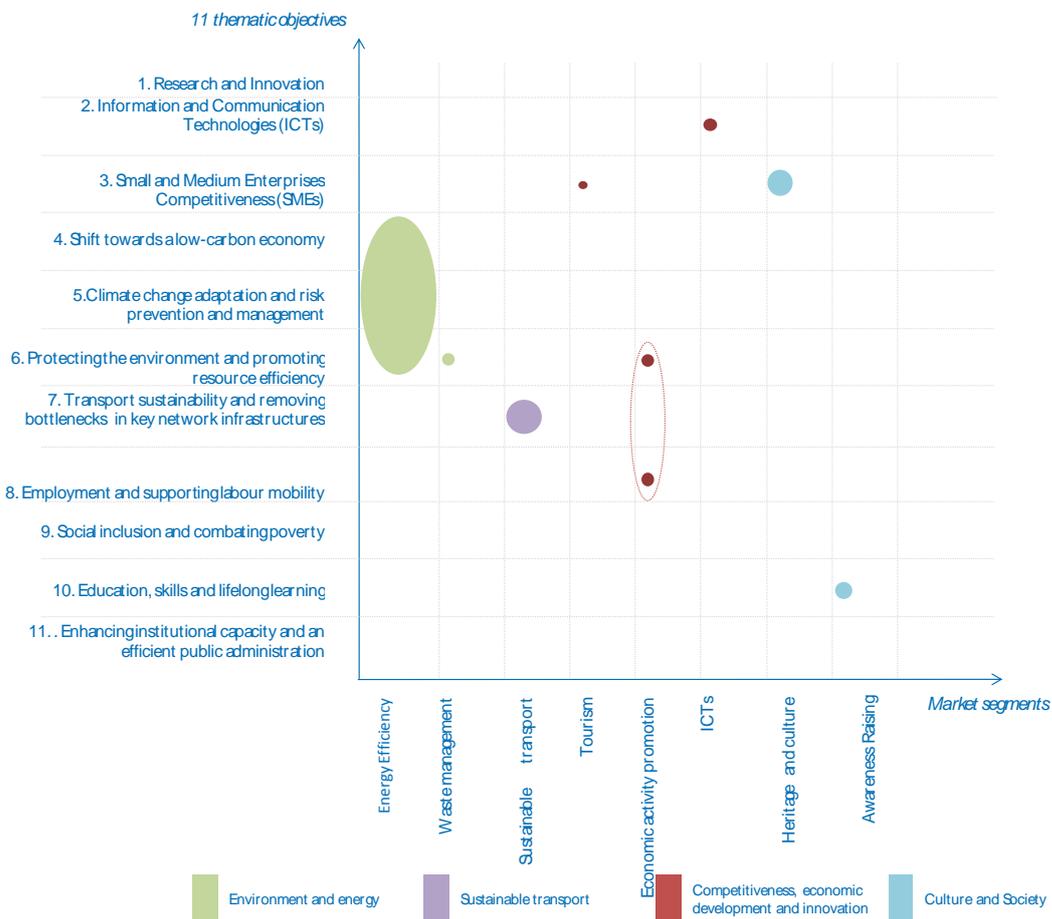
² Always observing the rules on state aid exemptions

³ This evidence constitutes the basis for developing a theoretical exercise within the research framework and does not guarantee the effective eligibility of the projects in the hypothetical event of finance with FIs

The sectors and segments identified are as follows:

- **Environment and Energy**
 - Energy efficiency
 - Waste management
- **Sustainable transport**
- **Competitiveness, Economic Development and Innovation**
 - Tourism
 - Economic activity promotion
 - ICTs
- **Culture and society**
 - Heritage and culture
 - Awareness raising

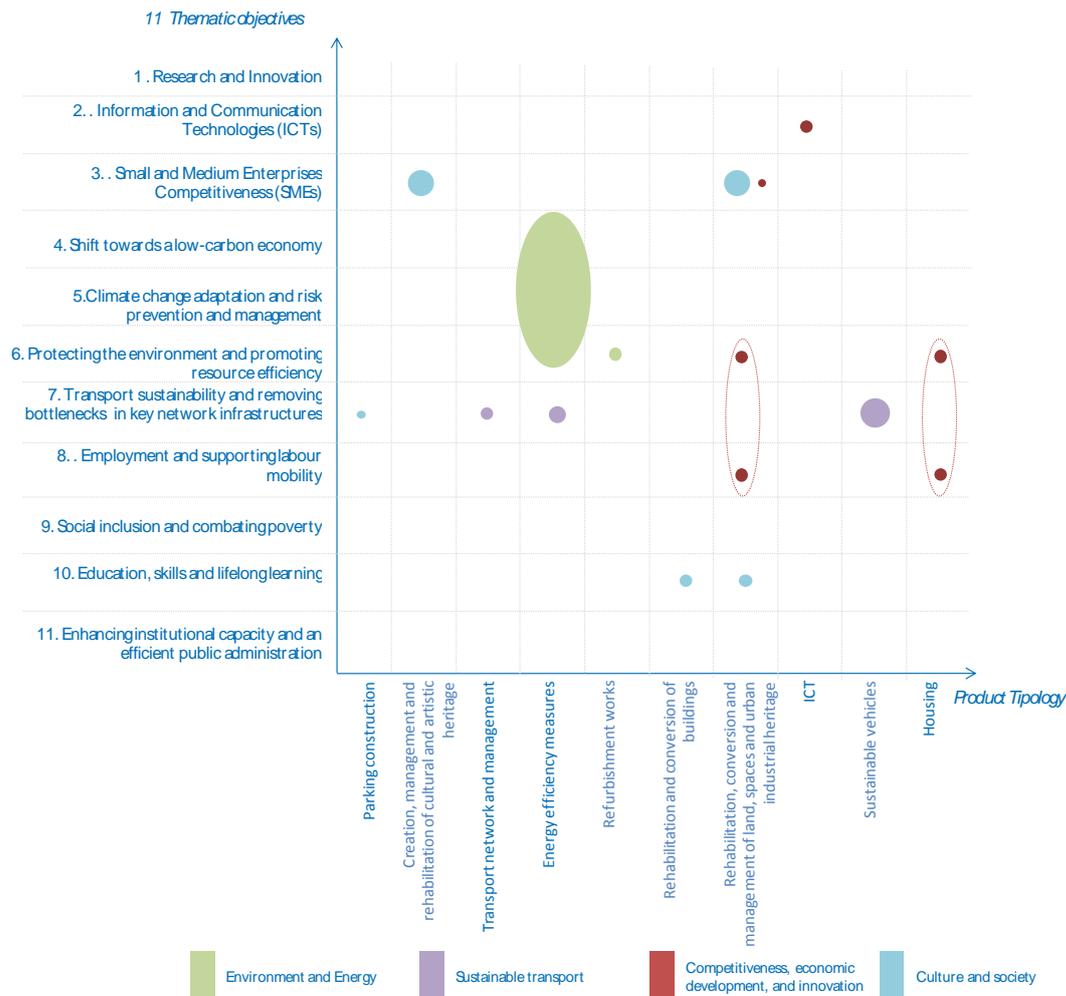
The cohesion between the projects and their market segments and the 11 TOs for the 2014-2020 programming period is set out in the following chart:



Source: Mazars and Ecorys

Chapter 4.4.1 provides a greater explanation of these market segments, including challenges and trends, key players, and their linkages with the TOs.

The relationship between the predominant types of product in each segment and the TO which they correspond is shown in the following chart:



Source: Mazars-Ecorys

Furthermore, the analysis examined the projects' financing requirements in addition to other information which would allow to undertake a financial modelling exercise. Such information includes the following data for each project, among others: total investment amount, maturity, and financing requirements.

Based on the data, the projects have been classified based on the economic sector, the project maturity (i.e. investment ready), and financial requirements. Projects which are "investment ready" are generally ready for implementation within less than two years, and less mature projects which would not be ready for investment for at least two or more years, subject to further due diligence.

Segments	Total Project Costs (short term/ mature projects) (M€)	Required financing (M€)*	Total Project Costs (long term/ less mature projects) (M€)	Required financing (M€)*
Energy Efficiency**	176	45	5,674	1,673
Heritage and Culture	-	-	286	98
ICTs	1	0.2	61	45
Sustainable transport	9	6	237	49
Waste management	-	-	7	5
Tourism	-	-	190	84
Economic Activity Promotion	83	46	105	53
Awareness raising	3	-	12	9
TOTAL	271	98	6,571	2,015

Source: Results obtained on the basis of the study questionnaire exercise

**Includes both debt and equity financing*

***The project portfolio identified is the result of the survey realised during the study among public sector promoters who responded to the survey (about 50 answers). However, a more extensive survey would be expected to help identify a more substantial portfolio of projects, and in particular, energy efficiency and small renewables projects.*

In the near future, strong demand is expectable, corresponding to mature projects such as the energy efficiency and economic development segments. For the ICT, heritage and culture and sustainable transport segments, short term demand can be defined as limited, and zero for the waste management, tourism and awareness raising segments. In parallel, with respect to the long term, greater demand is observed in all the segments identified, which remains high in the case of energy efficient and economic activity promotion. Demand is higher in the heritage and culture, sustainable transport and tourism segments.

According to the analysis, there is a total of €98 million of demand for debt and equity financing in the short term (i.e. investments to be made in the next 2 to 5 years) in the areas of energy efficiency and economic development. The market segments of Energy Efficiency and Economic Activity Promotion present more mature projects with potential debt and equity needs in the near future.

With respect to the longer term, projects with a value of €6,571 million have been identified as having financing needs of €2,015 million. For most of these cases, market failure is the result of the shortage of finance from the public and private sector which prevent projects from getting off the ground. Projects may face other obstacles, and a detailed analysis of each project will enable to determine the nature of funding necessary to cover the financing needs of most of the projects.

Analysis of two case study projects

The long-list of 51 projects was assessed and scored in order to develop the short-list of 10 projects which would be suitable for investments. Each project was assessed for both its financial

and economic viability. The short-list of projects was the basis for the second round of consultations with potential investors from the private sector. In particular, the energy efficiency segment stands out among the top 10 projects, with four projects targeted at implementing energy efficiency measures in municipal buildings and Generalitat de Catalunya buildings, and the promotion of renewable energies such as biomass. These are followed by the economic activity promotion and sustainable transport segments, each of which has two projects. Finally the shortlist includes one project from the ICTs sector and another from the tourism sector.

As part of the analysis, the sectors and market failures were identified and shared with the EIB, Managing Authority and Generalitat de Catalunya at the *Steering Committee* held on 2 July 2013, in which two projects were selected for a high-level financial modelling exercise. In addition to project documentations and the survey results, interviews were held with the project promoters for the two case studies in order to conduct a financial analysis using FIs.

Case study Project Number 1 - Energy efficient biomass heat production in municipal buildings: *Activities on municipal public tertiary buildings, including Energy Efficiency: biomass obtained from forest waste in different towns in Catalonia.*

The aim of the project is to organise the forest biomass market in Catalonia by installing approximately 150 boilers and small heating networks in municipal buildings which use certified wood chips from Catalan forests. The use of forest biomass would bring important savings in the energy bill for public buildings, potentially up to 80% in energy savings cost. The project is based on using local resources to install boilers in municipal buildings and thus achieve efficiency in forestry management. This project requires funds for each boiler over a period of ten years which would be repaid through the savings obtained by the municipalities. The proposed scheme shows considerable stability in the repayment capacity, since the boilers would generate a stable flow of revenue, guaranteeing a regular debt repayment capacity. For this reason a debt-type FI could be considered. The financing would be provided for installation of boilers, and repayment would be made while the installations were in operation. The anticipated payback period is 10 years thanks to the energy savings realised over the period. Once the debt is repaid, the boiler will be transferred to the public entities at no cost.

It is expected that the project will yield positive effects on the local economy due to its ability to create new jobs, particularly in rural areas. The full case study analysis is presented in Chapter 5.1.

Case study project Number 2- *Economic Development: Heritage city-core brownfield regeneration: Recovery of the former "Vapor Cortés" industrial complex in Terrassa*

The project objective is to revitalise a former 19th century industrial complex through integrated urban improvement actions that include: regeneration and reuse of most of the original buildings and redevelopment and creation of new public spaces and public services.

This project forms part of the Municipal Planning Organisation Programme of Terrassa (hereinafter "POUM"), which aims at the conservation of industrial buildings in the area of the former "Vapor Cortés" complex, due to their architectural and historical characteristics.

This is therefore an urban regeneration model based on recycling land containing derelict buildings in order to implement new uses and encourage new economic activities. The ensuing property sales will enable the FIs to be repaid with an estimated return on investment of between 10% and 20% according to prices anticipated in the area based on the financial modelling. The Terrassa municipality used conservative assumptions in its financial projections, taking into account the current situation of the real estate market as well as the foreseen development in forthcoming years and in particular its effects on Terrassa's local market.

The revenues from this project are formed basically by property sales and property rental. In view of these characteristics, a FI providing equity is considered, which will be more flexible in terms of the repayment schedule. This equity would be invested in the building phase and be reimbursed in line with the property sales.

The expected results include: 696 housing units as well as over 22,000 m² commercial space for SME activities, construction of public infrastructure and public space, reduction of 5 tonnes of carbon emission per annum and the creation of 50 jobs. The full case study is presented in Chapter 5.2.

Recommendations for the design of the Operational Programme strategy⁴

Under this section, and on the basis of the above tasks related to the supply and demand analysis, the study presents recommendations on the actual thematic objectives to be addressed and suggests investment priorities on the basis of the sectors and project pipelines that have been identified.

With this, the study contributes to set the grounds for the design of the strategy of the OP from which EU resources could be drawn for deployment through FIs.

Thematic Objectives (TOs) and investment priorities contained in the OP set out broad objectives for ESI Funds that are aligned to the Europe 2020 strategy and ensure that all support provided through ESI Funds contributes to the objectives of the Europe 2020 strategy.

These TOs and investment priorities will be selected from the full thematic menu established in Article 9 of the Common Provisions Regulation (CPR) (for TOs) and in Article 5 of the ERDF Regulation (for investment priorities), always in accordance with the relevant development needs of the territory concerned.

The structure of the OPs can vary. As a general rule the priority axes shall concern one TO and comprise one or more investment priorities of that TO (article 96(1) CPR). The application of derogations set out in this Article 96(1) should be explained and justified.

From all the above, the study includes **two options** for the design of the OP Priority Axes, which are provided in accordance to EC DG REGIO's "provisional template and guidelines for the OP content" (version 3 – May 2013)⁵:

⁴ It has to be noted that the recommendations on the design of the OP have been based on the proposals of the Common Provisions Regulation (Commission Amended Proposal adopted on 22.04.2013) and ERDF Regulation (06.10.2011). Every quote to the proposals along the report refers to these versions.

1. A first option that can be recommended to Catalonia in order to guide the preparation of the ERDF OP strategy, which is based on the potential definition of up to five Priority Axes corresponding to the TOs identified as being the most relevant for the use of FIs (TO3 – enhancing the competitiveness of SMEs, TO4 – supporting the shift towards a low-carbon economy in all sectors, TO6 - preserving and protecting the environment and promoting resource efficiency, TO7- promoting sustainable transport and removing bottlenecks in key network infrastructures and TO9 – promoting social inclusion, combating poverty and any discrimination).
2. A second option would imply the establishment of one specific Priority Axis for FIs that will be complementary to the other identified Priority Axes in the Programme, which will have a thematic approach. This "FI axis" would be related to more than one TO, financing projects or project areas that they could be financed through FIs.

This second option will have to observe the application of derogations set out in Article 96(1), which in practice would entail that these derogations will have to be justified, "with a view of achieving better effectiveness and efficiency in a thematically coherent integrated approach"⁶.

Both options should be conveniently explained following section 2.A.2.3: The planned use of financial instruments of DG REGIO's "Draft template and guidelines for the OP content" (version 3 – May 2013).

→ Option I: thematic approach

The proposed TOs and Investment Priorities are mainly based on the potential financial supply and demand in the region of Catalonia. For this reason, it might be necessary to complement that selection in the future, once the final versions of the regional strategy for Catalonia (OP) and the national and multi-regional strategy for Spain (Partnership Agreement) are available.

The table below shows the recommendations towards the definition of an OP strategy for Catalonia that could have up to 5 Priority Axes where the use of FIs could be envisaged.

Each of these Priority Axes is presented with its:

- Related TOs;
- Investment priorities;
- Resources needed, calculated on the basis of the survey of potential projects carried out as part of this study and according to the level of maturity of the projects and;
- Expected outputs and results that could be achieved.

⁵ Draft template and guidelines for the content of the operational programme, http://ec.europa.eu/regional_policy/what/future/pdf/preparation/2_operational_programme_template_2013_05_21.pdf

⁶ Guidance Fiche: Building Priority Axes, Version 1- 29.07.2013. http://ec.europa.eu/regional_policy/what/future/pdf/preparation/2709_gui_guidance_building_priority_axis_.pdf

Priority Axes	Pre-selected Thematic Objectives	Investment Priorities ⁷	Resources needed (€)	Expected outputs/results
Up to 5 Priority Axes where the use of FIs could be envisaged	TO3) Enhancing the competitiveness of SMEs	<p>a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators</p> <p>b) developing and implementing new business models for SMEs, in particular with regard to internationalisation</p>	<p>Short term/mature projects: 6,690,000</p> <p>Long term/less mature projects: 702,036,399</p>	<ul style="list-style-type: none"> • Support to the creation and enhancement of Catalanian SMEs • Contribution to stimulate economic activity in urban areas • Increase the quality of Catalan SMEs in the tourism sector
	TO4) Supporting the shift towards a low-carbon economy in all sectors	<p>a) promoting the production and distribution of energy derived from renewable sources</p> <p>c) supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector</p> <p>e) promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable</p>	<p>Short term/mature projects: 70,150,696</p> <p>Long term/less mature projects: 1,783,909,190</p>	<ul style="list-style-type: none"> • Contribution to the reduction of carbon emissions • Actual savings in energy consumption • General promotion of the use of renewable energies • Positive impact on the environment and boosting economic activity

⁷ Proposal for a regulation of the ERDF, Article 5: Investment priorities
http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2014/proposals/regulation/erdf/erdf_proposal_en.pdf

Priority Axes	Pre-selected Thematic Objectives	Investment Priorities ⁷	Resources needed (€)	Expected outputs/results
		multimodal urban mobility and mitigation-relevant adaptation measures		
	TO6) Preserving and protecting the environment and promoting resource efficiency	e) taking action to improve the urban environment, to revitalise cities, regenerate and decontaminate brownfield sites (including conversion areas), reduce air pollution and promote noise-reduction measures	Short term/mature projects: 77,164,696 Long term/less mature projects: 1,243,864,509	<ul style="list-style-type: none"> • Involvement of different typologies of private and public actors • Increase of competitiveness and development • Enhancement of environmental protection • Rehabilitation of valuable historical and cultural heritage buildings • Redevelopment of free spaces • Construction of new public facilities
	TO7) Promoting sustainable transport and removing bottlenecks in key network infrastructures	b) enhancing regional mobility by connecting secondary and tertiary nodes to TEN-T infrastructure, including multimodal nodes c) developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility	Short term/mature projects: 9,657,854 Long term/less mature projects: 138,622,854	<ul style="list-style-type: none"> • Enhancement of infrastructures and networks • Creation of new networks and interconnections • Promotion of sustainable transport at local and regional level • Reduction of carbon emissions. • Contribution to the economic revitalisation of the territory • Reduction of externalities caused by the excessive use of private vehicles and a more energy sustainable transport network

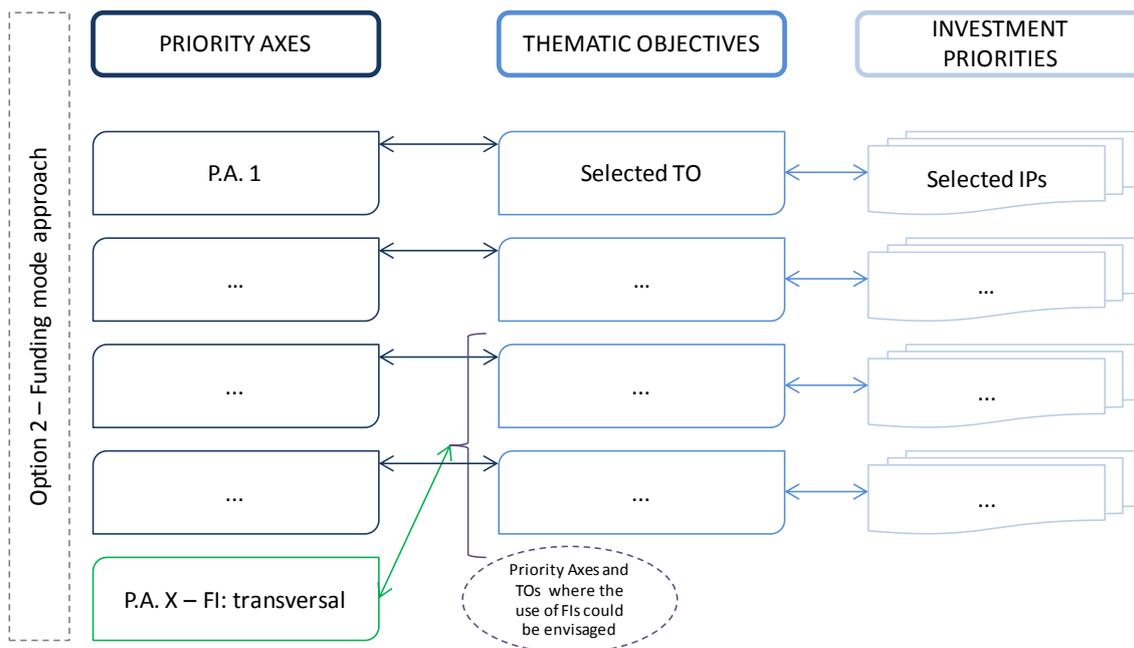
Priority Axes	Pre-selected Thematic Objectives	Investment Priorities ⁷	Resources needed (€)	Expected outputs/results
	TO9) Promoting social inclusion, combating poverty and any discrimination	b) providing support for physical, economic and social regeneration of deprived communities in urban and rural areas	Short term/ mature projects: 6,330,000 Long term/less mature projects: 590,236,699	<ul style="list-style-type: none"> · Involvement of different typologies of private and public actors · Enhancement of local economy and employment opportunities generation · Enhancement of social cohesion · Regeneration of deprived areas · Rehabilitation of spaces · Conversion of old and abandoned buildings for commercial use · Attraction of enterprises · Job creation

→ Option II: funding model approach

As indicated above, the second option proposed for the integration of the FIs into the OP structure is focused on promoting FIs as one of the basic channels for funding projects.

The model proposes the establishment of a specific Priority Axis for FIs that is complementary to the other identified Priority Axes for the Programme, which will have a thematic approach. This "FI axis" would finance projects or project areas which, although linked to other Priority Axes in the OP from a thematic standpoint, are able to generate returns and could be financed through FIs. This proposal would thus require close coordination between the "FI axis" and each of the other Priority Axes.

In this way, the structure of the OP strategy that could take place in this scenario could be the following:



General Conditions and Design of the implementation strategies

For the new Programming Period 2014-2020, there is greater incentive to use FIs and it is also envisaged that FIs can be complemented with grants, which is particularly advantageous for projects that do not generate sufficient revenues.

Article 37 of the CPR mandates that prior to allocating OP resources to FIs, MA must undertake an Ex-Ante Assessment to establish evidence of market failure or sub-optimal investment situations. The Ex-Ante Assessment will include an analysis of the market failure, investment strategy, value-added, state aid implications, level of co-investments, expected results and impacts, and lessons learnt. If required, the Ex-Ante Assessment may need to be periodically updated to reflect changes in the market conditions.

Technical assistance may be used for projects or for putting the FI into operation. Potentially, many of the projects identified in this study could benefit from technical assistance, for example, in project structuring, improving their business plans, and getting projects to an "investment ready" status. It is recommended that the amount of funds allocated to technical assistance should not exceed 4% of all the ESI Funds allocated to a Priority Axis in each OP, in accordance with the content of Articles 58 and 119 of the final Regulation⁸.

FIs may be implemented at European, national, regional, transnational or trans-regional level. In terms of implementation options, there will be greater flexibility in terms of implementation options pursuant to Article 38 of the CPR for the Programming Period 2014-2020. Thus, MAs will be able to select the following options⁹ for organising FI within the OP framework:

⁸<http://new.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN>

⁹ These suggested 'Implementation Options' is currently under development by the European Commission. No additional information is available

1. EU level - Contributing to an EU level Instrument¹⁰
2. At national/regional level - Establishing FI managed by MA as a single fund
3. At national/regional level - Multiple FIs under a "Funds of Funds" Structure

→ EU level Instrument

This option entails establishing FIs at EU level, and they will be managed by the European Commission, such as the COSME initiative for SMEs, Horizon 2020 for research and innovation, Connecting Europe Facility for Infrastructure, and Guarantee Facility for the Cultural and Creative Sectors. In such case, OP contributions for FIs are ring-fenced for investments through a Priority Axis (co-financing at 100%).¹¹ Pursuant to Article 38, the responsibility for implementation and management would remain with the Commission; however, the ultimate responsibility will rest with the MAs. The regulations have yet to clarify the method for allocating the funds and a definition of the investment priorities.

This option has the potential to generate greater synergies with existing instruments at European level. Although this option is not currently being considered in Catalonia, it may be reviewed once the Ex-Ante Assessment is carried out and when further clarifications from the European Commission are issued.

→ National/regional level – FI as a single fund

Under this option FIs can be established at national, regional, transnational, or cross-border level, managed by or under responsibility of the MAs either "tailor-made" or "off the shelf" instruments as a single fund for implementing FIs. This is currently being designed by the European Commission under shared management in order to help accelerate the set-up process and a quicker rollout of FIs in the Programming Period 2014-2020.

The advantage of this option would be that it would be relatively easy to put it into operation and to control the ERDF funds allocated to the FI, whilst taking lessons learnt from implementing FIs in the 2007-2013 programming period.

Broadly speaking, the implementation of the FI as a single fund could be supported by one of the following three ideas:

- A single fund that invests in thematic projects that fulfils the three pillars of urban development. For example, an urban development project with positive effects on economic development, social cohesion and the environment.
- A territorial approach (geographical-based) including different institutional and geographic organisations with a strategy aimed at reducing inequalities between different urban areas, which would lead to compliance with the EU 2020 Strategy for reducing inequalities between regions.
- A strategic financing approach (debt or equity-based FIs), guaranteeing that each financed project is part of a group of coherent and coordinated actions to reduce the risk of inefficiency in the event of independent, isolated actions.

¹⁰ http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/financial_instruments_en.pdf

¹¹ The exact modalities of allocation of funds are to be determined by the Commission.

→ National/regional level – multiple FIs under a “Fund of Funds” Structure

This option entails the creation of FIs managed by or under the responsibility of the Catalan MA under a “Fund of Funds” structure. The thematic focus of the FIs can be linked to different TOs in order to achieve OP objectives.

Under this structure, the different OP investment priorities might cover several TOs. The thematic focus of the FIs can be linked to different TOs in order to achieve the OP objectives. For Catalonia, the supply and demand analysis carried out as part of this study shows that the different project ideas are distributed among different economic sectors, hence the suitability of implementing thematic FIs under a “Fund of Funds” structure, thus allowing investments in multiple thematic areas.

A “Fund of Funds” is a useful structure for establishing future FIs because it offers flexibility to the fund managers to diversify investments across multiple FIs, for example to transfer monies between FIs to reflect changes in the market, if required. This approach also allows for a portfolio approach balancing financial and non-financial returns (socio-economic impacts). Having multiple FIs under a “Fund of Funds” creates efficiency, allowing the fund manager to capitalise on economies of scale, share expertise, and cross-pollinate marketing and communication activities to promote FIs. MAs have several procurement options with respect to selecting Fund Managers(s), whether to make direct investments in projects, or to manage a ‘Fund of Funds’ to invest in individual Financial Instruments. These include:

- Entrusting the European Investment Bank (EIB) Group as the “Fund of Funds” Manager;
- Appointing an international financial institution (IFI) in which a Member State is a shareholder, or financial institutions established in a Member State aiming at the achievement of public interest under the control of a public authority, selected in accordance with applicable Union and national rules.
- A body governed by public or private law.

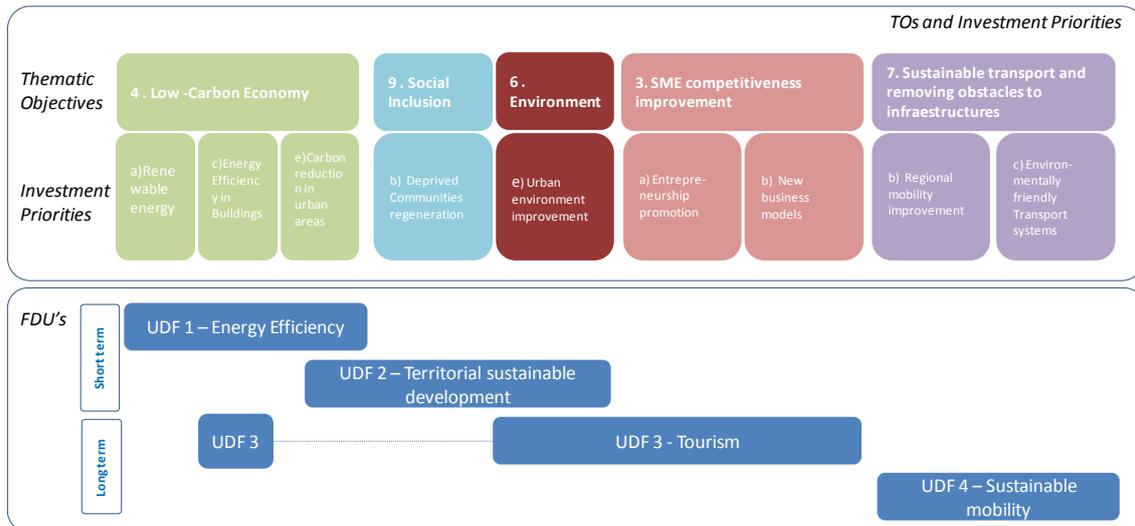
Design of investment strategies

After consulting the Spanish Ministry of Finance and Public Administration (*MA of the Catalan ERDF 2014-2020 OP*) and the Generalitat de Catalunya (*Government of Catalonia - the Intermediate Body*), the financial framework of Catalonia ERDF 2014-2020 OP is currently not fully defined at the time of this study. For this reason, estimates regarding the size of the investment that could be supported by FIs included in this study are based on the investment needs of the project ideas detected within the scope of this study. Ultimately, any investment decisions are to be based on an Ex-Ante Assessment as defined in Article 37 of CPR.

Based on the demand analysis and the four market segments identified, it is proposed the following TOs to be included under a dedicated axis for FI:

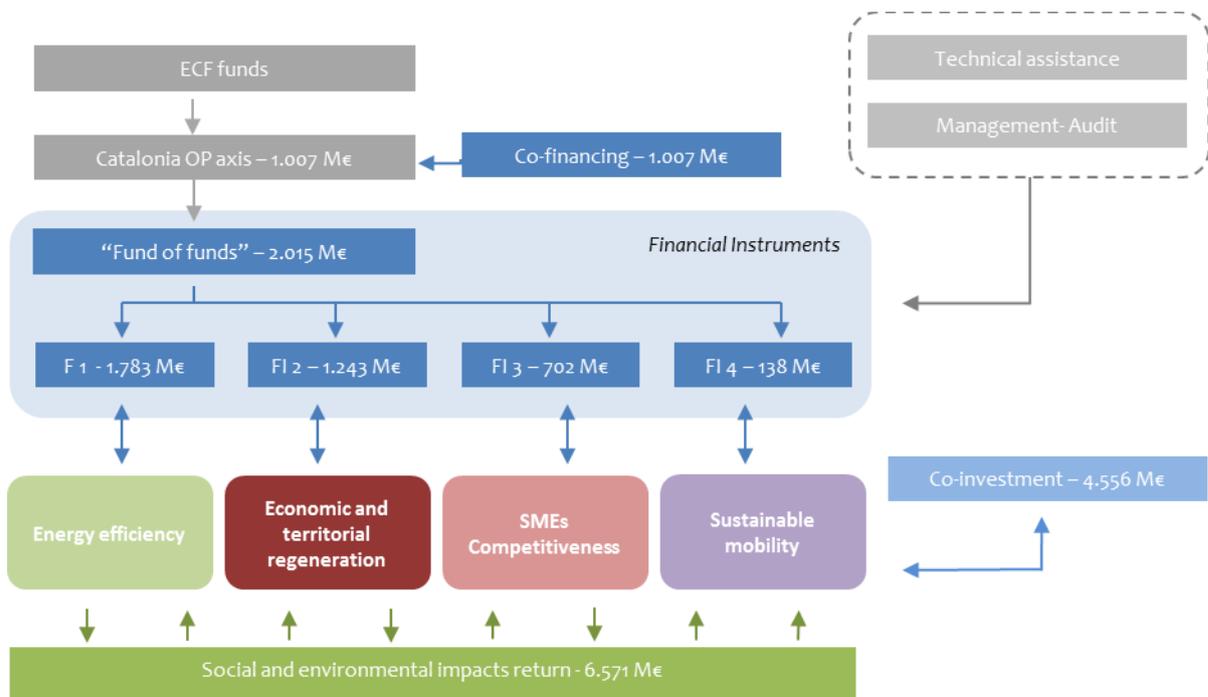
- Energy efficiency – TO4: Low-carbon economy
- Economic and territorial regeneration – TO6: Environment and TO9: Social inclusion
- Competitiveness of SMEs – TO3: Improvement in the competitiveness of SMEs

- Sustainable mobility – TO7: Sustainable transport and elimination of obstacles in infrastructures.



Source: Mazars/Ecorys

As a result, a structure that can generate an expense of approximately € 6,571 million eligible for ESI Funds, in accordance with a finance demand of approximately € 2,015 million, is set out below. These figures are based on the responses to the survey conducted during the course of this study, and would be further refined as part of the ex-ante assessment requirements. However, it is possible that some projects will not be implemented and others will be financed before the fund is set up, and that new projects will emerge, attracted by the finance conditions offered.



* Amounts to be confirmed during the ex-ante assessment.

Source: Mazars/Ecorys

The creation of four FIs devoted to the selected market segments would allow co-funding of almost € 2,015 million (€1,007 for ESI Funds and € 1,007 for public or private investors). This amount would be invested in the four FIs created, based on the distribution determined by the Fund of Funds. This would enable projects to be executed for a value of € 6,571 million, thanks to a co-investment of €4,556 million. In all, the global impact on the region, pursuant to the OP, is almost 3.3 times the amount of the OP resources invested in FIs. The FIs corresponding to the selected industries would include debt and own funds, since that is the need shown by the projects in the identified segments.

However, as already mentioned, the Catalonia OP has not yet been determined and therefore the amounts or the selection of the industries or priority axes will depend on the decisions taken by Generalitat de Catalunya and by the Programme MA.

Implementing a "Fund of Funds" would simplify the management of these FIs since the funds allocated for short-term projects could therefore be assigned to projects from another Priority Axis, in the event that the projects were delayed, for instance. This would also enable the financing of technical assistance, management and auditing activities. Furthermore, it is envisaged that the participation of actors from the private sector will increase the interest in managing FIs and also in co-funding the programme.

Action plan

To implement the FI, Generalitat de Catalunya will have to conduct a specific ex-ante assessment pursuant to Article 37 of CPR (other than the ex-ante evaluation made within the scope of preparing the OP 2014-2020 under Article 55 of CPR). It will also have to conduct a study on combining support with existing instruments at a regional, national and European level and give a precise definition of the eligibility criteria and the method used to select the projects. A recent study¹² shows that it would take up to two years to implement the FIs and for this reason the process should be started as soon as possible.

The implementation of the FIs will require the elaboration of FI funding agreements, cash agreements and other necessary contracts. All these documents are not required before the OP validation and the creation of the FI. FI implementation and management may be entrusted to the European Commission for EU level instruments. The MA could also opt to appoint the EIB through a direct award as per Article 38 of the CRP without the need for a tender process. Alternatively, MA can also appoint a suitable financial institution or fund management company through a competitive tendering process subject to EU and national regulations.

In order to plan the FI fund needs, business plans will have to be drafted (this is required for paying the ESI Funds) for the projects, FIs and the fund of funds. Payment of the ESI Funds to the FI should be in keeping with the needs of the two-year business plan identified for the projects, FIs and portfolio fund during the launch phase, updated in accordance with the evolution of the potential project portfolio and the selection made by the investment

¹² Financial Instruments Stocktaking Exercise in Preparation for 2014-2020, EIB, April 2013

committee. Furthermore, communication actions will also have to be executed to ensure that the FI concept is properly understood by the promoters and identify projects that are eligible for investment and attract potential investors for the projects of FIs dedicated to sectors of activity.

Final conclusion

Catalonia has a well-developed and integrated territorial and urban planning system, and this, together with its successful experience during previous initiatives of URBAN and a successful but limited participation in JEREMIE, represents an excellent starting point for the potential implementation of FIs.

Moreover, the current situation of difficulty in accessing credit, and the limited possibilities of local debt and a general shortage of funds, together with the option of obtaining finance in the best possible market conditions, contributes to enhancing the attraction of the use of FIs for local and regional actors in Catalonia.

This significant potential is widely corroborated by a solid, attractive demand with respect to the maturity and characteristics of the ideas for the projects analysed in this study, which suggest that tangible possibilities exist in the fields of energy efficiency, sustainable territorial development, tourism and sustainable mobility of including Investment Priorities for implementation with the FIs in the Catalonia ERDF OP.

Specifically, the Report concludes (and this is quite clear based on the case studies analysed), that the energy efficiency and economic activity promotion – urban regeneration segments could be a short-term target for using FIs if this is considered appropriate by the relevant authorities.

Based on the foregoing, the study proposes a series of recommendations for designing the ERDF 2014-2020 Operational Programme for Catalonia which is based on four Priority Axes: Energy Efficiency, Economic and Territorial Regeneration, Competitiveness of SMEs and Sustainable Mobility, all corresponding to the TOs identified as being the most relevant (TO3 – improving the competitiveness of SMEs, TO4 – Low-carbon economy, TO6 - Environment, TO7- Sustainable mobility and TO9 – Social inclusion).

These recommendations in the OP design would be implemented through adopting an Investment Strategy with a Fund of Funds formed by four Urban Development Funds corresponding to the four Priorities described above, allocating amounts of approximately €2,015 million (€1,007 million from ESI Funds and €1,007 million from public and private investors), distributed as follows:

- €1,783 million for energy efficiency;
- €1,243 million for economic and territorial regeneration;
- €702 million for competitiveness of SMEs and
- €138 million for sustainable mobility.

This Investment Strategy could generate almost €6,571 million in eligible expenses, which is approximately 3.3 times the amount of the OP resources that would be invested in the FIs.

Ultimately, it is fundamental to take into account that any contribution to FIs through ESI Funds and the OPs will need to be based on the mandatory "ex-ante assessment which has identified market failures or sub-optimal investment situations, and investment needs", as per Article 37 of the CPR.

TABLE OF CONTENTS

Executive Summary.....	5
1. Introduction	27
1.1. Study objectives	27
1.2. The JESSICA initiative	27
1.2.1. Main benefits of the JESSICA initiative	28
1.2.2. Practical aspects of implementing FIs	29
1.2.3. The 2014-2020 programming period as the context for applying FIs	30
2. Study methodology and work programme	31
2.1. Study objective and phases	31
3. Analysis of the current setting and recent experiences.....	34
3.1. Principal strategic plans and instruments that are fundamental for territorial development in Catalonia	34
3.1.1. Principal strategic plans and instruments that are fundamental for territorial development in Catalonia	34
3.1.2. Plans and strategies that affect territorial development	36
3.2. Experiences and lessons learned from the URBAN initiatives.....	48
3.2.1. The experience of Catalonia in URBAN	48
3.2.2. Lessons learned: integrated approach and “Acquis Urban”	49
3.3. Lessons learned from using Financial Instruments, including the use of the JEREMIE in Catalonia	50
3.4. Main findings.....	52
4. Analysis of supply and demand.....	53
4.1. Prevailing conditions in Catalonia with respect to the potential introduction of Financial Instruments: Public Sector	53
4.1.1. Context	53
4.1.2. Role of Financial Instruments and interest on the part of the public sector	53
4.1.3. Potential and advantages	54
4.1.4. Main risks	54
4.1.5. Possible areas for investment	55
4.2. The “grey zone” and market failure: initial considerations.....	55
4.3. Existence of finance for urban projects in the region	56
4.3.1. Context	56
4.3.2. Financing lines for urban projects currently existing in Catalonia	63
4.3.3. Consultations with Financial Institutions	66
4.4. Market segments	68
4.4.1. Market segments identified as being in the “grey zone”	68
➔ Environment and Energy	73
➔ Competitiveness, Economic Development and Innovation.....	76
➔ Culture and society	81

→	Transport	84
4.4.2.	Size, maturity and needs in financing the projects.....	86
4.4.3.	Project evaluation and ranking	91
5.	Analysis of the cases studies	101
5.1.	Case 1 – Energy efficient biomass heat production in municipal buildings: Activities on municipal public tertiary buildings, including Energy Efficiency: biomass obtained from forest waste in different towns in Catalonia.....	102
5.2.	Case 2 – Economic Development: Heritage city-core brownfield regeneration: Recovery of the former “Vapor Cortés” industrial complex in Terrassa	111
6.	Recommendations in designing the Operational Programmes	123
6.1.	General framework.....	123
6.2.	Recommendations in designing the Operational Programme strategy	124
6.2.1.	Identification of Thematic Objectives and Priority Axes.....	125
6.2.2.	Operational Programme structure proposal	131
6.3.	Context for implementing Integrated Territorial Investment and Community-Led Local Development.....	135
6.3.1.	Possible implementation and development of ITI and CLLD in Catalonia	136
6.3.2.	Integrated Territorial Investment – a flexible tool.....	136
6.3.3.	A designated territory and an integrated territorial development strategy.....	136
6.3.4.	A package of actions to be implemented	137
6.3.5.	Management agreements for monitoring Integrated Territorial Investment	137
6.3.6.	Advantages of this system:	138
7.	General considerations for implementing FIs.....	139
7.1.	Technical assistance.....	140
7.2.	Eligible cost and state aid	141
7.2.1.	Eligibility of the cost	141
7.2.2.	State aid rules.....	142
7.3.	Financial Instrument payment mechanism	143
7.4.	Return on investment, risk and impact	144
8.	Implementation Strategy	146
8.1.	Implementation option	146
8.1.1.	EU Level Instrument	146
8.1.2.	Financial Instrument managed by the MA as a single fund	147
8.1.3.	Multiple FIs under a “Fund of Funds” Structure.....	147
8.2.	Investment strategy	149
8.3.	Implementation procedures and action plan for Catalonia	152
8.4.	Opportunities and added value.....	153
8.5.	Communication and information.....	154
8.6.	Actions to be taken	154
9.	Final conclusion.....	156
	Bibliography	158

Appendixes

Appendix I – Identification of the different geographical and territorial levels of Catalonia

Appendix II – Report on activities

Appendix III – Calendar

Appendix IV – Consultation with actors from the public sector

Appendix V – Consultation with actors from the private sector

Appendix VI – Data sheets of the projects identified

1. Introduction

The Mazars – Ecorys consortium was appointed in March 2013 to undertake the 2014-2020 JESSICA Evaluation Study in Catalonia. This study, supported by the European Commission and the European Investment Bank, was requested by the European Regional Development Fund (ERDF) Operational Programme (OP) Managing Authority (MA) for Catalonia to understand the demand for Financial Instruments (FIs). In accordance with the objectives of urban and territorial, energy efficiency and innovation, this specific study will support MAs with the preparation of the OP for the 2014-2020 programming period.

1.1. Study objectives

The Common Provision Regulations (CPR)¹³ foresees a greater use of European Structural and Investment Funds (ESI Funds) to be deployed through FIs to support a range of Thematic Objectives (TOs) in line with the Europe 2020 strategy. On the basis of Ex-Ante Assessment to determine specific suboptimal performance and market failure, MAs can establish FIs to achieve its strategic objectives. The inclusion of FIs in the OPs is the responsibility of the MAs.

The study aims to assist the MAs in incorporating FIs into the new programming period 2014-2020 to support urban and territorial development. The objective of this study was to determine how and to what extent such FIs can facilitate, accelerate or amplify investment in sustainable urban and territorial development in the context of the 2014-2020 Cohesion Policy framework in Catalonia during the programming period 2014-2020.

Therefore, the objectives of the study are:

- a. Understanding the demand for FIs to support urban and territorial policy in Catalonia;
- b. Evaluating to what extent FIs can accelerate investments for supporting sustainable urban development projects through debt, capital and guarantees;
- c. Exploring the option of combining FIs with other forms of financial support, using Integrated Territorial Investment (ITI) and an approach based on Community-Led Local Development (CLLD); and
- d. Describing the investment strategies and the implementation action plan, in order to support the development of FIs for encouraging urban regeneration and innovation.

1.2. The JESSICA initiative

JESSICA - Joint European Support for Sustainable Investment in City Areas - is a technical assistance initiative of the European Commission (EC) developed jointly with the European Investment Bank ("EIB") and in collaboration with the Council of Europe Development Bank (CEB) with the aim of supporting sustainable urban development and regeneration through FIs. The objective of JESSICA is to address the challenges and complexity of sub-optimal

¹³ It has to be noted that the analysis related to EU programming has been based on the proposals of Common Provisions Regulation (Commission Amended Proposal adopted on 22/04/2013) and ERDF (06/10/2011). Every quote to the proposals along the report refers to these versions.

performance within the urban sector, and to deploy FIs as a strategic tool for cities to promote investment projects as an integrated investment strategy, whilst leveraging private sector financing.

Under procedures applicable in the 2007-2013 programming period, MAs in the Member States (MS) are offered the possibility to invest some of their Structural Funds (SF) allocations in FIs (revolving funds) supporting urban development and recycle financial resources in order to enhance and accelerate investments in Europe's urban areas. These FIs are Urban Development Funds (UDFs) investing in Public-Private Partnerships (PPPs) and other projects included in integrated plans for sustainable urban development. One of options available to MAs is to channel funds to UDFs using Holding Funds (HFs), which are set up to invest in several UDFs. This may offer the advantage of enabling MAs to delegate some of the tasks required to implement FIs to expert professionals.

Suitable urban development projects are structured so that they not only generate sufficient returns to ensure that the funds used can operate as revolving funds, but also achieve the appropriate social and economic impacts. In this way, JESSICA is focused on creating a lasting legacy of funding with European and national public funds for long-term reinvestment in sustainable urban transformation.

1.2.1. Main benefits of the JESSICA initiative

The use of FIs through the JESSICA initiative offers the following benefits:

- a. Sustainable long-term support for urban development through the revolving character of FIs (portfolio funds via the Holding Fund and UDFs). FIs via the JESSICA initiative seeks to unlock development potential of projects which experienced difficulties in obtaining finance from the private sector due to the combination of high risks and low returns on investment. FIs via JESSICA can provide the necessary financial resources for the projects to become viable investment propositions. Furthermore, FIs are revolving funds, as opposed to grants, meaning that funds could be reinvested into future projects after the capital have been repaid, thus acting as a catalyst for investments which in otherwise might not attract the necessary financing. FIs also ensure the possibility of generating larger social and economic impact, in comparison with a model based only on using grants.
- b. FIs enable MAs to tap into financial and managerial expertise from international financial institutions such as the EIB Group as well as other financial institutions.
- c. Leveraging of additional resources for public-private partnership and other urban projects in the EU regions. This is strengthened by the ability to attract additional investments in terms of funds and projects.
- d. Creation of robust incentives to allow the final beneficiaries to implement projects more effectively and efficiently. The capital return flow obtained from successful projects can be used for further investments in the future.
- e. By educating public and private actors, JESSICA creates synergies between stakeholders by combining financial management expertise and project implementation capacities. In

addition the use of FIs provides scope for private sector stakeholders to manage projects that are in the public interest.

- f. Acts as a catalyst for establishing cooperation between stakeholders at different levels in order to tackle issues in the urban environment.
- g. Ensuring flexibility from the financial standpoint, since the financial products (debts, equity, guarantees, etc.) can be selected on a case-by-case basis. Furthermore, FIs can be combined with grants, other forms of public sector investment and other forms of ESI Funds (subject to compliance with the State aid legislation).
- h. Assuring flexibility from the standpoint of project eligibility. For instance, public sector projects could be given priority to access financing from FIs or an incentive structure could be used by offering attractive conditions for private sector project promoters to submit suitable projects (subject to compliance with the State aid legislation).

This framework constitutes an important starting point for the EU 2014-2020 programming period.

1.2.2. Practical aspects of implementing FIs

FIs are used as strategic tool for cities and regions to promote investment projects as an integrated investment strategy that supports broader economic objectives. Implementing FIs requires experienced EU programme management as well as expertise in financial management and investments. FIs provide funds for investments by providing debt, guarantees, subordinated debt and equity. Their characteristics are set out below:

- **Debt.** Extending of loans to the public or private sector for long-term repayment and favourable interest rates and term conditions (i.e. longer repayment period). Favourable term conditions reduce the project's borrowing costs, which decreases the overall financing cost of the project.
- **Subordinated debt.** Extended to the public or private sector for setting up a project; above all it attracts other funders whose debt will have a lower risk. Such debt is referred to as 'subordinate', because the debt providers (the lenders) have subordinate status in relationship to the normal debt.
- **Equity.** This is an instrument for facilitating project development with initial contribution to the capital. In the case of FIs in the form of equity capital, FIs can be used to supplement /co-invest with other equity funding provider (including initial developer). Equity also enables the project to attract other investors as the equity capital often helps to de-risk the projects, thus making the return on investments more attractive to investors. The contribution may be cash or in kind (land, etc.). Repayments, in the form of dividends, can be reused for investment in new projects.
- **Guarantee.** A guarantee offers an additional form of mitigating project risk exposure. Acting as a form of an insurance product, the FI guarantee can be structured to cover specified or all project risks for a certain project operational period. Coverage of these project risks could potentially allow for the enhancement of the commercial loan's lending terms, by lowering

facility's interest rate and extending its tenor over a longer operational project period, covered by the availability of a financial guarantee. This instrument allows the project risk to be reduced and provides liquid funds, thanks to easier access to debt. The returns are obtained in the form of an annual rate.

1.2.3. The 2014-2020 programming period as the context for applying FIs

The greater use of FIs is included in the CPR which sets the conditions for the use of ESI Funds, in accordance with the European legislation and policies related to "Europe 2020" Strategy. For the 2014-2020 programming period, the Cohesion Policy context will have the following strategic objectives:

Europe 2020	Thematic Objectives	Urban Development Platforms	Energy	Financial Instruments (FIs)
<ul style="list-style-type: none"> • Delivering sustainable growth, creating jobs, and promoting innovation • SMART growth • SUSTAINABLE growth • INCLUSIVE growth 	<ul style="list-style-type: none"> • RTDI • ICT • SME, including EAFDR, EMFF • Low Carbon Economy • Environment • Sustainable transport and infrastructures • Employment/Labor Mobility • Social Inclusion • Education • Institutional capacity/efficiency in public administration 	<ul style="list-style-type: none"> • Lessons Learnt • Knowledge sharing • Capacity Building • Best practices • Case studies 	<ul style="list-style-type: none"> • Investments in Energy efficiency and renewable energies • 20% of ERDF for competitive regions • 6% of ERDF for convergence regions 	<ul style="list-style-type: none"> • Greater flexibility to use FIs • Combining ERDF, ESF and CF • Single Priority Axis focused on FIs (less co-financing) • Clearer rules on combining grants with revolving instruments • Developing of the shelf instruments for quick implementation

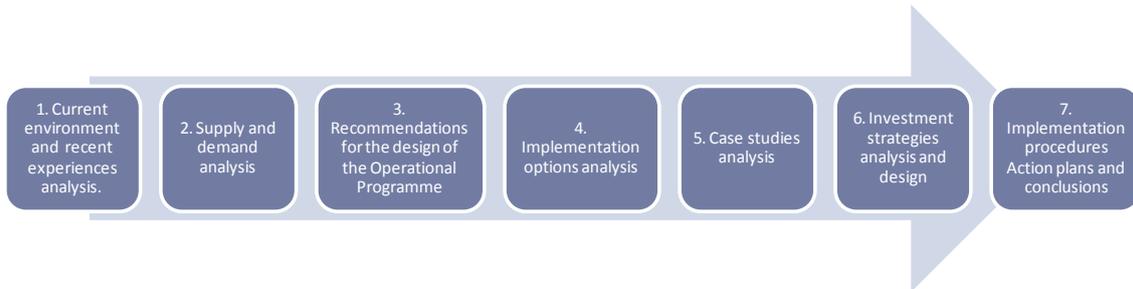
In addition, there are greater flexibilities outlined in the CPR on the use of ESI Funds for FIs for the programming period 2014-2020, including:

- Multi-funding;
- Focus on EU priorities – Europe 2020 Strategy;
- Increase in the importance of FIs;
- Role of territorial areas as opposed to administrative boundaries;
- Increase in the extent of involvement of cities and urban areas;
- Greater requirements in terms of achieving impacts from urban projects;
- Possibility of combining FIs with grants;
- Consolidation of the urban dimension;
- Integrated Territorial Investments (ITIs);
- Community-Led Local Development (CLLD).

2. Study methodology and work programme

2.1. Study objective and phases

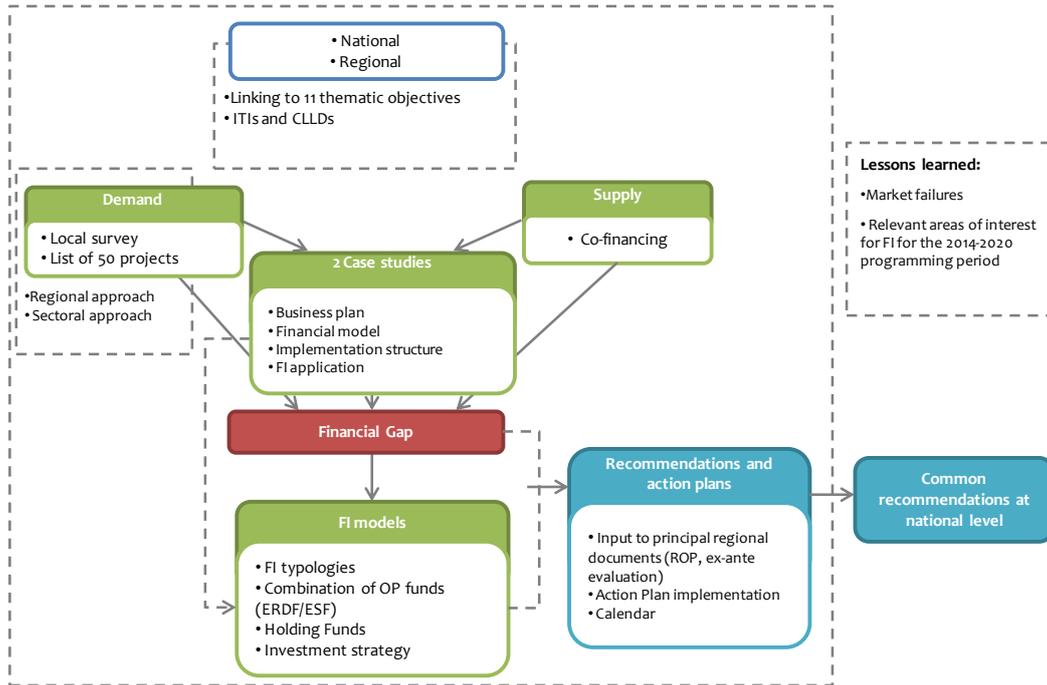
The overall approach to the study is illustrated in the diagram below:



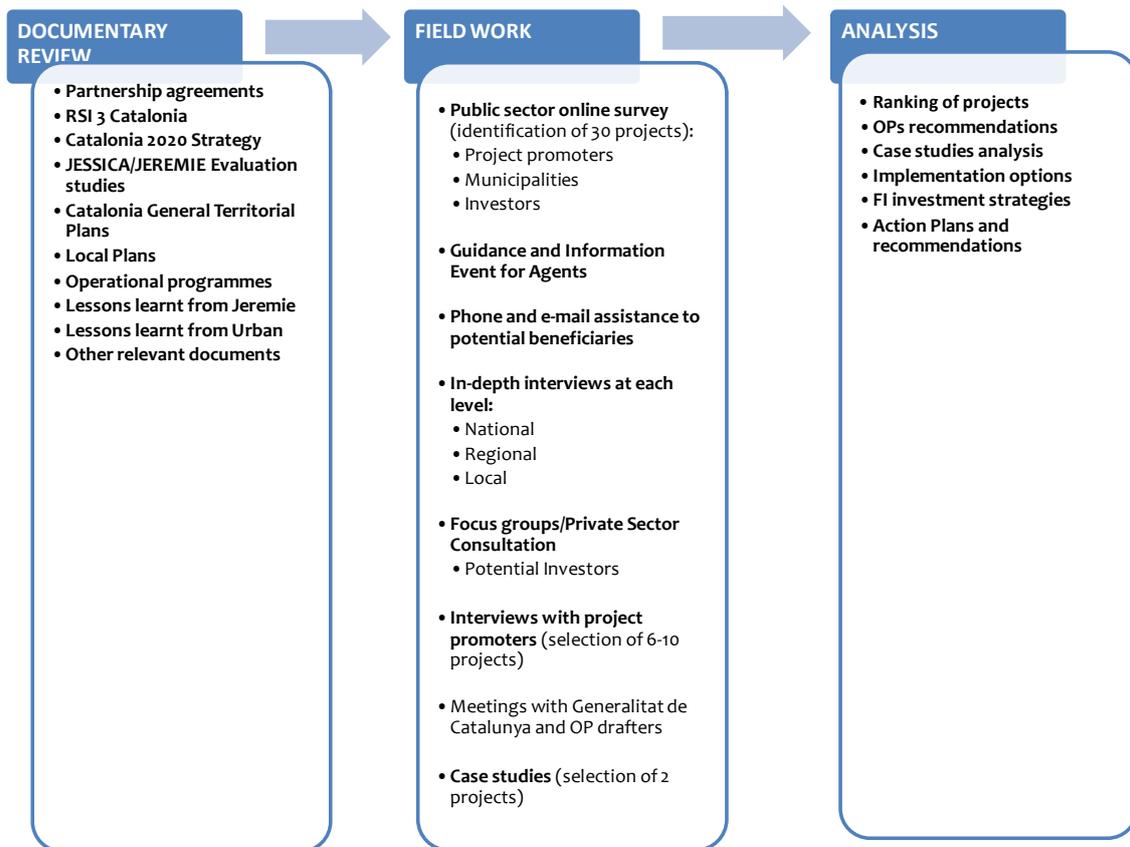
In order to achieve the objectives of the study, the methodology focuses on three main types of activity:

1. Desk-based research: an analysis of the relevant policy documents and urban development and regeneration strategies in Catalonia, with a view to understand the long-term project expectations and their compatibility with the FIs;
2. Fieldwork, including surveys, interviews and focus groups with the relevant private and public stakeholders;
3. Analysis, including the potential size and type of FIs and their thematic focus as well as recommendations on the possibility of including FIs within the 2014-2020 ERDF OP for Catalonia.

Specifically, the methodology within the scope of this study includes the elements illustrated in the following chart:



The methodology uses the following steps to achieve the study objectives:



3. Analysis of the current setting and recent experiences

This section presents the results of the policy and documentation review undertaken for the purpose of understanding the current setting as well as recent experiences in Catalonia with respect to territorial and urban development. This helps to set the background in order to identify opportunities for implementing the FIs in the Catalan region.

To set the analysis in the appropriate context, firstly the main **fundamental strategic plans and instruments for territorial development** were considered. This review includes a description of the instruments and legislation related to territorial and urban organisation in Catalonia. It also includes an analysis of strategic plans developed by Generalitat de Catalunya that has impacts on territorial development in areas of competitiveness, housing, infrastructures and transportation, environment, urban regeneration and tourism.

Secondly, information about the main success factors of the **URBAN I and II and Urbana Initiatives** during the last three years of the 2007-2013 programming period was also considered as part of the policy review.

Lastly, a review of the lessons learned in **using FIs, and in particular, the use of the JEREMIE Instrument in Catalonia in 2007-2013** is also highlighted in the documentation analysis.

Appendix I also includes a description of the **different geographical areas of Catalonia**, giving a general context of their territorial organisation. It also helps to identify territories with significant economic, environmental, climatic and social challenges.

3.1. Principal strategic plans and instruments that are fundamental for territorial development in Catalonia

3.1.1. Principal strategic plans and instruments that are fundamental for territorial development in Catalonia

The different territorial and urban planning levels and figures exist in Catalonia are organised as set out in the following figure:

Territorial and Urban Planning levels and figures



Source: Mazars/Ecorys

The **General Territorial Plan of Catalonia - PTG (Law 1/1995)**, approved in March 1995, is the framework for consolidating sustainable development, establishing territorial balance, and organising growth in Catalonia. It also takes into account environmental conservation and outlines the priorities for attracting economic activities with the aim to ensure that all Catalan citizens have high quality of life. The specific objectives of the PTG are:

- a. To promote a balanced distribution of growth in order to reach adequate income levels throughout the entire territory;
- b. To foster the organised growth of implantations in the territory with the objective of increasing the efficacy of the economic activities and achieving a better quality of life;
- c. To support economic growth in Catalonia and reduce unemployment.

The PTG establishes the territorial model of Catalonia by encompassing the whole region and all its sectors. The PTC is implemented through actions and specific integrated additional plans which are prepared in accordance with the bases and guidelines set by the PTG.

In the first place, given that experience has shown that it is necessary to tackle territorial challenges using supra-municipal logic, the PTG defines the need to set up **Partial Territorial Plans** for each of the 7 Functional Territorial Areas (FTAs)¹⁴ in order to achieve the objectives for sustainable development across all territories. The Partial Territorial Plans, which include all

¹⁴ For the purpose of the provisions of article 12 of Law 23/1983 (21 November 1983) on Territorial Policy, the following areas of application are established for the partial territorial plans:

- a) Metropolitan Area: Alt Penedès, Baix Llobregat, Barcelonès, Garraf, Maresme, Vallès Occidental and Vallès Oriental.
- b) Girona District Area: Alt Empordà, Baix Empordà, Garrotxa, Gironès, Pla de l'Estany, Ripollès and Selva.
- c) Camp de Tarragona Area: l'Alt Camp, Baix Camp, Baix Penedès, Conca de Barberà, Priorat and Tarragonès.
- d) Terres de l'Ebre Area: Baix Ebre, Montsià, Ribera d'Ebre and Terra Alta.
- e) Ponent Area: Garrigues, Noguera, Pla d'Urgell, Segarra, Segrià and Urgell.
- f) Central Districts Area: Anoia, Bages, Berguedà, Osona and Solsonès.

sectors, control the use of open space and land designations, urban settlements, areas of cooperation and multi-municipal planning (district and supradistrict) and infrastructure for mobility.

On the other hand, according to the PTG, the territorial development strategies with a sector-based approach are established in the **Sector Territorial Plans**, which cover the entire region of Catalonia. These plans are drafted by the Generalitat de Catalunya, following the directives established in the PTG. The most relevant Plans for this study are the **Transport Infrastructure Plan** (2006-2026) and the **Housing Sector Territorial Plan**.

The urban planning directives have been established in the Urban Planning Law¹⁵, in close coordination with the territorial planning, which is implemented through the **Urban Development Master Plans** (PDU), the **Municipal Planning Organisation Programmes** (POUMs) and the **Urban Planning Regulations** (NPU) in keeping with the criteria established by the PTG and the Partial and Sector Territorial Plans.

The **PDU** is an urban planning instrument for use within the supramunicipal scope, in accordance with territorial planning and sustainable urban development, infrastructures, mobility of people and goods and public transport, protection of brownfield land and housing policies arranged with municipalities. At present there are currently 19 PDUs and 12 Urban Development Master Plans for Strategic Residential Areas. They are valid for an indefinite period of time, but they are to be reviewed every 10 years or before, in accordance with territorial planning regulations, or if this is decided on and duly justified by the Department of Territorial Policy and Public Works.

Municipal Planning Organisation Programmes (POUMs) are integrated territorial urban planning organisation instruments. These usually cover one municipality, but may cover multiple municipalities. POUMs seek to classify land and to develop the urban implementation model and the structure and development of urban planning. At present there are 8 Urban Planning Territorial Committees, plus an additional sub-committee specifically in the city of Barcelona. They are responsible for the design and implementation of the respective Municipal Planning Organisation Programmes and are subject to review when the established term has expired or when the circumstances specified for this purpose take place.

Lastly, the **NPU**s have been developed as a general instrument for application in all municipalities in Catalonia that have no urban planning programme. These Regulations are valid for 4 years provided the processing of the POUMs has not ended, thereby ensuring there is no interference in determining the growth model to be established by municipalities with the respective guarantees of citizen participation through processing the respective POUMs.

3.1.2. Plans and strategies that affect territorial development

This section identifies the plans and strategies developed and implemented in Catalonia in areas related to sustainable urban development in which FIs could support; for instance:

¹⁵ Law 3/2012 (12 February 2012), amending the revised text of the Urban Planning Law approved by Legislative Decree 1/2010 (3 August 2010)

- Urban regeneration;
- Environment and Energy;
- Transport;
- Competitiveness, Economic development and Innovation;
- Tourism; and
- Housing.

→ Urban regeneration

One of the main priorities of the Generalitat de Catalunya is to combat social deprivation and improve the living conditions of all its citizens. Sector-related interventions (i.e. training, employment and health) are not sufficient to achieve this objective alone. Integrated actions are necessary to tackle social poverty, which includes measures targeted specifically at vulnerable population along with actions for improving dilapidated areas.

With this objective, two strategies have been launched for joint actions by the Generalitat de Catalunya and the municipalities involved who are responsible for economic development and improving the urban conditions across Catalonia.

Firstly, **Law 2/2004, Improvement of Neighbourhoods, Urban Districts and Towns that require special attention, also known as the Neighbourhoods Law**, seeks to improve and transform deprived areas. Through this law, special attention is given to areas with high levels of deprivations and degradation in order to improve the conditions and quality of life of their citizens and thus promote social cohesion. For this purpose a financial fund of €600 million was set up for co-funding (between 50% and 75%) projects presented by the different municipalities, to achieve the urban regeneration of neighbourhoods, urban districts and towns in general. The projects include measures targeted at improving public space, providing parks, refurbishing degraded building. Projects could also include the provision of equipment for collective use, incorporation of information technologies in buildings, promotion of sustainability in urban development or accessibility and elimination of architectural barriers.

Since 2004, 7 grants have been awarded as a result of the Neighbourhoods Law. These seven awards have given rise to public investment of approximately €1,320 million allocated to the integral improvement of neighbourhoods in all parts of Catalonia. Within this framework the aid allocated in the seventh award increased the number of neighbourhoods with integral regeneration projects from 117 to 143. The table below summarises the most relevant data for each of the awards.

Call year	Projects approved	Municipalities	Aid approved by the Generalitat de Catalunya (M EUR)	Total Project Budget (M EUR)
2004	13	12	98.8	189.2
2005	17	17	99	198
2006	17	17	98.42	197.34

2007	24	24	89.66	197.99
2008	22	22	99	198
2009	26	26	99	169.23
2010	29	29	94.92	171.62
TOTAL	148		583.88	1321.38

The municipalities eligible for receiving funds are neighbourhoods or urban areas classified as 'deprived' or have (damaged buildings, lack of quality public space, service deficits), demographic challenges (loss or aging of the population or extremely accelerated growth), severe economic or social problems related to local economic development. Priority is attached to actions taken in older areas, town centres, housing estates built during the 1950s and marginalised urban areas.

Secondly, **Law 3/2009 on the Regularisation and Improvement of Residential Areas with Urban Planning Deficits** is aimed at improving low-density residential areas that are isolated from urban areas with a shortage of infrastructure and basic services. For this purpose a special fund has been set up for regularising residential areas, and two areas of support were awarded annually:

- Providing municipalities with the necessary funds to draft the adaptation programmes, prepare urban planning documents and projects, purchase land, implement specific projects for telecommunications, landscaping or fire prevention and execute certain improvement works in residential areas.
- Finance for project implementations through loans extended to municipalities, to help them execute and speed up the development work included in the adaptation programmes.
- Grants for owners who fulfil certain requirements, to offset financing costs incurred in undertaking improvement works in their residential buildings or neighbourhoods.

The fund is established annually in the Generalitat de Catalunya's central budget and is the responsibility of the urban planning department.

Opportunities for implementing Financial Instruments

The seven awards of the Neighbourhoods Plan organised to date have shown that it is a fundamental tool in improving and developing areas in need of special attention. However, in view of the current economic situation, the enormous debt of municipalities and the difficulties in obtaining finance pose a threat to the success of these actions. In this regard, FIs represents an opportunity to provide financial support to municipalities in developing and implementing integrated plans for improving and regenerating their neighbourhoods and

historical centres. In particular, potential projects might include:

- Regeneration and conversion of historical buildings
- Reclassification of activity zones
- Conversion of peri-urban areas
- Economic activity promotion through setting up business incubators, shopping districts, etc.
- Smart Cities.

→ Environment and Energy

The Environment and Energy sector is gaining importance amongst policymakers and in the design of their territorial strategies and for economic competitiveness. The risks arising from the depletion of natural resources, increases in oil prices, and degradation of the environment require sound environmental and energy policies to ensure safety and stability in energy supply for the future. The policy needs to establish an energy model that is competitive in economic terms and with less dependence on external sources. Additionally, the policy should place greater relevance on renewable energies, whilst reducing the consumption of fossil fuels and improve energy efficiency in buildings.

In this regard, the Generalitat de Catalunya prepared in 2010 its **2026 Catalan Sustainable Development Strategy**, which foresees a reduction in negative socio-economic externalities from 4% of the Catalan GNP in 2008 to 2.3% in 2026. This Strategy constitutes the road map that establishes the key lines and strategic objectives for the transition of Catalonia to a safe, eco-efficient, low carbon content economy through efficiency in using resources and reducing their impacts on health and the environment. In particular, its main objectives are aimed at:

- harmonising economic development through improving the wellbeing and the quality of life of citizens;
- internalising environmental costs and the value of ecosystem services and biodiversity;
- ensuring the ecological restoration caused by environmental impacts and the recovery of natural capital and its functionality;
- achieving a truly horizontal and vertical integration of the different sector policies and the different government levels, thereby guaranteeing coherence between the many sector-related objectives; and
- ensuring the participation of citizens in decision-taking processes and achieving an educated and generous society that offers equal opportunities.

To achieve this, the strategy also aims to raise awareness among producers and consumers about ways to mitigate environmental externalities. Such interventions could be, for example, through using environmental tax instruments and establishing aid and grants to strengthen or foster sustainable strategies. Some examples of this type of instrument are set out below:

- Credit lines for adapting energy efficiency measures, cogeneration systems and the use of renewable energies in the industrial sector;
- RDTI agreements between the public and private sectors to promote eco-efficiency and ecodesign in the industrial sector;
- Diversification or extension of tax benefits for the reform, construction or regeneration of buildings and houses, subject to the application of sustainability criteria;
- Demand management programmes to reduce electricity consumption peaks and their effects on non-efficient power generation and grid losses;
- Increase in the progressive nature of water rates and an extension of their scope;
- Incentives for reducing environmental externalities in different manufacturing industries;
- Promotion of aid awards to local government bodies for drafting extraordinary local employment plans (Work-Promotion Project) related to sustainability;
- Credit lines for the adaptation of local Agenda 21 programmes to the contents and requirements of the Covenant of Mayors (PAES).

In addition the Generalitat de Catalunya is committed to implementing a sustainable energy generation and consumption model that will contribute to the EU objective of achieving a low-carbon economy. Based on this objective, in October 2012 the **Catalan 2012-2020 Energy and Climate Change Plan** was approved, which outlines the Catalan energy policy strategies for 2020. The mission is to achieve a low carbon economy that is innovative, competitive and sustainable over the medium to long term. This can be achieved through a strategy based on energy saving and efficiency, renewable energies, mitigating climate change, planning of energy infrastructure and promoting R&D activities. The Plan also identifies the consolidation of the energy industry as an opportunity for improving competitiveness, economic growth and creating skilled jobs. It also seeks to integrate the importance of involving civil society in building the new energy model of the region through training, information, participation and the inclusion of impoverished social sectors.

For this purpose, the Plan outlines specific strategies in the fields of wind energy, electric vehicles, sustainable energy in buildings, electrical infrastructure, the use of energy obtained from forest biomass, waste-to-energy evaluation, the implantation of a business sector in emerging energy areas, a new focus of action for the Catalan Energy Administration and the Directives of the Catalan Energy Emergency Management Plan. Specifically, the strategies consist of the following:

Strategies within the Plan's different action fields

Energy source	Strategies
Onshore wind energy	<ul style="list-style-type: none"> · Elaboration of an Onshore Wind Energy Implementation Map · Repowering of the Onshore Wind Parks with more than 15 years of life. · Elaboration of a Catalonian Small Wind Energy Implementation Strategy
Offshore wind	<ul style="list-style-type: none"> · Enhancement and support to current experimental projects, with the aim to gradually support their

energy	consolidation and implementation.
Electric vehicles	<ul style="list-style-type: none"> • Promotion of Electric Vehicles (EV) acquisition, through promotion, information and dissemination of EV activities. • Promotion of EV industrialisation and related RDTI. • Development of public and private EV recharge infrastructures. • Adaptation and international positioning of the automotive, energy and information technologies sectors, as well as of new emerging sectors and peripheral activities related to EV. • Establishment of the necessary synergies between the different efficient transport systems (railways, road collective transport and car sharing among others) and the EV.
Energy sustainability in the building sector	<ul style="list-style-type: none"> • Optimisation of resources and materials. • Reduction of energy consumption and strengthening the use of renewable energies. • Reduction of waste and emissions. • Optimisation of building maintenance and use. • Increase the quality of life of residents.
Electric infrastructure	<ul style="list-style-type: none"> • Increase the capacity to fully integrate distribution generation systems and renewable energies. • Shift towards a network concept that integrates a wide group of producers and consumers to participate and collaborate in the management of systems, both from the supply and the demand side. • Promotion of “smart-grids” that take into account the development of important RTDI actions for their implementation in the medium and long term.
Forest Biomass	<ul style="list-style-type: none"> • Advice on the assessment of biomass exploitation resources to those emergent initiatives in order to appraise the available resources (firewood, cork, poplar, etc.) Enhancement of biomass specific aid. • RDTI lines, both in the resource production and energy transformation stages. • Dissemination activities, seminars and trainings to the different agents of the sector. • Guarantee forms for forest biomass supply for energy production. • Cooperation to study the best logistic method for each project, and for the set of projects as a whole, in the Catalan territory. • Promotion of heating installations and electric service fed with forest biomass. • Maintenance of assistance lines designed to reduce the residual biomass extraction cost from forest resources. • Coordination of the competent administrations in the utilisation of biomass for energy.
Energy assessment from waste	<ul style="list-style-type: none"> • Development of energy specific lines for waste management. • Characterisation and institutional approval. Standardisation (composition certificate, calorific values, % of renewables, ...) • Citizens participation.
Development of a business sector	<ul style="list-style-type: none"> • Implementation of a sustainable mobility and energy efficiency system. • Sustainable construction and energy consumption optimisation. • Development of new business models. • More diversified, efficient and sustainable energy generation.

The Catalan 2012-2020 Energy and Climate Change Plan was drafted by the **Catalan Strategy for adapting to Climate Change (ESCACC)**. Based on an initial review, ESCACC proposes 182 measures, 30 of which are general, with the rest being specific for each socio-economic sector and natural system. The strategy will be implemented through sector-based action plans promoted by the respective Generalitat de Catalunya departments, with the participation of the private sector and the rest of the government.

Lastly, reference should be made to the active and role played by the government in building a new energy model. To that end, Generalitat has approved the **2011-2014 Generalitat de Catalunya Buildings and Services Energy Saving and Efficiency Plan** which has a dual economic and energy objective and envisages a fall in energy consumption, an increase in

energy efficiency and a reduction in energy costs of the Generalitat de Catalunya. This aspect is particularly relevant in the current context of austerity in public spending. The programme is based on an investment of €296 million and close cooperation between the public and private sectors and will affect all areas of the Generalitat de Catalunya and the public sector. Reductions of 12% in energy consumption and of 4.4% in energy costs are foreseen for 2014. It is estimated that energy savings will be multiplied by four by 2020-2026. To achieve this, the conditions of supply and of the energy bills charged to the consumption centres of the Generalitat de Catalunya will be reviewed and an investment programme will be designed and executed for increasing energy savings and energy efficiency. Furthermore, awareness raising and training programmes will be set up for civil servants.

Moreover, within the framework of the activities of the **Catalan Energy Plan (CEP) for 2006-2015**, the Catalan Energy Institute has decreed the following public aid awards, targeted mainly at public buildings (including residential) and private companies, in addition to local corporations:

- 2012 Window Renovation Plan (€7 million);
- 2012 Store Lighting Renovation Plan (€1 million);
- 2011 Household Appliance and Air Conditioning Renovation Plan (€6.3 million);
- 2011 Aid for the renewable energies industry (€3,682 million):
 - o Installations for using forest biomass in heating homes
 - o Installations for using solar energy through thermal solar collectors
 - o Photovoltaic solar energy installations or hybrid photovoltaic solar and wind energy installations
 - o Installations for using forest biomass for heating purposes
 - o Installations for producing and using bio gas energy
 - o Installations for using geothermal energy
 - o Remote monitoring and/or viewing system of energy production in thermal solar installations;
- 2011 Aid for the energy saving and energy efficiency area (€24 million).

Opportunities for implementing Financial Instruments

The environment and energy efficiency sector is a relevant area for FIs, and also a priority of the Generalitat de Catalunya, due to its effects on the environment and the economic potential of this industry. In this regard, projects related to energy efficiency measures in public buildings owned local government bodies could be financed through FIs. This can be done through the possibility of obtaining a return through cost savings, or through setting up management models based on cooperation between the public and the private sectors. Other potential projects to be financed by FIs in this sector are:

- Energy efficiency measures in public and private buildings
- Implementation of renewable energies

- Waste management
- Water treatment.

→ Transport

The greater mobility of people and goods has put pressure on infrastructure and transportation networks. This has caused negative effects including environmental degradation and an increase in traffic accidents, which need to be counterbalanced with mobility policy measures and the provision of upgraded infrastructure networks. To that end, **Law 9/2003 on Mobility** was approved in Catalonia for the purpose of implementing an economically sustainable environmental mobility model. The objective of this Law is to integrate urban growth and economic policies with mobility policies, giving priority to public transport and smart transport networks that include multi-modal transportation hubs to meet the demand of a growing population, whilst also reducing urban congestion. Safety is also a key priority as well as improving connectivity between cities to further generate economic activities. The Mobility Law was deployed through related provisions for different territorial areas:

- **National Mobility Directives**, in the form of Sectoral Territorial Plans which are used to prepare other mobility planning instruments
- **Mobility Master Plans** for the territorialised application of the national mobility directives.
- **Specific Plans** which enforce the sector-based application of the directives for the different mobility resources or infrastructure in the transport of both passengers and goods; and
- **Urban Mobility Plans** which constitute the basic document for configuring the sustainable mobility strategies of the Catalan municipalities.

Lastly, the Law emphasises the need for integrated planning to coordinate and link the mobility policies not only to urban development,¹⁶ but also to the planning of infrastructure. Integrated infrastructure planning is essential for the appropriate use of public resources, to avoid delays and unnecessary extra costs in investments, reduce the environmental impact and increase social and economic benefit.

In this regard, in 2006 the **Catalan Transport Infrastructure Plan (PITC)** was approved as a planning instrument for establishing an integrated definition of the necessary infrastructure network for Catalonia for the year 2026, with a total foreseen investment of €44,794 million. This currently focuses on road networks, railway networks and logistics, and an undertaking exists to extend it to other port and airport infrastructures in order to set up a complete infrastructure plan for Catalonia. The PITC takes the form of a sectoral territorial plan and focuses on environmental sustainability, a nodal territorial structure, social and economic progress and safety.

¹⁶ The Law determines that no new urban development projects can be approved unless they have a study on the mobility generated by them

Opportunities for implementing Financial Instruments

The Laws and Plans for the development of infrastructure and mobility in Catalonia have been drafted in combination with the territorial and urban plans. Together, these Laws and Plans highlight the need to promote public transport, intelligent transport systems and intermodal transport. In addition, given the geographic location of Catalonia straddling the Mediterranean Sea, transportation connectivity is important to the overall Catalan economy. However, the current economic crisis makes it difficult to finance major infrastructure projects. This means there is a need for public-private partnership to invest in key transport infrastructure. In this respect, the use of FIs constitutes an alternative for funding projects of this type, such as:

- Development of multimodal platforms
- Public transport networks
- Implementation of sustainable transport systems for private vehicles (e.g. *car sharing, car pooling...*)
- Transport infrastructure
- Intelligent transport systems.

→ Competitiveness, Economic Development and Innovation

During recent years the Generalitat de Catalunya has implemented a number of economic recovery measures in order to address the profound impacts inflicted by the economic crisis. In this respect, the Generalitat de Catalunya is seeking to boost the economy and employment base using a new sustainable economic growth model, while preserving social cohesion.

For that purpose the Generalitat de Catalunya requested the Advisory Council for Economic Development and Growth (CAREC) to conduct a study on the challenges and opportunities of the Catalan economy (**CAREC Report for the Economic Summit**) in order to establish the priorities and guiding policies targeted at economic growth in Catalonia. This report, prepared by a team of independent experts, analyses the main challenges, including: employment, finance, productivity and consumer confidence. The aim is to tackle each challenge with short-term measures, and developing a long-term strategic framework for economic development.

Taking as references the CAREC recommendations and the lessons learned from the two previous competitiveness agreements¹⁷, the Generalitat de Catalunya launched **Catalonia 2020 Strategy (ECAT 2020)**, within the framework of the Europe 2020 Strategy. The ECAT2020 strategy¹⁸ is the result of a broad participatory process and represents the commitment of the Government to its citizens. It also addresses policies to promote economic and social policies with focus on improving competitiveness and employment. In this way, it establishes the objectives and the action plan that should guide the policies until 2020, based on smart, sustainable and inclusive growth.

The activities of ECAT 2020 are divided into six priority areas, which are in turn organised around eight strategic axes.

¹⁷ Strategic Agreements for the competitiveness of the Catalan economy of 2008 and 2011

¹⁸ Approved on 10 April 2012

ECAT 2020 Priority fields and Strategic axes

Priority areas/fields	Strategic Axes
Employment and Training/Education	To improve employability, especially through occupational guidance and education
Social Cohesion	To improve the functioning of the labour market
Green Economy	To facilitate enterprises access to finance
Innovation and knowledge	To promote a strategic reorientation for enterprises
Business dynamism	To promote entrepreneurship
Internationalisation	To promote the transition towards a more resource-efficient economy
	To promote the modernisation of the Administration and the simplification of administrative procedures
	To develop the strategic infrastructure needed by the productive fabric

Source: Mazars/Ecorys

Each axis is developed in accordance with a series of operational objectives and the impacts on the six priority areas are to be examined on an annual basis. In conjunction with Ivàlua (Catalan Institute for the Evaluation of Public Policies), a study is currently underway to develop a method for monitoring and evaluating the actions of ECAT 2020. An indicators system will allow the actions of ECAT 2020 and the strategic agreement to be monitored and their impact on competitiveness and employment to be assessed. In accordance with this approach, it is foreseen that the first annual report on economic strategy and the monitoring of ECAT 2020 will be published in 2013.

Lastly, it is important to highlight the work being carried out by the Generalitat de Catalunya in preparing a **Research and Innovation Strategy for Smart Specialisation** (RIS3) which involves the development of a special agenda to promote an economy based on knowledge and technological innovation that will attract investment from the private sector.

Opportunities for implementing Financial Instruments

One of the areas of activity foreseen for the use of FIs is the creation of new spaces dedicated to commercial activities for SMEs and the ICT and RTDI industries. Catalonia has an important business network, formed mainly by SMEs. In addition, the recommendations made by the CAREC and the priorities established in ECAT 2020 and envisaged in RIS3 are strongly committed to promoting policies and strategies based on innovation, knowledge and support for SMEs. Furthermore, in implementing these, special importance is attached to public-private activities, searching for sources of finance other than banks and promoting new financial instruments. Potential projects which could be financed by FIs are:

- Creation of areas for entrepreneurs
- Development of ICTs
- Creation of economic activity (new commercial and industrial spaces).

→ Tourism

According to the analysis made by the Generalitat de Catalunya, Catalonia is a well-established, diverse and growing international tourist destination. Tourism is a key sector for the Catalan economy, and the Generalitat de Catalunya is committed in making the region a top tourist destination. Towards this end, the Generalitat de Catalunya has approved the **Catalan 2012-2020 Tourism Plan** to consolidate and promote competitiveness in the tourism industry. This is of strategic importance to the region's economic growth and provides the framework for Catalonia's Tourism Marketing Plan.

Firstly, the competitive model used in the Strategic Tourism Plan is based on 5 major directives which are targeted at promoting the international tourism sector by integrating different destinations within Catalonia, whilst also positioning the region as major tourism destination. Together, these directives would help to strengthen the tourism value chain and to focus on quality tourism and excellence.

On the other hand, the Tourism Marketing Plan is aimed at creating the "Catalonia" tourist initiative, with direct marketing campaign aimed at increasing tourists and gaining their loyalty. This is envisaged through online marketing activities, creating a network of offices abroad based on Catalan Tourism Promotion Centres, increasing cooperation between the public and the private sectors and defining a new management model by adapting the structure of the Catalan Tourism Agency (ACT).

Opportunities for implementing Financial Instruments

Given the importance of tourism in driving economic growth and a source of employment, the efforts of the Generalitat de Catalunya should focus on supporting the tourism industry and improving the tourism infrastructure. In this respect and in line with the recently approved Tourism Plan, there is high potential for implementing FIs through projects promoted in coordination with the private sector and local government bodies aimed at:

- Improving energy efficiency in hotels
- Urban regeneration
- Remodelling of historical buildings
- Elimination of architectural barriers
- Smart City projects.

→ Housing

In recent years, access to housing has been on top of the policy agenda which has worsened since the economic crisis. It has been revealed that access to housing has profound impacts on specific segments of the populations, such as youth and elderly population as well as immigrants. Increases in the price of housing, an inefficient rental market and deteriorating mortgage conditions have led families to incur high levels of debt resulting from the collapse of the housing market. The high unemployment rate and loss of purchasing power mean that many of these families now have insufficient financial capacity to pay their debts, thus putting constraints on household finances and low consumer confidence.

In response to this situation, the Generalitat de Catalunya has been working in this area by approving the following initiatives:

- Law 18/2007 on the Right to Housing;
- 2007-2016 National Housing Pact;
- Housing Sectoral Territorial Plan.

The **Right to Housing Law** was set up with the aim of defining housing policies, regulate and guarantee the right to housing and transform the market with a view to adapt it to the current market situation. For this purpose, it has promoted the creation of affordable homes. For the first time the Law assigns an active role to local government bodies as providers of land and subsidises to housing developers by means of direct or private initiatives using instrumental organisations or agreements with the Generalitat de Catalunya and its specialised bodies.

The Housing Law is implemented through the **2007-2016 National Housing Pact** between the Generalitat de Catalunya and key housing developers. The Pact establishes the general guidelines of the housing policy for forthcoming years through a series of 1800 specific measures for responding to the 5 main challenges facing the industry for a total of €8,222 million. These are as follows:

1. Improvement in access to housing, especially for young people (€4,974 million);
2. Improvement in the structural and habitable conditions of the existing housing stock (€1,449 million);
3. Improvement in accommodation for elderly persons and people with functional diversity (€798 million);
4. Preventing social exclusion related to housing (€751 million);
5. Guaranteeing decent, adequate housing for people with housing problems – homeless people, people in poor living conditions or in overcrowded conditions (€250 million).

To achieve the objectives established in the National Housing Pact and to comply with the requirements of the Right to Housing Law, the **Territorial Sectoral Housing Plan** was implemented as the framework of guidance for applying the housing policies throughout the Catalan territory over the next ten years, based on the following priorities:

- Improvements in the existing housing stock by bringing empty homes back to use and through the regeneration of the housing stock;
- Optimisation of urban land through the establishment of quotas for social housing on consolidated urban land and in urban sectors on non-consolidated urban land; New housing on urban land;
- Specification actions such as the Strategic Residential Areas Programme and training programmes and the inclusion of public land and housing.

Lastly, the Plan describes the scope of action, identifying areas with a high demand and stressing the need to integrate the actions of the Plan with the urban planning tools already described earlier (PDUs, POUMs and NPUs).

Opportunities for implementing Financial Instruments

In the context of the existing economic crisis, the problem of access to housing has become a major challenge for governments to grapple with. There is a general consensus that government should play an active role in guaranteeing the right to housing for the most vulnerable population groups. Furthermore, in the case of Catalonia, there are many homes (almost one and a half million, according to the Housing Agency) which were built before 1980, when the first legislation related to energy efficiency was passed. In the event of not being upgraded, these buildings are in a state of "ruin," therefore, energy efficiency measures should be adopted. However, the current conditions of the financial market and the enormous debt of local governments make it difficult to implement and support these two strategies. For this reason it is imperative that governments seek alternative sources to finance their housing policies. In this respect, FIs could be a valid instrument for actions such as:

- Building social housing
- Refurbishment of buildings and implementation of energy efficiency measures.

3.2. Experiences and lessons learned from the URBAN initiatives

3.2.1. The experience of Catalonia in URBAN

Catalonia participated in the different phases of the URBAN initiative over two programming periods. During the 1994-1999 and 2000-2006 programming periods, 41 cities in Spain benefited from URBAN I and URBAN II for implementing urban regeneration projects. The following table shows the different interventions carried out in Catalonia since the beginning of the 1990s:

Programme	Projects carried out in Catalonia
URBAN Projects Pilot (1990-1993)	Pobla de Lillet. Restoration Works of Clot del Moro in Pobla de Lillet
URBAN Community Initiative (1994-1999)	Badalona (Serra d'en MENA), Regeneration of Sabadell central area Urban intervention in Santa Coloma de Gramanet
URBAN Community Initiative II (2000-2006)	Sant Adrià de Besòs – Barri de la Mina (National Urban Planning Award 2007)

Broadly speaking, the URBAN experience was considered a great success by the wider urban regeneration and economic development communities. Thus, during the 2007-2013

programming period and based on a similar approach to the one used in URBAN I and II, the term *URBANA Initiative* was used to designate the interventions to be carried out within the framework of urban development and regeneration in Spain. These URBANA projects would be financed by Priority 5 of the regional OPs for the convergence regions and the competitiveness and employment regions.

Consequently, in the case of Catalonia, the Catalan 2007-2013 OP supported four different projects in the Autonomous Community:

	Sabadell – Project for the recovery and improvement of neighbourhoods
	Trinitat Nova Urban Initiative
“Urbana” Initiative (2007-2013)	Integrated Intervention in Santa Coloma de Gramanet, Serra d’en Mena
	Economic and social regeneration in the Gornal- L’Hospitalet de Llobregat district

3.2.2. Lessons learned: integrated approach and “Acquis Urban”

The denomination URBAN or what is known as “Acquis Urban” includes a series of common features and elements which have been considered success factors for urban development in deprived urban areas of Catalonia and the rest of Spain.

These features encompass mainly the following aspects:

- **Integrated approach.** The interventions included within the framework of the successive URBAN initiatives have an important element integrated into their design and implementation, including aspects of economic development, infrastructure, environment, combating social exclusion, increasing the use of ICTs, etc. This promotes the global nature of the activities carried out in the deprived areas and allows them to have a significant impact on several indicators such as improvement in unemployment levels, new economic activities, new green areas, training services, new fixtures and services, and so forth.
- **Partnership approach.** This approach integrates cooperation and multilevel governance by all stakeholders involved urban development and regeneration. In most cases, this partnership has been led by the municipality, but it has integrated civil society, neighbour associations, sector-based organisations and environmental agencies, among others, on a regional scale. The innovative nature of the approach is due to the way in which the management and coordination of the activities are organised, which are achieved through the creation of a Consortium that brings together municipalities, provincial councils and the Generalitat de Catalunya. In parallel, a new partnership of neighbour associations, institutions and stakeholders is integrated into that Consortium for designing and executing the Programme, with whom the Consortium sets up cooperative agreements. The implementation of thematic networks around that structure helps channelling the participation of citizens, social movements and the most relevant social and economic

agents in the area (social, education, medical and employment services) and the implementation of projects in a manner that is based on consensus and integration.

- This **leading and prominent role played** by the local authority is also considered a major success, allowing the administration to improve its management capacities and processes by applying an integrated approach in a logical way, through partnership.
- **Flexibility in designing and executing the activities.** The URBAN programmes permit the successive re-programming of operations and changes to be made in the design of interventions based on on-going programme monitoring and evaluation processes. Due to the multi-year programming, the element of flexibility was incorporated into the design to allow for changes in the macro economy in which the scope of intervention requires modification.
- **Participation of the private sector** and investors in urban regeneration projects, mainly real estate developers. Once the actions in the deprived areas have been implemented, the private sector invest and build homes and other amenities which drives up value in the area.
- **Lever or catalyst effect on new investments.** URBAN has facilitated the channelling of new investments related to the programme activities. Once actions are implemented in deprived areas, then the transformation starts to kick in, giving rise to a “pull” effect on other activities or investments in the area creating a ‘catalytic’ effect on urban regeneration, including the creation of business parks or leisure complexes, or the materialisation of plans for social housing promoted by local authorities or the Generalitat de Catalunya. For instance, the “Barcelona KEY” project is aimed at promoting investment with high added value in research, business and new international economic activity to strengthen the role of Barcelona and Catalonia as an economic and knowledge hub. It is foreseen that the project will be implemented in an area in the Mina district which was regenerated as part of the URBAN programme.

3.3. Lessons learned from using Financial Instruments, including the use of the JEREMIE in Catalonia

Since the implementation of the **JESSICA and JEREMIE FIs** in Spain during the 2007-2013 programming period, a series of lessons and best practices can be used to formulate the investment policy, strategy, and architecture of the FIs for supporting investment in urban development during the programming period 2014-2020.

In particular the use of the **JEREMIE instrument in Catalonia** in 2007-2013 allows key lessons to be taken into account that is directly applicable in the future implementation of the FIs in the 2014-2020 programming period, in the form of best practices and bad practices which could either be replicated or avoid in future operations. Broadly speaking the strengths of these instruments and the added value they bring are focused on the following aspects:

- The “lever” and multiplier effect, since FIs are revolving instruments;

- The sustainable nature of these instruments since the potential returns can be re-invested, unlike with the case of traditional grants. This characteristic is particularly relevant in the existing economic context of budget restrictions and reduction in the credit available for businesses;
- Promotion of joint responsibility since FI are repayable, therefore the party putting up the other part of the capital knows that it is assuming a risk that consists of the obligation to repay the loan, and this fosters implication and joint responsibility on the part of the beneficiaries;
- The availability of the capital within 6 months of setting up the Fund allows for a greater financial margin, meaning they do not have to commit their funds until they receive the funding, on completion of the project.

The **best practices** resulting from the experience of using these FIs should be applied when designing and setting up FIs in Catalonia during the 2014-2020 programming period. These can be summarised in the three aspects described below:

1. The importance of **capitalising the existing know-how and expertise** available in the territory when selecting the management structure. In the case of JEREMIE in Catalonia, the choice of an institution such as the Catalan Institute of Finance (ICF), with sound financial knowledge and an appropriate management structure, was a key factor in the successful implementation of that FI;
2. The importance of having the **firm backing of local, regional and national governments** which denotes decisive support and has contributed to the success of setting up the instrument;
3. The need for the **investment strategies** to have a **flexible design** that will permit modification if required to reflect changes in the market. In the case of JEREMIE in Catalonia, this adaptation took place through transfer from the micro credit lines, in which it was seen that the initial endowment was in excess of demand, to the venture capital line, which exceeded the initial demand forecasts.

Based on this experience in applying the FIs it is also possible to obtain a series of recommendations with respect to the **aspects that could be improved** for the introduction of FIs in Catalonia during the programming period 2014-2020. In particular, through the consultation process carried out as part of the study entitled "*Financial Instruments: Stocktaking Exercise in preparing for the 2014-2020 programming period*", certain lessons learned and recommendations have been identified which could be relevant for defining the ERDF OP 2014-2020 for Catalonia in all matters related to the incorporation of the FI:

1. There is a general lack of knowledge about how these instruments operate and how they are managed. For this reason, it will be necessary for **awareness raising activities** from the start by promoting and improving the informational activities on a national and regional level. In this regard the option of **using Technical Assistance** could be considered (which could be funded through the OP Technical Assistance axis), to provide financial advice (support in designing and implementing the FIs; structuring of products; etc.) and/or non-

financial advice (market evaluations; marketing and promotion; legal counsel; regarding compliance with respect to state aid and the EU Regulations; project selection; etc.) for managers and beneficiaries of the OP;

2. It will be necessary to **make an effort to simplify and clarify the legislations** governing these instruments, to prevent a potential lack of legal safety, from their management and control systems to the signing of the contracts by the beneficiaries;
3. It will be necessary to **adapt the intensity of the controls and supervision** to the volume of the funds received by the final beneficiaries (in the case of JEREMIE) since at present no differentiation is made based on this variable, which introduces an additional difficulty into this type of aid. Furthermore the grade of supervision should be adapted to the type of entity;
4. It will be necessary to **create capacities** at all levels: from administrative management of the funds, to allow a better understanding of the role and the actors involved in this scope, to support for the beneficiary by financial experts, in order to assess the feasibility of their projects and help them clearly define their financial plans, and support for beneficiaries in their effective implementation, since the management and control activities will require expert assistance on the subject;
5. It is advisable to **identify and capitalise successful actions** with respect to FIs during the 2007-2013 programming period, based on acquired experience and the lessons learned;
6. The implementation of these FIs should be based on an **analysis of market needs** determined by the Ex-Ante Assessment, and will only be effective if based on a sound knowledge of the same.

3.4. Main findings

This preliminary documentary analysis confirmed that Catalonia has the necessary foundation for implementing FIs. Specifically:

1. Catalonia has a widely-developed and integrated territorial and urban planning system, which is an excellent starting point for implementing FIs;
2. Among its strategic policy objectives, Catalonia has identified the scopes of action in which FIs could support. These include urban regeneration, action with respect to housing, infrastructure and mobility, environment, energy efficiency and tourism;
3. Catalonia has had a clearly positive experience in terms of the integrated, partnership approach and the impact of the diverse interventions co-funded by successive URBAN Programmes since the beginning of the 1990s, which has enabled them to be considered best practices that should be repeated in order to achieve results, added value and a lever or multiplier effect;
4. Catalonia has considerable experience in using FIs through the implementation of JEREMIE in the 2007-2013 programming period. This has enabled it adopt lessons learnt for the implementation of future FIs in the 2014-2020 programming period.

4. Analysis of supply and demand

4.1. Prevailing conditions in Catalonia with respect to the potential introduction of Financial Instruments: Public Sector

Following consultations with various stakeholders in the **Public Sector** (national, regional and local), a series of conclusions can be drawn about the prevailing conditions and demand for the potential implementation of FIs in Catalonia.

4.1.1. Context

The **context** should be considered as being within the process of elaborating the Spanish Partnership Agreement. This will constitute the framework for the national Cohesion Policy during the 2014-2020 programming period. It is foreseen that this will be signed by the end of 2013.

In parallel, work has commenced at national and regional level to prepare the ERDF 2014-2020 OP. On a national scale, it is envisaged that this process will be completed by the middle of 2014. At present, the ex ante conditionalities factors are being defined. After consulting with stakeholders from the Spanish Ministry of Finance and Public Administration, RDTI will be of relevance with respect to all the funds available. Moreover, in more developed regions, 20% of the total funds will be allocated to the low carbon economy and 5% to urban regeneration. It is foreseen that a relevant role will be assigned to the new Integrated Territorial Investments (ITIs) instrument and likewise, the idea of elaborating multi-regional OPs has been considered.

As for the ERDF 2014-2020 OP for Catalonia, work has already begun on drafting the OP and it is scheduled to be completed by March 2014. The strategy development is still at a preliminary stage. Within this framework, the RIS3 Strategy will play an important role and a study is currently being carried out with the aim to include key findings into the framework of the ERDF OPs and eventually, the ESF, which is expected to be completed in middle of 2014.

4.1.2. Role of Financial Instruments and interest on the part of the public sector

With respect to the **role played by FIs** in the 2014-2020 programming period, the intention of the European Commission is to promote greater use of FIs using ESI Funds. One way to do this could be using existing reimbursable aid into FIs, which shows the importance of using FIs to support policy objectives. Some novel elements have already been considered for their implementation in the new programming period,¹⁹ with the most significant being the inclusion of private sector companies to the current typology of eligible beneficiaries. Despite a certain degree of complexity associated with the use of FIs perceived by some Autonomous Communities who are accustomed to implementing grant schemes and have limited experience with revolving funds such as FIs, generally, the Spanish **public sector is extremely interested** in using FIs. In Catalonia, following interviews with different local actors,²⁰ there is strong support for using FIs. There is a high degree of knowledge about the existence of these FIs, especially in relation to the project eligibility and requirements, although to date most of the finance used

¹⁹ As reported by the Catalan Government

²⁰ Catalan Association of Municipalities, Barcelona Provincial Council, Terrassa and Figueres Municipalities and others

for urban development or regeneration projects has been channelled through grants. Due to the current situation and the difficulty in accessing credit due to the local debt levels and the shortage of funds, the use of FIs constitutes an attractive option to interested stakeholders due to favourable term conditions (i.e. interest rates and repayments). In addition, public stakeholders noted that assessing projects that have economic return or “indirect return” in terms of promoting the local economy, improving employment levels or promoting innovation are welcomed, as they contribute to the region’s strategic objectives.

Municipalities represent a very important class of project promoters and are currently well aware of the urgent need to implement new actions to regenerate their urban areas, as well as to find new forms and sources of finance.

4.1.3. Potential and advantages

After consulting local and regional stakeholders, a series of advantages has been identified as well as the enormous potential for this type of instrument.

The public sector acknowledges many **advantages and great potential** in using FIs. Firstly, the possibility of obtaining finance in favourable term conditions²¹ make FIs extremely attractive for their potential beneficiaries. Furthermore in general, the use of FIs as revolving funds and not through grants may contribute to improvements in management practices. With respect to the beneficiaries, the need for projects to generate a return on the projects and the obligation to repay the borrowed amount contribute to a more efficient use of the funds and a deeper sense of accountability from the beneficiary.

4.1.4. Main risks

The public sector envisages several **risks** in using FIs:

- The **effective return on the projects**. A risk is observed with respect to the real possibility of finding projects in which a return or a profit is assured in areas of activity such as sustainable urban development and energy efficiency. The risk increases in the case of sustainable transport, in which it is even more difficult to guarantee project profitability since it is a heavily subsidised sector with deficit in which it is very difficult to recuperate costs.
- The **possibility of incurring debt**. On a local scale with respect to the way in which aid or loans from FIs are calculated in the public accounts, there may be risks associated with strict debt limits established in the General State Budget Law 17/2012 (27 December) for 2013 and in Organic Law 2/2012 (27 April) on Budget Stability and the restrictions imposed by Royal Decree-law 8/2010 (20 May) concerning “Extraordinary Measures for Reducing Public Debt”. However, it should be mentioned that involving the private sector through the use of public-private partnership represents a viable mechanism for implementing projects which could be financed through FIs.
- The **contribution of own equity**. At a regional level, the lack of a contribution of own equity to the fund is considered a risk, for which reason participation and the

²¹ In the absence of a regimen of state aid exemption

contribution of funds by other government bodies apart from the Generalitat de Catalunya would be required. In this respect, a necessary factor would be the contribution of ERDF joint finance through private equity.

- Possible lack of **demand** in a difficult and ever-changing context is also a concern raised by public sector stakeholders.

4.1.5. Possible areas for investment

There are several **possible areas for investments**, identified following the interviews and meetings carried out as part of the fieldwork. Several priority areas have been identified which include the following:

- Energy efficiency
- Smart cities
- Sustainable transport
- Urban regeneration
- Tourism

4.2. The “grey zone” and market failure: initial considerations

The fieldwork carried out has revealed the existence of projects with eligibility criteria in terms of the major strategic objectives (TOs)²² for the 2014-2020 programming period (see section 4.4.1) and the financial, social and environmental impacts. These projects have been classified as having “funding difficulties”, and their implementation using only private funds alone would not be feasible. This aspect corresponds to two basic criteria taken from the regulation²³:

Considerations

(23) Financial instruments supported by ESIF funds should be used to address specific market needs in a cost effective way, in accordance with the objectives of the programmes and should not crowd out private financing. The decision to finance support measures through financial instruments should be determined therefore on the basis of an ex ante assessment.

(24) Financial instruments should be designed and applied so as to promote participation by private sector investors and financial institutions on an appropriate risk-sharing basis. To be sufficiently attractive to the private sector, financial instruments need to be designed and implemented in a flexible manner. Managing authorities should therefore decide on the most appropriate forms to implement financial instruments to address the specific needs of the target regions, in accordance with the objectives of the relevant programme.

These projects may have a single component – a building for R&D companies – or multiple components – a zone in which public infrastructure, green areas and buildings dedicated to tourism are located.

²² Common Provisions Regulation, Article 9: Thematic Objectives
<http://new.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN>

²³ <http://new.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN>

The financing difficulties encountered by these projects, which in all cases may generate some levels of return, may be due to different factors:

- A risk factor due to the **innovative** nature of the project; in the case of developing new technologies (for example smart grids for distributing energy), measuring the return on a technical evolution when already in operation (for instance, in restoration work to reduce energy consumption) or the launch of new services in which commercial success is not guaranteed (for instance a new sector of activity, such as remote control centres).
- An **economic** factor if the investment requires a long period before it can be reimbursed, or if the profitability of the operation is present through the use of an infrastructure or a service but the return of the initial investment is difficult to obtain (for instance, building a tramway).
- A **scale** factor in the case of pilot projects which should change to an industrial dimension, with the contractual and cultural changes that this entails (public-private partnerships, investment instruments, rules related to State aid, etc.)

These risk factors in financing projects represent the need for the intervention of FIs and they have helped to identify the market segments in which there is a demand for FIs in the region of Catalonia.

4.3. Existence of finance for urban projects in the region

4.3.1. Context

The analysis of the existence of finance for urban projects in the region of Catalonia should be regarded within the economic, social and business context of the 2007-2013 programming period.

That context has been marked by a financial crisis both in Spain and in Catalonia, which has had a particularly strong impact on the financial and business sectors. This has led to a general decline in activity and consumption and an increase in debt levels in businesses, households and governments.

There are several singular events which allow for a better understanding of the current capacity of the different private and public agents to put up finance for projects in the region, which are all interconnected and has significant impacts on the local economy.

These are the following:

- reduction in the number of banks in Spain and Catalonia
- situation of the building and real estate market
- high level of government debt

→ Reduction in the number of banks in Spain and Catalonia

In the past five years a restructuring of assets and the write-down process has taken place in the banking sector across Spain. As a result of the bank restructuring, there is now only a handful of

major financial institutions. As of 2013, the six large financial institutions held almost 85% of all assets in Spain.

The *subprime* crisis that started in 2007, together with the collapse of the highly indebted housing market and the overall reduction of business activity and consumption had a great impact on the financial sector. The banking sector reform resulted in the reduction of Spanish banks from 54 in 2009 to 17 in 2013 as part of the mandatory consolidation process, which is still on-going. During the banking restructuring process, consolidation was marked by:

- the reduction of savings banks which were either absorbed by other institutions or converted into banks;
- the listing of banks on the stock exchange, in order to obtain funds;
- the nationalisation or intervention of banks by the Bank of Spain;
- the implementation of a fund (FROB – Fund for Orderly Bank Restructuring) for injecting capital into banks with problems;
- the creation of a “bad bank” (SAREB) to consolidate the problematic assets of banks.

The Catalan region is formed mainly by SMEs, which also went through a radical transformation. Although there are major state banks operating in Catalonia, the region has traditionally maintained a network of savings banks which have strong ties with the different territories and is very active in providing finance to local businesses sector.

Within the context of the crisis and the consolidation of the banking sector, only 3 of the 11 regional financial institutions (10 savings banks and 1 bank) remain today. One of these, Catalunya Banc, was transferred in full to the FROB in December 2012 and is now in the process of being sold by the Bank of Spain.

2009	2010	2011	2012	2013
Caixa Sabadell Caixa Manlleu Caixa Terrasa	UNIMM	UNIMM	Integrated in BBVA	
La Caixa Caixa Girona	Caixabank	Caixabank	Caixabank	Caixabank
Caixa Laietana	Integrated in BBVA			
Banco Sabadell	Banco Sabadell	Banco Sabadell	Banco Sabadell	Banco Sabadell
Caixa Catalunya Caixa Tarragona Caixa Manresa	Catalunya Banc	Catalunya Banc	Catalunya Banc	Catalunya Banc (on sale)
Caixa Penedés	Integrated in Banco Mare Nostrum	-	-	-
11	4	4	3	3

Source: Mazars/Ecorys on the basis of information from CECA, AEB, Bank of Spain.

The new banking map in Spain and Catalonia indicates not only a reduction in the number of banks and financial intermediaries with the capacity to finance private and public projects,

businesses and families but has also brought new changes in decision-making, interlocutors, internal loan management policies, etc.

Consequently in Catalonia the following banks are responsible for providing finance: CaixaBank and Banco Sabadell, along with Banco Santander, BBVA, BANKIA (transferred to the FROB) and Banco Popular.

➔ **Situation of the building and real estate market**

There is no doubt that the real estate industry was one of the most severely affected by the crisis in Spain and many projects (residential, commercial and industrial projects) have not yet been completed due to a shortage of finance or inability to lease or sell the property.

The evolution of the "Building intensity index in Catalonia" from 2008 to 2012, which shows the number of houses built for every thousand inhabitants, has gone from 3.7 to 0.7 on a regional scale, or a reduction of 81%.

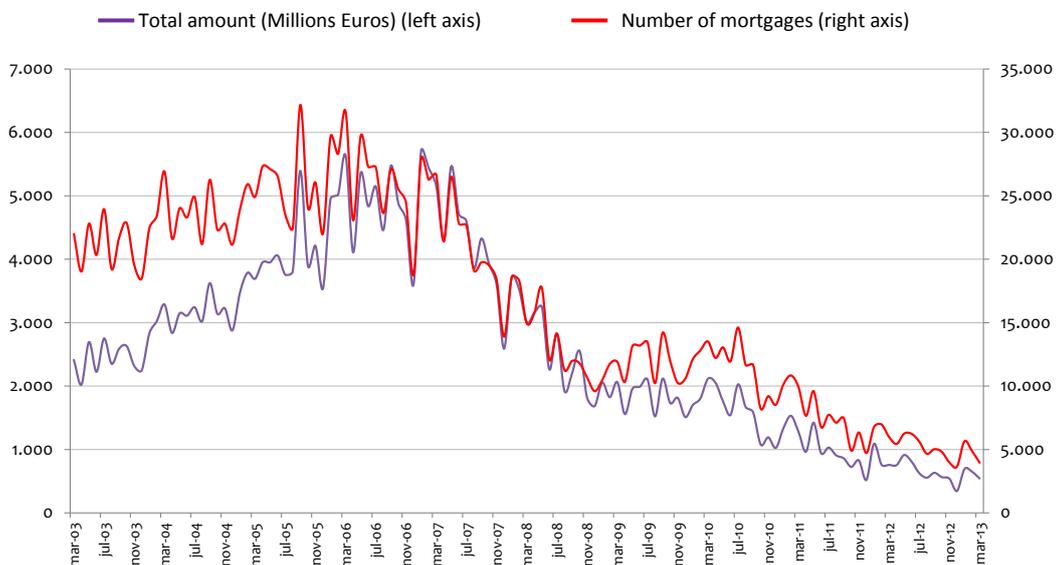
Construction works intensity 2008-2012 in Catalonia – Regions and Provinces

Index	2008	2009	2010	2011	2012
Catalonia	3.7	7.7	1.8	1.0	0.7
Barcelona	2.7	1.2	1.7	1.0	0.6
Girona	8.3	3.9	2.6	1.1	0.9
Lleida	7.8	2.2	1.9	1.3	0.8
Tarragona	4.7	2.5	2.0	1.0	1.2

Source: Catalonia Statistics Institute and Department of Territory and Sustainability of the Secretariat of Housing and Urban Improvement

The real estate mortgage loan figures in Catalonia fell from a record high of €5,706 million in January 2007 to €543 million in March 2013, representing a fall of 90%. During the same period, the number of mortgages decreased from 27,911 to 3,958, or an overall reduction of 70%.

Trend of Real Estate Mortgage credit in Catalonia



Source: National Statistics Institute

As a result of the crisis, the debt levels within the real estate industry, including those of developers and builders reached levels that were unsustainable for businesses, leading to the closing or bankruptcy of many thousands of companies directly or indirectly associated with the real estate industry.

Consequently, between 2007 and 2010, 95,714 Spanish companies related to the building industry were closed, accounting for 35% of all the existing ones. The majority of these were small business with fewer than 50 workers.

Construction industry structure, series 2005-2010 **Evolution of the total number of companies**

Number of employees	2005	2006	2007	2008	2009	2010	Series 2007-2010	
From 1 to 9	182,252	184,527	221,966	177,334	159,466	150,514	-71,452	-32%
From 10 to 19	33,754	31,932	27,616	21,818	16,061	16,710	-10,906	-39%
From 20 to 49	16,201	17,792	17,368	10,591	7,897	7,331	-10,037	-58%
From 50 to 99	3,155	3,818	3,766	2,545	1,936	1,465	-2,301	-61%
From 100 to 249	1,169	1,340	1,444	1,243	816	623	-821	-57%
From 250 to 499	219	230	255	207	143	108	-147	-58%
From 500 to 999	76	100	92	78	61	44	-48	-52%
1000 or more	36	48	37	42	35	35	-2	-5%
TOTAL	236,862	239,787	272,544	213,858	186,415	176,830	-95,714	-35%
% Annual change rate		1%	14%	-22%	-13%	-5%		

Source: Ministry of Public Works

From the credit standpoint, the banks currently have a large number of real estate assets on their balance sheets and the promotion of the sector also depends on the future of these and the role that banks will play with respect to the latter. The real estate assets amount to almost €325,000 million, with 54% of this amount represented by real estate assets that are considered to be distressed.

Consequently, financing projects related to urban development with a real estate component or a high construction component is not among the main priorities of the financial sector due to the recent experience. Furthermore, banks are not willing to take on development risks and extra due diligence is undertaken prior to financing major real estate projects. At present there are limited private companies, developers or builders in the sector who are able to take on investments and have the ability to attract external finance for implementing projects. In general, those who do are large business corporations with healthy balance sheets whose scope of activity is targeted at large projects.

The PWC²⁴ report "Towards a new sustainable and competitive real estate industry" recommends that the transformation of the industry be focused on a different model through

²⁴ "Towards a new sustainable and competitive real estate industry" [http://kc3.pwc.es/local/es/kc3/publicaciones.nsf/V1/9468836074BFD81EC12579F80037DFAD/\\$FILE/PwC-informe-construccion-sostenible.pdf](http://kc3.pwc.es/local/es/kc3/publicaciones.nsf/V1/9468836074BFD81EC12579F80037DFAD/$FILE/PwC-informe-construccion-sostenible.pdf)

integrated actions with other relevant stakeholders, local governments, and financial institutions. The proposals put forward a series of proposals for the Spanish state:

1. Preparation of a strategic territorial development plan.
2. Promoting the **regeneration of tourist areas and urban areas through specific tax-related shock plans.**
3. Identification of opportunities for flexible workplaces, fostering incentive policies for areas with excess supply, such as coastal areas. The increasing technological benefits will gradually allow an increase in the importance of working from home.
4. Stimulating the development of a **more technological, efficient and sustainable business model** which is consequently more competitive and profitable, through:
 - a. the consolidation of new state and regional incentives to encourage building processes that are more technological, efficient and ecological and for sustainable buildings that promote energy savings and RDTI.
 - b. the promotion of sustainable urban planning indicators.
 - c. the monitoring of sustainability indicators by an independent body supervised by the State.
5. **Promoting balanced financing models that are adapted to the interests of the all parties** (banks, real estate developers and end users).
6. **Promoting policies to motivate the financing of projects classified as technological and sustainable.**
7. **Coordination of local governments and the way in which municipalities are financed, thereby increasing regional and state urban planning competencies as opposed to local ones.**
8. Increasing the **simplification, transparency and integrated** urban planning formalities.
9. **Activating training and coaching plans on demand for final users and for investors.**

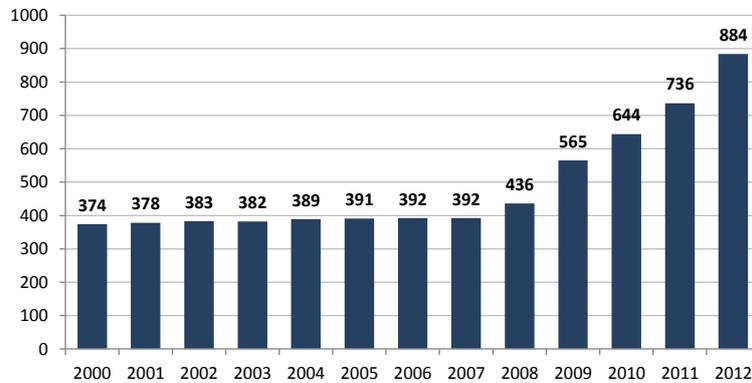
In this regard although in the short term the industry requires adjustments by all stakeholders, including governments, banks and developers, to allow new projects to be developed and finance, there is a general willingness to move in the same direction, which is to guide the transformation of the industry towards a new model in which the use of FIs appears to be aligned with the foreseen trends.

→ Government debt

Another factor that has a direct effect on the capacity to finance projects is the financial situation of central, region and municipal governments.

The total debt of governments in Spain amounted to €884,416 million at the end of 2012, equivalent to 84.1% of the GNP, according to the Bank of Spain. As can be evident in the following chart, the increase in public debt started in 2007, which coincided with the start of the economic and financial crisis. Since then, national debt has more than doubled.

Spanish Public Debt (Thousand Million Euros)

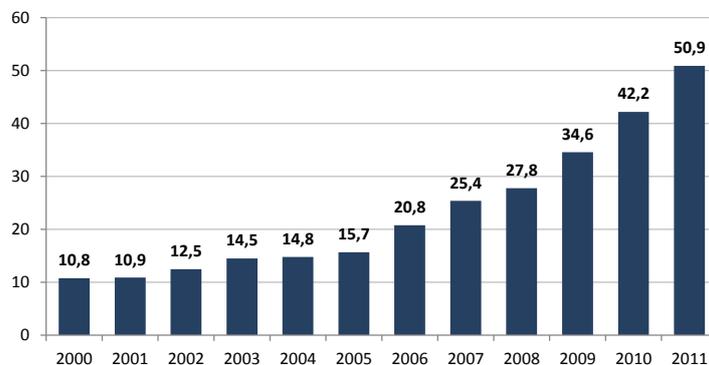


Source: Bank of Spain

On closer examination of debt at different government levels, the Central Government reached debt levels of €760,262 million in 2012, equivalent to 72.3% of the GNP, while regional debt amounted to €185,048 million (17.6% of the GNP), and municipal debt, €41,967 million (4% of the GNP).

Based on the latest data provided by the Bank of Spain in 2012, the debt of the Generalitat de Catalunya exceeded €50,000 million, equivalent to 26% of the GNP, representing an increase of 21% compared to 2011. In percentage terms, Catalonia is the third most indebted region of Spain, with the first being the Community of Valencia (29.3%) and the second, Castilla-La Mancha (27,8%).

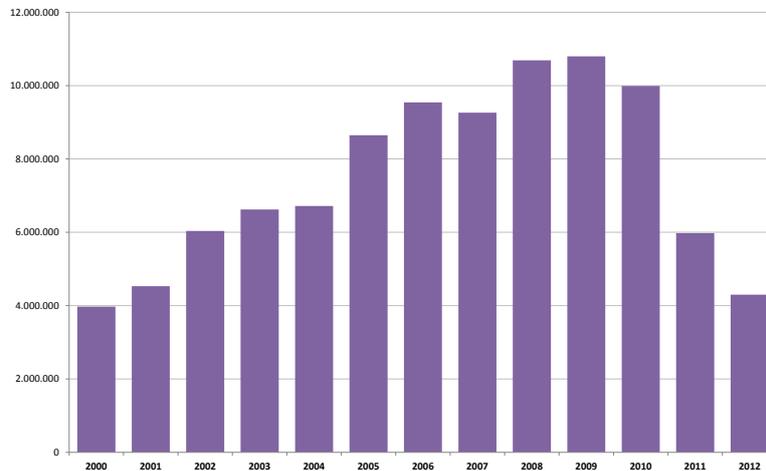
Catalonia Public Debt (Thousand Million Euros)



Source: Bank of Spain

These circumstances have forced all levels of government to take drastic management decisions to reduce the deficit, however debt continues to grow year on year in terms of investment and expenses. As shown in the following chart, from 2009, investment in Catalonia which amounted to €10,796 million was reduced to almost €4,299 million in 2012, representing a fall of 60.2%.

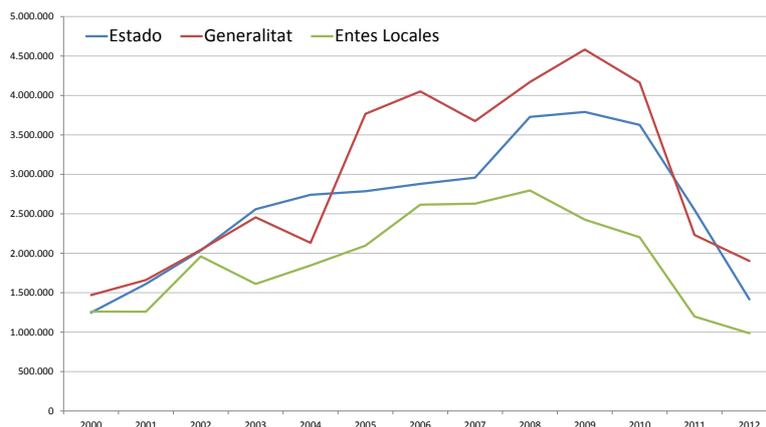
Trend of total real investment budgeted for Catalonia (000€)



Source: Department of Economy of the Generalitat de Catalunya

The reduction in investment was similar for all levels of government (State, Regional and Local Government Bodies), amounting to almost 60% between 2009 and 2012, as can be seen in the following chart:

Evolution of the budgeted Total Real Investment in Catalonia by type of Government (€000)



Source: Generalitat de Catalunya, Department of Economy

As a result Section Two of Article 14 of Chapter VI of Royal Decree-law 8/2010, "Extraordinary measures for reducing public debt" (20 May) implemented by the central government sets forth a series of economic and financial measures for local governments which restricts their access to long-term public and private credit in any form. This is what is popularly known as "debt ceiling".

"Article 14. Applicable to local government bodies.

(...)

*Two. From the time this regulation takes effect and until 31 December 2013²⁵, **local government bodies and all bodies classified as belonging to the Public Administration sector that report to them may not access long term public or private credit in any form for funding their investments, or replacing pre-existing operations in full or in part**, with the exception of those that are beneficial to the body in terms of net present value for reducing its financial burden, repayment term or both. (...)"*

The debt limit referred to in the above section has been modified on several occasions, and the one set forth in provision Thirty-one of Law 17/2012 (27 December) of the General State Budget for 2013 is currently in effect on an indefinite basis:

*"Local Government Bodies and all bodies classified as belonging to the Public Administrations sector that report to them (...) **may arrange new long-term credit operations for financing investments if the total volume of the outstanding balance does not exceed 75 per cent of the current income** paid or accrued based on the figures appearing in the consolidated accounting statements (...).*

(...)

***Government bodies with negative net savings** or an outstanding debt volume greater than the amount set forth in article 53 of the Revised Text of the Local Tax Legislation approved by Royal Legislative Decree 2/2004 (5 March) **may not arrange long-term credit operations** (...)"*

Therefore the situation of high debt, the debt ceiling and the reduction in investments incurred by governments have impacts in their capacity to invest in new projects. Similarly, as will be explained in the next section, banks are not willing to increase their exposure to the public sector.

4.3.2. Financing lines for urban projects currently existing in Catalonia

→ Regional level

On a regional level, the Government of Catalonia extends loans, aid and grants through different departments, institutions or agencies.

Catalan Institute of Finance (ICF)

Through its portal FINEMPRESA, the ICF offers financing lines for specific projects. However as a general rule, the eligibility is based on the feasibility of the business plan analysed by the ICF, and not based on the themes. Consequently, the content of the project may or may be related to urban projects and the activity lines of FIs (urban regeneration, competitiveness, energy

²⁵ The law may be extended every year before 1 January and is currently in force - review 2013 (http://noticias.juridicas.com/base_datos/Admin/rdl8-2010.html)

efficiency, etc.) of ICF's investment policy. The following are some of the ICF lines that exist at present:

- **Investment Line:** financing of fixed, tangible, intangible or financial assets *which promote the competitiveness of Catalan businesses*. The beneficiaries should be companies that are based in and/or operating in Catalonia with a turnover of less than €250 million a year and a business plan that adds value to the Catalan economy.

Financial conditions:

- Amount: up to 80% of the project, with a minimum of €100,000 and a maximum of €10 million
 - Interest rate: Euribor plus spread, which is determined based on the project
 - Repayment and grace period: between 5 and 15 years, including a grace period of up to 2 years
 - Commissions: up to a maximum of 1.80% of the amount of the loan
 - Collateral: determined in accordance with the operation risk.
- **Social Economy and Cooperation Line:** loans for social enterprise guaranteed by the Department of Enterprise and Employment for financing different purposes: investment in fixed tangible and intangible assets, capitalisation of businesses, working capital and advances for grants and payment commitments through public sector contracts.

It is targeted at *social economy* companies and individuals, whether or not they are members of cooperative societies, for capital increases or social contributions. The companies may be:

- Cooperative societies, including agrarian cooperative societies
- Labour societies
- Cooperative society federations
- Agrarian transformation societies
- Insertion companies, special work centres and bodies that promote them.

Financial conditions of loans for investments:

- Amount: up to 80% of the investment with a minimum of €30,000 and a maximum of €1 million
- Term: maximum term of 15 years including a grace period of up to 2 years
- Interest: Euribor plus a spread of between 4.90% and 5.90%
- Commission: opening fee of 0.50%

- Collateral: that considered sufficient in the opinion of the ICF.

Catalan Energy Institute (ICAEN)

The Catalan Energy Institute also has a line of aid for *renewable energy and energy efficiency* projects. The projects are selected either through open call processes or through closed call processes with competing companies.

Department of Territory and Sustainability

The Department of Territory and Sustainability (TES) offers grants and aid for the *regeneration of homes, sustainability and environmental activities*:

- Aid for improving accessibility and eliminating architectural barriers in buildings managed by the Catalan Housing Agency
- Aid for rehabilitating buildings for residential use
- Aid for housing refurbishment
- Grants for the implementation of external lighting environmental organisation activities Grants for implementing activities to fight climate change
- Grants for implementing projects to promote environmental education and awareness raising.

→ National level

Spanish Ministry of Development

On a state level, in April 2013 the Spanish Ministry of Development presented the "Integrated Housing and Land Plan", with the objective of establishing a new housing policy model through the approval of:

- the Urban Rehabilitation, Regeneration and Renovation Law
- the State Plan for Promoting House Rental and Urban Rehabilitation, Regeneration and Renovation (2013-2016)
- the Bill on Measures to ensure the Flexibility and Promotion of the House Rental Market (which has now entered the parliamentary procedure)
- the transposition of two European directives on energy certification
- Aid from the IDAE and credit lines from the ICO.

Official Credit Institute (ICO) and Institute for Energy Diversification and Saving (IDAE)

Among other objectives the Spanish Government is committed to improving the state of conservation, accessibility, quality, sustainability and energy efficiency in the housing stock and contributing to the conversion and promotion of the building industry.

The available lines of aid and finance include:

- **Ico Line For Housing and Building Rehabilitation 2013:** as part of the “ICO enterprises and entrepreneurs 2013” line
 - Objective: to cover the funding needs of individuals and property owners in undertaking housing or building rehabilitation or reform projects.
 - Endowment: €1,000 million. Fixed/variable interest rate (Euribor 6 month interest rate) plus spread:
 - 2% for operations with a term lower than 1 year, or
 - 230% for longer terms.
- **Idea Line-** Aid Programme for Integrated Energy Savings and Efficiency Projects in Apartment Buildings
 - Objective: to promote the implementation of integrated actions for energy efficiency savings and the use of renewable energies (renovation of windows, façades, roofs, boilers, air conditioning equipment, incorporation of equipment for the individual measuring of heating and hot water consumption, replacement of conventional energy by biomass or geothermal energy, etc..)
 - **Endowment:** €100 million (from the electricity tariff and charged to the Energy Savings and Efficiency Action Plan).
 - *Direct public aid:* activities taken on the outer shell and heat installations in buildings are eligible for aid amounting to 20% of the cost of the activity
 - *Reparable loans:* for activities that include biomass or geothermal energy in order to finance between 60 and 100% of the activity.
- **CLIMA Project** – for the purpose of promoting a low carbon economy (call organised on 15 March 2013)
 - €10 million for purchasing CO2 reduction credits in the residential sector for projects that affect renewable energies, measures for reducing the consumption of fossil fuels, etc.

4.3.3. Consultations with Financial Institutions

Focus groups were held with several major financial institutions operating in Catalonia and with the firm Ahorro Corporación (AC), who is currently responsible for managing the AC JESSICA Fund in Andalusia. The purpose of the consultation was to obtain preliminary opinions on the situation of urban development projects in Catalonia, the use of FIs through the JESSICA initiative and the reasons why commercial banks are not financing urban projects.

At the meeting, a summary was presented of the type of projects resulting from the consultation, and an in-depth discussion was held with information about some of the main projects studied.

→ Summary of the meetings held:

- The financial institutions consulted are active in financing large infrastructure projects (usually Public Private Partnerships (PPP)) and in providing direct finance to regional and local governments.
- During recent years major projects with a large public component implemented in Catalonia include the following, among others: Metro line 9, extension of the Catalonia Railways railway line to Terrassa, extension of Barcelona Port, High Speed Rail Network (AVE) and the High Occupancy Vehicle lane (VAO).
- One characteristic that is common to all the financial institutions is the fact that they do not finance specific projects (with the exception of large infrastructure projects) but the investments of local public authorities in general. Therefore they do not analyse the project risk, but that of the municipality or government body.
- Consequently, financial institutions have no detailed knowledge about the destination of the loans provided as part of the total investment made by governments and have a very limited view of the urban regeneration/development market in the case of purely public projects.
- With respect to the obstacles currently existing for funding investment projects with a public component, these include:
 - the perception of risk as regards the governments and their repayment capacity.
 - the absence of debt capacity or a minimum initial capital to set up the projects.
 - the lack of experience/knowledge on the part of municipalities or local governments about the projects they undertake.
 - the excessively long return periods (10-15 years) considered for the projects.
- In relation to private projects, the fact that developers have little capital and the shortage of cash makes it difficult to invest in viable propositions.
- The type of financial products used by financial institutions in funding public projects and governments varies and includes: syndicated loans, standard loans, renting, etc.
- One common observation made by the different financial institutions consulted was the existence in their portfolio of many projects and proposals from local governments which could well fit in with the funding and type of projects that would be suitable for FIs.

→ Conclusions following the preliminary consultation with Financial Institutions

- **Need to endow the UDF with FIs that constitute a credit enhancement for the project** to make projects viable and interesting for commercial banks to invest alongside the UDF.

- In this regard it would be necessary to design a range of FIs that is sufficiently varied and flexible with respect to conditions and terms, that would preferably include:
 - *Investment in "Equity" capital or "Mezzanine" Debt:* in order to give the project greater financial robustness and attract private investment and finance, FIs would be especially recommended for projects with a higher risk or volatility than expected from revenues and those with a longer estimated term for achieving the objectives in terms of profits or cash flows.

Given the current situation of the credit market, financial institutions do not plan to support projects with debt ratios above 50% of the investment and the inclusion of a larger percentage of equity will therefore be necessary in the projects.

 - *Long term debt:* either in the form of subordinated or junior debt, allows the debt of private financial institutions to take a preferential position with respect to the senior loan provided by the UDF.
 - *Senior debt:* in similar conditions to commercial debt for projects with a greater certainty of cash flows, less risk of demand and shorter maturity terms.
 - *Renting of equipment and installations:* for projects that require them (for instance some cases of energy efficiency), since they would not be calculated as debt by local governments.
 - *Guarantees:* related to mitigating the risk of default by governments, either in the form of bank bonds or through the option of refinancing the debt extended by the UDF in the event of failure to repay the financial institutions.
- **Need for FIs with the option of long term maturities** to allow the private sector to participate in the financing in terms that are currently established at between 5 and 7 years compared to the 10-15 years previously applied.
- The high perception of risk perceived by private investors and financiers with respect to local governments would allow the separation of the risk from the debt to be seen as a positive element only in relation to the project studied, through the **creation of SPVs ("Special Purpose Vehicles") for implementing the project.**

4.4. Market segments

4.4.1. Market segments identified as being in the "grey zone"

The following section describes the sectors and market segments identified based on the projects received as part of this study. It is important to highlight that this analysis is based on the project proposals obtained in the fieldwork stage, and this evidence thus forms a basis for developing a theoretical exercise within the framework of the study without guaranteeing the effective eligibility of the projects in the event of funding with FIs.

In the event of implementing FIs in Catalonia, the selection of the operations to be financed will depend on the proposals received during the call for project proposals, whether or not they have been analysed in this study.

The consultation process resulted in 51 projects promoted by 22 regional and local governments.

Regional level	Local level	Other
Department of Culture	<ul style="list-style-type: none"> · Metropolitan Area of Barcelona · Tarragona Municipality · Sant Cugat del Vallès Municipality · Figueres Municipality · Lleida Municipality · Terrassa Municipality · Olot Municipality · Barcelona Provincial Council 	<ul style="list-style-type: none"> · Santa Creu i Sant Pau Hospital Private Foundation(FPSHCSP) · FIRA 2000- Trade Fair
Department of Education		
INCASOL-Catalan Land Institute		
Infrastructures of the Generalitat de Catalunya		
Directorate General for Transport and Mobility		
Meteorological Service		
Housing Agency		
Directorate General for Telecommunications and Information society		
Directorate General for Tourism Programming		
Catalonia Railways		
ICAEN-Catalan Energy Institute		
Forest Technology Centre for Catalonia		

The analysis of the projects began with screening the eligibility criteria within the Common Strategic Framework (CSF) and their respective funding difficulties. This analytical work is aimed at identifying the market segments which could be particularly relevant for the application of FIs. Specifically the sectors identified and the segments they cover are:

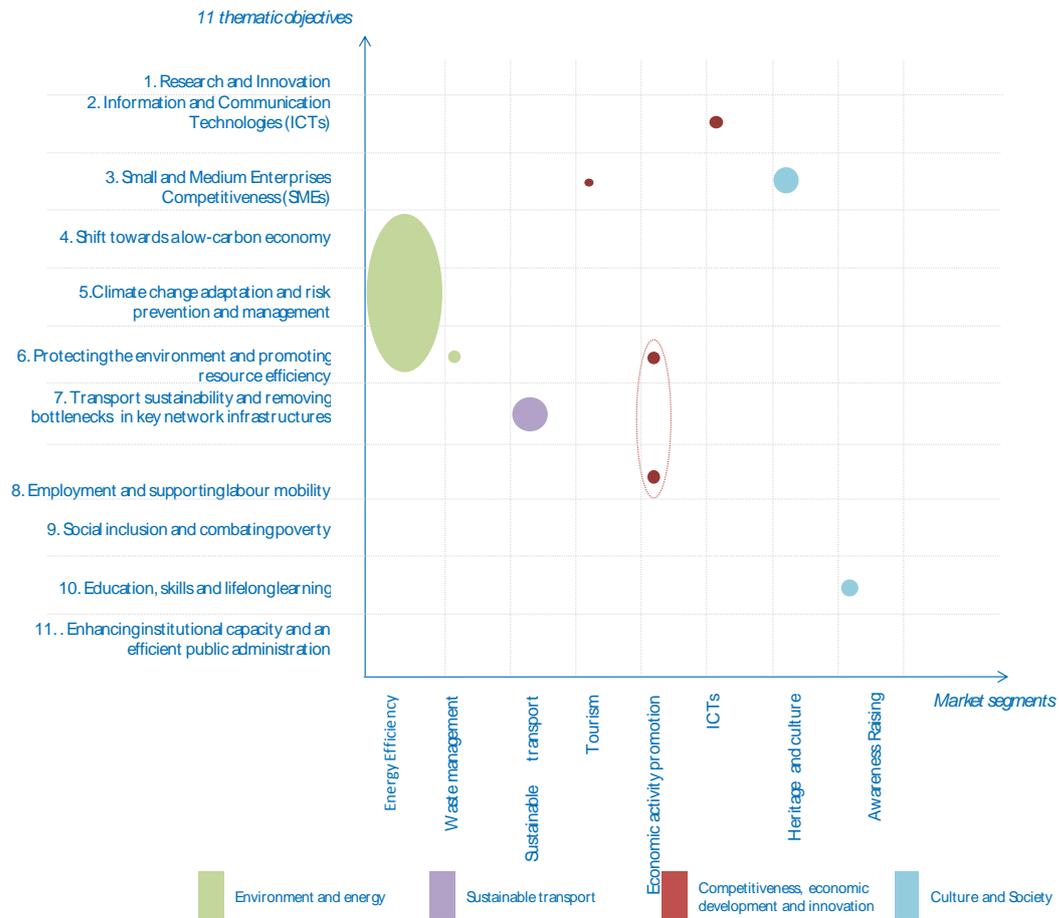
- **Environment and Energy**
 - Energy efficiency
 - Waste management

- **Competitiveness, Economic Development and Innovation**
 - Tourism
 - Economic activity promotion
 - ICTs

- **Culture and society**
 - Heritage and culture
 - Awareness raising

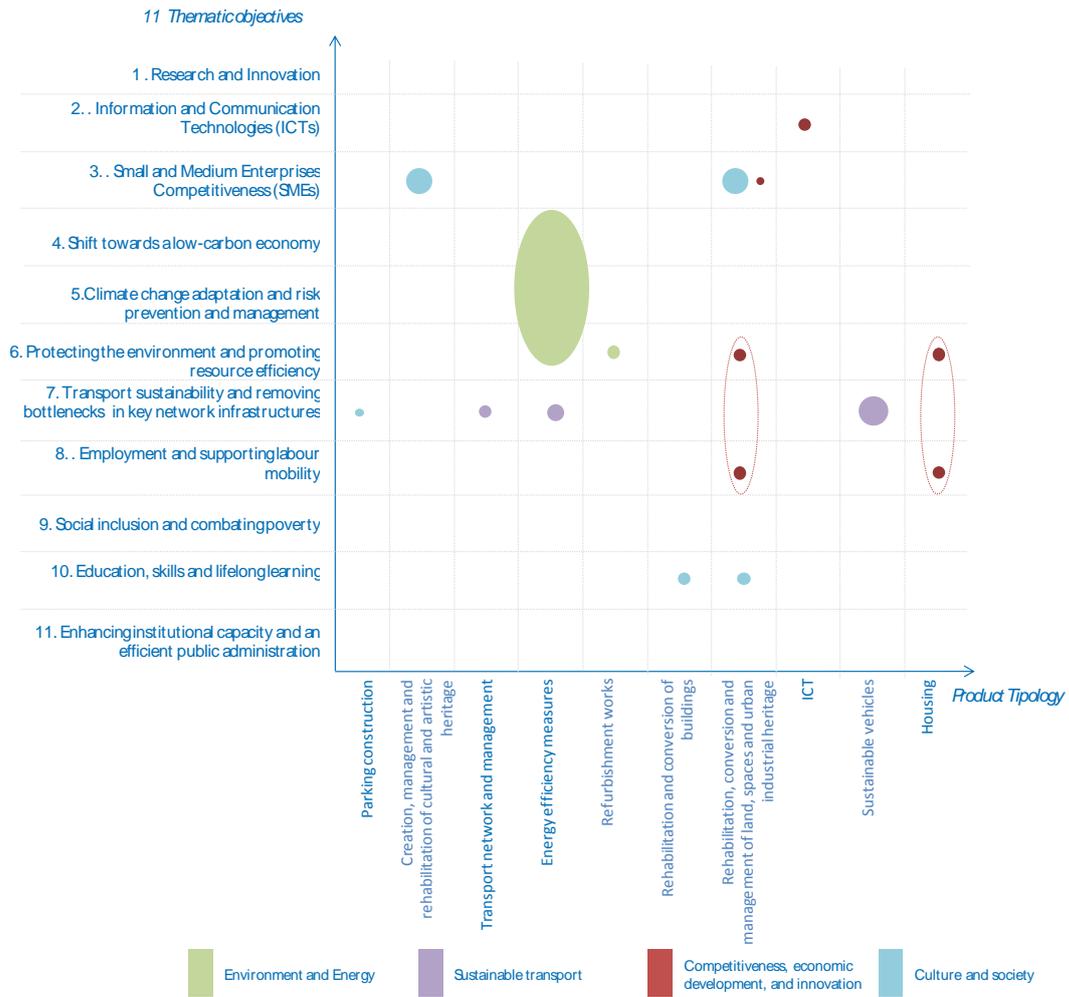
- **Transport**
 - Sustainable transport

The cohesion between the projects and their market segments and the 11 TOs for the 2014-2020 programming period is set out in the following chart:



Source: Mazars and Ecorys

The relationship between the predominant types of product in each segment and the TO which they correspond is shown in the following chart:



Source: Mazars-Ecorys

The relationship between the sectors and the market segments to which the main types of outputs/products identified belong to are set out in the following table.

Number of projects by sector and segment and main product types

SECTOR and SEGMENT/PRODUCT	Parking constructions	Creation, management and rehabilitation of cultural and artistic heritage	Transport network and management	Energy efficiency measures	Refurbishment works	Rehabilitation and conversion of buildings	Rehabilitation, conversion and management of land, spaces and urban industrial heritage	ICTs	Sustainable Vehicles	Housing	TOTAL
Environment and energy				20	3						23
Energy efficiency				20							20
Waste management					3						3
Competitiveness, economic development and innovation						2	4	3		1	10
Economic activities promotion						2	3			1	6
ICTs								3			3
Tourism							1				1
Culture and Society	1	6				2	1				10
Heritage and culture	1	4					1				6
Awareness raising		2				2					4
Transport			2	1					5		8
Sustainable transport			2	1					5		8
Total	1	6	2	21	3	4	5	3	5	1	51

Source: Mazars-Ecorys

→ Environment and Energy

Energy efficiency

▪ Challenges and trends

At a national level, it is estimated that the activities implemented in the low carbon economy sector, one of the key priorities of the Europe 2020 Strategy are still quite limited.

Improvement in energy efficiency is one of the priorities of the Generalitat de Catalunya, due to its effect on the environment and the economic potential which can yield the economic return required for the use of FIs. Likewise, the exemplary role of the Government in applying the new energy model, specifically the Energy Savings and Efficiency Plan applied to the Generalitat de Catalunya Buildings and Services, and the role assigned to public-private partnership, represent an area in which FIs could be used. Different possibilities of action are considered for improving energy efficiency in buildings and in the public and private housing stock. The Housing Agency estimates that there are currently approximately 20,000 municipal public buildings and approximately 120,000 private buildings. The first have advantages due to their centralised management which would allow a higher net return to be obtained in terms of savings in electricity consumption.

In addition, actions are envisaged with respect to public lighting which accounts for the highest portion of expense of municipalities in terms of improving their performance and energy savings. Likewise, the use of alternative fuels is being considered, such as biomethane, biodiesel, wind energy and biomass.

▪ Projects identified in Catalonia

Environment and Energy				
Energy Efficiency				
Maturity level	Project	Amount (€)	Location	Main products and actions
Low	Energy self-sufficiency in the municipality	---	Sant Cugat del Vallés	Energy Efficiency Measures
	Construction of a biomethane miniplant and adaptation of municipal and public transport vehicles, and municipal facilities' heating boilers for biomethane consumption	2,500,000	Figueres	
	Energy saving and efficiency plan in Secondary education Buildings of the Department of Education	6,000,000	Vallés Occidental	
Medium	Actions in public municipal tertiary buildings including renewable technologies: forest biomass	11,300,000	Catalonia	Energy Efficiency Measures
	Energy saving and efficiency in public facilities through small investment actions	2,101,490	Catalonia	
	Energy saving and efficiency in public facilities through active management	4,559,980	Catalonia	
	Energy saving and efficiency in public facilities through the replacement of conventional boilers by biomass boilers	5,224,800	Catalonia	

Environment and Energy				
Energy Efficiency				
Maturity level	Project	Amount (€)	Location	Main products and actions
	Photovoltaic self-consumption in public facilities	15,256,000	Catalonia	
	Construction of municipal districts heating with local biomass exploitation	1,300,000	La Garrotxa	
	Promotion of energy efficiency in Figueres Housing stock	2,500,000	Figueres	
	Implementation of steam production systems through biomass exploitation	---	Sant Cugat del Vallés	
	Implementation of a district heating and cooling system in the Municipality	---	Sant Cugat del Vallés	
	Implementation of an energy smart grid in the Sant Joan industrial site	---	Sant Cugat del Vallés	
	Enhancement of energy efficiency and municipal building maintenance in Lleida town	5,000,000	Lleida	
	Private housing stock	5,400,000,000	Catalonia	
	Energy saving and efficiency Plan in the Generalitat de Catalunya's buildings	96,860,987	Catalonia	
High	Public management of social housing	44,866,994	Canyelles, Can Jofresa, Sant Roc and Santa Eulàlia	Energy Efficiency Measures
	Implementation of an energy efficiency improvement system in municipal buildings	---	Sant Cugat del Vallés	
	Housing regeneration in the Canyelles neighbourhood in Barcelona City	---	Barcelona	

▪ **Investment and management models identified: Key Players**

In general, the management of these projects requires cooperation between the Government and private enterprises which are the main key stakeholder. The most frequent case is the tender system of electricity supply contracts or energy provision management contracts for energy service companies (ESCOs). In some cases the creation of public-private partnership is also envisaged to implement such projects.

In other cases, particularly in projects which envisage energy improvement activities in buildings, the concession is granted by the Government to another type of private company, for instance a regeneration building company, suppliers of materials for renovating buildings, boiler companies and companies that supply forest biomass or technological companies, with the last two being those entrusted with implementation of the projects.

The expected return on this type of project is quite clear and is guaranteed through energy savings in government bills. Nonetheless, this type of project requires a technical audit to analyse the anticipated savings and the promoter is required to guarantee the savings.

Certain risks have been identified, such as the supply of fuels for generating energy from biomass and the price of the fuels (biomass, gas, etc.).

The FIs that could be considered are debt, own equity and mechanisms for guaranteeing energy savings, the guarantee of revenues in the event of a lack of fuel supply and cost guarantees in the event of a sudden increase in the price of gas, if necessary.

- **Link with Thematic Objectives**

The projects included in the energy efficiency industry make a clear contribution to achieving three of the eleven TOs:

- Thematic Objective 4: supporting the shift towards a low-carbon economy in all sectors;
- Thematic Objective 5: promoting climate change adaptation, risk prevention and management;
- Thematic Objective 6: preserving and protecting the environment and promoting resource efficiency;

In a more generalised but non-prioritised manner, contributing to promoting the use of ICTs is also a relevant objective for most of the projects in this segment and they are targeted at achieving this.

Waste management

- **Challenges and trends**

Waste management and waste-energy projects is a priority in the I Catalan 2012-2020 Energy and Climate Change Plan which sets the strategies of the Catalan energy policy until 2020.

The mission of the Plan is to achieve a low energy intensity/low carbon emission economy and society that is innovative, competitive and sustainable in the medium and long term through a global strategy based on energy savings and efficiency, renewable energies, mitigating climate change, energy infrastructure planning and promoting RDTI. The Plan also considers the consolidation of the energy sector as an opportunity for improving competitiveness, economic growth and the creation of skilled jobs; and the importance of engaging civil society in building the new energy model of the region through training, information, participation and inclusion of impoverished social sectors.

- **Projects identified in Catalonia**

Waste management				
Maturity level	Project	Amount (€)	Location	Main products and actions
High	Alternative route of the collector in the Port of Barcelona Coast Area	3,540,000	Barcelona	Refurbishment works
	Construction of collectors in the residential areas of Can Paulet and Can Rafael, in the Cervelló municipality	1,140,000	Cervelló	
	Odour treatment in the pumping stations of Zona Franca and Ginebra	2,038,000	Barcelona	
Environment and Energy				
Waste management				

Maturity level	Project	Amount (€)	Location	Main products and actions
High	Alternative route of the collector in the Port of Barcelona Coast Area	3,540,000	Barcelona	Refurbishment works
	Construction of collectors in the residential areas of Can Paulet and Can Rafael, in the Cervelló municipality	1,140,000	Cervelló	
	Odour treatment in the pumping stations of Zona Franca and Ginebra	2,038,000	Barcelona	

- **Investment and management models identified: Key Players**

The key stakeholders for these projects include the government with cooperation between different departments, particularly the Catalan Water Agency, the Metropolitan Area of Barcelona and in the collector pipe construction project, Barcelona Port Area. The management model is similar in all three projects where the Catalan Water Agency is responsible for the financial part, i.e., for approving the solution adopted and the necessary investment, and the Metropolitan Area of Barcelona, alone or in conjunction with Barcelona Port Area, is responsible for executing the works.

In this type of project, the revenues are guaranteed by the government. For this reason, the FIs recommended are debt and own equity. The risk is the increase in the price of fuels; if the government considers that this risk is too high, it could eventually be covered through guarantees.

- **Link with Thematic Objectives**

All three projects contribute to achieving TO6 preserving and protecting the environment and promoting resource efficiency. The grade of the intensity for each of the projects under that objective varies; it is intense in the case of projects related to the collector pipes and it is weak in the case of the project entitled "Treatment of odours in the pumping stations of Zona Franca and Ginebra". For that reason, since it is difficult to include projects under the TO, it has been decided that, due to thematic reasons, it could not be included within the scope of projects that could be financed through FIs.

→ **Competitiveness, Economic Development and Innovation**

Economic activity promotion

- **Challenges and trends**

Catalonia has a very important business network formed mainly by SMEs. Likewise both the recommendations made by the CAREC, the priorities established in ECAT 2020 and the proposed RIS3 are strongly committed to promoting policies and strategies based on innovation, knowledge and support to SMEs. In addition, in implementing these strategies and plans, special importance is attached to public-private activities, searching for alternative finance mechanism and promoting new instruments.

On the other hand, with respect to economic development in the different areas of Catalonia and above all, in relation to the Neighbourhoods Law, municipalities have expressed their concern about the impossibility of being able to continue the planned works due to municipal economic difficulties and difficulties in obtaining finance. As a result, some Catalan municipalities with deprived areas have prepared integrated plans for improving and regenerating their neighbourhoods and historical centres, but have insufficient funds to invest in projects.

Although it is more difficult to find projects with potential return, local actions have been considered for converting abandoned warehouses into premises for economic activity for entrepreneurs at a lower rent, or converting peri-urban spaces for economic purposes, where it might be possible to obtain a return.

- **Projects identified in Catalonia**

Economic activity promotion				
Maturity level	Project	Amount (€)	Location	Main products and actions
Medium	Green Ring in Terrasa	3,000,000	Terrasa	Regeneration, conversion and management of land, spaces and urban industrial heritage
	Strategic residential area in the former factory of La Estrella. Intervention in Industrial Site 1	6,740,000	Badalona	
	Agricultural park in the Horta de Lleida	1,500,000	Lleida	
	Integral Plan for Urban improvement and new activities, Terrasa XXI	22,000,000	Terrasa	Regeneration and conversion of buildings Housing buildings
	Restoration of the former industrial complex "Vapor Cortès"	28,700,000	Terrasa	
High	Ca n'Alemany Industrial Site	42,600,000	Viladecans	Regeneration, conversion and management of land, spaces and urban industrial heritage

- **Investment and management models identified: Key Players**

In all the projects analysed within this segment, cooperation models have been established between different public and private stakeholders, ranging from the creation of new partnerships or public-private partnership for joint ventures without creating a new *ad hoc* body. The new model also includes using different systems, such as land reorganisation through cooperation and land reorganisation through compensation.

It should be pointed out that with respect to the private stakeholders investing in this type of project for economic development, the objective is to involve as many different private stakeholders as possible; for example, by fostering the participation of new entrepreneurs, land owners and/or financial institutions.

Product typology	Expected return
Integral intervention in a urban area	House and land sale
Regeneration of the industrial architectural heritage	Rents and sales
Reuse of suburban spaces	Land rent

The revenues obtained from projects are linked to an increase in economic activity and eventually to an increase in the taxes paid to local governments. The FIs recommended in such cases are debt and own equity. The high risk related to the new companies established could lead to the need for guarantees in the event of those companies being in default or becoming insolvent.

- **Link with Thematic Objectives**

There is a strong correlation between the projects analysed and several of the 11 TOs. The most relevant links are with the following objectives:

- Thematic Objective 6: Preserving and protecting the environment and promoting resource efficiency
- Thematic Objective 8: Promoting sustainable and quality employment and supporting labour mobility

More generally, the projects in this segment will also contribute to the competitiveness of SMEs, research and innovation and ICTs.

Information, Communication, Technologies (ICTs)

- **Challenges and trends**

The use of ICTs represents a fundamental driver for improving the competitiveness of the economy and promoting the development of smart cities through setting up integrated projects for optimising urban management. For instance, new integrated government platforms (e-government, open government, traffic monitoring and control systems, integration of bus networks with rail networks, optical fibre and wireless networks in cities etc.). In this respect, it is important to highlight the work being done by the Generalitat in preparing the RIS3 Strategy, which involves the implementation of a specific agenda to promote the development of an economy based on knowledge and technological innovation that will attract investment from the private sector.

- **Projects identified in Catalonia**

Competitiveness, economic development and Innovation
ICTs

Maturity level	Project	Amount (€)	Location	Main products and actions
Low	Smart region	60,000,000	Catalonia	ICTS
Medium	API for the access to meteorological data of the Catalonia Meteorological Service	300,000	Catalonia	ICTS
	Design, renovation and setting up of the meteorological radar of Vallirana (Barcelona)	640,000	Barcelona Metropolitan Area	

- **Investment and management models identified: Key Players**

Most of the projects analysed in the transport, environment and energy efficiency and economic development sectors have an important component that involves the development and promotion of ICTs and innovation for improving energy efficiency, promoting intelligent transport systems or implementing improvements in the competitiveness of SMEs.

However, based on the analysis, it is clear that only three projects have the development of ICTs *per se* as their main objective. The project promoters for such projects are departments of the Generalitat de Catalunya, working in conjunction with local government bodies and highly specialised companies to add value to the project. This may be launched through a public tender process. In the case of the *smart cities* and *smart region*, projects generally have active participation from local citizens.

For projects of this type, it is advisable to use FIs such as debt and own equity, with the need to consider the accounting of positive externalities generated as part of project returns.

- **Link with Thematic Objectives**

The projects will contribute to TO2 Enhancing access to, and use and quality of, information and communication technologies. Nonetheless, given the integrated nature of two of the three projects analysed,²⁶ it is important to also mention their contribution to the TOs related to environmental protection, improvement of competitiveness and increase in institutional capacity and the effectiveness of government.

The Catalan Meteorological Service Project for the design, innovation and implementation of the meteorological radar system in Vallirana (Barcelona), might not fit the criteria for the use of FIs since this activity is too specific and has little impact on the social, economic, and environmental elements of the region.

Tourism

- **Challenges and trends**

Tourism is a transversal sector of key importance for the Catalan economy and also a driver of economic activity. This industry currently has positive growth rates. In this regard, special relevance is given to activities aimed at improving the quality of the tourism sector. To this end,

²⁶ API for accessing the meteorological data of the Catalan Meteorological Service and Smart Region

on 4 June 2013 the Generalitat approved the Strategic Tourist Sector Plan to further support the growth of the tourism industry focusing on converting warehouses into cultural venues, restaurants or hotels. This Plan is targeted at the 2013-2016 period, with the possibility of extending it to 2020. Its scope includes the definition of specific actions, timescales, and a budget. The Plan has several advantages such as the possibility of evaluating loans on hotel property and the usual cooperation between the public and the private sectors in the tourist industry.

Likewise, the level of poor stock of hotels in Catalonia (20%²⁷) would also require upgrades, representing an opportunity to attract new investors and increase their competitiveness.

- **Projects identified in Catalonia**

Competitiveness, economic development and Innovation				
Tourism				
Maturity level	Project	Amount (€)	Location	Main products and actions
Medium	Enhancement of the Catalan coast as a tourist destination	190,000,000	Catalan Mediterranean coast	Regeneration, conversion and management of land, spaces and urban industrial heritage

- **Investment and management models identified: Key Players**

The project forms part of the recently approved Strategic Tourism Plan. A "cascade" of actions is planned, including a General Plan and a specific intervention (improvement of coastal tourist destinations) and a Pilot Plan for the Costa Brava.

During the first phase of the Plan, an intervention is planned that will be funded mainly through loans at favourable interest rate aimed at converting the hotel stock. During this phase the coordination will be executed for the most part with private entities. In this respect, it is important to note the longstanding tradition of public-private partnership existing in the sector through the Sectoral Boards and the Catalan Tourism Agency, a mixed public-private body. During the second phase, activities will be focused on coordinating the different government levels with the private sector with a view to take integrated action on all the elements comprising the tourist offering as a whole: energy efficiency, sustainable tourism, public transport, telecommunications, conversion into "smart destinations" through wireless networks in cities, intelligent car parks, etc.

The possibility of completing the financing sources with the Tourism Development Fund, which receives funds through the tourist tax implemented in November 2012, is currently being evaluated.

²⁷ According to information provided by the Sub-directorate for Tourism

The revenues for projects of this type are linked to the increase of tourist activity in the area of implementation and the increase in the value of buildings. This will enable an increase to be made in taxes paid to the government. The type of FIs recommended are debt and own equity.

The risk lies in the lack of improvement in tourist activity or the increase in value of buildings. For this reason a guarantee mechanism could facilitate the development of projects of this kind.

- **Link with Thematic Objectives**

The project would result in improving Catalonia as a tourist destination while at the same time increasing the economic growth of the region. For this reason, it will contribute mainly to TO3 Enhancing the competitiveness of SMEs . From a more generic perspective this project will also contribute to creating jobs, reducing CO2 emissions and protecting the environment.

→ **Culture and society**

Heritage and culture

- **Challenges and trends**

Catalonia has a varied and extensive historical and cultural heritage distributed throughout the region. This is a key differentiating aspect for territorial development from the cultural and tourist interest perspective. In this respect, one of the ten priority objectives of the Strategic Tourism Plan for 2016 is focused on improving the use of natural and cultural heritage for tourism, in a sustainable manner. For this purpose, it will be necessary to not only refurbish and protect historical buildings and archaeological sites but also implement strategies to guarantee economic sustainability of the monuments and design integrated strategies to foster economic development and environmental protection in the regions where they are located.

- **Projects identified in Catalonia**

Heritage and Culture				
Maturity level	Project	Amount (€)	Location	Main products and actions
Low	Actions in the Cultural and Touristic Heritage of Empúries (l'Escala)	---	L'Escala	Parking construction
	Urban regeneration and enhancement of the business, cultural and tourism activities	120,000,000	Barcelona	Regeneration, conversion and management of land, spaces and urban industrial heritage
	Regeneration of the Historical and Cultural heritage to promote the conservation, tourism and culture	65,000,000	Barcelona	Creation, management and regeneration of cultural and artistic heritage
Medium	Montjuïc Clúster/Museum Centre and Architectural project for the future venue of the National History Museum of	70,000,000	Barcelona	Creation, management and regeneration of

Catalonia			cultural and artistic heritage
Economic and tourist revitalisation of the city of Tarragona from its cultural and historical heritage	30,000,000	Tarragona	
Restoration and adaptation of the outdoor areas of La Cartoixa d'Escaladei	1,400,000	Escaladei-La Morera de Montsant	

▪ **Investment and management models identified: Key Players**

Project management for promoting heritage and culture is carried out jointly at different levels of government (central, regional and local, depending on the case) and the private sector which will participate in projects through operating agreements and service tenders. In some cases the creation of Heritage Management Consortiums is envisaged, formed by the government and the key developers operating in the sector.

It is important to highlight the integrated nature of the projects analysed which propose the establishment of additional measures to reduce dependence on public aid and guarantee the economic feasibility of each monument.

For projects of this type, the recommended FIs are debt and own equity. Furthermore, if required by the projects, a guarantee mechanism on the value of the buildings could be set up, if they form part of the financial structure. The following table shows the possible types of return expected, based on the product typology to be developed:

Product typology	Expected return
Parking construction	Sale, rent, exploitation royalties, users' fees, marketing, etc.
Creation of areas for service delivery	Rental of spaces for commercial and advertising activities, marketing, exploitation royalties, etc.
Creation of hotels	Guests' fees
Creation of monument visibility and ludic spaces	Rental of spaces for commercial and advertising activities, marketing, exploitation royalties, users' fees, etc.

▪ **Link with Thematic Objectives**

The links with the different TOs vary, depending on the different project typologies:

- The project for taking action with respect to heritage and tourism in Empúries (l'Escala), which envisages the construction of a car park to relieve traffic congestion when entering the town would be linked to TO 7: Promoting sustainable transport and removing bottlenecks in key network infrastructures.
- In view of their integrated focus, the projects for adapting the archaeological site of Tarraco and Cartuja de Escaladei will contribute to economic and tourist promotion in

the region and specifically to TO 3: Enhancing the competitiveness of SMEs". In general, it will also contribute to protecting the environment and creating employment.

- No clear contribution of the project to the development of a museum cluster in Montjuic and regeneration of the historical and cultural heritage of the Trade Fair to the TOs is observed, although broadly speaking, they might have an effect on competitiveness of SMEs and the creation of jobs.

Awareness raising

- **Challenges and trends**

Some of the artistic, cultural and industrial heritage buildings in Catalonia are currently abandoned. This poses an important challenge for recovering their value in terms of art and heritage, based on the strictest sustainability criteria, in order to allow the development of social and cultural projects to respond to the needs and concerns of current society, for instance, the environment, sustainable development or health.

This type of project seeks to promote the collective use of space, networks and communications between people and groups, exchange of information and the implementation of collaborative projects whose focus is directed at education and raising awareness. Multidisciplinary activities are planned in one space related to research, debate, exhibitions, the creation of enterprises and the dissemination and promotion of information.

- **Projects identified in Catalonia**

Culture and society				
Awareness raising				
Maturity level	Project	Amount (€)	Location	Main products and actions
Low	Railway Interpretation Centre	400,000	Rubí	Creation, management and regeneration of cultural and artistic heritage
	Mediterranean Knowledge centre for the Green Economy	5,350,000	Barcelona	Regeneration and conversion of buildings
Medium	Innovation and Knowledge Centre for the promotion of healthy habits and sustainability	2,950,000	Barcelona	Regeneration and conversion of buildings
High	Museum of Science, Climate and Environment	3,000,000	Lleida	Creation, management and regeneration of cultural and artistic heritage

- **Investment and management models identified: Key Players**

Given the participative nature of these projects, actions are planned at different levels of government and civil society, through initiatives such as the active collaboration of the educational community in developing educational and museum-related contents. Furthermore, in the case of the Science, Climate and Environment Museum to be established in Lleida, the participation of the Social Work Area of La Caixa in developing the museum contents should be mentioned.

The level of involvement of the private sector in designing and implementing the projects is low. In most cases, its participation is limited to operating complementary services or renting spaces. For projects of this type, FIs such as debt and own equity are recommended.

- **Link with Thematic Objectives**

In general, projects from this market segment will contribute to TO 10 investing in education, training and vocational training for skills and lifelong learning by developing education and training infrastructure; In addition, depending on the theme and especial type of project, they will contribute to the following TOs:

- The Science, Climate and Environment Museum in Lleida will promote environmental protection, contributing to the TOs related to changing to a low CO2 emission economy; adapting to climate change and risk management and prevention; and environmental protection and efficiency of resources;
- The Railway Interpretation Centre will encourage the use of sustainable transport;
- The two projects for refurbishing and converting the two wings of the old Sant Pau Hospital for developing a Mediterranean green economy knowledge centre and the project Innovation and knowledge centre for encouraging healthy eating habits and sustainability will contribute to protecting the environment. Likewise, the foreseen establishment of an entrepreneurs centre will contribute to improving the competitiveness of SMEs and the generation of employment.

→ **Transport**

Sustainable transport

- **Challenges and trends**

The legislation and plans for developing infrastructure and mobility in Catalonia have been drafted on an integrated basis with the territorial and urban planning programmes. They put an emphasis on the need to promote public transport, intelligent transport system and intermodal transport. Likewise, given the geographical location of Catalonia, maritime transport, transportation of goods and intermodal transport have become important pillars of its economy.

On one hand, the public transport sector is generally in deficit and is heavily subsidised, therefore recuperating costs and obtaining a possible return on projects in this sector might be complicated. On the other hand, the current crisis makes it difficult to finance large infrastructure projects and public-private partnerships are especially important in this area.

In this respect, FIs could represent an alternative source of financing certain types of urban infrastructure, such as more sustainable and energy-efficient urban transport initiatives.

- **Projects identified in Catalonia**

Sustainable transport				
Maturity level	Project	Amount (€)	Location	Main products and actions
Low	Design of a car-sharing service with electronic vehicles	5,500,000	Figueres	Sustainable vehicles
	Implementation of a sustainable transport system in the municipality	---	Sant Cugat del Vallés	
	Renovation of Sant Joan funicular	4,100,000	Collbató	
Medium	Connection of the ADIF network Papiol-Mollet line in international gauge with the FGC operational centre in Rubí	3,000,000	Rubí y Sant Cugat del Vallés	Sustainable vehicles
	Development of a sustainable transport strategy through the renovation of the fleets of urban buses, police vehicles, and municipal vehicles and implementation of a smart service of parking management	30,000,000	Terrassa	Transport network and management
	Intermodal interchange in the Barcelona High Speed Rail Station – French frontier for Girona airport	9,000,000	Vilobí d'Onyar	Energy Efficiency Measures
	Smart city: regional express bus network and smart interchange stations	125,000,000	Barcelona, Tarragona, Girona, Lleida	
	T-mobilitat.cat	60,000,000	Catalonia	

- **Investment and management models identified: Key Players**

The promoters of these transport projects may be regional or local promoters. Key project promoters in these projects also include the private sector with differing levels of involvement: from public-private partnerships to government concessions for building infrastructure and operating services.

Although in principle this sector might be considered to be in deficit and being heavily subsidised, some potential sources of economic return on the projects have been identified, as set out in the following table:

Product Typology	Expected return
Transport stations	Rental of spaces for commercial and advertising activities, marketing, exploitation royalties, users' fees, etc.
Infrastructures	Service outsourcing, fees
Transport lines exploitation	Fees
Energy Efficiency	Savings in the energy bill
Transport tickets	Fees, marketing
Car-sharing services	Incomes from vehicle rental, marketing

The revenues generated are linked to the number of users. The FIs recommended for funding these projects are debt and own equity. The risk of insufficient revenues could be covered through mechanisms for guaranteeing income and energy savings for energy efficiency projects.

- **Link with Thematic Objectives**

The TO which these project would no doubt contribute to is TO 7 Promoting sustainable transport and removing bottlenecks in key network infrastructures.

4.4.2. Size, maturity and needs in financing the projects

The projects data sheets submitted by the project promoters were the basis for the demand analysis. The information gathered includes: the total project costs, project maturity and financial needs. Based on this information, it was possible to firstly identify projects requiring external finance in order to be implemented, classify them based on the economic sector, and determine their grade of maturity and their financing needs in the short and long term. Short term corresponds to mature projects awaiting finance to be executed in which construction can commence within less than two years. Long term refers to projects which are still at the initial conceptual phase and which in principle will not be executed for a period of at least two years.

Segments	Total Project Costs (mature projects) (M€)	Required financing (M€)*	Total Project Costs (less mature projects) (M€)	Required financing (M€)*
Energy Efficiency**	176	45	5,674	1,673
Heritage and Culture	-	-	286	98
ICTs	1	0.2	61	45
Sustainable transport	9	6	237	49
Waste management	-	-	7	5
Tourism	-	-	190	84
Economic Activity Promotion	83	46	105	53
Awareness raising	3	-	12	9
TOTAL	271	98	6,571	2,015

Source: Results obtained on the basis of the study questionnaire exercise

*Includes debt and equity financing

** The project portfolio identified is the result of the survey realised during the study among public sector promoters who responded to the survey (about 50 answers). However, a more extensive survey would be expected to help identify a more substantial portfolio of projects, and in particular, energy efficiency and small renewables projects.

In the near future, there is expected to be strong demand, corresponding to mature projects such as the energy efficiency and economic development segments. For the ICT, heritage and culture and sustainable transport segments, short term demand can be defined as limited, and zero for the waste management, tourism and awareness raising segments. This conclusion was used to justify the selection of the two case studies of this report (see Chapter 5) from among the projects belonging to the energy efficiency and economic development segments. In this regard, it should also be mentioned that although **not all the project data sheets provide sufficient information to evaluate their maturity** level, mature projects have been identified

precisely in the energy efficiency, economic development and sustainable transport segments. However, this does not mean that there are no mature projects in other segments.

In parallel, with respect to the long term, greater demand is observed in all the segments identified, which remains high in the case of energy efficient and economic activity promotion. Demand is higher in the heritage and culture, sustainable transport and tourism segments.

As regards the financial size of the projects, based on the analysis, it is observed that there is a total short term demand for €271 million in relation to which the promoters appear to need access to funding amounting to €98 million. In the long term, projects have been identified for a value of €6,571 million with an estimated funding need of €2,015 million.

In most cases, the market failure results from the shortage of funding by the public and private sectors. This poses a serious problem in getting projects off the ground. The contribution of these amounts from a FI, as a complement to other types of investment, would therefore allow the projects to be implemented for a much higher amount than that provided by the FI: €271 million as opposed to the €98 million to be provided in the short term, and €6,571 million with a contribution of €2,015 million. The analysis of the project contents and themes in the short and the long term has made it possible to establish their correspondence and whether they belong to one or more TOs.

In particular, as shown below, the short-term projects identified are mainly concentrated in the following TOs:

- TO 4: Supporting the shift towards a low-carbon economy in all sectors
- TO 5: Promoting climate change adaptation, risk prevention and management
- TO 6: Preserving and protecting the environment and promoting resource efficiency
- TO 8: Promoting sustainable and quality employment and supporting labour mobility

Distribution of short term project costs by TO

Segments	TO1	TO2	TO3	TO4	TO5	TO6	TO7	TO8	TO9	TO10	TO11	SUM
	Research & Innovation	ICTs	SMEs	Low Carbon Economy	Climate Change	Environment	Sustainable Transport	Employment	Social Inclusion	Education	Institutional Capacity	
Energy	-	762,800	-	59,732,842	20,068,596	60,602,842	-	29,067,197	1,695,000	3,814,000	-	175,743,277
Heritage	-	-	-	-	-	-	-	-	-	-	-	-
ICTs	109,000	406,000	-	-	316,000	94,000	-	-	-	-	15,000	940,000
Sustainable transport	-	-	-	2,250,000	1,800,000	900,000	4,050,000	-	-	-	-	9,000,000
Waste treatment	-	-	-	-	-	-	-	-	-	-	-	-
Tourism	-	-	-	-	-	-	-	-	-	-	-	-
Economic promotion	1,347,854	4,260,000	6,690,000	7,567,854	14,077,854	14,817,854	5,607,854	18,975,000	4,635,000	4,260,000	300,000	82,539,269
Awareness raising	300,000	-	-	600,000	750,000	750,000	-	-	-	600,000	-	3,000,000
Total	1,756,854	5,428,800	6,690,000	70,150,696	37,012,450	77,164,696	9,657,854	48,042,197	6,330,000	8,674,000	315,000	271,222,546

Source: Mazars/Ecorys on the basis of questionnaire and analysis carried out

This distribution shows that although there are many promoters with project ideas, they still lack sufficient maturity to be implemented in the short term, and therefore, the necessary financing requirements.

On the other hand, as shown in the following chart, the TOs recording the highest demand rates at long term are:

- TO 4: Supporting the shift towards a low-carbon economy in all sectors
- TO 5: Promoting climate change adaptation, risk prevention and management
- TO 6: Preserving and protecting the environment and promoting resource efficiency
- TO 7: Promoting sustainable transport and removing bottlenecks in key network infrastructures
- TO 8: promoting sustainable and quality employment and supporting labour mobility

Distribution of long term project costs by TO

Segments	TO1	TO2	TO3	TO4	TO5	TO6	TO7	TO8	TO9	TO10	TO11	SUM
	Research & Innovation	ICTs	SMEs	Low Carbon Economy	Climate Change	Environment	Sustainable Transport	Employment	Social Inclusion	Education	Institutional Capacity	
Energy	-	1,218,798	557,581,399	1,715,483,836	573,516,689	1,155,734,235	375,000	573,813,897	546,181,699	549,656,697	250,000	5,673,812,251
Heritage	18,500,000	18,500,000	64,560,000	18,920,000	24,500,000	24,500,000	-	58,600,000	38,320,000	3,500,000	16,500,000	286,400,000
ICTs	3,109,000	18,406,000	6,000,000	6,000,000	6,316,000	6,094,000	-	-	-	-	15,015,000	60,940,000
Sustainable transport	9,000,000	46,300,000	550,000	12,625,000	11,350,000	15,185,000	132,640,000	6,250,000	-	-	2,700,000	236,600,000
Waste treatment	-	-	-	-	-	6,713,421	-	-	-	-	-	6,713,421
Tourism	-	-	57,000,000	19,000,000	38,000,000	19,000,000	-	57,000,000	-	-	-	190,000,000
Economic promotion	1,347,854	4,260,000	14,390,000	9,767,854	17,377,854	14,817,854	5,607,854	26,675,000	5,735,000	4,260,000	300,000	104,539,269
Awareness raising	1,665,000	-	1,955,000	2,112,500	750,000	1,820,000	-	590,000	-	1,000,000	1,807,500	11,700,000
Total	33,621,854	88,684,798	702,036,399	1,783,909,190	671,810,543	1,243,864,509	138,622,854	722,928,897	590,236,699	558,416,697	36,572,500	6,570,704,941

Source: Mazars/Ecorys on the basis of questionnaire and analysis carried out

This analysis, based on the different financial needs in the short and long term, make it possible to evaluate the economic sectors and TOs which require a larger volume of finance and serve as a basis for determining the future investment strategy.

4.4.3. Project evaluation and ranking

The project analysis has been made through an evaluation matrix consisting of 11 criteria which are described in the following table. Each of the criteria has been rated from 1 to 5, with 1 corresponding to a low level, 3 to an intermediate level and 5 to a high level. Lastly, these scores have been weighted in accordance with the values shown in the table. A total of 55 points has been assigned to the technical feasibility of the project and 45 points to economic feasibility:

- In the technical feasibility section the maximum score has been assigned to coherence and correlation with the TOs, since these are differentiating aspects for the projects which determine their capacity to offer a response to certain specific territorial needs (internal cohesion), contribute to the strategies set by the Generalitat for improving the socio-economic and environmental conditions of the region (external cohesion) and contribute to achieving the TOs and the European Strategy for Intelligent, Sustainable, Inclusive Growth. On the other hand, lower scores have been assigned to the management system, promoter's experience, project maturity and replication since although these factors are essential for the success of the project, these variables are not yet sufficiently well developed in most of the projects analysed.
- In relation to financial feasibility, similar scores have been established for the four variables analysed.

Criteria	Rationale	Weighting
Technical viability		55
Project coherence		24
Internal	Coherence analysis between the identified problems, the objectives established and the expected results	12
External	Analysis of project coherence with regional and national strategies	12
Contribution to the TOs	Degree of correlation between the project objectives and the Thematic Objectives	12
Management system	Number and nature of the participating actors (at the different levels of public administration and private actors) and their involvement level	5
Promoter's experience	Promoter's experience in projects alternative funding or ERDF funding	4
Project maturity level	Project stage: idea, intermediate, mature	5
Replicability	Replicability potential of the project in other territories	5
Economic viability and sustainability		45
Cost-Impact ratio	Relationship between the project cost and the actions and expected results	10
Return on Investment	Relationship between the estimated cost and the expected return	15

Timeframe	Timeframe foreseen for the generation of return and the repayment of the financing	<i>10</i>
Financing	Adequacy of the available funds volume to the project cost	<i>10</i>

The final weighted scores obtained by each of the projects, applying these criteria, have enabled the 51 projects to be included in a "list" or "ranking" with those obtaining the best scores appearing at the top and those obtaining the lowest scores at the bottom. The result of this analysis is shown in the following table:

Result of the general project ranking

No.	Project	Sector	Segment	Mark
1	Enhancement of energy efficiency and municipal building maintenance in Lleida town	Environment and Energy	Energy Efficiency	86
2	Agricultural park in the Horta de Lleida	Competitiveness, economic development and Innovation	Economic activity promotion	82.6
3	Strategic residential area in the former factory of La Estrella. Intervention in Industrial Site 1	Competitiveness, economic development and Innovation	Economic activity promotion	81.5
4	Energy saving and efficiency Plan in the Generalitat de Catalunya' s buildings	Environment and Energy	Energy Efficiency	81.4
5	Actions in public municipal tertiary buildings including renewable technologies: forest biomass	Environment and Energy	Energy Efficiency	79.9
6	API for the access to meteorological data of the Catalonia Meteorological Service	Competitiveness, economic development and Innovation	ICTs	78.8
7	Ca n'Alemany Industrial Site	Competitiveness, economic development and Innovation	Economic activity promotion	78.5
8	Museum of Science, Climate and Environment	Culture and society	Awareness raising	78
9	Construction of municipal districts heating with local biomass exploitation	Environment and Energy	Energy Efficiency	77.1
10	Smart city: regional express bus network and smart interchange stations	Transport	Sustainable transport	76.6
11	Construction of a biomethane miniplant and adaptation of municipal and public transport vehicles, and municipal facilities' heating boilers for biomethane consumption	Environment and Energy	Energy Efficiency	76.4
12	Intermodal interchange in the Barcelona High Speed Rail Station – French frontier for Girona airport	Transport	Sustainable transport	75.2
13	Public management of social housing	Environment and Energy	Energy Efficiency	74.6
14	Development of a sustainable transport strategy through the renovation of the fleets of urban buses, police vehicles, and municipal vehicles and implementation of a smart service of parking management	Transport	Sustainable transport	74.6
15	Design, renovation and setting up of the meteorological radar of Vallirana (Barcelona)	Competitiveness, economic development and Innovation	ICTs	73.8
16	T-mobilitat.cat	Transport	Sustainable transport	73.6
17	Private housing stock	Environment and Energy	Energy Efficiency	73.4
18	Design of a car-sharing service with electronic vehicles	Transport	Sustainable transport	73

No.	Project	Sector	Segment	Mark
19	Promotion of energy efficiency in Figueres Housing stock	Environment and Energy	Energy Efficiency	72.6
20	Green Ring in Terrasa	Competitiveness, economic development and Innovation	Economic activity promotion	72.6
21	Enhancement of the Catalanian coast as a tourist destination	Competitiveness, economic development and Innovation	Tourism	72.1
22	Energy saving and efficiency in public facilities through small investment actions	Environment and Energy	Energy Efficiency	72
23	Restoration of the former industrial complex "Vapor Cortès"	Competitiveness, economic development and Innovation	Economic activity promotion	71.6
24	Implementation of an energy efficiency improvement system in municipal buildings	Environment and Energy	Energy Efficiency	71.3
25	Photovoltaic self-consumption in public facilities	Environment and Energy	Energy Efficiency	71.2
26	Actions in the Cultural and Touristic Heritage of Empúries (l'Escala)	Culture and society	Heritage and Culture	71.1
27	Integral Plan for Urban improvement and new activities, Terrassa XXI	Competitiveness, economic development and Innovation	Economic activity promotion	70.6
28	Energy saving and efficiency plan in Secondary education Buildings of the Department of Education	Environment and Energy	Energy Efficiency	69.2
29	Restoration and adaptation of the outdoor areas of La Cartoixa d'Escaladei	Culture and society	Heritage and Culture	69.1
30	Energy saving and efficiency in public facilities through active management	Environment and Energy	Energy Efficiency	68.7
31	Energy saving and efficiency in public facilities through the replacement of conventional boilers by biomass boilers	Environment and Energy	Energy Efficiency	68.5
32	Housing regeneration in the Canyelles neighbourhood in Barcelona City	Environment and Energy	Energy Efficiency	67.4
33	Implementation of an energy smart grid in the Sant Joan industrial site	Environment and Energy	Energy Efficiency	67.3
34	Energy self-sufficiency in the municipality of Sant Cugat del Vallès	Environment and Energy	Energy Efficiency	66.8
35	Implementation of a district heating and cooling system in the Municipality	Environment and Energy	Energy Efficiency	66.4
36	Innovation and Knowledge Centre for the promotion of healthy habits and sustainability	Culture and society	Awareness raising	63.9
37	Connection of the ADIF network Papiol-Mollet line in international gauge with the FGC operational centre in Rubí	Transport	Sustainable transport	63.8
38	Implementation of a sustainable transport system in the municipality of Sant Cugat del Vallès	Transport	Sustainable transport	63.4
39	Economic and tourist revitalisation of the city of Tarragona from its cultural and historical heritage	Culture and society	Heritage and Culture	62.8

No.	Project	Sector	Segment	Mark
40	Implementation of steam production systems through biomass exploitation	Environment and Energy	Energy Efficiency	61.5
41	Renovation of Sant Joan funicular	Transport	Sustainable transport	58.6
42	Railway Interpretation Centre	Culture and society	Awareness raising	58
43	Mediterranean Knowledge centre for the Green Economy	Culture and society	Awareness raising	57.5
44	Smartregion (Cataluña)	Competitiveness, economic development and Innovation	ICTs	56.2
45	Montjuïc Clúster/Museum Centre and Architectural project for the future venue of the National History Museum of Catalonia	Culture and society	Heritage and Culture	56
46	Municipal energy saving in Barcelona area: public street lighting and biomass exploitation	Environment and Energy	Energy Efficiency	52.5
47	Urban regeneration and enhancement of the business, cultural and tourism activities	Culture and society	Heritage and Culture	49.6
48	Alternative route of the collector in the Port of Barcelona Coast Area	Environment and Energy	Waste management	45.4
49	Construction of collectors in the residential areas of Can Paulet and Can Rafael, in the Cervelló municipality	Environment and Energy	Waste management	45.4
50	Regeneration of the Historical and Cultural heritage to promote the conservation, tourism and culture	Culture and society	Heritage and Culture	43.2
51	Odour treatment in the pumping stations of Zona Franca and Ginebra	Environment and Energy	Waste management	33.4

Having analysed the projects, the information about the first ten suitable projects were shared and contrasted in a Focus Group with four selected financial institutions. The purpose of the session was to identify the interest in and possibility of support for projects of this type and the obstacles in regard to financing and investment conditions. For this reason it was decided to exclude projects whose capacity to generate profits was categorically put in doubt by the representatives of the financial sector (Science, Climate and Environment Museum in Lleida and the Orchard Park in Lleida) from the short-list. On the other hand, it was considered convenient to take into account the T-mobilitat (T-mobility) and Improvement in tourist management of the Catalan coast projects, in view of their interest and alignment with the strategies of Generalitat de Catalunya. In the case of the transport project, this was also highlighted due to having a high grade of maturity.

The following table shows the consolidated ranking following a double round of consultations with the private sector regarding the 10 most relevant projects that fulfil the criteria of technical and economic feasibility, financial sustainability and potential interest for receiving funding:

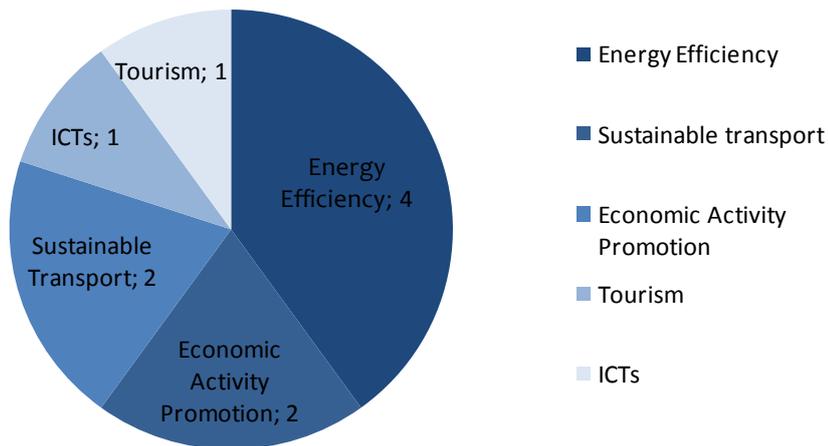
Result of the ranking of the short-listed projects

No	Project	Sector	Segment	Mark
1	Enhancement of energy efficiency and municipal building maintenance in Lleida town	Environment and Energy	Energy Efficiency	86
2	Strategic residential area in the former factory of La Estrella. Intervention in Industrial Site 1	Competitiveness, economic development and Innovation	Economic activity promotion	81,5
3	Energy saving and efficiency Plan in the Generalitat de Catalunya' s buildings	Environment and Energy	Energy Efficiency	81,4
4	Energy saving and efficiency Plan in the Generalitat de Catalunya' s buildings	Environment and Energy	Energy Efficiency	79,9
5	API for the access to meteorological data of the Catalonia Meteorological Service	Competitiveness, economic development and Innovation	ICTs	78,8
6	Ca n'Alemany Industrial Site	Competitiveness, economic development and Innovation	Economic activity promotion	78,5
7	Construction of municipal districts heating with local biomass exploitation	Environment and Energy	Energy Efficiency	77,1
8	Smart city: regional express bus network and smart interchange stations	Transport	Sustainable transport	76,6
9	T- mobilitat.cat	Transport	Sustainable transport	73,6

No	Project	Sector	Segment	Mark
10	Enhancement of the Catalanian coast as a tourist destination	Competitiveness, economic development and Innovation	Tourism	72,1

In particular, the energy efficiency segment stands out among the top 10 projects, with four projects targeted at implementing energy efficiency measures in municipal buildings and Generalitat de Catalunya buildings, and the promotion of renewable energies such as biomass. These are followed by the economic activity promotion and sustainable transport segments, each of which has two projects. Finally, the shortlist includes one project from the ICTs sector and another from the tourism sector.

Projects shortlist by segment



Source: Mazars/Ecorys on the basis of submitted projects

There is a clear concentration of regional promoters and only two projects are promoted by local government bodies: the Lleida Municipality and the Olot Municipality along with Garrotxa District Council. The rest of the projects were proposed by Generalitat Departments or Institutes such as INCASOL, ICAEN, and the Forest Technology Centre for Catalonia, the Meteorological Service of Catalonia, the Directorate General for Transport and Mobility and the Directorate General for Tourism. However, in general, the projects foresee the participation of several government levels, thereby enhancing their management and assuring complementarity and synergies with other initiatives set up in the territory.

It should also be mentioned that most of the projects (7) expect considerable private sector participation, either through the creation of PPPs or tender systems. In the case of the sustainable transport and tourism promoters, it is envisaged that private companies themselves will apply to the UDF to finance projects.

The expected project investment varies greatly, ranking from €300,000 (Meteorological Service) to between €180 and 200 million (Tourism) and even €5,400 million (Energy efficiency). In this respect it should be mentioned that two of the projects presented and analysed correspond to Generalitat Plans (the Energy Savings and Efficiency Plan in Generalitat Buildings and the Strategic Tourism Plan).

It should be highlighted that finance from FIs is normally granted to specific projects and not to plans or strategies as a whole. The information regarding the financial allocation contained in the Plans analysed can thus serve as a reference for estimating the global amount of the investments and the size of the corresponding FIs. Nonetheless, in the event of accessing

finance through FIs in the future, it will be necessary to establish some kind of phasing procedure for the Plans that could correspond with projects or specific operations eligible for financing through FIs. In this sense, one Plan might contain projects at different stages of development and maturity.

In addition, transport projects stand out due to their amounts, with budgets of between €120 and €130 million (Smart city) and €60 million (T-mobilitat). The high level of investment and the fact that this is a sector in deficit that is extremely dependent on public subsidies might make it difficult to consider them for FIs. In fact, a low level of participation of projects from this sector is observed in UDFs constituted to date in other European regions.

Broadly speaking, the foreseen funding method is debt with estimated levels of more than 50%. Likewise it is observed that the return is ensured through energy savings and the sale of the energy produced (particularly, in energy efficiency projects), sales, marketing, rental of premises, operating fees, etc.

In the INCASOL projects, due to the difficulties in the real estate sector, there could be a risk, since the expected return comes solely from the sale of plots. In the current situation of severe crisis in the real estate and building sector, a certain degree of caution should be applied.

Based on the analysis carried out and the consultations conducted with the financial sector, it can be concluded that all the short-listed projects are in the so called "grey zone" since they could generate a reasonable return on investment and an important impact on the region. Nonetheless, due to their specificities they are unable to attract private investment in a clear and direct manner.

5. Analysis of the cases studies

After establishing a *ranking system*, the projects were 'scored' where the top-ranked projects formed the basis for the second round of consultations with potential private sector investors. Through a more detailed analysis, the projects were classified by sectors and market failures/sub-optimal investment situations were identified. The results of this analysis were then shared with the EIB, the Spanish Ministry of Finance and Public Administration and the Generalitat de Catalunya at the *Steering Committee* held on 2 July 2013, where the two case studies projects were selected for financial analysis and to assess their potential value-added in the use of FIs.

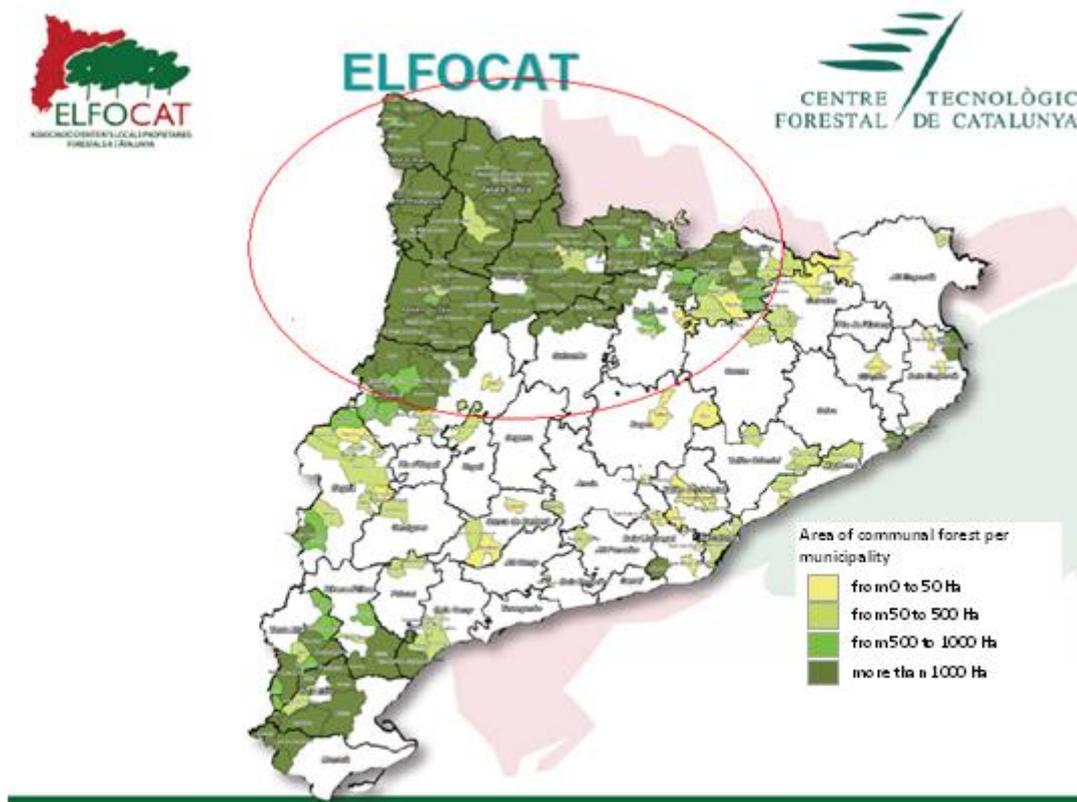
The criteria forming the basis for selecting the two projects include: the relevance of the sector to strategic objectives, the robustness of the business plans, geographical location, priorities of Generalitat de Catalunya, and coherence with other projects implemented. After applying these criteria, one of the case studies was identified among the short-listed projects, while the other was selected based on thematic interest, despite of not being included among the ten pre-selected projects.

In addition to project documentations and the survey results, interviews were held with the project promoters for the two case studies in order to conduct a financial analysis to assess their suitability for FIs. The two case studies presented in this chapter have been developed based on the information obtained through these sources.

5.1. Case 1 – Energy efficient biomass heat production in municipal buildings: Activities on municipal public tertiary buildings, including Energy Efficiency: biomass obtained from forest waste in different towns in Catalonia

Introduction

As Catalonia has important forest resources, this project is of special relevance. The project would allow for sustainable solutions for managing the forestry sector using forest biomass from the area shown on the graphic. **Presentation of the geographic location**



Source: CTFC- Presentation of the Heating boilers Programme

The project promoter, the **Forest technology Centre for Catalonia (CTFC)**, based in Solsona (Lleida – Catalonia), was set up in 1996 as a Consortium with a range of institutions from the Catalan public sector, including Generalitat de Catalunya and Lleida Provincial Council. At present, the institution has more than one hundred professionals including scientists, technicians, support staff and receives support from governments, institutions and companies with its general research activities.

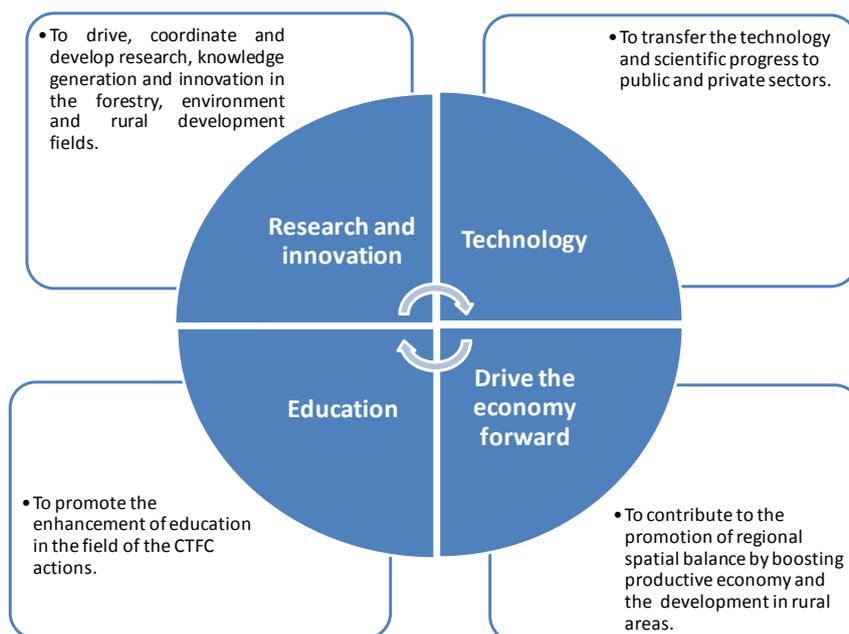
Regional/sectoral institutions that give support to CTFC



Source: CTFC- Presentation of the Heating boilers Programme

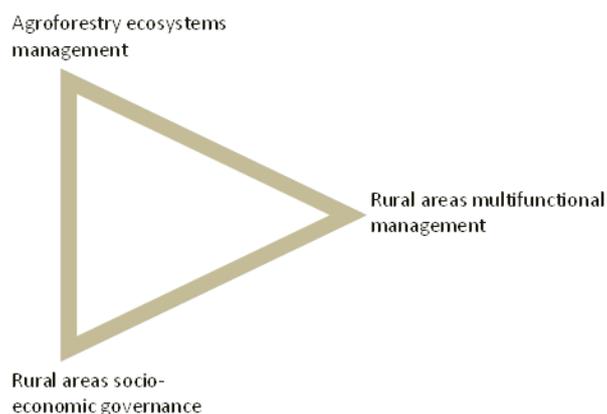
The **mission** of the CTFC is to contribute to the modernisation and economic competitiveness of the forestry sector, rural development and sustainable environmental management through activities related mainly to RDTI, Training, and promoting the economic development.

Strategic objectives of the CTFC



Source: Mazars/Ecorys

Specifically, the activity carried out by the CTFC is aimed at providing solutions related to ecosystem management and the interaction of natural resources with society, in order to improve the wealth and wellbeing of people, whilst striving for more sustainable development and preservation of the environment in the context of current global change. The activity of the CTFC is based on three work programmes:



Project concept and objectives

The aim of the project is to **organise the forest biomass market in Catalonia** through **the installation of boilers and small heating networks** in municipal buildings, which use certified wood chips from Catalan forests.

This opens up the prospect of a **new integrated model for the management and provision of energy supply services** as an alternative form of energy. Presently, the conventional energy system in most of the municipal buildings in Catalonia is based on the use and consumption of diesel. The use of forest biomass would bring important savings in the energy bill of public buildings.

That project meets the objectives of **transforming the region to a low CO₂ emissions economy** (bringing potential savings of up to 80%), **using renewable energies** (through consuming forest biomass), **environmental protection** (promoting forestry management and reducing the risk of fire) and **revitalising the economy** (by creating local economic activity through the installation of boilers, the maintenance of those boilers and forestry management in rural areas).

The project's positive effects on the local economy include the ability to create new jobs, particularly in rural areas, and the possibility of opening up new economic opportunities for

related industries, as outlined in the table below:

Effects on the local economy	Areas of development	Estimate on expected results
DIRECT employment generation	<ul style="list-style-type: none"> Labour opportunity generation in the following areas: <ul style="list-style-type: none"> ✓ Forestry use and management. ✓ Wood transport. ✓ Organisation and management of logistics centres. ✓ Biomass transformation in solid biofuel (wood chips). ✓ Biofuels transport to consumers. 	<p>According to available data and performed calculations, for each 1,000 humid biomass tonnes (50% of humidity) it is generated:</p> <ul style="list-style-type: none"> ✓ 1 direct jobs ✓ 1,05 indirect jobs <p>The project of forestry biomass in Catalonia envisages the mobilisation of between 12,500 and 13,500 annual tonnes of forest biomass. This means the generation of 30 direct and indirect jobs.</p>
INDIRECT employment generation	<ul style="list-style-type: none"> Labour opportunity generation in the following areas: <ul style="list-style-type: none"> ✓ Forestry and transport machinery. ✓ Engineering and consultancy services. ✓ Distribution and maintenance of biomass heating boilers. ✓ Infrastructures (civil works, etc.). 	
Other opportunities	<ul style="list-style-type: none"> Development and creation of Energy Service Companies. To boost the market of equipment manufacturing industries. 	

* Source: Heating boilers Plan- Effects on the local economy

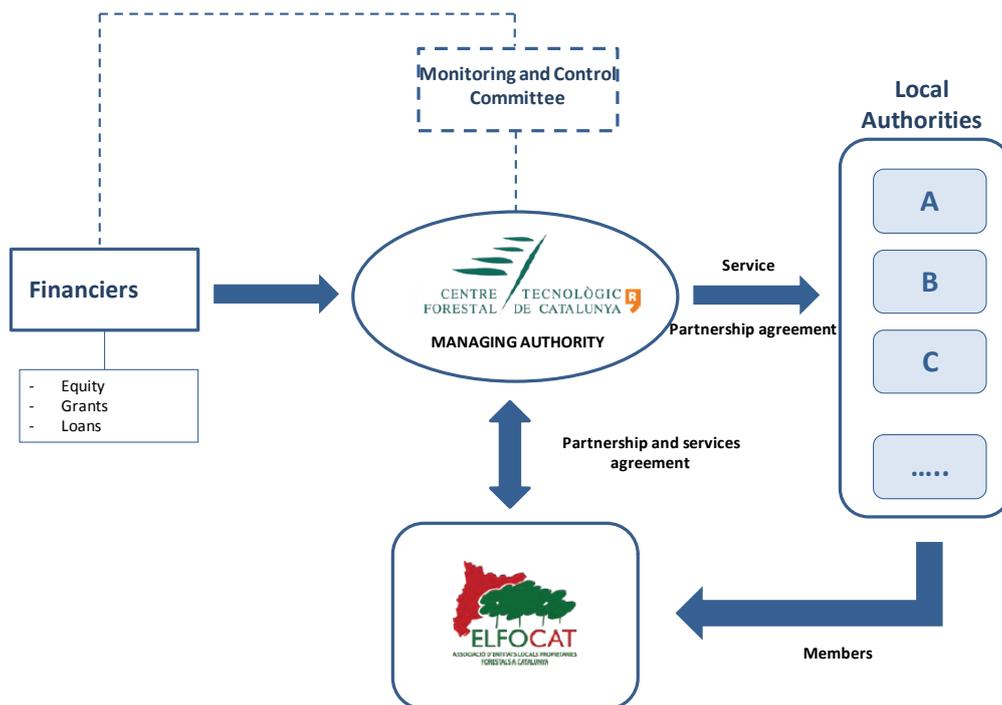
Project characteristics and management

The project consists of promoting approximately **150 boiler and heating network installations** in the different buildings and services of the Catalan municipalities. In accordance with the study, energy needs vary depending on districts and the demand for energy is driven by seasonal changes i.e. winter periods as well as other factors that affect the price of energy. In this regard the project promoter has classified the **41 districts** of Catalonia into **3 groups** (with level 1 taking the greatest priority), with a minimum number of installations being envisaged for each group.

Classification	Number of Counties	Premises-Facilities
Level 1	9	49
Level 2	22	89
Level 3	10	12
TOTAL	41	150

The following chart shows a diagram of the **project management** and the different agents which would intervene in it:

Project management by the CTFC



Source: CTFC- Presentation of the Heating boilers Programme

As the institution responsible for promoting the project, the CTFC would take charge of the entire service management process and would be the body entrusted with managing the funds from the private investors in addition to managing the procurement of equipment and installation services. In addition, together with the representatives of the financial institutions, it would set up a Committee for monitoring and monitoring the project, thereby establishing a channel of communication and regular information sharing between the managing entity and investors. One of the main functions of the Committee would be to determine the criteria for joining the programme and to approve the investments.

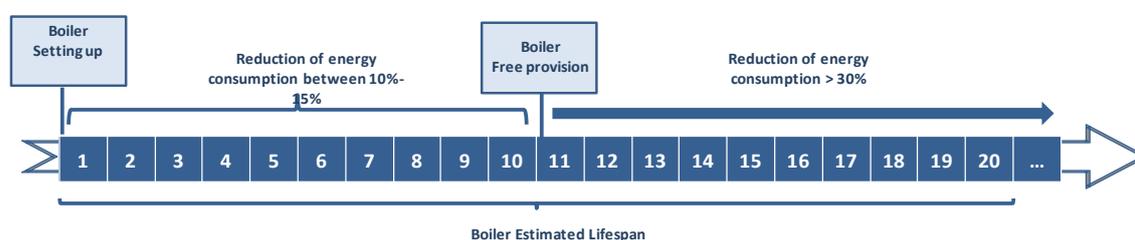
On the other hand, with respect to managing the service, the CTFC would be responsible for the following areas, through signing collaborative agreements with the municipalities:

- Management of the wood chip purchase process from the municipalities (as the owner of the forests) or, if necessary, from other private operators;
- Establishing the applicable energy rates (established in accordance with the diesel price paid by each institution);
- Control of the energy supply service (annual operating hours, etc.);
- Control of billing and collections from the municipalities.

The main **benefits obtained by the municipalities** taking part in this new management model are:

- **Immediate reduction of between 10-15% in current energy cost** during the first 10 years of the service and **increased energy savings (equal to or higher than 30%)** from year ten;
- **Possibility of obtaining additional resources** from the self-supply of chips from the same forest;
- Capacity to implement **real forest stewardship**;
- **No initial investment is required** by the municipalities;
- After 10 years the CTFC **would transfer the boiler and installation** to the beneficiary institutions **at no cost** and they would still have a useful life of approximately 10 years.

A diagram showing more or less how the service functions is set out below:



Source: Mazars/Ecorys

The Required investment

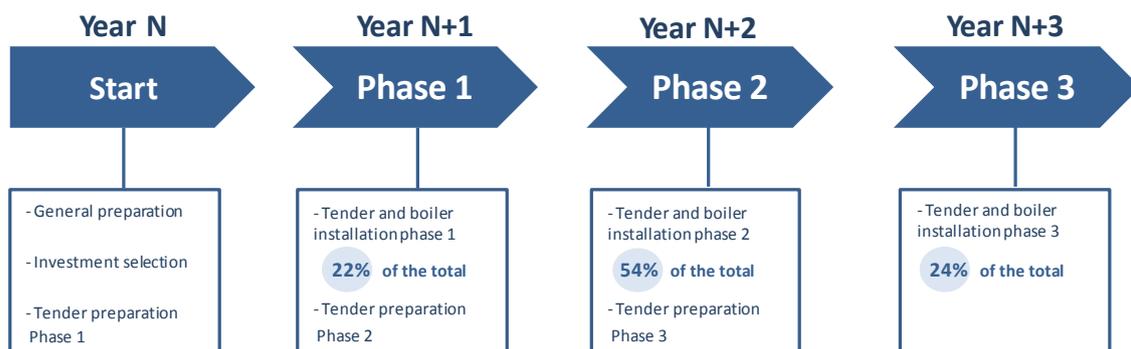
The required **investment** for implementing the project, which will depend on the type and power of the boilers installed, is around **€11.2 million** (excluding VAT), with the main investment headings corresponding to the following items (*):

Concept	Amount (K€)	Description
Studies and projects	304	Licenses, executive project, construction management, fees
Civil engineering works	5,620	Constructions and building improvements
Machinery	3,115	Biomass boilers acquisition
Contingencies	362	Extra cost estimate of 4% (calculated for the headings of Studies and Projects, Civil engineering and Machinery)
CTFC Costs	1,800	Mainly, engineering costs and external advice and CTFC staff coordination and management costs (during the

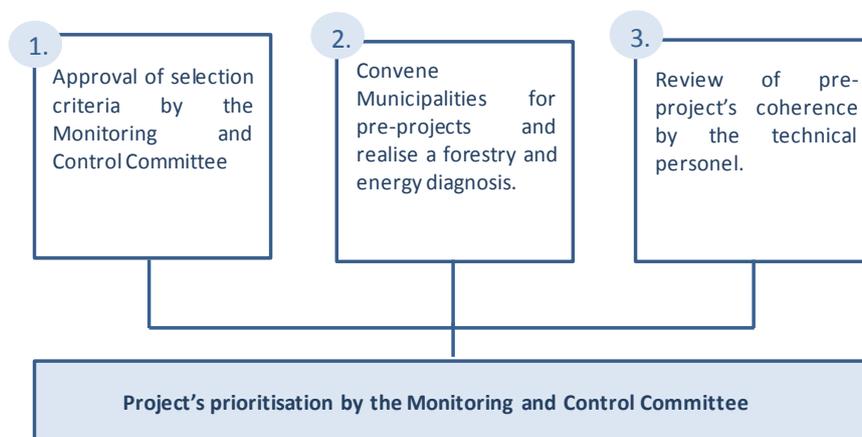
		project setting up and operational phase).
TOTAL	11,201	

(*) Estimated investment considering the purchase and installation of a total of **150 boilers** (96 80 kWt boilers, 41 150 kWt boilers and 13 300 kWt boilers)

It is foreseen that **the project implementation process** (purchase and installation of 150 boilers) will consist of a total of **3 phases**, over a period of **4 years**:



One of the tasks to be carried out by the Monitoring and Control Committee during the initial phase of the project would be the **investment selection process** which would consist of the following steps:



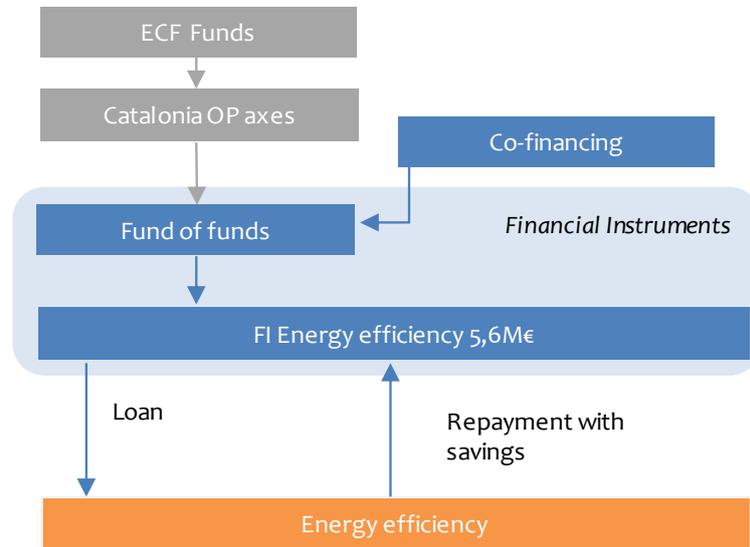
The revenues would come from payment to the municipalities participating in the project and calculated by the CFTC based on the real consumption made by the municipalities.

Funding the project

The estimated cost of implementing the project is €11.2 million, with €5.6 million of this amount being financed by the Generalitat and provincial councils, and €5.6 million by FIs. The communication (2008/C 14/02) defines the rules for the interest rate applicable to projects of this type, which is the reference rate (IBOR 1-year rate) + the applicable spread. In August 2013, the reference rate was 0.67% and the project has a "good/satisfactory rating" and "Normal/low

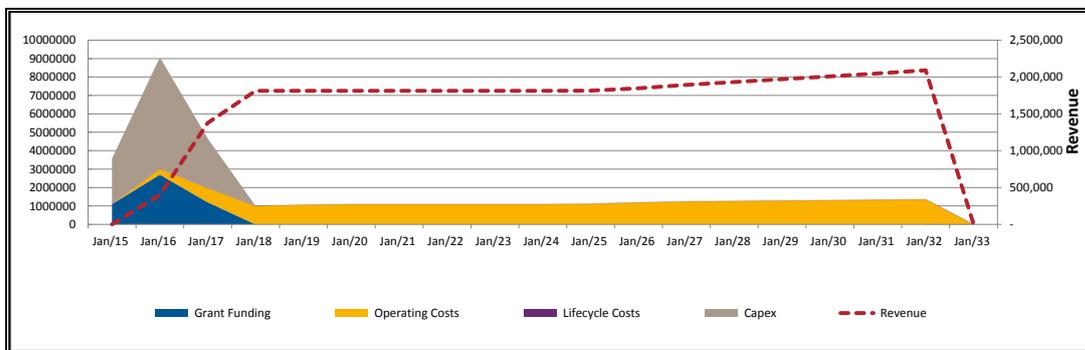
collateralization” meaning that a margin of between 1% and 4% could be considered, i.e. the project could benefit from a financial rate of between 1.67% and 4.67%. Therefore, a rate of 5% has been used for this study. In this sense, there is no risk in terms of state aid in financing this project. Based on these financial conditions the FI debt could be repaid in 10 years, at which time the CFTC could transfer the boilers to the respective municipalities.

FI structure for the project



The following chart shows the project cash flows:

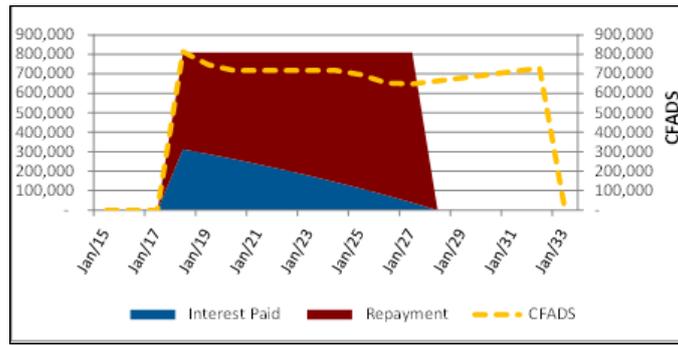
Cash flows



Source: Mazars/Ecorys

The following graph shows the FI debt cash flow:

FI Debt



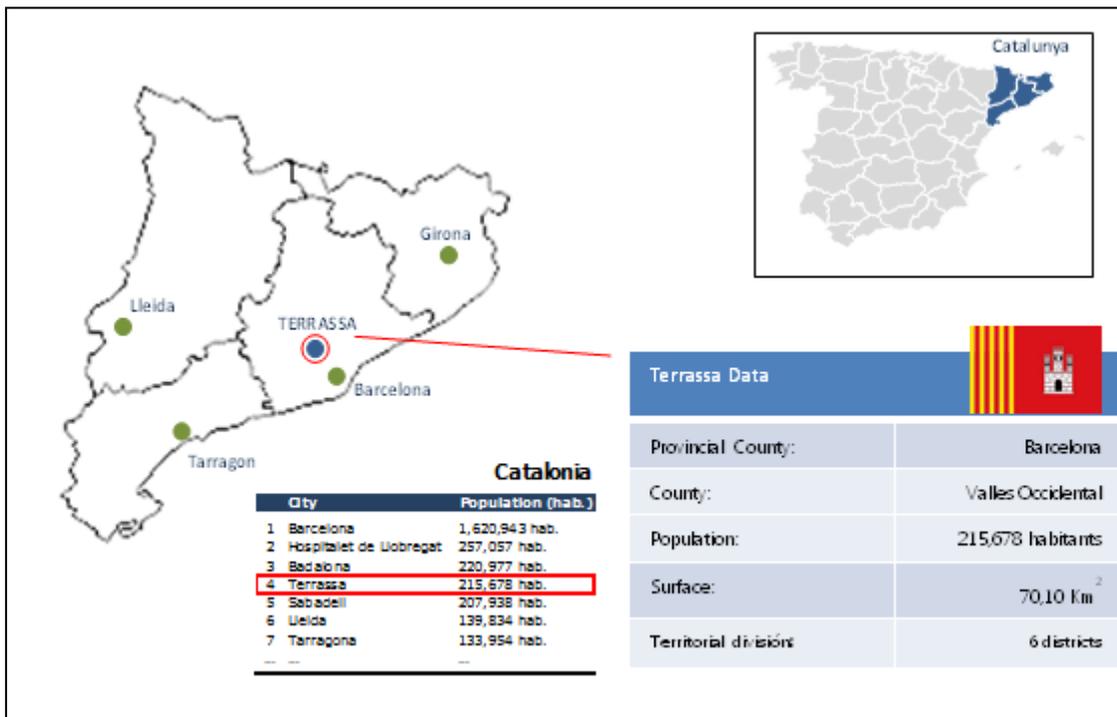
Source: Mazars-Ecorys

5.2. Case 2 – Economic Development: Heritage city-core brownfield regeneration: Recovery of the former “Vapor Cortés” industrial complex in Terrassa

Introduction

The municipality of **Terrassa** is located approximately twenty kilometres outside of Barcelona. It is located in the Valles Occidental district and is the capital of the district, together with Sabadell. In 2005, the city had a population of more than 200,000 inhabitants and is currently the fourth city in Catalonia (and the twenty-fourth in Spain) by population. It has a surface area of 70.10 km² and is divided into 6 territorial districts.

Geographic location and basic information about Terrassa



The city of Terrassa is strongly committed to promoting **economic development, consolidating its industries and services sectors** and **transforming its economic model in order to generate more employment and skilled jobs**. In this regard, some of the **strategic objectives** defined in the Terrassa Municipality Mandate for 2012-2015 are based on the following aspects:

- Accelerating economic development for employment in general.
- Upgrading and expanding infrastructure to accommodating new economic activities.
- Strengthening the industrial network related to innovation and knowledge.
- Improving and ensuring greater access to public services for businesses and entrepreneurs.
- Promoting a sustainable economy and diverse forms of social economy and innovation to generate new employment opportunities.

The Terrassa municipality has a **total budget** amounting to almost **€161 million** for 2013.

Project concept and objectives

The project objective is to recover an old nineteenth-century industrial complex through **integrated urban improvement actions** which include: redevelopment and reuse of most of the original buildings, as well as the creation of new public spaces with the provision of new services.

That project is included in the Municipal Planning Organisation Programme of Terrassa ("POUM") which promotes the **conservation of industrial buildings in the area of the former "Vapor Cortés" complex, due to their architectural and heritage characteristics.**

This is therefore an **urban regeneration model** through regenerating old land with derelict buildings in order to create premises for economic activities.

→ Area of activity

The scope or area of activity of the former "Vapor Cortés" industrial complex is located to the north-west of Terrassa in the Ca n'Aurell quarter near Rambla d'Egara, close to the city centre.

Objectives and expected result

The principal objectives and expected results of the programme for recovering the old "Vapor Cortés" industrial complex are set out below:

Objectives	<p>Recovery of disused urban areas and environmental recovery of contaminated soils.</p> <p>Creation of new urban fabrics with free spaces and sustainable mobility concepts (promotion of urban mobility modes such as walking, cycling and public transport).</p> <p>Creation of new spaces that allow the development of new research and development activities.</p> <p>Creation of new jobs.</p> <p>Reduction of Start-ups' implementation costs that will result in an increase of their competitiveness.</p> <p>Reduction of carbon emissions as a consequence of the concentration model and urban mixture composition of residential areas, economic activity/services and urban infrastructure (compact and diverse city model).</p> <p>Creation of a higher collaborative and institutional concentration capacity.</p>
Expected results	<p>Urban building area destined to the promotion of 696 housing (141 subsidised) and more than 1.200 parking spots.</p> <p>22,808 m² of commercial space for economic activities.</p> <p>Regeneration of a total of 6,971 m² of valuable historical and cultural heritage buildings to house and facilitate the development of economic activities (Terrassa Municipality)</p> <p>Construction of public facilities (Public School).</p> <p>Redevelopment of 7,276 m² of free spaces (Public square- 6,662 m²).</p> <p>Development of 12,039 m² urban spaces for pedestrian routes and parking spots (road system).</p> <p>Creation of 10 new enterprises and productive centres.</p> <p>Creation of 50 new jobs.</p> <p>Reduction of 5 annual tonnes of carbon emission, as a result of the reduction in work, education and residential journeys.</p> <p>Creation of 2 new networks for cooperation between administrations.</p>

The principal figures and magnitudes of the project are described below:

Intervention area- Main figures	
Sector surface (soil)	60,603 m²
Surface of provided properties	51,264 m²
Number of provided properties	36 units.
Surface of buildable areas (soil)	29,853 m²
Number of resulting parcels	46 units.
Max. Surface for private use	79,271 m²
Max. Surface for Housing use	56,463 m²
Max. Surface for comercial and economic use	22,808 m²
Max. Number of Housing	696 units.
Min. Number of subsidised housing	141 units.

Destination	Land surface (m2)
Transfer systems	30.749,97
Free spaces	7.276,03
Facilities	11.435,00
Viability/Connectivity and parking	12.038,94
Private land	29.853,47
Net lands for reparcelling	29.853,47
Total "Vapor Cortés" industrial site	60.603,44

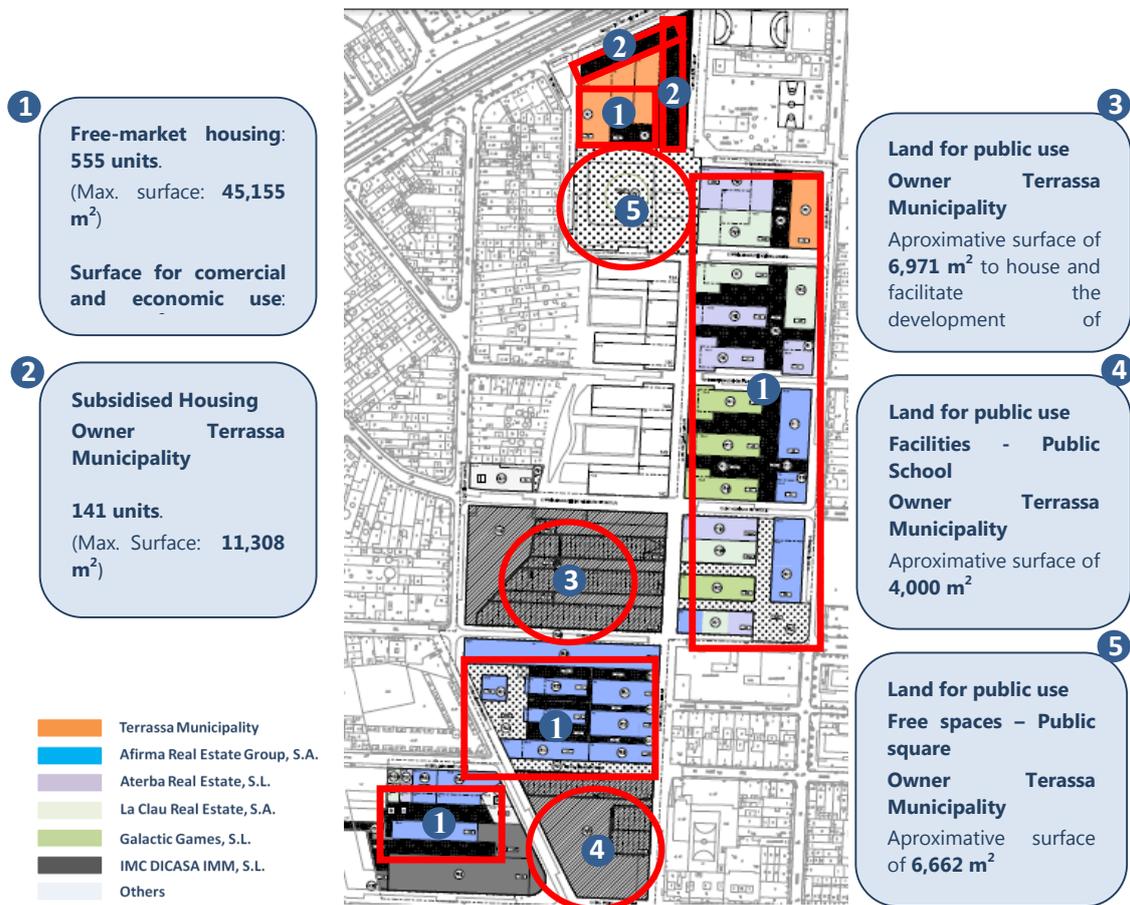
Development Investment:
10,873,302 €

**Investment in Planning,
 Projects and management:**
1,120,000 €

**Compensation costs (non
 owners):**
1,594,854 €

Following the implementation of the urban regeneration activity unit for the former "Vapor Cortés" industrial complex, **30,750 m² of land for public use** would be generated based on a transfer system to the municipality, and **29,853m² of land for development** (with a maximum development ceiling of 79,271 m²), with the following uses and destinations being contemplated for these:

Location and land use resulting from land reorganisation projects



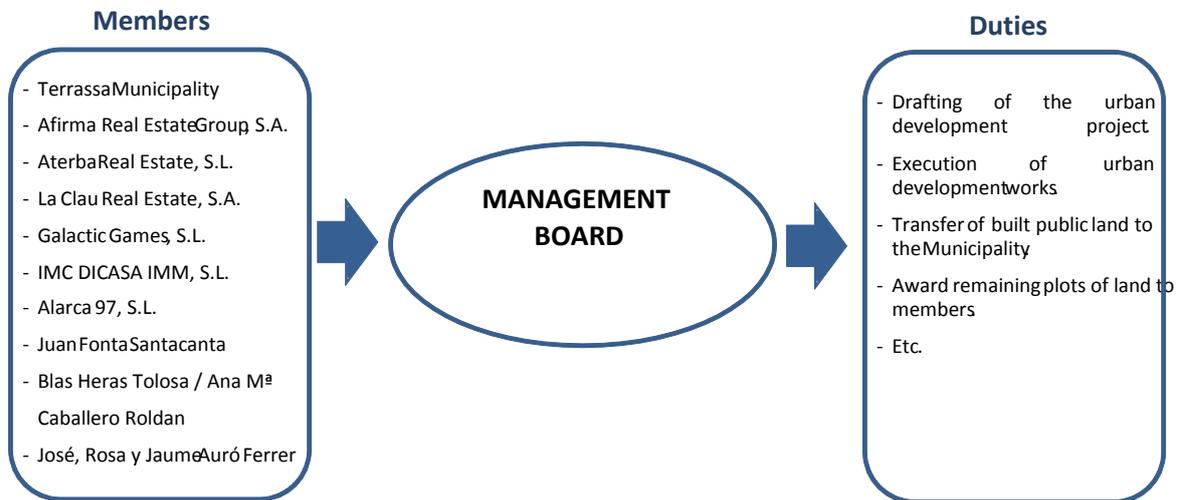
Source: Land Reorganisation Project in the frame of the PM-COR 001 Vapor Cortés, Industrial Site I

Project characteristics and management

The project currently has all the necessary administrative permits and authorisations for development. In this respect, the following basic documents have been drafted and approved:

- **Urban Improvement Plan for transforming Vapor Cortés, PM-COR001**, which received the final approval of the Terrassa municipality on 26 January 2006 and is identified in the POUM.
- **Project for the Development of the Vapor Cortés sector**, which received the final approval of the Municipal Government Board on 23 May 2008.
- **Project for Land Reorganisation area PM-COR001 Vapor Cortés**, in the basic compensation mode, which received the final approval of the Municipal Government Board on 19 July 2009.

The legal and administrative body regulating the relations between the different stakeholders for the land reorganisation project is the **Compensation Board** (established through a public document dated 26 April 2006). That urban development body, which has its own legal personality, **is formed by the owners of the land included in the activity unit.**



Characteristics and management of the project

The Land Reorganisation Project defines the following list of **properties and owners** following the urban development process:

Owners	Contributed soil (m2)	%	% Resulting entitlements
Afirma Real Estate Group, S.A	18.692,23	36,46%	32,82%
Aterba Real Estate, S.L.	8.851,02	17,27%	15,54%
La Clau Real Estate, S.A.	7.901,96	15,41%	13,87%
Galactic Games, S.L.	5.103,66	9,96%	8,96%
IMC. DICASA. IMM, S.L.	2.466,76	4,81%	4,33%
Aralca 97, S.L.	1.526,89	2,98%	2,68%
Juan Font Santacanta	53,35	0,10%	0,09%
Blas Heras Tolosa / Ana Mª Caballero Roldan	53,35	0,10%	0,09%
José, Rosa y Jaume Auró Ferrer	951,57	1,86%	1,67%
PRIVATE ACTORS	45.600,79	88,95%	80,05%
Terrasa Municipality	5.663,03	11,05%	9,95%
Terrasa Municipality (10%)	0,00	0%	10%
PUBLIC ACTORS	5.663,03	11,05%	19,95%
TOTAL	51.263,82	100,00%	100,00%

Sector surface (60,603 m²) = Public land (30,750 m²) + Construction Land (29,853 m²)

Private actors: 80.05%

Public actors: 19.95%

The **Terrassa** municipality would have a **quota of approximately 20%** of the urban land. That quota includes 10% for urban-planning use of the sector which is transferred on a mandatory basis to the municipality, at no charge, in accordance with current urban planning legislation. The other **private actors** are for the most part real estate developers.

Required investment

➔ **Investment**

In accordance with the information set out in the Land Reorganisation Project, the **estimated net investment for the project** is **€13,588,156** (excluding VAT), after deducting the necessary amounts for compensation to be received by the owners during the land reorganisation process (**€15,023,959**).

Sector surface: 60,603 m²

Cost (*): 11,993,302 €

(* Development + Planning, projects and management.

**Average cost (€/m²):
197.90**

The estimated costs incurred in urban planning and development, projects and management would amount to €11,993,302, giving rise to an **average cost of €197.90/m²**. Given the specific characteristics of the project, focused on urban regeneration activities in an area where there are shops and houses, that cost would be considerably lower than the average cost of a conventional urban development project.

Furthermore, certain elements exist which are not compatible with the urban planning for which compensation must be paid and buildings which are compatible with the planning located on the plots to be transferred for public services, which will also receive compensation. In this respect three types of compensation exist:

Compensation typologies	
Incompatible constructions:	It corresponds to constructions that are not compatible with urban planning and should be demolished.
Compatible constructions:	It corresponds to buildings that should be refurbished and that are situated in plots of land classified for obligatory transfer for public facilities.
Incompatible activities:	It corresponds to those activities incompatible with urban planning that should be compensated due to the cessation of their activity.

The total estimated amount of the three types of compensation is **€16,618,813**. The beneficiaries of €15,023,813 of this amount would be owners of land included in the activity unit, and the remainder (€1,594.854) would be paid to third parties affected by the land reorganisation project.

The following chart shows the **estimated net investment of the project by owners**, distinguishing between the gross investment (amount of urban charges) and the amount of compensation paid as indemnity:

Owner	Net investment	Share (%)	Gross Investment	Compensation
Terrasa Municipality	3.209.535	23,6%	3.209.535	-
Afirma Real Estate Group, S.A	4.839.120	35,6%	10.256.745	(5.417.625)
Aterba Real Estate, S.L.	3.753.979	27,6%	4.957.530	(1.203.551)
La Clau Real Estate, S.A.	3.195.801	23,5%	4.399.352	(1.203.551)
Galactic Games, S.L.	(2.787.317)	-20,5%	3.117.752	(5.905.069)
IMC. DICASA. IMM, S.L.	742.391	5,5%	1.066.977	(324.586)
Aralca 97, S.L.	774.005	5,7%	1.016.240	(242.236)
Juan Font Santacanta	4.375	0,0%	28.682	(24.307)
Blas Heras Tolosa / Ana M ^a Caballero Roldan	4.375	0,0%	28.682	(24.307)
José, Rosa y Jaume Auró Ferrer	(148.107)	-1,1%	530.620	(678.728)
TOTAL	13.588.156	100,00%	28.612.115	(15.023.959)

The Terrassa municipality has drafted a study on the potential revenues that could be generated in the new Vapor Cortés activity area once the project has been fully developed and implemented.

In this respect, the revenues considered in that study come from the following activities:

- **Promotion and sale of housing** (free and officially social housing) and **commercial land for economic activities** (surface area marked as numbers 1 and 2 in the plan entitled "Location and destination of the buildings following the land reorganisation project").
- **Rental of spaces** owned by the Terrassa municipality (**surface area of 6,971 m²**) to be used for accommodating and facilitating economic activity promotion (surface area marked as number 3 in the plan "Location and destination of the buildings following the land reorganisation project").

In accordance with the strategic objectives defined by the Terrassa municipality, it should be mentioned that those spaces would be **preferably offered to entrepreneurs and newly-established companies** operating in strategic sectors for the city, especially in activities with a technological component.

The following chart shows a summary of the main hypotheses considered and the result of the estimates made for each type of activity:

Sources of income	Considered hypothesis	Summary of forecasts
Promotion and sale of properties (private and social housing) and commercial properties	<ul style="list-style-type: none"> • Sale of 696 dwellings (141 social) and commercial properties in a time-frame of 7 years (year 4 to 10, being the first 3 years for construction works) • Increasing sales pace during the period (Years 4 and 5: 10%; Years 6 to 9: 15%; Year 10: 20%), being conservative during the firsts years. • Average sale price below the market price (discount of around 70%) following of social price policy. 	<ul style="list-style-type: none"> • Total income of 37,900,000 euros. • Sales breakdown by product typology: <ul style="list-style-type: none"> ✓ Free-market housing: 28,669,779 € (average selling price 634.92 €/m²). ✓ Social housing: 2,551,416 € (average selling prices 225.62 €/m²). ✓ Commercial property - Economic activities: 6,678,805 € (average selling price 292.83 €/m²).
Leasing of spaces intended to house and facilitate economic activities development	<ul style="list-style-type: none"> • Surface for rental: 6,971 m². • Expected income period of 8 years (years 3 to 10). • Increasing occupation level during the period (30% the first year and 80% the lasts years), being a little aggressive at the beginning. • Expected average rent price during the period between 7.62 y 11.79. • Expected net revenue of 82% of gross revenue. 	<ul style="list-style-type: none"> • Expected rent income (net revenue) of 4,646,952 euros. • Expected net income (net revenue) of 3,800.000 euros.

In this context, the total revenues envisaged in the new Vapor Cortés activity area, based on the activities mentioned above, would amount to **€41,700,000**.

→ Promotion and sale of housing and commercial ceiling

The Terrassa municipality used **conservative assumptions in its financial projections**, taking into account the current situation of the real estate market as well as its foreseen development in the forthcoming years, and in particular, its effects on the Terrassa local market. In this context, the Terrassa municipality has considered selling prices for the different housing typologies that are well below current market prices for the area in accordance with a **social price policy**.

Sales Breakdown

Sales typology	New		Total
	Construction	Rehabilitated	
Private housing	27.356.697	1.313.082	28.669.779
Number of dwellings	520	35	555
Floorspace m ²	42.439	2.716	45.155
Average sale price/dwelling	52.609,03	37.516,63	51.657,26
Average m ² price	644,62	483,46	634,92
Social housing	2.551.416	-	2.551.416
Number of dwellings	141	-	141
Floorspace m ²	11.309	-	11.309
Average sale price/housing	18.095,15	-	18.095,15
Average m ² price	225,62	-	225,62
Commercial property - economic activities	3.989.726	2.689.079	6.678.805
Floorspace m ²	12.379	10.429	22.808
Average m ² price	322,31	257,85	292,83
TOTAL	33.897.839	4.002.161	37.900.000

Source: Mazars-Ecorys

Projected sales prices

Sale prices typology	Sale prices (€/m ²)
Newly-built private housing:	650.00
Refurbished housing:	487.50
Social housing :	227.50
Economic activity in new buildings:	325.00
Economic activity in refurbished buildings:	260.00

Source: Mazars-Ecorys

Moreover, in relation to the programmed sales a conservative policy has also been adopted for the first few years.

Programmed sales

Sales Programme- Programa de Ventas

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
% Annual Sales over the total	0%	0%	0%	10%	10%	15%	15%	15%	15%	20%	100%
Floorspace	-	-	-	7,927	7,927	11,891	11,891	11,891	11,891	15,854	79,000
Sales Income	-	-	-	3,790,000	3,790,000	5,685,000	5,685,000	5,685,000	5,685,000	7,580,000	37,900,000

Works execution

Source: Mazars-Ecorys

Housing prices in Catalonia (for new buildings and older housing stock) have fallen during recent years and now stand at levels of around €2,500/m². In the specific case of Terrassa, the prices have followed the same trend, with significant decrease in prices for newlybuilt housing.

Evolution of housing prices in Catalonia (€/m²)

Municipalities	New Construction					Second Hand				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
Barcelona	5,646	5,115	5,065	4,584	4,252	3,927	3,849	3,833	3,494	3,097
Gerona	3,149	2,85	2,817	2,668	2,558	2,567	2,073	2,167	2,111	2,099
Lleida	2,539	2,182	2,046	2,013	2,017	1,887	1,894	1,582	1,431	1,26
Tarragona	3,238	3,039	2,608	2,329	2,279	2,579	2,505	2,337	2,108	1,93
Terrasa	3,177	2,862	2,775	2,438	2,003	2,676	2,451	2,141	2,027	1,895
Change rate (%)	n.a.	-9.9%	-3.1%	-12.1%	-17.8%	n.a.	-8.4%	-12.7%	-5.3%	-6.5%
Catalonia	3,106	2,815	2,736	2,717	2,553	3,385	3,233	3,145	2,845	2,58
Change rate (%)	n.a.	-9.4%	-2.8%	-0.7%	-6.0%	n.a.	-4.5%	-2.7%	-9.5%	-9.3%

Source: Generalitat de Catalunya, Department of Territory and Sustainability, Housing and Urban Improvement Secretariat.

→ Rent

As regards revenues from rent, a **conservative estimate was been used with respect to occupation levels and prices**. The following table shows the programmed revenues during the projected period:

Programmed revenues from rent

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
% Occupation	0%	0%	30%	40%	60%	70%	80%	80%	80%	80%	n.a.
Price/m2/month	-	-	7.62	8.33	9.72	10.83	11.74	11.79	11.26	10.86	n.a.
Change rate (%)	n.a.	n.a.	n.a.	9.3%	16.7%	11.4%	8.4%	0.4%	-4.5%	-3.6%	n.a.
Annual Gross Income	-	-	191,327	278,728	487,858	637,166	785,66	789,006	753,537	726,769	4,647,051
Expoytation Costs	15,000	15,000	15,000	50,196	87,821	114,144	141,395	142,061	135,641	130,793	847,051
Costs over Gross Income (%)	n.a.	n.a.	7.8%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.2%
Net Income	(15,000)	(15,000)	176,327	228,532	400,037	520,022	644,265	646,945	617,896	595,976	3,800,000

Works execution

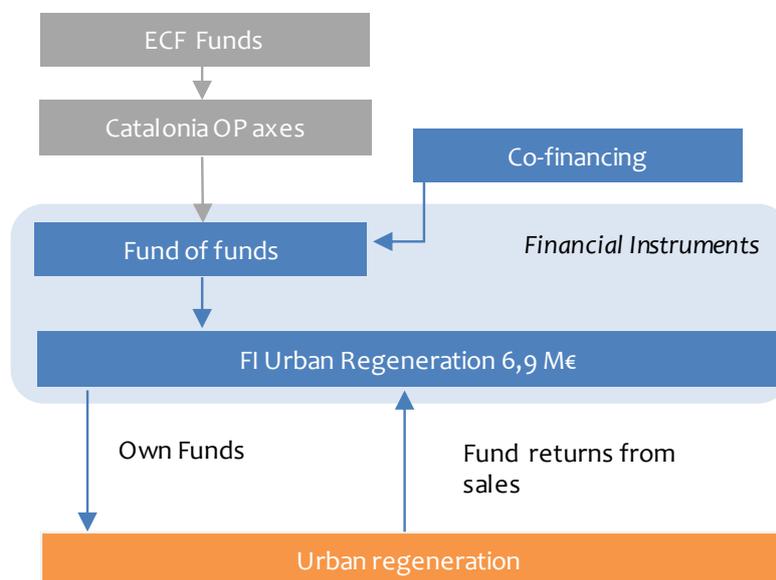
Source: Mazars-Ecorys

Funding the project

As discussed earlier, the total development cost for implementing the project is €11,993.302, with €5 million of this amount being funded by the municipality. The remaining €6,993,302 will have to be paid when development starts, but repayment could only be made once the properties were to be sold.

This setting means that the timeline for repayments is not guaranteed. Therefore, it would be appropriate to consider the application of an equity-type FI into the financial model. The property sales will allow the FIs to be reimbursed with a return on investment of between 10% and 20%, however this will depend on the pace of the sales. Lastly, the selling prices will be established by the Generalitat, and so the state aid risk is minimal.

FI structure for the project

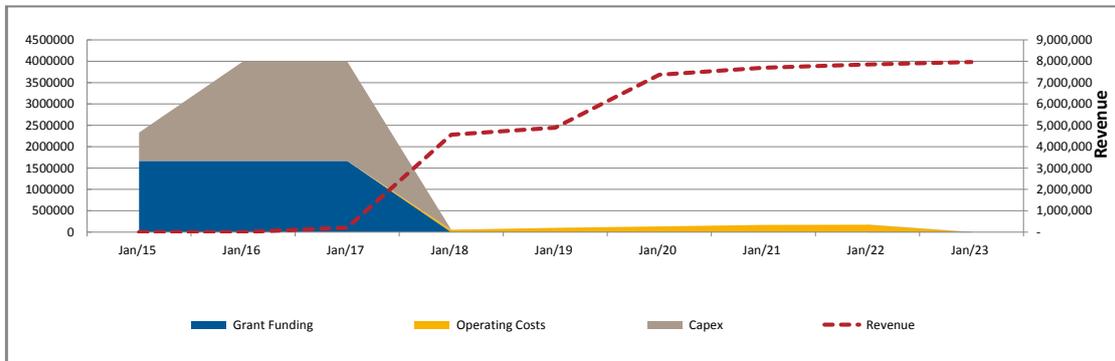


Source: Mazars-Ecorys

The revenues from this project will mainly come from the sale and rents of properties. To cover the risk-related to the uncertainty of the sales pace indicated earlier, an own equity FI would be required to finance the €6,993,302 in order to make this land reorganisation project feasible.

The following chart shows the cash flows expected in the project:

Cash flows



Source: Mazars-Ecorys

In the event that the sales are sold at the pace expected by the project promoters, a timeline of six years is estimated for repayments, but a certain degree of flexibility in repaying own equity would be necessary to ensure the success of the project.

6. Recommendations in designing the Operational Programmes

6.1. General framework

The European Structural and Investment (ESI) Funds in Spain for the programming period 2014-2020 include the European Regional Development Fund (ERDF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). The aim of the ESI Funds is to promote competitiveness and convergence in all regions, and together the ESI Funds are important resources to help tackle economic development issues and contribute to the Europe 2020 Strategy. In particular, for the ERDF (and similarly for the rest of the funds), priority should be given to the themes considered in three fundamental framework documents:

- The specific recommendations of the Council for Spain,
- The National Reforms Programme and
- The Commission Position Paper report.

As established in the latter, the Position Paper, the ESI Funds for the 2014-2020 programming period require a general reorientation of investments toward the following sectors:

- Research and innovation;
- Support to SMEs;
- The quality of education and training;
- Inclusive labour markets that promote skilled employment and social cohesion and lead to considerable increases in productivity;
- The inclusion of the objectives regarding climate change, and
- The transition to a low carbon emission economy which uses resources efficiently.

Towards this end, the planning and execution of ESI Funds in Catalonia and Spain consider an inclusive approach which responds to the challenges identified, in order to accomplish the following:

- Optimise the impact of the co-financed activities with respect to the results to be achieved. The Europe 2020 objectives are included in the different ESI Funds so that each one contributes to promoting smart, sustainable and inclusive growth.
- Promote sectors with a high potential for growth.
- Exploit synergies between ESI Funds and other EU policies and instruments.
- Contribute to implementing the reforms defined in Spain for overcoming the challenges of the financial crisis, particularly those focused on employment, productivity and competitiveness.
- **Supporting FIs and private investment in order to achieve a leverage effect on public funds.**

To achieve these objectives, as indicated in the **June 2013 version of the Draft for the Partnership Agreement of Spain and the European Commission on the 2014-2020 cohesion policy**, the intervention of ESI Funds will be concentrated on a limited number of priorities, which will bring about an increase in the efficiency of public interventions and make it possible to reach the critical mass needed to generate a real impact on the social and economic situation of Spain and its regions, in this case, Catalonia.

Based on the foregoing, the general framework establishing the recommendations of this Report in terms of preparing the new OP for Catalonia is concentrated on a small number of priorities which are linked to the Europe 2020 Strategy, focusing on the results, ex ante and ex post conditions and the on-going monitoring of the progress made in achieving the agreed objectives.

In addition it is important to emphasise that in the case of the ERDF, the Regulation specifically indicates that the aid should be focused on research and innovation, support to SMEs and supporting a low carbon economy (up to 80% of the funds should be used for these major thematic areas).

Likewise the Regulation indicates “within the sphere of sustainable urban development, it is considered necessary to support inclusive measures in order to face the economic, environmental, climate-related and social changes affecting urban areas (sic)”.

Given that this is the general framework summarised above, and having observed that the Partnership Agreement draft is at an intermediate phase of preparation and that at the time of writing this report, the 2014-2020 OP for Catalonia²⁸ is being drafted, a series of duly grounded and contrasted recommendations is set out below for the purpose of contributing to design the OP in all aspects related to the use of FIs during the 2014-2020 programming period.

6.2. Recommendations in designing the Operational Programme strategy

Based on the analysis of supply and demand made in Chapter 2 of this report, the guidelines and contents of the Regulation and the draft of the Partnership Agreement of Spain indicated above in the general framework section, this part of the report presents two options for using the FIs in the ERDF OP for Catalonia. With respect to the selection of TOs, the structure used to present them and identification of the Investment Priorities²⁹, it is necessary to point out that:

1. The proposed TOs and Investment Priorities are mainly based on the potential financial supply and demand in the region of Catalonia. For this reason, it might be necessary to complete that selection in the future as the regional strategy for Catalonia (OP) and the national and multi-regional strategy for Spain (Partnership Agreement) are defined;
2. The guidelines for drafting and structure of the OPs emphasise that “as a general rule, the programmes should establish Priority Axes which are mono-fund and cover only one TO and one regional category” and that “in duly justified cases it is also possible to establish Priority Axes which combine complementary investment priorities from different TOs to achieve a maximum contribution to the Priority Axes”;
3. In considering the recommendations set out below, the document European Commission DG REGIO “Provisional template and guidelines for the content of the OP” (version 3 – May 2013) was used as a reference.

²⁸ As was indicated at a meeting held by the Mazars-Ecorys consultant team with Generalitat de Catalunya and those responsible for drafting the OP.

²⁹ ERDF Regulation Proposal, article 5: Investment priorities
http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2014/proposals/regulation/erdf/erdf_proposal_es.pdf

6.2.1. Identification of Thematic Objectives and Priority Axes

This preliminary approach is based on the potential demand resulted from this study. After classifying the project ideas into a series of market sectors and segments, a mapping exercise to the 11 TO was undertaken. It is expected that the OP is aligned with the 11 TOs outlined in the EU 2020 Strategy, in accordance with the ERDF Regulation and the draft of the Partnership Agreement for Spain.

The evaluation of the project ideas for Catalonia, consultations with the private sector, contacts with the Generalitat de Catalunya and analysis of their cohesion with the European, national and Catalan framework have made it possible to identify the priority thematic areas for the region that coincide with the TOs and the investment priorities³⁰. These are set out in the following table:

³⁰ Selected, in accordance with the consultations made, from the list of Investment Priorities included in article 5 of the Regulation Proposal of the European Parliament and of the Council concerning specific provisions related to the ERDF

Table – Selection of TOs and Investment Priorities

Investment priorities ³¹	Potential effect and results on the territory	Selection rationale		
		<u>EU strategies and priorities</u>	<u>Catalonia strategies and priorities</u>	<u>Supply and demand analysis</u>
TO3) Enhancing the competitiveness of small and medium-sized enterprises (SMEs)				
<p>a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators</p> <p>b) developing and implementing new business models for SMEs, in particular with regard to internationalisation</p>	<p>Actions for urban development and economic regeneration that will create the general framework for the reinforcement of Catalanian SMEs and the improvement of economic competitiveness. The tourism sector represents the main frame for the application of FIs in this axis.</p> <p>As an example, the project-integral plan for the tourism sector foresees actions for the regeneration of obsolete hotels equipment and the enhancement of energy efficiency in the buildings, thus contributing to the promotion of business and the improvement of tourist agents' competitiveness.</p>	<p>Since Catalonia is one of the most developed regions, at least 80% of resources will be focused on energy efficiency and renewable energies, research and innovation and SME support (TO3).</p>	<p>This TO represents a priority for Catalonia, as it is evidenced by the ECAT 2020 and the RIS3 draft available to date. In this context, the relevance of SMEs in the Spanish and Catalanian business fabric justifies the economic development actions based on the support to these key actors.</p> <p>Specifically, it should be pointed out the relevance of the tourism sector as a motor of the Catalanian economy, as it has been demonstrated in the recent approval of the National Tourism Strategic Plan. This Plan foresees a series of cascade actions: from a General Plan, to a specific intervention and a Pilot project in the Costa Brava.</p>	<p>A series of analysed projects have a positive impact on the promotion of SME competitiveness.</p> <p>It has to be pointed out a project-integral plan for the tourism sector launched by the Generalitat de Catalunya, which constitutes a pilot activity for the launch of the General Tourism Plan, aimed at improving the competitiveness in this sector.</p> <p>The strong sectoral and integrated approach of the foreseen intervention in this frame could be extrapolated to other relevant sectors in Catalonia.</p>
TO4) Supporting the shift towards a low-carbon economy in all sectors				

³¹ Art.9 of the Proposal on Common Provisions Regulation and Art. 5 of the Proposal on ERDF Specific Provisions Regulation.

Investment priorities ³¹	Potential effect and results on the territory	Selection rationale		
		<u>EU strategies and priorities</u>	<u>Catalonia strategies and priorities</u>	<u>Supply and demand analysis</u>
<p>a) promoting the production and distribution of energy derived from renewable sources</p> <p>c) supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector</p> <p>e) promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures</p>	<p>Reduction of carbon emissions, thus contributing to the shift towards a low carbon economy. Furthermore, the promotion of the use of renewable energies for the development of this sector, with positive impacts on the environment and economic activity.</p> <p>An example that may illustrate this last aspect is the saving estimation of kWh consumed in the ICAEN project, where savings in the Generalitat de Catalunya buildings is estimated to be of 449 million kwh/year.</p>	<p>Since Catalonia is one of the most developed regions, at least 80% of resources will be focused on energy efficiency and renewable energies (TO4), research and innovation and SME support of which 20% will be used for energy efficiency and renewable energies.</p>	<p>This TO represents a priority for Catalonia, as it is evidenced by the Catalonia Strategy for Sustainable Development in the 2020 horizon, the Catalonian Plan for Energy and Climate Change 2012-2020, the Catalan Strategy for adapting to Climate Change, the Plan for Savings and Energy efficiency in the buildings and facilities of the Generalitat de Catalunya 2011-2014 and the Catalonia Energy Plan 2006-2015.</p>	<p>19 of the projects analysed in the frame of the present study are focused on energy efficiency measures. The majority proposes actions for the improvement of energy efficiency in infrastructures and public and private buildings. Moreover, an important number of projects promote the production and distribution of renewable energies, in particular biomass (5 projects) and photovoltaic systems (5 projects). Overall, projects are oriented towards carbon reduction.</p> <p>Additionally, it has also been identified a series of projects that contribute to carbon reduction through actions for the regeneration of deprived areas, including green spaces and the promotion of their sustainability from an environmental point of view.</p>

Investment priorities ³¹	Potential effect and results on the territory	Selection rationale		
		<u>EU strategies and priorities</u>	<u>Catalonia strategies and priorities</u>	<u>Supply and demand analysis</u>
TO6) Preserving and protecting the environment and promoting resource efficiency				
e) taking action to improve the urban environment, to revitalise cities, regenerate and decontaminate brownfield sites (including conversion areas), reduce air pollution and promote noise-reduction measures	<p>The involvement of different typologies of private and public actors affects the intervention area, thus increasing its competitiveness and development, while taking into account environmental protection.</p> <p>Relevant effects are the regeneration of valuable historical and cultural heritage buildings, the redevelopment of open spaces and the construction of new public facilities, among others.</p>	The ERDF specific provisions regulation gives special attention to urban sustainable development, objective to be achieved by assigning at least 5% of ERDF resources to urban sustainable development.	This TO represents a priority for Catalonia, as it is evidenced in Law 2/2004 for Neighbourhood Improvement and Law 3/2009 for the Legalisation and Improvement of Urban Developments with urban deficiencies.	6 project ideas proposed by different Catalanian authorities foresee integral and sustainable interventions from an environmental point of view, which are focused on the recuperation and improvement of deprived areas through urban regeneration and economic activity creation. Among those, the "Vapor Cortés" project addresses the regeneration of the industrial complex situated in the centre of Terrassa city, providing new uses for the development of productive activities and promoting synergies with public spaces, facilities and housing.
TO7) Promoting sustainable transport and removing bottlenecks in key network infrastructures				
b) enhancing regional mobility by connecting secondary and tertiary nodes to TEN-T infrastructure, including	The enhancement of infrastructures and networks and the creation of new nodes and interconnections will promote the use of sustainable transport at local and regional level, while reducing carbon emissions. Additionally, it is estimated that improvements in the communications	The Position of the EC on the development of partnership agreements and programmes in Spain for the period 2014-2020 points out, among the financial priorities, the need to promote the use of clean transport modes in urban areas and the rationalisation	This TO represents a priority for Catalonia, as it is evidenced in the Plan for Transport Infrastructures in Catalonia (PITC), the integral design of the necessary infrastructure network for Catalonia in the horizon 2026 and the Mobility Act: national	8 of the projects analysed in the frame of the consultation process realised in the present study aim to improve sustainable mobility at a local level, as well as to promote a sustainable interterritorial transport system. Actions such as car-sharing, public cars and

Investment priorities ³¹	Potential effect and results on the territory	Selection rationale		
		<u>EU strategies and priorities</u>	<u>Catalonia strategies and priorities</u>	<u>Supply and demand analysis</u>
multimodal nodes c) developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility	systems and the creation of new spaces will contribute to the economic revitalisation of the territory. Relevant effects are the reduction of externalities caused by the massive use of private vehicle and a greater energy sustainability of transports.	of the transport system.	guidelines, Master plans, specific plans and urban mobility plans.	railways networks are foreseen, among others. Specifically, the ambitious T-Mobilitat project in the field of Smart Cards and launched by the Generalitat of Catalunya commenced its works in 2013.
TO9) Promoting social inclusion, combating poverty and any discrimination				
b) providing support for physical, economic and social regeneration of deprived communities in urban and rural areas	The involvement of different typologies of private and public actors globally affects the intervention area, thus increasing its competitiveness and development, while boosting local economy and employment opportunities generation, thus enhancing social cohesion.	The ERDF specific provisions regulation gives special attention to urban sustainable development, objective to be achieved by assigning at least 5% of ERDF resources to urban sustainable development.	This TO represents a priority for Catalonia, as it is evidenced in Law 2/2004 for Neighbourhood Improvement, Urbana areas and Villas that demand special attention, namely the Neighbourhoods act, and Law 3/2009 for the Legalisation and Improvement of Urban Developments with urban	6 of the projects analysed in the frame of the survey realised in the present study propose integral and sustainable interventions from an environmental point of view focused on the recuperation and improvement of deprived areas through urban regeneration and economic activity creation. As an example, the intervention project

Investment priorities ³¹	Potential effect and results on the territory	Selection rationale		
		<u>EU strategies and priorities</u>	<u>Catalonia strategies and priorities</u>	<u>Supply and demand analysis</u>
	The regeneration of deprived areas through the projects will allow the regeneration of spaces, the conversion of building for commercial use thanks to the attraction of enterprises and jobs creation. The project located in Badalona municipality (former factory of La Estrella) contributes to illustrate this aspect: it foresees the construction of 7,919 m2 green spaces, 11,489 m of road system, as well as the generation of the necessary land (4,625.35m ²) for the construction of a public school.		deficiencies.	in the former factory of La Estrella, in Badalona, foresees the transformation of an old industrial site and housing estate through the construction of new housing, thus generating sustainable activities and spaces from an environmental and social point of view while boosting economic activity.

6.2.2. Operational Programme structure proposal³²

Under this section, and on the basis of the above tasks related to the supply and demand analysis, the study presents recommendations on the actual thematic objectives to be addressed and suggests investment priorities on the basis on the sectors and project pipelines that have been identified.

With this, the study contributes to set the grounds for the design of the OP strategy from which EU resources could be drawn for deployment through FIs.

Thematic objectives and investment priorities set out broad objectives for the ESI Funds that are aligned to the Europe 2020 strategy and ensure that all support provided through ESI Funds contributes to the objectives of the Europe 2020 strategy.

These TOs and investment priorities will be selected from the full thematic menu established in Article 9 of the CPR (for TOs) and in Article 5 of the ERDF Regulation (for investment priorities), always in accordance to the relevant development needs of the territory concerned.

The structure of the operational programmes can vary. As a general rule the priority axes shall concern one thematic objective and comprise one or more investment priorities of that TO (article 96(1) CPR. The application of derogations set out in this Article 96 (1) should be explained and justified.

From all the above, the study includes **two options** for the design of the OP Priority Axes, which are provided in accordance to EC DG REGIO's "provisional template and guidelines for the OP content" (version 3 – May 2013)³³:

1. A first option that can be recommended to Catalonia in order to guide the preparation of the ERDF OP strategy is based on the potential definition of up to five Priority Axes corresponding to the TOs identified as being the most relevant for the use FIs (TO 3 – improvement in competitiveness of SMEs, 4 – Low-carbon economy, 6 - Environment, 7- Sustainable mobility and 9 – Social inclusion).

2. A second option would imply the establishment of one specific Priority Axis for FIs that will be complementary to the other identified Priority axes for the Programme, which will have a thematic approach. This "FI axis" would be related to more than one TO, financing projects or project areas that fall within the "grey zone", meaning that they can be financed through FIs.

This second option will have to observe the application of derogations set out in Article 96(1), which in practice would entail that these derogations will have to be justified, "with a view to achieving better effectiveness and efficiency in a thematically coherent integrated approach"³⁴.

³² It has to be noted that the recommendations of the design of the OP have been based on the proposals of the Common Provisions Regulation (Commission Amended Proposal adopted on 22.04.2013) and ERDF Regulation (06.10.2011). Every quote to the proposals along the report refers to these versions.

³³ Draft template and guidelines for the content of the operational programme, http://ec.europa.eu/regional_policy/what/future/pdf/preparation/2_operational_programme_template_2013_05_21.pdf

³⁴ Guidance Fiche: Building Priority Axes, Version 1- 29.07.2013. http://ec.europa.eu/regional_policy/what/future/pdf/preparation/2709_gui_guidance_building_priority_axis_.pdf

Both options should be conveniently explained following section 2.A.2.3: The planned use of financial instruments of DG REGIO's "provisional template and guidelines for the OP content" (version 3 – May 2013).

→ Option I: thematic approach

The proposed TOs and Investment Priorities are mainly based on the potential financial supply and demand in the region of Catalonia. For this reason, it might be necessary to complement that selection in the future, once the final versions of the regional strategy for Catalonia (OP) and the national and multi-regional strategy for Spain (Partnership Agreement) are available.

The table below shows the recommendations towards the definition of an OP strategy for Catalonia that could have up to 5 Priority Axes where the use of FIs could be envisaged.

Each of these Priority Axes is presented with its:

- Related thematic objectives;
- Investment priorities;
- Resources needed, calculated on the basis of the survey of potential projects carried out as part of this study and according to the level of maturity of the projects and;
- Expected outputs and results that could be achieved.

Priority Axes	Pre-selected Thematic Objectives	Investment Priorities ³⁵	Resources needed (€)	Expected outputs/results
Up to 5 Priority Axes where the use of FIs could be envisaged	TO3) Enhancing the competitiveness of SMEs	a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators	Short term/mature projects: 6,690,000	• Support to the creation and enhancement of Catalonian SMEs • Contribution to stimulate economic activity in urban areas
		b) developing and implementing new business models for SMEs, in particular with	Long term/less mature projects: 702,036,399	• Increase the quality of Catalan SMEs in the tourism sector

³⁵ Proposal for a regulation of the ERDF, Article 5: Investment priorities
http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2014/proposals/regulation/erdf/erdf_proposal_en.pdf

regard to internationalisation			
TO4) Supporting the shift towards a low-carbon economy in all sectors	a) promoting the production and distribution of energy derived from renewable sources		
	c) supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector	Short term/ mature projects: 70,150,696 Long term/less mature projects: 1,783,909,190	<ul style="list-style-type: none"> • Contribution to the reduction of carbon emissions • Actual savings in energy consumption • General promotion of the use of renewable energies • Positive impact on the environment and boosting economic activity
	e) promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures		
TO6) Preserving and protecting the environment and promoting resource efficiency	e) taking action to improve the urban environment, to revitalise cities, regenerate and decontaminate brownfield sites (including conversion areas), reduce air pollution and promote noise-reduction measures	Short term/mature projects: 77,164,696 Long term/less mature projects: 1,243,864,509	<ul style="list-style-type: none"> • Involvement of different typologies of private and public actors • Increase of competitiveness and development • Enhancement of environmental protection • Rehabilitation of valuable historical and cultural heritage buildings • Redevelopment of free spaces • Construction of new public facilities
TO7) Promoting	b) enhancing	Short term/ mature	<ul style="list-style-type: none"> • Enhancement of

sustainable transport and removing bottlenecks in key network infrastructures	<p>regional mobility by connecting secondary and tertiary nodes to TEN-T infrastructure, including multimodal nodes</p> <p>c) developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility</p>	<p>projects: 9,657,854</p> <p>Long term/less mature projects: 138,622,854</p>	<p>infrastructures and networks</p> <ul style="list-style-type: none"> • Creation of new networks and interconnections • Promotion of sustainable transport at local and regional level • Reduction of carbon emissions. • Contribution to the economic revitalisation of the territory • Reduction of externalities caused by the excessive use of private vehicles and a more energy sustainable transport network
TO9) Promoting social inclusion, combating poverty and any discrimination	b) providing support for physical, economic and social regeneration of deprived communities in urban and rural areas	<p>Short term/mature projects: 6,330,000</p> <p>Long term/less mature projects: 590,236,699</p>	<ul style="list-style-type: none"> • Involvement of different typologies of private and public actors • Enhancement of local economy and employment opportunities generation • Enhancement of social cohesion • Regeneration of deprived areas • Rehabilitation of spaces • Conversion of old and abandoned buildings for commercial use • Attraction of enterprises • Job creation

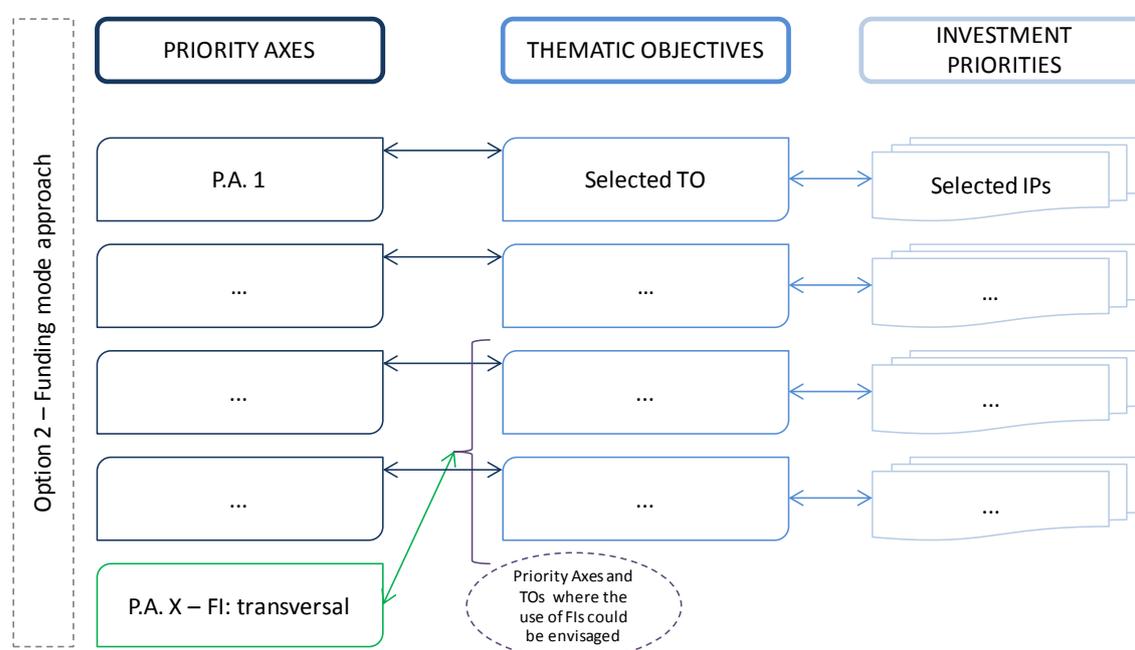
→ Option II: funding model approach

As indicated above, the second option proposed for the integration of the FIs into the OP structure is focused on promoting FIs as one of the basic channels for funding projects.

The model proposes the establishment of a specific Priority Axis for FIs that is complementary to the other identified Priority Axes for the Programme, which will have a thematic approach.

This "FI axis" would finance projects or project areas which, although linked to other Priority Axes in the OP from a thematic standpoint, are able to generate returns and are located in the "grey zone", meaning they can be financed through FIs. This proposal would thus require close coordination between the "FI axis" and each of the other Priority Axes.

In this way, the structure of the OP strategy that could take place under this scenario could be the following:



6.3. Context for implementing Integrated Territorial Investment and Community-Led Local Development

The Integrated Territorial Investment (ITI) and Community-Led Local Development (CLLD) lines are defined in Article 35 and 36 of the CPR and their main general characteristics are presented in this section, since as already mentioned in section 6.1 of the general framework, the Strategy of the OP for Catalonia, its Priority Axes and its investment priorities are not yet available and are in the process of being prepared.

The ITI instrument establishes agreements for the integrated use of the investments within the agreements framework for more than one Priority Axis of one or more OPs. The funding of several axes and priority programmes can be grouped in an integrated investment strategy for a specific territory or functional area. This may be in the form of an integrated urban development

strategy, and also inter-municipal cooperation in specific territories. Consequently, MAs can delegate certain parts of different Priority Axes to a body (a local authority) to ensure that the investments are executed in a complementary manner. Certain components of an ITI may be applied through local participative development, combining both approaches.

6.3.1. Possible implementation and development of ITI and CLLD in Catalonia

The Catalan context may in principle seem favourable for the implementation of ITI and CLLD, but during the preparation of this study, the preliminary phases of analysing and drafting the OP Strategy and the actions to be included in it were still under way. Therefore, the decision to implement this type of new initiative within the context of the European cohesion policy and integrating them into the 2014-2020 ERDF OP for Catalonia will depend on the structure of the OP that is eventually adopted by the Generalitat de Catalunya and the MA, and the preparation of an integrated inter-sectoral development strategy. This strategy should still be prepared if the Generalitat de Catalunya should consider an intervention of this type necessary (which would have to be considered within the OP preparation process and its respective ex-ante assessment); this study, therefore, includes a context-related approach for its future implementation.

6.3.2. Integrated Territorial Investment – a flexible tool

ITI is a tool for implementing territorial strategies on an integrated basis. It is not an operation or a sub-priority of an OP, but allows MS to implement OPs in a cross-cutting way and use the funding of several Priority Axes for one or more OPs, to guarantee the implementation of an integrated strategy for a specific region. In this sense, the existence of an ITI will offer MS the flexibility they need to design the OP and facilitate the effective implementation of the integrated actions through simplified funding. It is important to stress that ITI can only be used effectively if the geographic area affected has an inter-sectoral and integrated territorial strategy.

The key elements for ITI are³⁶:

- a designated territory and an integrated territorial development strategy;
- a package of actions to be implemented;
- management agreements for monitoring the ITI.

6.3.3. A designated territory and an integrated territorial development strategy

It is essential to develop an integrated inter-sectoral development strategy that focuses on the development needs of the affected area. The strategy should be designed so that the actions can be based on synergies produced through coordinated implementation.

The actions established in keeping with the specific territorial needs are supported by the ITI instrument. However it is still necessary to respect the context of cooperation. For this reason the European Territorial Cooperation (ETC) regulation requires all intermediary bodies

³⁶ EC ITI Fact Sheet : http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/iti_es.pdf

designated to implement ITIs to “be designated by the public authorities of at least two participating countries”³⁷.

6.3.4. A package of actions to be implemented

The actions to be executed through ITI will contribute to the TOs of the relevant Priority Axis of the participating OPs and to the territorial strategy development objectives. This can be funded through the ERDF, ESF and the Cohesion Fund, but it is not obligatory to combine all the Funds in each ITI, which is especially important in the case of sustainable urban development.

One ITI may provide support not only in the form of grants but also through FIs³⁸ where appropriate, to execute the actions defined in the development strategy.

The Community-Led Local Development (CLLD³⁹) element may be used as one of the bases for implementing an ITI. Nonetheless there are important differences between an ITI and CLLD. CLLD is a bottom up approach. The local action group is responsible for determining the content of the local development strategy and the operations. Many of the proposal investment priorities may make a direct contribution to developing the geographic area in question and there is no obligation to implement them all through this instrument. However, it is advisable for the sectoral investments in the area in question to be included in the line of the integrated territorial development strategies.

6.3.5. Management agreements for monitoring Integrated Territorial Investment

The MA is ultimately responsible for monitoring and implementing ITI operations. However, it may designate intermediary bodies, including regional development bodies, local authorities and non-governmental organisations to carry out all or some of the management and implementation tasks. The manner and level for delegating ITI management may vary depending on the administrative agreements of the MS or the region.

The diagram on the next page shows how an ITI may receive combined funds from several Priority Axes in one or more programmes for an inter-sectoral, multidimensional intervention. An ITI may support any operation related to the investment priorities of the participating Priority Axes.

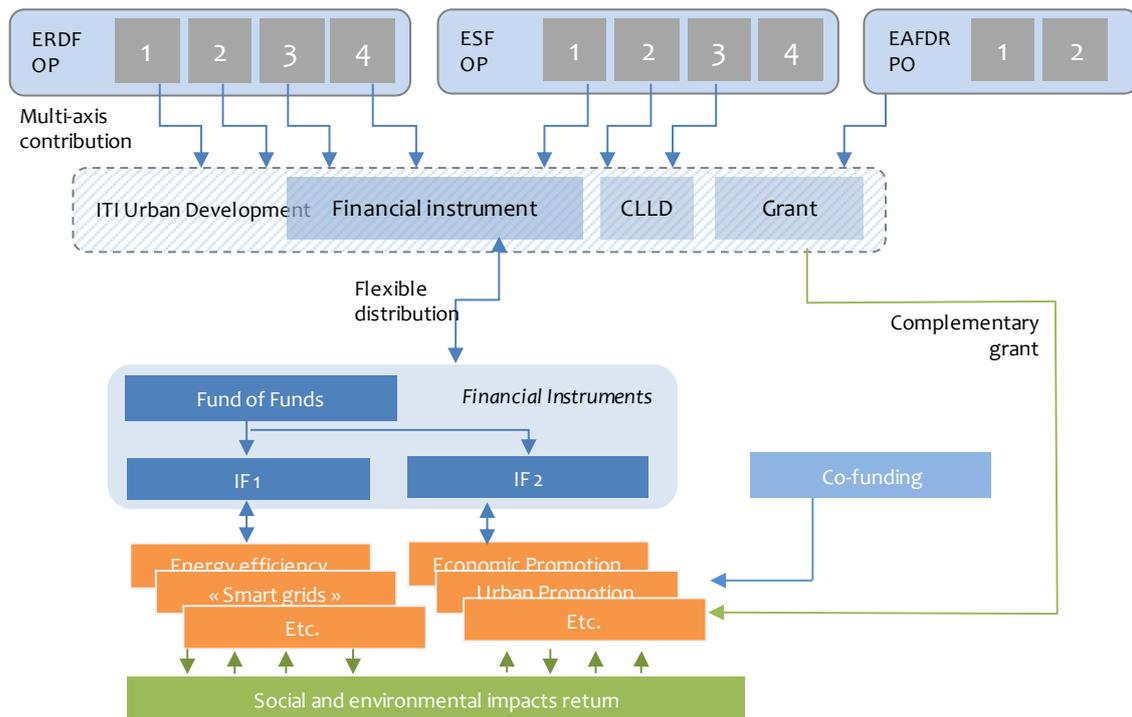
The objective of ITI is to deploy a multi-sectoral investment strategy in a defined territory (with the possibility of establishing a local management system) or on a regional scale. This objective corresponds to that of implementing the FI that would allow the urban dimension in the OP to be strengthened by combining several Priority Axes and involving local actors through the market sectors identified.

³⁷ Article 10 of the ETC

³⁸ Article 37-45 of the CPR

³⁹ Articles 28-30 of the Proposal regulation on common provisions

Organisation of the FI in the form of an ITI



Source: Mazars-Ecorys

MS should earmark at least 5% of ERDF resources for ITI with management delegated to cities. Greater incentives for using ITI, for example providing an additional 10% ESI Funds co-financing (i.e. 60% ESI Funds and 40% national co-financing) is being discussed, but this has yet to be confirmed with the European Commission.

6.3.6. Advantages of this system:

The Commission proposals with respect to ITI have several potential advantages:

- ITI as an instrument for promoting the integrated use of Funds has the potential to provoke a better aggregate result with the same amount of public investment.
- Delegating ITI management will engage interested sub-regional (local/urban) agents by assuring their involvement in preparing and implementing the programme.
- Since an ITI has different sources of finance guaranteed at the start, there will be greater safety with respect to funding integrated actions.
- ITI are instruments designed for a development focus based in an area that can help deploy the under-utilised potential available at local, urban and regional level.

7. General considerations for implementing FIs

This section provides an outline of the general considerations and practical arrangements for implementation of FIs in the Programming Period 2014-2020. For the Programming Period 2014-2020, there is a greater incentive to use FIs and it is also envisaged that FIs can be complemented with grants, which is particularly advantageous for projects that do not generate sufficient revenues.

Pursuant to Article 37 of the CPR mandates that prior to allocating OP resources to FIs, MA must undertake an Ex-Ante Assessment to establish evidence of market failure or sub-optimal investment situations prior to allocating ESI Funds to FIs. The Ex-Ante Assessment shall include:

- **Assessment of market failure, sub-optimal investment situations and investment needs:** The European Commission has seen that successful design and implementation of FIs hinges on a correct assessment of market gaps and needs and therefore during the 2014-2020 Programming Period FIs should be designed on the basis of an Ex-Ante Assessment. The mismatch between the demand and supply of the different types of FIs, known as the financing gap, constitutes the rationale for public intervention.
- **Investment strategy:** Experience shows that it is crucial to link the Ex-Ante Assessment and the OP strategy. Particularly considering the future possibility to combine FIs with grants, the Ex-Ante Assessment should be integrated with programming to address the different market gaps. The Ex-Ante Assessment must include more information on what type of financial products should be put in place to avoid overlaps and inconsistencies between funding instruments implemented by different actors at different levels and what final recipients shall be targeted. Options for implementation arrangements should be also examined.
- **Level of co-finance/co-investment:** knowledge of the level of funds (from ESI Funds as national co-financing sources, as well as the expected level of involvement from the private sector in the form of co-investment, for example) which the MAs intend to channel in to FIs under their OPs will be a crucial component of the Ex-Ante Assessment process, as it allows the evaluators to suggest what type of financial products could be put in place to address the identified funding gap(s). The need for, and level of, preferential remuneration to attract counterpart resources from private investors should also be assessed.
- **Expected impacts and results:** establishing targets for expected impacts and results for FIs was problematic during the 2006-2013 Programming Period. Expected impacts and results to be assessed focus on a specification of the expected results and how the FI concerned is expected to contribute to the achievement of the specific objectives and results.
- **Value added:** The Ex-Ante Assessments will tie the findings related to market gaps more closely into the objectives and priorities of the ESI Funds programmes, and the added value of FIs under consideration must be explained.
- **Application of lessons learnt:** there must be an assessment of lessons learnt from similar instruments or ex-ante assessments in the past. The 2007-2013 Programming Period was a learning experience for many MAs implementing FIs for the first time and

there is now considerable experience being built up which can usefully feed into the development of the Ex-Ante Assessment methodology for 2014-2020.

- **Provisions allowing for periodic reviews and updates:** during the implementation phase MAs may consider that the Ex-Ante Assessment no longer accurately represents the current market conditions at the time of implementation; therefore, the review and update of the Ex-Ante Assessment may become necessary to reflect changes in the market.

The FIs could invest in projects in different forms such as own equity, debt and financial guarantee. The selection of the form of investment depends on the type of project, its needs and the characteristics of the investors participating in funding the project. The types of investment in which the FI could participate in should be indicated in the documents implementing the FI.

If a project requires a loan and has the capacity to repay it in the appropriate conditions, the most suitable form of investment is debt. In this case the project revenues should be well defined and a certain degree of security should exist during the loan term (the typical example for this case would be infrastructure projects paid and guaranteed by the public sector). For projects with revenues or costs that raise greater uncertainties, given the risk level of the project, the most suitable form of investments would be own equity (for example a project that generates revenues after a long construction term). Lastly, for projects that could attract the necessary finance, if the revenues or costs were guaranteed, the most suitable form of investment is a guarantee (for instance, an energy project in which the selling price must be guaranteed to plan the income generated and then obtain a loan).

7.1. Technical assistance

Technical assistance may be used for projects or for putting the FI into operation. Potentially, many of the projects identified in this study⁴⁰ could benefit from technical assistance, for example, in project structuring, improving their business plans, and getting projects to an "investment ready" status. For FIs, relevant public sector body could benefit from technical assistance that would include the preparation of all the phases for start-up and the necessary documentation, and general support in preparing the project investment plans, analysing their performance and selecting the respective auditing firms.

To guarantee the success of the operations, technical assistance will have to include three fundamental competences: project finance, investment management, and knowledge of EU regulatory and policy framework, including State aid.

It is recommended that the amount of funds allocated to technical assistance should not exceed 4% of all the ESI Funds allocated to a Priority Axis in each OP, in accordance with the content of Articles 58 and 119 of the final Regulation⁴⁰. This is especially important during the FI launch phase, in preparing the first investment projects and creating the necessary instruments for monitoring the performance of the Funds.

⁴⁰ <http://new.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN>

To ensure the success of the implementation of FIs and the implementation of investment programmes, technical assistance for the MA and promoters has several advantages:

Technical assistance for the MA

The technical assistance could be provided by members of the MA who specialise in FIs or external consultants, and would be aimed at:

- advising the MA during the phases of creating and managing the funds and supervision of studies (Ex-Ante Assessments and legal services)
- supporting the MA in the tender procedure of fund managers
- assisting the MA in negotiations with public and private investors
- proposing an investment programme for each FI in agreement with the fund managers
- building a project assessment criteria for selecting investment propositions
- ensuring the regular review of the project funding process, taking into consideration the performance of the ESI Funds and the established investment pace.

Technical assistance for promoters

The technical assistance available to promoters should be aimed at:

- awareness-raising and information sharing
- explaining the methodology for evaluating projects and providing guidance on the investment process to increase their success
- offering technical assistance in structuring the projects;
- assisting the different parties in negotiations with public and private investors.

This technical assistance could be funded with ESI Funds with a limit of 10% of the funds allocated to the FI⁴¹, including co-financing.

7.2. Eligible cost and state aid

7.2.1. Eligibility of the cost

The first issue deals with the eligibility of the costs incurred in executing the project within the framework of current policies and objectives regarding the use of ESI Funds. It is not necessary for all project costs to be eligible, but the eligible cost amount should be equal to the amount paid for FIs and no double co-financing of same item of expenditure is allowed (i.e. the sum of the ESI Funds and the total co-funding for financing the FI). For instance, to be eligible for total funding of €20 million (that is €10 million in ESI Funds and €10 million in co-funding), the project would need €20 million in eligible costs.

The cost eligibility issue should be considered on a project-by-project basis based on the related OPs and also considering other applicable regulations and policies. For the 2014-2020 programming period, 11 TOs guide the use of the ESI Funds and FIs. The European Commission proposes a flexible approach: the costs could cover different objectives and the same project

⁴¹ Ibid.

could accumulate grants attributable to different objectives. Total project cost eligibility is the sum of eligible costs attributable to the objectives set out above. A detailed justification will be necessary with an eligibility audit that can be funded using European funds.

The eligible costs and certificates are clarified in the Amendment Proposal (context, 26-27⁴²), which stipulates that the Generalitat de Catalunya should establish specific provisions regarding the amounts that should be accepted as eligible expenditure and the reuse of resources attributable to the ESI Funds, including the use of the resources remaining after closing the programmes.

The Regulation suggests that expenditure payment requests (or fund disbursement requests) should be made by phases. The following contributions will depend on the expenditure incurred in preceding contributions:

- 1st contribution: a maximum of 25% of the total contribution of the programme to FIs
- 2nd contribution: a maximum of 25% if at least 60% of the first contribution has been spent
- 3rd and following contributions: a maximum of 25% if at least 85% of the preceding contributions have been spent.

This mechanism is set up to avoid blocking important funds in FIs if the respective contributions have not been spent.

7.2.2. State aid rules

General principles of State aid⁴³

The state aid rules only apply to the measures that fulfil all the criteria listed in article 87(1) of the Commission Press Release about the application of articles 87 and 88 of the EC Agreement concerning State aid⁴⁴, and in particular the following:

- a) **Transfer of public funds** including national, regional or local authorities, public banks and foundations. The financial transfers constituting the aid may take different forms: not only grants or subsidised interest but also guarantees, acceleration depreciation, capital contributions, tax exemption, etc.
- b) **Economic benefits:** State aid should constitute an economic benefit from which the beneficiary cannot normally benefit.
- c) **Selection:** State aid should be selected and they can then change the competitive balance and market conditions between certain companies.
- d) **Effect competition and trade:** State aid may give rise to a change in competitive and trading conditions between member states.

⁴² European and Council Regulation Proposal 2011/0276 (COD)

⁴³ Extract from the EC Directorate-General for Competition- Vademecum – State Aid Law - 30 September 2008

⁴⁴ "Commission Press Release on the application of articles 87 and 88 of the EC State Aid Agreement in the form of a guarantee" (Official Journal No C 155, 20.6.2008, p. 10-22 and corrigendum top. 15 in Official Journal No C 244, 25.9.2008, p. 32)

In some cases State aid can be accepted. The compatibility of the aid can be established through an analysis of the positive effects of the aid (regarding its contribution to executing the TOs) compared the negative effects (mainly the disturbing of competition and exchanges resulting from this aid): the "balancing test". To declare a compatible type of aid, that aid should be necessary and in proportion to the effort required to reach the objectives. There are four methodologies for defining compatibility:

1. Non-aid - *De minimis* (less than a defined amount)
2. General Block Exemption Regulation (GBER)
3. Standard evaluation
4. Detailed evaluation

If the aid evaluations meet all the conditions defined in the "*de Minimis*" exemption, there is no obligation to present a note to the European Commission (while MS have the obligation to monitor this aid to establish whether it is in line with the "*de Minimis*" regulation).

Individual aid measures or aid programmes that fulfil all the conditions defined in the «General Block Exemption Regulation» (GBER) adopted by the EC do not have to notify the EC DG Competition. The MA should submit a summary describing the aid measures no later than 20 business days after the measure is implemented. For measures that are exempt from the GBER notification the MA should also publish the entire text of the measure on the Internet and ensure it remains available while the provision is in force.

7.3. Financial Instrument payment mechanism

FIs are not regarded as "major projects" with the meaning of the regulation (Article 100⁴⁵). An important number of articles in the Regulation regulate the use of FIs:

Payment of ESI Funds

Payment of ESI Funds to the FI corresponds to a business plan requirement. Successive requests for payment of ESI Funds to the FI should include expenses incurred in reference to the preceding requests. The beneficiary of the ESI Funds is considered to be the FI management entity.

The modes for payment of funds to the beneficiary (management entity) and the final beneficiary (project) and the use of funds received from projects (repayment of own equity, interest, charges etc.) should be indicated in the FI legislative documentation.

The obligation to maintain the funds in a project for a period of five years does not apply to FIs and so they can benefit from a longer return with no restriction in term.

⁴⁵ Regulation of the European Parliament and of the Council - COM(2013) 246 end

Reuse of resources returned and profits

The return on investment should be used in the ESI Funds eligibility criteria. Funds reinvested in the FI in the form of debt or own equity should be reused in projects in the form of investment or FIs.

Interest, dividends, charges or other forms of income received by FIs and generated by the investment can be reused to pay management costs or contribute to the preferential remuneration of certain investors; or they can be reinvested in other projects through the same or other FIs. The reuse of reverted funds appears to be flexible with regard to selecting the priority axis or the project. Eight years after the end of the of the eligibility period the reuse of funds reverting from the FI may be released from the obligations of article 45 of the CPR.

7.4. Return on investment, risk and impact

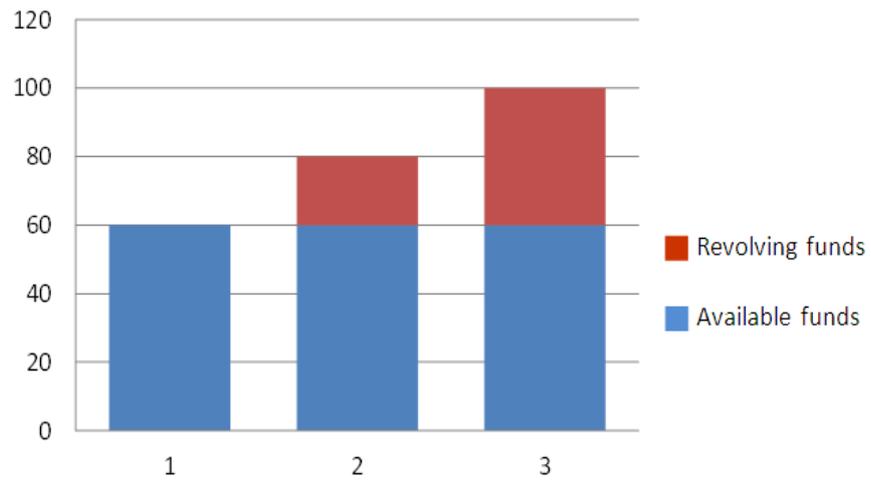
The implementation of the FIs device denotes a capacity to provide the necessary investment for accomplishing the TOs. However, even though the project selected generate positive externalities, including a global reduction in energy consumption, improvement in the quality of life or social cohesion, they would not manage to attract sufficient finance without the support of FIs.

To prepare the return on investment, it can be seen that the contribution of funds is made by phases, depending on the project progress, to thus optimise the use of the available funds (and therefore not block funds in a project in which implementation is delayed, for instance).

The FIs must be returned or repaid and this brings about an increase in the positive effects, since the returned funds are reinvested in new projects. It should be said that these funds are thus invested in projects with a risk, since it is possible that the projects funded will not generate sufficient revenues or do this in time to repay the debt.

The following graph shows the evolution of the funds available in a FI after each investment cycle, and how the total capacity increases with the revenues generated by the projects.

Investment cycles



FIs should generate sufficient revenues to cover the programme operating expenses. For that reason the use of FIs allows projects that do not comply with market criteria to be implemented, since it may increase the attractive nature of projects through improving their profitability. In fact, FI has a dual positive effect by increasing the volume of funds available for the projects and facilitating the mobilisation of private funds.

8. Implementation Strategy

This section aims to draw upon recommendations on the potential implementation structure for FIs.⁴⁶ In the 2007-2013 Programming Period, MAs have the option to establish a “Fund of Funds” or directly appoint the FI manager without the use of the Holding Fund. FIs may be implemented at a European, national, regional, transnational or transregional level. It should be noted that the European Commission is preparing general instruments for specific cases which would benefit from favourable conditions. The general provisions of the European legislation provide for flexibility in organising FIs in a portfolio approach. In terms of implementation options, under the CPR for the Programming Period 2014-2020, there is greater flexibility in the implementation option pursuant to Article 38.

8.1. Implementation option

The regulation foresees that several OPs corresponding to different ESI Funds can finance the same FI, provided they are booked separately. Three implementation options have been identified for organising the FI within the OP framework:

- **Contributing to an EU Level Instrument**⁴⁷
- **National/Regional level - Financial Instrument managed by MA as a single Fund**
- **National/Regional level - Multiple thematic FIs under a “Fund of Funds” structure**

8.1.1. EU Level Instrument

This option entails contributing to an **EU Level Instrument**, controlled directly or indirectly by the European Commission. such as the COSME initiative for SMEs, Horizon 2020 for research and innovation, Connecting Europe Facility for Infrastructure, and Guarantee Facility for the Cultural and Creative Sectors. In such case, OP contributions for FIs are ring-fenced for investments through a Priority Axis (co-financing at 100%).⁴⁸

Pursuant to Article 38, the responsibility for implementation and management would be with the Commission, however, the ultimate responsibility will rest with the MAs. In this case a dedicated axis in the OP is recommended, since it would benefit from a co-financing rate of 100% and participation of the region would not be necessary.⁴⁹ The EU level instruments are still under discussion at the European Commission.⁵⁰ This option would allow for synergies to be generated with existing instruments at a European level. However, this option is not considered at the moment, but may be reviewed at the time of the Ex-Ante Assessment and when further clarifications are issued from the European Commission.

⁴⁶ http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/financial_instruments_en.pdf

⁴⁷ http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/financial_instruments_en.pdf

⁴⁸ The exact modalities of allocation of funds are to be determined by the Commission.

⁴⁹ [http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com\(2012\)0496_/com_com\(2012\)0496_es.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2012)0496_/com_com(2012)0496_es.pdf)

⁵⁰ To follow the latest discussions relating to Financial Instruments, please see: http://ec.europa.eu/regional_policy/what/future/experts_documents_en.cfm

8.1.2. National/regional level – FI as a single fund

Under this option FIs can be established at national, regional, transnational, or cross-border level, managed by or under the responsibility of the MAs; they can be either “tailor-made” or “off the shelf” instruments as a single fund for implementing FIs.

The “off the shelf” instruments are standardised instruments which the terms and conditions will be pre-defined within the Commission’s Implementing Act. This is currently being designed by the European Commission under shared management in order to help accelerate the set-up process and a quicker rollout of FIs in the 2014-2020 Programming Period. The “off the shelf” instruments should be fully compatible with State aid rules, thus allowing for a swift rollout under existing frameworks. The advantages of having “tailor-made” FIs would allow a region to design specific FIs to address specific market gaps as determined by Ex-Ante Assessment.

The advantage of this option would be that it would be relatively easy to put it into operation and to control the ERDF funds allocated to the FI, albeit taking lessons learnt from implementing FIs in the 2007-2013 programming period.

It is envisaged that the FI could allow for an urban dimension to be consolidated within the OP, combining several Priority Axes and engaging local actors in the operation of the device. Broadly speaking, the implementation of the FI as a single fund could be supported by one of the following three ideas:

- A single fund that invests in thematic projects that fulfils the three pillars of urban development. For example, an urban development project will have positive effects on economic development, social cohesion and the environment.
- A territorial approach (geographical-based) including different institutional and geographical organisations with a strategy aimed at reducing inequalities between different urban areas, which would lead to compliance with the EU 2020 Strategy for reducing inequalities between regions.
- A strategic financing approach (debt or equity-based FIs), guaranteeing that each project financed is part of a group of coherent and coordinated actions to reduce the risk of inefficiency in the event of independent, isolated actions.

If the funding is drawn down from the dedicated Priority Axis for FIs, the amounts allocated to this axis would benefit from a 10% top-up, reducing the co-financing rate from national funds (or private funds) to 40% rather than 50%. The disadvantages of this option are however:

- The lack of flexibility of the ERDF budgets allocated to these axes if they are previously established in the OP.
- The cost eligibility of the projects would have to be limited to the selected axes.

This option is however unlikely to be implemented over the short term and the third option is more likely to be implemented under a “Fund of Funds” structure.

8.1.3. Multiple FIs under a “Fund of Funds” Structure

This option entails the creation of FIs managed by or under the responsibility of the Catalan MA under a “Fund of Funds” structure. The thematic focus of the FIs can be linked to different TOs in

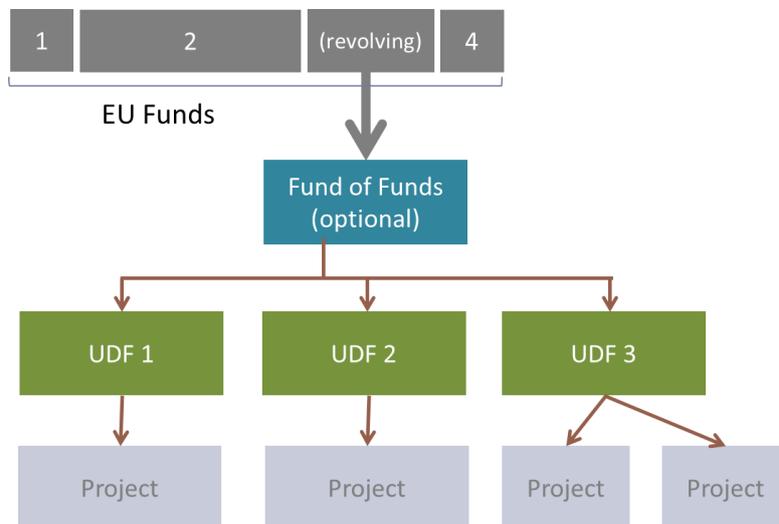
order to achieve the OP objectives. For Catalonia the supply and demand analysis (section 4 – “Analysis of supply and demand”) shows that the different projects are distributed among different economic sectors, and so the implementation of thematic FIs by economic sectors is proposed.

To determine whether the “Fund of Funds” approach is appropriate in the context of Catalonia, MAs will need to take into consideration several important issues, amongst them are:

- the maturity of the FI markets,
- the number of funds,
- internal administrative capacities of MA to managing FIs, and
- the size of FIs

This information can be determined in the mandatory Ex-Ante Assessment in due course. Different options should be considered before designing and implementing the FI structure depending on the investment priorities and objectives of Catalonia.

It is the discretion of MA to set up an FI directly, without an intermediary such as a “Fund of Funds”. This means that the MA would be obliged to select the FI managers in accordance with the EU and national level regulations, and transfer the funds (via a funding agreement) directly to the successful Fund Manager, who will be responsible for making investments into suitable projects that fit within the investment policy and strategy, as well as responsible for monitoring and reporting.



Source: Mazars/Ecorys

A “Fund of Funds” is a useful structure for establishing future FIs because it offers flexibility to the fund managers to diversify investments across multiple FIs, for example to transfer monies between FIs to reflect changes in the market, if required. This approach also allows for a portfolio approach to balance financial and non-financial returns (socio-economic impacts). Having multiple FIs under a “Fund of Funds” creates efficiency, allowing the fund manager to capitalise on economies of scale, share expertise, and cross-pollinate marketing and communication activities to promote FIs.

This structure is especially recommended for MAs who have limited experience with implementing FIs, or where the financial market is still relatively underdeveloped. In effect, this implementation structure allows MAs to tap into specialised expertise in designing and managing future FIs. The “Fund of Funds” structure is also recommended where MAs have limited internal capacity and technical skills in investment management and risk mitigation that is a prerequisite for the successful implementation of FIs.

In this way, the main benefit of this investment model would be the possibility of allocating funds between various FIs under the “Fund of Funds” approach, depending on the market demand and reinvesting them in other axis if they are not used. This option is not included in the regulations at the time of conducting this study, but it could be considered for the purpose of increasing the flexibility of the funding mechanism.

MAs have several procurement options with respect to selecting Fund Managers(s) , whether to make direct investments in projects, or to manage a “Fund of Funds” to invest in individual Financial Instruments. These include:

- Entrusting the European Investment Bank (EIB) Group as the “Fund of Funds” Manager;
- Appointing an International Financial Institutions (IFI) in which a MS is a shareholder, or financial institutions established in a MS aiming at the achievement of public interest under the control of a public authority, selected in accordance with applicable Union and national rules;
- A body governed by public or private law.

In the above three cases, the MAs can award a direct contract to either the EIB Group or an suitable international financial institution (IFI) without going through public procurement which could accelerate the set-up of the FI. Alternatively, MAs have the option of procuring a financial institution via a competitive procurement process.

8.2. Investment strategy

This section of the study analyses different alternatives to solve the market failures identified by mobilising the available ESI Funds to support regional investment efforts in projects located in the “grey zone”.

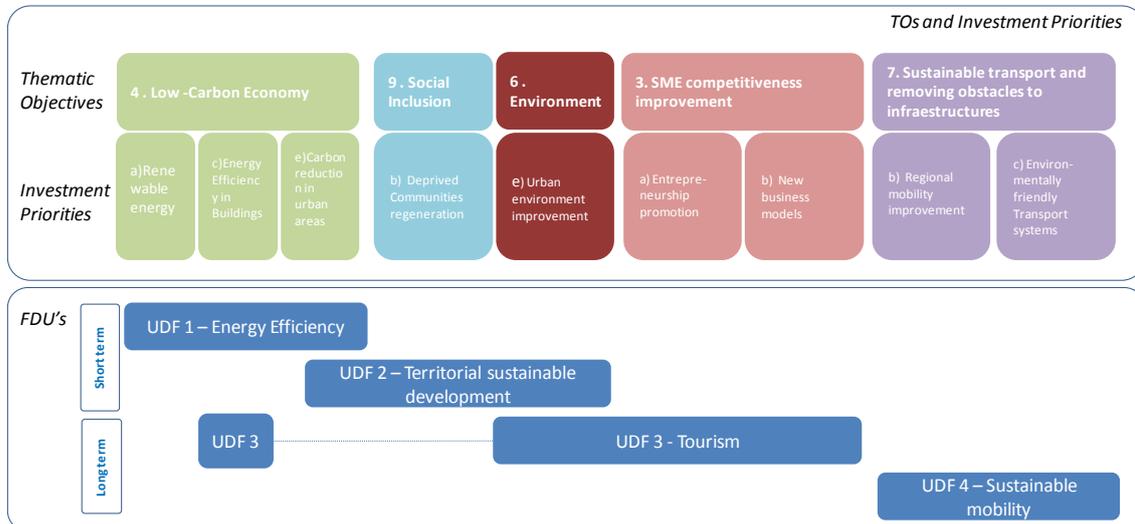
Firstly, it should be mentioned that after consulting the MA of the 2014-2020 ERDF OP for Catalonia, and the Generalitat de Catalunya as the Intermediate Body, the financial framework of the 2014-2020 ERDF OP for Catalonia has not yet been completely defined.

For this reason, estimates regarding the investment volume that could be supported through FIs are based on the investment needs of the project ideas detected within the framework of this study (see Chapter 2). Based on the project analysis, the existence of demand is identified mainly in four market segments, which are proposed as Priority Axes for each FI and include the TOs set out below:

- Energy efficiency – TO4: Low carbon economy
- Economic and territorial promotion – TO6: Environment and TO9: Social inclusion
- Competitiveness of SMEs: – TO3: Improvement in competitiveness of SMEs

- Sustainable mobility – TO7: Sustainable transport and elimination of infrastructure obstacles

This structure is summarised in the following graph:

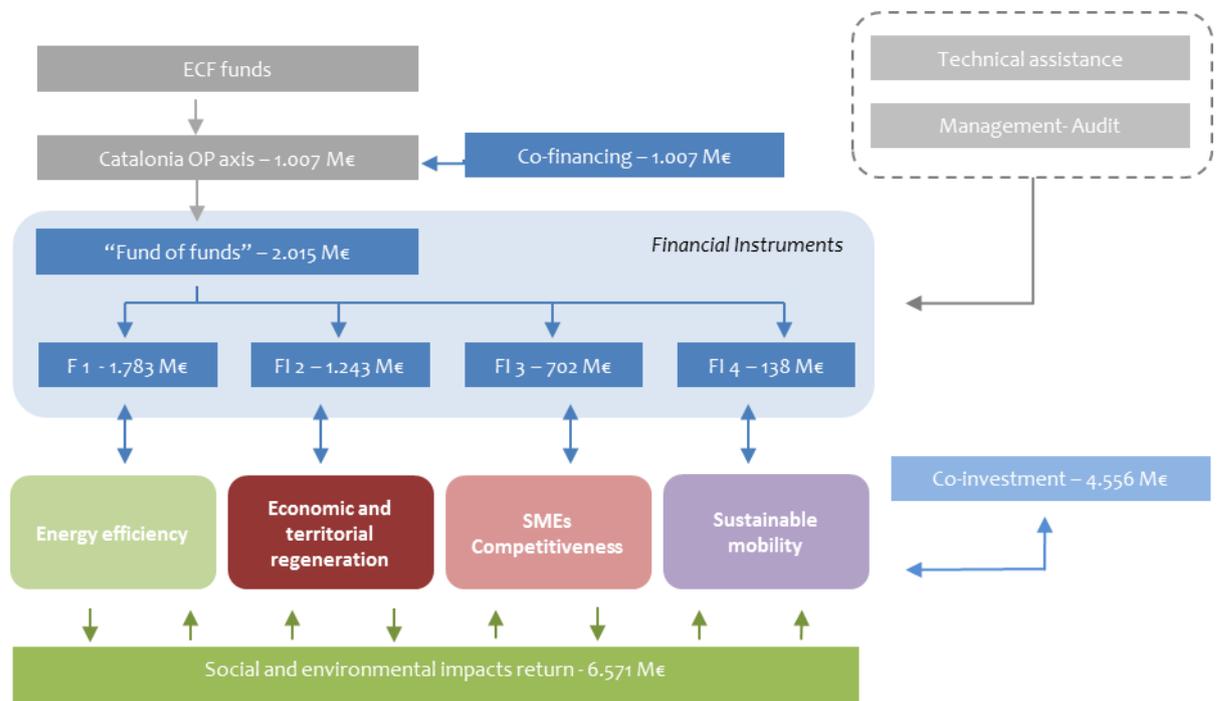


Source: Mazars-Ecorys

Each Priority Axis encompasses one or two TOs and includes several investment priorities. It is seen that each FI created will allow one or several Priority Axes to be supported, in view of the cross-cutting nature of some projects such as the tourism-based projects analysed in the study, which not only include activities aimed at promoting the competitiveness of SMEs, but also interventions for encouraging economic and territorial promotion and energy efficiency.

As a result of the above, the Investment Strategy proposed in this study (considering, as mentioned earlier, that the financial framework of the 2014-2020 ERDF OP for Catalonia is not yet fully defined), the following graph shows a possible Strategy design with a structure that could generate almost €6,571 million of eligible costs for ESI Funds based on a demand for finance of around €2,015 million. Again, these figures are based on the responses to the survey conducted in preparing this study and should be analysed and consolidated, if necessary, in subsequent phases of preparing the OP with an Ex-Ante Assessment prior to allocating ESI Funds to FIs.

Furthermore it is plausible that some projects will not be implemented and that others will be financed before the fund is set up and that new projects will emerge, attracted by the financing conditions offered.



*Amounts to be confirmed during the ex-ante assessment.

Source: Mazars-Ecorys

The creation of four FIs dedicated to the selected market will allow co-financing of almost €2,015 million (€1,007 million through ESI Funds and €1,007 million through public or private investors). This amount would be invested in the four FIs created, depending on the allocation determined by the "Fund of Funds". Within this framework it would be possible to implement projects for a value of €6,571 million, thanks to the co-investment of €4,556 million. In all, the wider impact on the region, based on the OP, would reach almost 3.3 times the amount of the OP resources invested in FIs (an investment of €6,571 million with €2,015 million of OP resources).

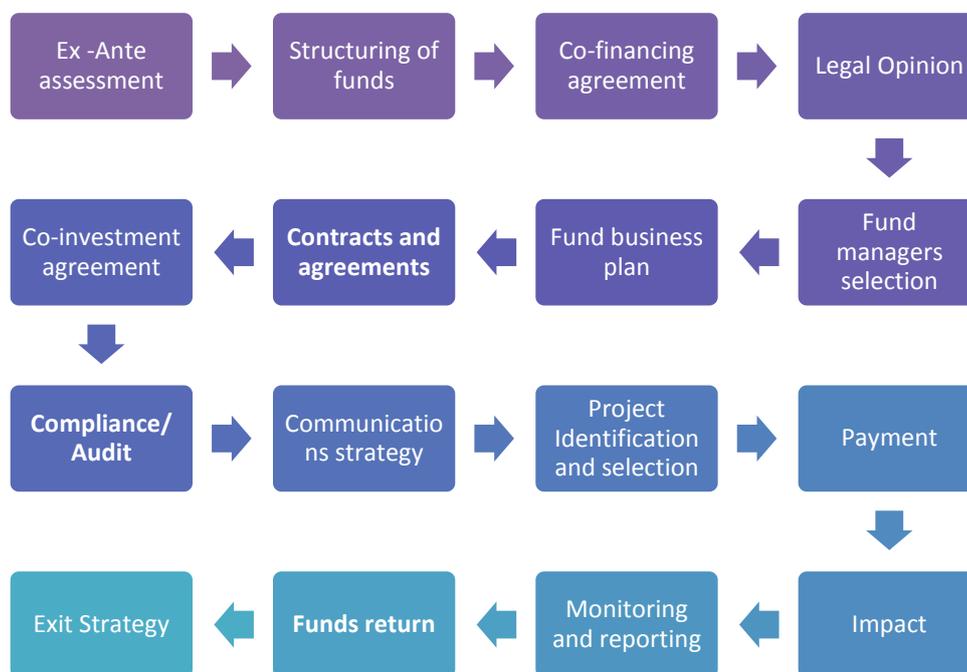
The FIs that correspond to the selected sectors would mainly include debt and own equity, as these are the most relevant products after studying the projects conducted in the identified segments.

Lastly, it should be said that the reason for including a "Fund of Funds" in the Investment Strategy is because it will allow the management of these FIs to be simplified, since that way, the funds allocated to projects at short term could be used for projects from another Priority Axes in the event of the projects being delayed, for instance. This would also enable the financing of technical assistance, management and audits.

It is also envisaged that the participation of actors from the private sector will increase interest in managing FIs and also in co-funding the programme.

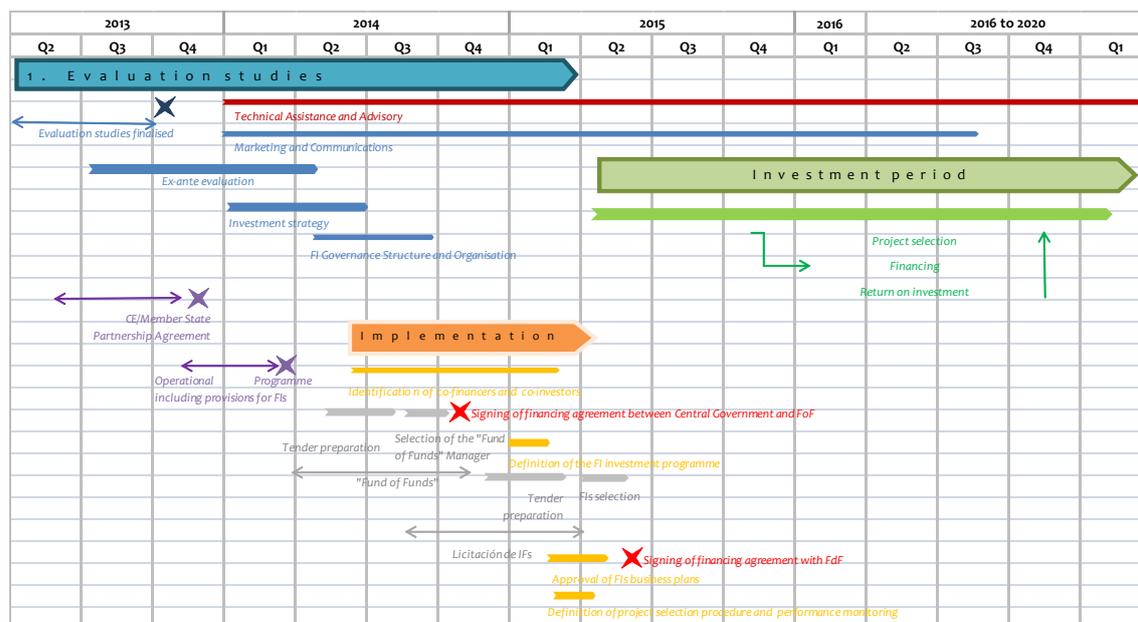
8.3. Implementation procedures and action plan for Catalonia

The EC is still in the process of discussing the Partnership Agreement and the Regional OPs for 2014-2020 with the MS, but it appears that the new agreements would allow for greater flexibility in terms of the “*de-minimis*” rule. At all events, the implementation procedure will include the following phases:



- Ex-ante Assessment: Article 37 of the CPR stipulates that an Ex-Ante Assessment is mandatory before implementing FIs.
- A legal consultation will be required to ensure compliance with national and European legislation.
- A financial advisory service might be useful in selecting fund managers and structuring the FIs.
- Communication and Auditing for transmitting the programme and winning the trust of public and private investors and persuade them to participate in the co-funding and co-investment processes.
- Identification and selection of projects carried out by the FI managers. In addition technical assistance will be needed to prepare the business plan or structure the project.
- Payment of funds, control and financial reports and repayment of funds to allow projects to be financed.
- Identification of the positive impacts of the FIs in order to insert them into the framework of the OP.
- Exit strategy in the event of the maturity of the FIs.

Approximate calendar for implementing the OP:



8.4. Opportunities and added value

Public and private sectors are complementary in nature; the public sector needs the funds management and investment know-how of the private sector and in turn, the latter needs to use the assets of the public sector and benefit from advantageous long-term funding, as well as the understanding of EU regulations and programmes.

The economic model of the projects in the "grey zone" is characterised by an important need for funds and modest revenues: in this case, the public sector could contribute to improving the profitability of these projects. This public contribution may take the form of putting up economic assets such as buildings, for instance, and the private sector would provide the necessary funds to finance projects. This economic model has several advantages:

- An optimum financial structure which limits the use of financial funds and flows
- The project benefits and risks are shared by public and private actors, since they are both investors
- Preservation of public interests given that the public sector participates in managing the projects and in taking strategic decisions in investments

- Control over the transfer of assets used for the project by the public actors on completion of the project, since they continue to be the owners (which is not the case if the actors transfer their assets to private actors for executing a project).

To implement a model of this type, it appears that the rules regarding the use of ESI Funds need to be clarified and flexibility in allocating the funds needs to be increased.

8.5. Communication and information

Communication with public spheres, promoters and the private sector will bring about an increase in the capacity of the FIs to identify investment opportunities. The programme requires the support of all the economic actors to increase the total investment volume, either by proposing initiatives and projects that require funds, or actors to take part in the co-funding and co-investment processes. It should be emphasised that communication should always include technical explanations to increase involvement and the success of the projects.

The implementation of the programme would require the submission of explanatory documents with specific examples and case studies for the market actors, and the organisation of conferences and informative meetings. The success of implementing FIs will depend on the private sector's understanding of their benefits and challenges.

The identification of projects eligible for FIs will be the responsibility of the FI or fund of funds manager.

8.6. Actions to be taken

To implement an FI the Generalitat de Catalunya will have to conduct an Ex-Ante Assessment as specified in Article 37 of CPR (which is different from the ex ante evaluation made in preparation for the OP 2014-2020). This will include a study on support combinations with existing regional, national and European instruments and clearly define the eligibility criteria and the methodology for selecting the projects. A recent study⁵¹ shows that implementing FIs may take up to two years and therefore the process should start as soon as possible.

To implement the FIs, FI funding agreements, cash management agreements and other contracts will have to be prepared. All these documents will not be required before the validation of the OP and the creation of the FI.

The FI management can be entrusted to the EC or EIB, without the need for a tender process. It can also be entrusted to an eligible financial institution through a competitive tender process in accordance with the applicable national and European legislation.

⁵¹ Financial Instruments Stocktaking Exercise in Preparation for 2014-2020, EIB, April 2013

In order to plan the FI fund needs, business plans will have to be drafted (this is required for paying the ESI Funds) for the projects, FIs and the fund of funds. Payment of the ESI Funds to the FI should be in keeping with the needs of the business plan identified for the projects, FIs and portfolio fund during the launch phase, updated in accordance with the evolution of the potential project portfolio and the selection made by the investment committee.

Furthermore, communication actions will also have to be executed to ensure that the FI concept is properly understood by the promoters and identify projects that are eligible for investment and attract potential investors for the projects of FIs dedicated to sectors of activity.

9. Final conclusion

1. Catalonia has a widely-developed and integrated territorial and urban planning system which, together with its successful experience in the previous URBAN initiatives and a successful but limited participation in JEREMIE, constitutes an excellent starting point for the potential implementation of FIs.
2. In recent years, the number of financial institutions in Catalonia has been reduced, with debt in Catalonia, exposure to the property development sector and real estate assets of these financial institutions totalling almost €325,000 million, of which 54% is made up of real estate assets classified as problematic. According to recent information provided by the Bank of Spain, the Generalitat de Catalunya debt in 2012 exceeded €50,000 million, equivalent to 26% of the Gross National Product (GNP), and a law has been implemented to promote the principle of a “debt ceiling” that limits debt capacity. All the above has led to the current situation of difficulty in accessing credit, extremely limited possibilities with respect to local debt and a generalised shortage of funds. This, together with the possibility of obtaining finance in the best possible market conditions, contributes to enhancing the attractiveness of FIs among local and regional actors in Catalonia.
3. The strong potential demand for FIs, which is proven by the evidence base and projects analysed as part of the study, suggests that there are real possibilities of including Priority Investments for implementation with aid from the FIs in the Catalonia ERDF OP in the areas of energy efficiency, sustainable territorial promotion, tourism and sustainable mobility.
4. In particular, the report concludes (as can be seen in the case studies) that the energy efficiency and economic development – urban regeneration segments could be eligible in the short term for FIs, if this is considered appropriate by the relevant authorities.
5. Based on this favourable context for the implementation of FIs in Catalonia, a series of recommendations is proposed for designing the 2014-2020 ERDF OP which would include four main axis: Energy Efficiency, Economic and Territorial Promotion, Competitiveness of SMEs and Sustainable Mobility, all of them corresponding to the TOs identified as being the most relevant (TO 3 – improvement in the competitiveness of SMEs, 4 – Low carbon economy, 6 - Environment , 7- Sustainable mobility and 9 – Social inclusion).
6. These recommendations in designing the OP would be based on adopting an Investment Strategy with a “Fund of Funds” formed by four Urban Development Funds corresponding to the four Priorities described above, with allocated amounts in the region of €2,015 million (€1,007 from ESI Funds and €1,007 million from public and private investors), to be distributed as follows: €1,783 million for energy efficiency, €1,243 million for economic and territorial promotion, €702 million for competitiveness of SMEs and €138 million for sustainable mobility.

7. This Investment Strategy could eventually generate almost €6,571 million in eligible costs, representing approximately 3.3 times the amount of OP resources that would be invested in the FI.
8. Ultimately, it is fundamental to take into account that any contribution to FIs through ESI funds and the OPs will need to be based on a specific "Ex-Ante Assessment identifying market failures or sub-optimal investment situations, and investment needs", as provided for in Article 37 of CPR.

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Appendixes

Appendix I – Identification of the differential geographic and territorial levels of Catalonia

Description of the territorial organisation (cities, municipalities, districts and Functional Territorial Areas (FTA))

The organisation of the geographic areas of Catalonia has evolved in historical terms since the First Plan for the Distribution of Catalan Territory into Zones established in 1932 by Nicolau M. Rubio i Tudurí, to the current distribution.

As established in the General Territorial Plan of 1995, Catalonia is a functional unit, due to the exchanges and interrelations between its diverse territories. It is a global territory which includes working, residential, leisure spaces, etc. that are juxtaposed to form the integrity of the Region's spatial territory.

The basic territorial organisation area is formed by **municipalities and cities, along with their metropolitan areas** which are strongly developed since this is the unit around which most of the economic activity is concentrated. Each territory creates its own city, which constitutes its capital and is agglutinated around it, forming a symbiotic whole. Catalonia currently has 936 municipalities, with 22 of these concentrated in the metropolitan area of Barcelona.

The capital of Catalonia is **Barcelona**, which currently has a population of over 1,600,000 inhabitants and acts as a cohesive and agglutinating unit for the whole territory, constituting a strong pole of attraction for the activity generated throughout the Autonomous Community and its influence extends beyond the territorial limits of the region. Barcelona is the second city in Spain in terms of size and economic importance, following the capital, Madrid, and the eleventh in the EU in population terms. Its metropolitan expansion, with a population of over 5 million people, is ranked sixth in importance in the European Union.

Barcelona is currently recognised as a Global City due to its relevance in cultural, financial and tourism terms. It has one of the most important ports in the Mediterranean and is also a key communications site between Spain and France due to the motorway and high speed rail networks. Barcelona airport was used by more than 35 million passengers in 2012.

The General Territorial Plan of Catalonia establishes as increasing the representative role of the urban network of Barcelona (in its role as the capital of Catalonia) as one of the basic objectives of the Territorial Promotion Plans.

The next most important metropolitan areas after Barcelona are Girona, Tarragona-Reus-Valls and Lleida. The first two are located in the pre-coastal corridor which is the preferred communications axis between France and the Iberian Peninsula. Lleida is located on the Barcelona- Zaragoza- Madrid axis and is another neuralgic point in the transport networks with the capital.

Different municipalities have been set up around the metropolitan area of Barcelona whose population, development and growth are closely linked to that city. These include Sant Cugat,

Cerdanyola and Montcada i Reixac. However, other “intermediate” cities have been capable of maintaining their personality and central nature with respect to Barcelona, in a gigantic effort to generate activity and jobs. This is the case of Terrassa and Sabadell, Martorell, Granollers, Mataró, Vilanova i la Geltrú and Sitgès, which would be equivalent to the *nouvelles villes* in the Île de France region, around Paris and the *new towns* surrounding London. These cities are the ones that the General Territorial Plan aims to consolidate, to contribute to two of its essential objectives:

- Strengthen the multicentre nature of the metropolitan area by consolidating the urban networks of the intermediate cities;
- Establish a global territorial rebalance in Catalonia.

In addition the intermediate metropolitan areas located in the centre of the Autonomous Community should also be highlighted due to their relevance. These include Manresa (Bages), l’Anoia and Vic (Osona) and the urban systems in the region of Tortosa-Amposta, Figueras, Olot and Vilafranca del Penedès.

Within the municipalities special relevance is attached to the geographic unit formed by **neighbourhoods**, which are treated in a special manner in **Law 2/2004 (4 June) on the Improvement of Neighbourhoods, Urban Areas and Towns that require Special Attention**. The purpose of this Law is to tackle the specific problems affecting these smaller-sized areas within the municipality in which there are often problems of urban planning regression, demographic problems (caused by the loss of excessive growth of the population) and economic and social deficits.

Peri-urban spaces stand on unoccupied areas in urban agglomerations. They do not comply with strictly urban or rural functions and are characterised by their enormous need for space (for which reason the high price of the central areas expels them from the cities) and due to their very nature, for environmental or noise reasons, comply with their functions better far from urban areas: peri-urban farming activities, waste management, scrap yards or junkyards, massive spaces occupied by transport infrastructure (airports far from city centres, motorways, non-urban railway installations), military zones, natural protected areas near cities (green areas), etc.

The geographic area that comes after municipalities in Catalonia in terms of size is formed by the **districts**. The current division of Catalan territory into districts is the result of a law passed in 1936 which was abolished during the dictatorship and reinstated in 1987 following the restoration of the democracy. The governance and administration of the districts is carried out by the district councils.

Following several subsequent amendments, Catalonia is currently divided into 41 districts, as shown in the following map.

Districts of Catalonia



Some districts which share common features in regard to their location, territory or population are also subject to common regulations in terms of territorial planning. This is the case of the mountain districts, defined as such in accordance with Law 2/1983 (9 March) on Mountain Areas. These districts could be eligible for common strategic planning directives that should coordinate the correction of deficits in infrastructure and services in those districts, to prevent the population living in them from being forced to abandon their towns of residence.

Likewise districts seriously affected by low incomes, reductions in population and problems of economic stagnation could be declared areas for promotion by the Generalitat de Catalunya and special measures could be taken to favour their promotion.

The four **provinces** into which the Autonomous Community of Catalonia is divided are Lleida, Girona, Barcelona and Tarragona. This is the oldest geographic and administrative division in this Autonomous Community. Its principal governance bodies the Provincial Councils, formed by a president, one or several vice-presidents, the government board and the plenary council. They are territorial bodies whose main function is to control the economic and administrative interests of the provinces.

The following map shows the geographic distribution of Catalonia into its four provinces:

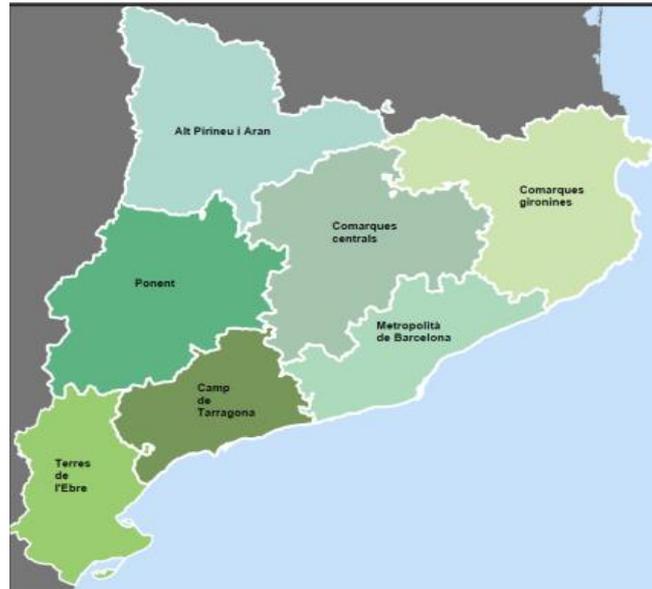
Provinces of Catalonia



Catalonia is divided up into 7 **Functional Territorial Areas (FTA)** following the approval of the General Territorial Plan of Catalonia (Law 1/1995) and its subsequent amendment through Law 24/2001 of 31 December, which recognises Alto Pirineo y Arán as a new and different functional area. The FTS are the current areas for developing the territorial planning through the Partial Territorial Plans. These are currently the following:

- **Alto Pirineo y Arán:** Alta Ribagorza, Alto Urgel, Cerdaña, El Pallars Sobirà, El Pallars Jussà, Valle de Arán;
- **Àmbito Metropolitano de Barcelona:** Barcelonès, Maresme, Vallès Oriental, Vallès Occidental, Bajo Llobregat, Garraf, Alto Panadés;
- **Comarcas centrales:** Noya, El Bages, Osona, Berguedà, El Solsonés;
- **Comarcas Gerundenses:** Alto Ampurdán, Bajo Ampurdán, Pla de l'Estany, Gironés, La Selva, La Garrocha, Ripollés;
- **Campo de Tarragona:** Tarragonés, Alto Campo, Bajo Campo, Bajo Penedés, Priorato, Cuenca de Barberá;
- **Poniente:** Segrià, Garrigas, La Noguera, La Segarra, Urgel, Plana de Urgel;
- **Tierras del Ebro:** Ribera de Ebro, Tierra Alta, Bajo Ebro, Montsià.

Distribution of the region of Catalonia into Functional Territorial Areas



Analysis of territories facing specific economic, environmental, climate-related and social challenges and difficulties

In general, two major areas of territorial imbalance are identified in Catalonia:

1. Zones congested by excessive development (this is the case of the metropolitan area of Barcelona and the coastline); and
2. Zones degraded due to deficits in this development process, due to the intrinsic circumstances and characteristics of these zones and their natural conditions, resources and geostrategic situation.

As a result of their social consequences the Territorial Development Plans are targeted at slowing down the inertia in population growth in metropolitan areas, by consolidating intermediate areas with a capacity for growth in order to foster territorial balance. The existence of urban systems generated by intermediate cities has enabled the urban development produced to take on a certain structure which, otherwise, would have made it chaotic. However, this has been done at a certain cost in environmental quality and generated some deficits in the services, utilities and infrastructure.

In the particular case of inferior sub-divisions of urban areas, their problems are described specifically through **LAW 2/2004 (4 June) concerning the Improvement of Neighbourhoods, Urban Areas and Towns that require Special Attention**. These are often old city centre areas which are suburban extensions built with no planning or the appropriate services, residential estates or slum areas. Problems of different natures often converge in these areas which in many cases affect the state of conservation of the buildings, urban planning and service networks; the existence of public spaces; the provision of services; the concentration of groups of citizens with special needs; access to roads and public transport; economic development; commercial activity and personal safety. These circumstances have a negative effect on the wellbeing of the citizens

who live in these areas and pose an obstacle for social cohesion and economic development. The intervention envisaged by the Law in these areas is an integrated action aimed at physical regeneration and environmental sustainability, social wellbeing and economic development, to convert space and public services into factors of social development that will generate social and cultural fabric.

As for problems related to climate change, the Catalan Government has carried out a diagnosis as part of the Catalan Strategy for adapting to Climate Change. 11 natural systems and socio-economic sectors were analysed (water, agriculture and livestock, biodiversity, forests and forestry management, industry and services, mobility and transport infrastructure, fisheries, health, energy sector, tourism and urban planning and the residential sector). The diagnosis identified a series of zones suffering from environmental vulnerability. As a result:

- The Pyrenees and coastline, particular the Ebro Delta, are the most vulnerable geographic areas, firstly due to the gradual increase in the mean temperature, and secondly due to the rise in sea levels;
- Water is the most vulnerable element due to the reduction of its availability, with direct consequences on other sectors. The forestry management sector is the one in which there is most knowledge about the effects of climate change.

Appendix II – Activities report

Within the framework of this study, the Mazars – Ecorys consortium has carried out office and field work, in which the first findings and **documentary analyses** were set out in the Initial Report presented on 6 May 2013 and completed with the advances made in the Intermediate Report presented on 27 June 2013.

The first project launch meeting was held in Barcelona on 9 April 2013. At that meeting the European Investment Bank and the firms Mazars and Ecorys presented the study objectives and the proposed methodology for submitting it to the MA of the ERDF OP for Catalonia and a series of local and regional actors representing the autonomous community and the relevant sectors for the JESSICA instrument.

For the purpose of identifying at least thirty projects for study in relation to the potential use of FIs in the Autonomous Community of Catalonia, firstly a consultation phase was initiated through a detailed **survey** with municipalities and hypothetical project promoters and co-investors from the public sector.

Subsequently an **informative and advisory event** was organised for potential project promoters from the public sector on 23 May 2013. This event, held in Barcelona, was promoted by the Department of Economy and Knowledge of the Generalitat de Catalunya Directorate General for Economic Policy and Promotion and attended by the European Investment Bank, the work teams of Mazars and Ecorys and a large number of agents from the Catalan public sector on a regional and local scale.

In addition on the day of the event (during the afternoon sessions) advisory work was carried out through **individual work sessions** with the institutions requesting this, in order to clarify doubts arising in completing the project identification questionnaire.

To speed up and promote the sending of information about potential projects by the public sector in Catalonia, following the event, a period was set up for **telephone and e-mail advice** (jessicacatalunya@ecorys.es) for potential beneficiaries who required further support in preparing the project identification questionnaire.

The outcome of this process was the submission of a total of 51 project ideas.

In parallel a series of **personal interviews** was held with **actors from the public sector** on a national, regional and local level to compare and enlarge on information about the relevant documents consulted with respect to the main socio-economic trends and magnitudes in Catalonia, the potential investment priorities, the magnitude of the investments made to date with this type of funding and the identification of a series of actors from the private sector with a potential interest in taking part in this type of scheme.

The complete chart of the interviews held with actors from the public sector is set out in Appendix IV of this document.

Moreover, with a view to determining the interest of the potential investors and obtain first-hand information about the main market failures and potential support from the public sector

for the type of projects proposed, an opinion poll was held with potential investors and project promoters through a preliminary round of **personal interviews with actors from the private sector**.

The complete chart of the interviews held with actors from the private sector is set out in Appendix V of this document.

Based on the information obtained through the field work, an **analysis of the questionnaires** and the **scores obtained by the projects** was made, applying a set of evaluation criteria.

After establishing the project *ranking*, the ones with the highest scores were selected and compared in a second round of consultations with potential investors from the private sector (this was done by organising a **focus group** on 26 June 2013) and a selection of financial institutions. This session made it possible to identify the sectors with market failures and cases potentially eligible for the application of FIs.

Furthermore a more detailed study of the selected projects was conducted for the purpose of completing the available information and analysing aspects related to their funding and structure in greater depth.

The results of these tasks were shared with the EIB and the Generalitat de Catalunya within the framework of the **Steering Committee** meeting held on 2 July 2013, during which the two case study projects were selected. Following this selection a series of activities was carried out through office and field work. Specifically, on 29 July 2013 a **meeting** was held with the Generalitat de Catalunya to analyse the status of the situation with respect to the 2014-2020 programming period, which provided further information for implementing recommendations, taking into consideration the potential of using FIs in formulating the ERDF OP for Catalonia.

Simultaneously, interviews were held with the promoters of the two case studies, to obtain as much information as possible about both, in addition to the information already available in documentary sources and in the results of the survey on potential project promoters. Based on the data obtained, the two case studies were developed.

Likewise, financial, statistical, documentary and legal analyses were made in order to formulate specific aspects of implementing FIs in Catalonia, focusing on aspects such as implementation options, investment strategies, implementation procedures and the drafting of an action plan for Catalonia.

Appendix III - Calendar

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	...	27	
Date	8-14 apr	15-21 apr	22-28 apr	29-5 may	6-12 may	13-19 may	20-26 may	27-2 jun	3-9 jun	10-16 jun	17-23 jun	24-30 jun	1-7 jul	8-14 jul	15-21 jul	22-28 jul	29-4 aug	5-11 aug	12-18 aug	19-25 aug	26-1 sept	2sep-6oct	7-13 oct	
Objectives	1. Analysis of the current environment and recent experiences																							
	2. Analysis of supply and demand																							
	3. Recommendations for the design of the Operational Programme																							
	4. Analysis of Implementation options																							
	5. Analysis of case studies																							
	6. Design of investment strategies																							
	7. Implementation procedures and Action Plans for Catalonia																							
Tools	Documentary review																							
	Interviews to the public sector																							
	Interviews to the private sector																							
	Survey for the identification of projects																							
	Event with Public Sector																							
	Advice to agents for the identification of projects																							
	Utilisation of the template for projects evaluation																							
Focus Group with Private sector																								
Project Management	Project management																							
	Bi-weekly calls																							
	Meetings																							
Reports	Drafts																							
	Finals																							

	Initial Calendar
	Extensions
	Modifications

Appendix IV – Consultation with actors from the public sector

- Actors from the public sector interviewed as part of the field work carried out, ordered by government level:

Name	Government
National level	
Joaquín Fernández Dapena (IFs)	Spanish Ministry of Inland Revenue and Public Administrations, DG Community Funds
Regional level	
Teresa Torres	IFEM – Instrumentos Financieros para Empresas Innovadoras (<i>Financial Instruments for Innovative Enterprises</i>)
José Pablo Rodríguez-Marín*	Catalan Housing Agency – Department of Territory and Sustainability
Albert Palomo*	Territory and Mobility Office – Department of Territory and Sustainability

Joan Lúria y Silvia Vives	Generalitat de Catalunya, DG Economic and Political Analysis
Carme Rubio	Subdirectorate of Tourism – Department of Enterprise and Employment
Local level	
Carles Bassaganya	Catalan Association of Municipalities - ACM
Jordi Castells	Barcelona Provincial Council – Dirección General de Relaciones Internacionales
Pere Montaña	Terrassa Municipality, Director of urban planning
Xavier Ludevid	Figueres Municipality, Director of urban planning

*Accompanied by Lluís Farran, Manager of the Department of Territory and Sustainability Technical Office

Appendix V – Consultation with actors from the private sector

- Actors from the private sector interviewed as part of the field work carried out, ordered by the financial institution to which they belong:

Name	Financial institution
Javier Larrañaga	La Caixa
Gonzalo Martín-Borregón Boguña	La Caixa
Fco. Javier González Moñux	Banco Sabadell
Victoriano López Pinto	Ahorro Corporación

Xavier García González de Villambrosia	Banco Sabadell
David Velázquez Gómez	Ahorro Corporación
Javier Zabala Murua	Ahorro Corporación
Josep Antoni Borrull i Polo	Santander

Appendix VI – Data sheets of identified projects⁵²

1. Environment and Energy

1.1. Energy Efficiency.

Project identification	
Project's name	ENHANCEMENT OF ENERGY EFFICIENCY AND MUNICIPAL BUILDING MAINTENANCE IN LLEIDA TOWN
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Lleida Municipality
Project's amount/budget	5,000,000 €
Location	Lleida
Short description (problem, objectives and results)	Given the big disparity among municipal buildings, an integrated management approach of these buildings is not implemented thus not allowing the adoption of energy efficiency reforms. Within this project, all the facilities will be integrated into a Smart Cities platform for buildings' integral management, thus enhancing energy efficiency in educational (schools), sports, social and administrative buildings, in order to obtain energy, economic and environmental savings.
Coherence	
Internal	The project offers a response to an identified need related to the lack of energy efficiency in public buildings. The project is not only focused on the implementation of energy efficiency measures in particular buildings, but it also foresees the development of a Smart Cities platform that will allow the integral management of all buildings. The expected result is the reduction of at least 20% of energy consumption.
External (with regional or national strategies)	The project falls within the Catalan 2012-2020 Energy and Climate Change Plan.
Thematic Objectives	
The Project is clearly linked to 3 objectives:	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management system	The project foresees the creation of a PPP between the Municipality and an Energy Service Company (ESCO).
Maturity level	The project is at an intermediate phase, with the viability and business plan underway.
Replicability	The project is replicable in other sectors of the public administration. In fact, there is in the present many institutions that are applying or are considering putting in place models of this type.
Economic viability and sustainability	
Cost-impact ratio	With an investment of approximately 5 million Euros, the project foresees a reduction of at least 20% of the energy consumption in municipal buildings (200) that currently amounts to 3,100,000 Euros (gas, fuels and electricity).
Rentability	Need to analyse. Expected saving is of 600,000 annual Euros against an investment of 5,000,000 Euros.
Timeframe	Short term
Financing	Two financing options are considered through equity participation: <ol style="list-style-type: none"> 1) The Municipality as JESSICA recipient launches a tender where the external company will finance the investment and the Municipality will return it with the savings realised during the project's life-cycle. 2) A joint action between the private company and JESSICA, where the last one finances the company that is executing the investment. This formula could be considered with a Municipal contribution of 25%.
Grey area	The project seems to be profitable but the estimation of energy savings needs more guarantees. The Municipality has already maintained contacts with important Energy Service Companies. However, is becoming

⁵² The data sheets are ordered by sectors, segments and scores obtained in the general ranking. The green files correspond to the ten projects on the short-list.

	more difficult to obtain bank or external financing.
Relevance in relation with JESSICA instrument	
The project is susceptible of being financed under the JESSICA instrument.	

Mark: 86 Ranking position: 1

Project identification	
Project's name	ENERGY SAVING AND EFFICIENCY PLAN IN THE GENERALITAT DE CATALUNYA'S BUILDINGS
Sector	Energy Efficiency and Energy
Promoter	Catalan Energy Institute
Project's amount/budget	96,860,987 €, of which; Welfare and Family : 4,684,662 € Culture : 3,475,400 € Agriculture : 2,779,039 € Economy: 1,250,042 € Business and Labour: 4,583,186 € Education: 13,451,258 € Governance: 693,501 € Home affairs: 19,681,633 € Justice: 33,253,124 € Presidency: 3,052,279 € Health: 1,116,157 € Territory and Sustainability: 8,840,706 €
Location	Catalonia
Short description (problem, objectives and results)	The purpose of the project is to improve energy efficiency in the Generalitat's buildings with the aim to reduce energy dependency, improve environmental sustainability and promote economic activity.
Coherence	
Internal	The problem identified is clear, concrete and very well delimited. The project's objectives are well defined, very specific. The expected results have been quantitatively specified, through easily measurable results.
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate Change Plan and is related to the 2011-2014 Generalitat de Catalunya Buildings and Services Energy Saving and Efficiency Plan. At the general level it is also integrated in the ECAT 2020 strategy.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation and environment protection. It also has a certain degree of correlation with the employment generation objective, as it entails the promotion of economic activity.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees a bidding system where the Generalitat launches a public tender and the Energy Services Companies are responsible for the project implementation.
Maturity level	The project is at an intermediate phase, with the viability study and business plan already realised.
Replicability	Yes, one of the project's objectives is its exemplary role for the Energy Services Companies' sector. It could be replicable in the rest of the administration as well as in the private sector.
Economic viability and sustainability	
Cost-impact ratio	With a forecast investment of 96,860,987€, the project aims to reduce energy consumption in the Generalitat de Catalunya's buildings by around 12% for the 2014 horizon and reduce the energy bill of buildings by around 15,2% for the 2020-2025 horizon, moving to null consumption buildings.
Rentability	Need to analyse. The expected return comes from the annual energy saving estimated in 449 millions of KWh.
Timeframe	Medium term
Financing	By means of debt (more than 50%) ensured through income coming from energy savings.
Grey area	Energy Services Companies difficulties in accessing credit and its high cost. The implementation of a new public contracting model and the readiness of the Energy services companies to assume saving guarantees are necessary.
Relevance in relation with JESSICA instrument	
This plan, as long as it is exposed, is susceptible of being financed under the JESSICA instrument. The project's coordination model, through a combined management scheme with ESCOs, is potentially capable of safeguarding a return through energy saving. In any case, it will always be necessary to divide the Plan into various segments and concrete operations as well as to launch different tenders to award the different projects.	

Mark: 81,4 Ranking position: 4

Project identification	
Project's name	ACTIONS IN PUBLIC MUNICIPAL TERTIARY BUILDINGS INCLUDING RENEWABLE TECHNOLOGIES: FOREST BIOMASS IN VARIOUS CATALUNYA'S SETTLEMENTS
sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Forest Technology Centre for Catalonia
Project's amount/budget	11,300,000 €
Location	Catalonia (Municipalities with large surface and forest activity)
Short description (problem, objectives and results)	The purpose of the project is to organise the forest biomass market, through the implementation of certified Wood Chips' Heating boilers in Catalunya's municipal buildings.
Coherence	
Internal	The problem identified is clear, concrete and very well delimited. The project's objectives are well defined, very specific. The expected results have been quantitatively specified, through easily measurable results.
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate Change Plan, 2011-2014 Generalitat de Catalunya Buildings and Services Energy Saving and Efficiency Plan, the Forest Biomass Heating boilers and the Fire prevention Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation and environment protection. It also has a certain degree of correlation with the employment generation and social inclusion objective, as it entails the promotion of economic activity in the rural areas.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Social inclusion and combating poverty 	
Articulation	
Actors/ Management System	The project foresees a bidding system where the Forest Technology Centre for Catalonia launches a public tender and the Heating Boilers companies and Forest Biomass Supply firms are responsible for the project execution.
Maturity level	The project is at an intermediate phase, with the viability study and business plan underway.
Replicability	The project is replicable provided that the conditions of forest area proximity and high heating demand during the winter are met.
Economic viability and sustainability	
Cost-impact ratio	11,300,000 Euros including biomass heating boilers costs, works and installations, maintenance and operation costs and integrated programme management costs. A saving in the costs of energy consumption for heating is foreseen (lower costs for the Municipality between 10-15% during the first 10 years, and subsequently >30%)
Rentability	The return is expected to come from: <ul style="list-style-type: none"> • Real estate rents • Increase in the purchase-sale value of real estate • Revenues for Municipalities coming from the energy consumption of installations through the project's life-cycle (10 years from the setting up of the heating boilers installations)
Timeframe	Short term
Financing	Foreseen financing: 50 % public grants (European funds, Generalitat de Catalunya, Provincial councils) and 50 % financing.
Grey area	-Financing model -Geographic dispersion of actions -Innovation in the management system
Relevance in relation with JESSICA instrument	
The project is susceptible of being financed under the JESSICA instrument, as the required conditions are achieved and return is safeguarded through energy saving.	

Mark: 79.9 Ranking position: 5

Project identification	
Project's name	CONSTRUCTION OF BIOMASS MUNICIPAL DISTRICT HEATINGS WITH LOCAL BIOMASS EXPLOITATION IN THE COUNTY OF LA GARROTXA
sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Olot Municipality and County Council of la Garrotxa
Project's amount/budget	1,300,000 €
Location	Olot and the County of La Garrotxa (a total of 21 municipalities and an approximate population of 55,000 inhabitants)
Short description (problem, objectives and results)	The purpose of the project is to improve energy efficiency in public buildings with the aim to reduce energy dependency, improve environmental sustainability by using local biomass and other renewable energies (geothermal and solar energy), and promote economic activity through the creation of direct and indirect jobs in the energy and forest management sectors.
Coherence	
Internal	The problem identified is clear, concrete and very well delimited. The project's objectives are well defined and very specific. The expected results have been quantitatively specified, through easily measurable results.
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate Change Plan, the Garrotxa Energy Plan 2012-2015 and the Fire prevention Plan of La Garrotxa County.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation and environment protection. It also has a certain degree of correlation with the employment generation objective, as it entails the promotion of economic activity.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees a bidding system where the Local Authority launches a public tender and the Technological and Constructing companies are responsible for the project execution. On the other hand, various collaborative agreements between the Municipality and the County council have been adopted.
Maturity level	The project is in an intermediate phase, with the viability study ongoing and the business plan foreseen.
Replicability	The project is replicable in similar territories to the Garrotxa county, thus replicable to rural territories with important forest presence and population gathered in small and medium size areas.
Economic viability and sustainability	
Cost-impact ratio	Forecasted investment is of 1,300,000 € (Olot 800,000€ - County 500,000€) to guarantee: <ul style="list-style-type: none"> • Reduction of low carbon emission of more than 550tn/year. • 2,500 MWh of produced energy through biomass exploitation. • 100Mwh of produced energy through photovoltaic exploitation. • 140 kM of geothermal energy installed.
Rentability	Need to analyse. The expected return comes from the earned income but the model is still not defined (programming and financing still to be defined).
Timeframe	Long term.
Financing	The project is partially financed.
Grey area	Limited financing availability. Lack of capacity to assure biomass supplies due to property fragmentation. Difficulty to safeguard a biomass exploitation price, competitive in the market, due to the forest mass characteristics of the region.
Relevance in relation with JESSICA instrument	
The project is relevant for the JESSICA instrument. It entails an integral action that comes from a regional (and national) strategy previously defined and it has a strong correlation with some TOs. The project is currently in an implementation stage.	

Mark: 77.1 Ranking position: 9

Project identification	
Project's name	CONSTRUCTION OF A BIOMETHANE MINIPLANT AND ADAPTATION OF MUNICIPAL AND PUBLIC TRANSPORT VEHICLES AND MUNICIPAL FACILITIES' HEATING BOILERS FOR BIOMETHANE CONSUMPTION
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Figueres Municipality
Project's amount/budget	2,000,000-3,000,000 €
Location	Figueres locality
Short description (problem, objectives and results)	The project pursues the construction of a biomethane plant to achieve municipal self-supply, as well as the adapting public equipment and municipal vehicles fleet. The plant will be fed through the recycling of solid urban waste, with the objective of supplying biomethane to the municipal network as a substitute for gas, fossil fuels. It is foreseen a project's return in terms of energy bill saving, both from heating and transport use.
Coherence	
Internal	There is a strong coherence between the identified problem, project's established objectives and expected results, measured in terms of energy saving.
External (with regional or national strategies)	The project is framed in various strategies such as the Imagine Low-Energy Cities and the Urban Mobility Plan.
Thematic Objectives	
There is a strong degree of correlation between the project and 4 of the TOs.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	It is foreseen that the Administration will be the main actor managing the project. It is also expected an administrative concession, probably to an Energy Services Company.
Maturity level	The project is at an idea stage; the implementation is not foreseen at the moment.
Replicability	The project's replicability is decidedly possible.
Economic viability and sustainability	
Cost-impact ratio	2,000,000-3,000,000 € Approximately 320,000 €/saving per year, and green certificate from 200,000 to 400,000 per year
Rentability	Need to analyse
Timeframe	Medium/long term
Financing	Information not available
Grey area	Land acquisition, waste management hazardous substances manipulation permits, plus Legal restrictions to local administration debt
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument, as the required conditions are met.	

Mark: 76,4 Ranking position: 11

Project identification	
Project's name	PUBLIC MANAGEMENT OF SOCIAL HOUSING
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Housing Agency
Project's amount/budget	44,866,993.69 €
Location	Canyelles, Can Jofresa, Sant Roc and Santa Eulàlia (Public Housing Park)
Short description (problem, objectives and results)	The purpose of the project is to improve energy efficiency in the public park, through housing regeneration, with the aim to decrease carbon emissions linked to energy consumption in buildings.
Coherence	
Internal	The problem identified is clear, concrete and very well delimited. The project's objectives are well defined and very specific. The expected results have been quantitatively specified and are easily measurable.
External (with regional or national strategies)	The project makes clear reference to the legislation and public planning: urban (Decree 274/2006 of 20 of June on public aids for the regeneration of public housing stocks in Barcelona city), energy, social infrastructure and economic development and competitiveness. On the other hand, it is framed in the Catalan 2012-2020 Energy and Climate Change Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation, environment protection and social inclusion. It also has correlation with the SME Competitiveness objective as it fosters the employment and the specialisation of the SMEs in the construction sector towards energy renovation and building energy certification.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Social inclusion and combating poverty • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	In the framework of this project, several collaboration agreements between different actors have been already reached. More precisely, the project foresees a PPP with the following actors: <ul style="list-style-type: none"> - Administration (Catalan Housing Agency, Department of Territory and Sustainability of the Generalitat de Catalunya, Municipalities) as a promoter agent; - Regeneration Construction Companies; - Material suppliers for building renovation; - External experts; - Financial agents.
Maturity level	The project is at a mature stage, waiting for funding.
Replicability	The project can be replicable in other territories.
Economic viability and sustainability	
Cost-impact ratio	Canyelles: Housing Agency Investment cost 36,342,010.31 € (Blocs A-B-C-D-E) Can Jofresa: Housing Agency Investment cost 3,765,000.00 € (Towers 3-10-5-6-7-11 y 12) Sant Roc: Housing Agency Investment cost 3,314,983.38€ (T-14 bloc 79, R-10 blocs 75-76-77-78, H-5 blocs 72-73-74 and 63 to 71, L-10 blocs 80-86). Santa Eulàlia: Housing Agency Investment cost 1,445,000.00 € (Blocs 1-2-3-4-5-6-7-8-13-14-15 and 16) Total: 44,866,993.69 € + not quantified Housing Blocs of INCASOL properties administered by the Agency The estimated budget comprises the material execution' budget, industrial benefits, project management' professional fees and taxes. Real Estate rents Increase in the purchase-sale value of real estate Grants
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	Land or Property mortgage
Grey area	The project fosters the saving but there is a lack of funds.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously	

defined and has a strong correlation with some TOs. The project is susceptible of producing a return and is technically possible.

Mark: 74,6 Ranking position: 13

Project identification	
Project's name	PRIVATE HOUSING STOCK
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Housing Agency
Project's amount/budget	5,400,000,000 €
Location	Catalonia
Short description (problem, objectives and results)	Objective: to improve energy efficiency in private housing built in the 60s and 80s, through their regeneration, with the aim to decrease carbon emissions linked to energy consumption in the buildings.
Coherence	
Internal	The problem identified is clear, concrete and well delimited. The project's objectives are well defined and very specific. The expected results have been quantitatively specified through easily measurable results.
External (with regional or national strategies)	The project refers to the 2 nd National Action Plan for Energy efficiency in Spain for the period 2011-2020 in buildings and equipment materials and the Catalan 2012-2020 Energy and Climate Change Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation, environmental protection and social inclusion. It also has correlation with the SME Competitiveness objective as it fosters the employment and the specialisation of the SMEs in the construction sector towards energy renovation and building energy certification.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Social inclusion and combating poverty • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	The project foresees a PPP with the following actors: Administration (Catalan Housing Agency, Department of Territory and Sustainability of the Generalitat de Catalunya, Municipalities) as a promoter agent; real estate agents, land administrators, regeneration construction companies; material suppliers for building renovation; external experts and financial agents.
Maturity level	Intermediate stage. A feasibility study and a Business plan are foreseen.
Replicability	Yes, more precisely the project is based on the previous analysis of other European models, which have already put in place similar actions, adapted to the Catalan climatology and management model has been studied.
Economic viability and sustainability	
Cost-impact ratio	<p>Annual forecast investment of 675,000,000 € per year (5,400,000,000 € of investment in 8 years) In the case of development by phases, the investment can be prioritised under the following criteria:</p> <ul style="list-style-type: none"> - By seniority - By climate area - By conservation status. Where the thermal insulation action can be more effective. <p>In the building envelope insulation (EPS beads + windows change) even though savings from energy demand are similar (57/65% in double faced façade and 56/66% in windows), the costs and their subsequent amortisation are very different, ranging between 3,1/1,6 years if actions are only undertaken in the double faced façade or 30,7/17,6 with changes in the windows. The joint action, which would be the most recommendable way to reach the maximum saving over the building envelop, has an amortisation ranging from 12,7 to 7,1 years.</p> <p>The injection within the double faced façade, if realised through the interior of the housings (with a duration of a year) and does not require the agreement of the whole community, is faster, with easy execution, without wastes and economically more viable (~800/1.000€ by housing/only chamber insulation).</p> <p>Real Estate rents and increase in the purchase-sale value of real estate</p>

Rentability	The business plan is not clearly defined.
Timeframe	Long term.
Financing	Information not available.
Grey area	Large project.
Relevance in relation with JESSICA instrument	
<p>The project is relevant for the JESSICA instrument. It includes an integral action that comes from a regional (and national) strategy, previously defined and has a strong correlation with some TOs. Nonetheless, its high implementation cost makes difficult its technical viability. Its economic sustainability is uncertain and given its high cost, it is suggested to be developed in several phases.</p>	

Mark: 73,4 Ranking position: 17

Project identification	
Project's name	PROMOTION OF ENERGY EFFICIENCY IN FIGUERES HOUSING STOCK
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Figueres Municipality
Project's amount/budget	2,000,000-3,000,000€
Location	Figueres
Short description (problem, objectives and results)	The purpose of the project is to improve energy efficiency in Figueres Housing Stock, with the aim to reduce energy efficiency and carbon emissions, while promoting the local construction sector, severely affected by the economic crisis context.
Coherence	
Internal	There is a strong coherence between the problem identified, the objectives and the project's expected results, although the latter have been formulated in an overly broad manner and have not been quantified.
External (with regional or national strategies)	The project is framed within various local and regional strategies, as the Municipal Urban Planning, the Sustainable Energies Action Plan, the Imagine Low-energy cities, the Diversification of Local economy structure Plan and the Strategic Plan for Economic Development.
Thematic Objectives	
The project will decisively contribute to the achievement of 4 TOs.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The participation of various public and private actors is foreseen, including the supervision of the project by the ICAEN. The Local Administration will be the project leader.
Maturity level	The project is at an intermediate phase, with the feasibility study and the business plan foreseen.
Replicability	The project is susceptible of being replicable in other territories.
Economic viability and sustainability	
Cost-impact ratio	2.000.000-3.000.000€ The project should be able to repaid the investment in 5 years with the savings generated
Rentability	The business plan is clearly defined.
Timeframe	Medium/Long term
Financing	Information not available
Grey area	<ul style="list-style-type: none"> - Difficulties in the coordination between the different agents. - Difficulties to motivate owner's communities, especially in the crisis context. - Economic viability, although the energy price is increasing and works and regeneration costs have decreased, trade margins are very tight, with the significance that it may be necessary to wait until the profitability is sufficient to motivate the sector to shift towards energy efficiency. Nonetheless, the implementation in June 2013 of the energy certificate, which will be introduced progressively in the next months, can be an important catalyst if it is managed accordingly. -Existing difficulties to gain access to credit by families and SME.
Relevance in relation with JESSICA instrument	
The project meets all criteria to be financed under the JESSICA instrument.	

Mark: 72,6 Ranking position: 19

Project identification	
Project's name	ENERGY SAVING AND EFFICIENCY IN PUBLIC FACILITIES THROUGH SMALL INVESTMENT ACTIONS
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Infrastructures of the Generalitat de Catalunya
Project's amount/budget	2,101,490,08 €
Location	Catalonia (public equipments)
Short description (problem, objectives and results)	The purpose of the project is to achieve null energy consumption in buildings through the execution of small investment actions. Concretely, the project will offer to third parties the possibility to realise small actions aiming to reduce the energy consumption. This will allow savings for the Administration and induce private investment.
Coherence	
Internal	The problem and objectives are clearly and accurately defined. The project's expected results have been concisely specified (e.g. reduction of energy costs on 10%).
External (with regional or national strategies)	From the energy scope, the project is framed within the Catalan 2012-2020 Energy and Climate Change Plan and from its social scope in the Energy Sustainability Action Plan in the Municipal sphere and the Green Schools programme of departmental level. It is also related with the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation and environment protection and resource efficiency.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	Infrastructures of Catalonia will be the main manager of the project and the companies awarded with the installation contracts will partially execute the project. It also foresees the participation of other companies.
Maturity level	The project is at an intermediate stage, with the feasibility study and the business plan foreseen.
Replicability	The project is perfectly replicable in other administrations.
Economic viability and sustainability	
Cost-impact ratio	2,101,490.08 €. The project would be developed in 315 public premises over which the Infrastructures of Catalonia holds a surface right. From savings in the electricity consumption, gas or fuel and water bills.
Rentability	The business plan is not clearly defined.
Timeframe	Short/Medium term
Financing	In the energy services model, several investors identified are willing to participate in the project, without having agreed on the specific conditions.
Grey area	Uncertainty in the National regulatory framework regarding investment categorisation (investment cannot be considered as debt) The economic model is not clearly defined, with uncertainty in the accounting treatment of the investment and its return.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined and it has a strong correlation with some TOs. The project is susceptible of producing a return and is technically possible. It is required to prepare the business plan.	

Mark: 72 Ranking position: 22

Project identification	
Project's name	IMPLEMENTATION OF AN ENERGY EFFICIENCY IMPROVEMENT SYSTEM IN MUNICIPAL BUILDINGS OF SANT CUGAT DEL VALLÉS
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Sant Cugat del Vallés Town
Short description (problem, objectives and results)	The Municipality seeks to reduce energy costs through the efficiency improvement of the street lights and heating, air conditioning and sanitary hot water systems in municipal buildings.
Coherence	
Internal	The problem identified is clear, concrete and well delimited. The project's objectives are well defined and specified although project expected results are not presented.
External (with regional or national strategies)	The project is coherent with the ECAT 2020 Strategy (green energy), the Catalan 2012-2020 Energy and Climate Change Plan, that is complemented with the Catalan 2012-2020 Strategy for adapting to Climate change (ECACC). It is also coherent with the new energy model of the public administration launched by the Generalitat through the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan, and with the Municipal Urban Plan that includes energy sustainability criteria.
Thematic Objectives	
The project has an important correlation with the European objective of shifting towards a low carbon economy (60%) through the reduction of energy consumption and an increase of green energy.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The actors identified are the Municipality and the external company. The management system foreseen is an administrative concession for the electricity service provision.
Maturity level	The project is at a maturity stage waiting for funding. The feasibility study has been realised and the business plan is ongoing.
Replicability	The project is replicable to other buildings of the local or the regional administration.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The business plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Information not available
Grey area	Initial high investment required.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, and it has a strong correlation with some TOs. The project is susceptible of producing a return and is technically possible. It is required to prepare the business plan.	

Mark: 71,3 Ranking position: 24

Project identification	
Project's name	PHOTOVOLTAIC SELF-CONSUMPTION IN PUBLIC FACILITIES
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Infrastructures of the Generalitat de Catalunya
Project's amount/budget	15,256,000 € (Two phases : pilot phase 265,000 € + implementation 14,991,000 €)
Location	Catalonia (public equipments in Catalonia)
Short description (problem, objectives and results)	The purpose of the project is to achieve null energy consumption in public buildings through photovoltaic self-consumption, while developing an educational programme for the promotion of photovoltaic systems. This will allow a monetary saving for the Administration, induce private investment and produce a social impact.
Coherence	
Internal	Although the problem and the objectives are jointly defined, the project's objectives are clear. The expected results have been clearly and accurately specified providing easily measurable values.
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate Change Plan and social infrastructure, the Energy Sustainability Action Plan in the Municipal sphere and the Green Schools programme. Also, it is framed within the 2011-2014 Generalitat de Catalunya Buildings and Service Energy Saving and Efficiency Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation, environment protection and resource efficiency, as well as to a lower degree with the ICTs development and education Thematic Objectives.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	Infrastructures of Catalonia will be the main manager of the project and the companies awarded with the installation contracts will partially execute the project. It also foreseen the participation of other companies.
Maturity level	The project is in an intermediate stage, with the feasibility study and business plan underway.
Replicability	The project is replicable.
Economic viability and sustainability	
Cost-impact ratio	<p>Two phases are considered:</p> <ul style="list-style-type: none"> a) Pilot phase: 265,000€ b) Photovoltaic implementation in own equipments: 14,991,000€ <p>The pilot phase corresponds to the promotion of installations for self-consumption in singular equipments so the contracting model is improved. The implementation of the phase b) will be executed in lots over 288 building of the housing stock over which that Infrastructures of Catalonia holds surface rights.</p> <p>Rents from savings in the electricity bill.</p>
Rentability	The plan is not clearly defined.
Timeframe	Medium term
Financing	Several investors identified are willing to participate in the project, without having agreed on the specific conditions.
Grey area	<p>Uncertainty in the National regulatory framework.</p> <p>The economic model is not clearly defined, with uncertainty in the regulatory treatment of the activity.</p>
Relevance in relation with JESSICA instrument	
The project is potentially relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined. Moreover it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Mark: 71,2 Ranking position: 25

Project identification	
Project's name	ENERGY SAVING AND EFFICIENCY PLAN IN SECONDARY EDUCATION BUILDINGS OF THE DEPARTMENT OF EDUCATION IN THE COUNTY OF VALLÈS OCCIDENTAL
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Directorate General of Public centres of the Department of Education
Project's amount/budget	6,000,000 €
Location	Counties of Vallès Occidental
Short description (problem, objectives and results)	The purpose of the project is the regeneration of schools centres, with the aim to reduce energy consumption, carbon emissions and implement renewable energies as well as to raise awareness and educate students in environment protection, renewable energies and energy saving.
Coherence	
Internal	The identified problem and established objectives are developed in a clear manner. The expected results are quantified in square meters, number of students that will receive training in renewable energies, etc. The actors involved in the project are clearly identified: educational community, experts of the Department of Education and private companies (ESCOs and construction companies).
External (with regional or national strategies)	The project is coherent with the ECAT 2020 Strategy (green energy), the Catalan 2012-2020 Energy and Climate Change, that is complemented with the Catalan 2012-2020 Strategy for adapting to Climate change (ECACC).
Thematic Objectives	
The project has correlation with the following objectives related to environment and with the TO related to education through the improvement of healthy habits and the environment awareness raising.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	Three different actors will manage the project: the educational community, the civil servants of the Department of Education and the private companies (ESCO and construction companies). The project will be articulated through the awarding of public procurement contracts to private companies and employment contracts with the civil servants.
Maturity level	The project is at an initial development phase and the feasibility study and business plan are foreseen.
Replicability	The project is replicable. In fact, it is foreseen the duplication of the model to the rest of Catalan counties (all secondary centres managed by the Generalitat), adapting them to the local specific conditions.
Economic viability and sustainability	
Cost-impact ratio	6,000,000 €
Rentability	The plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Information not available
Grey area	Economic issues.
Relevance in relation with JESSICA instrument	
In light of the information provided, this project fits in the JESSICA initiative due to its thematic approach and its capacity to offer a clear investment return through energy saving.	

Mark: 69,2 Ranking position: 28

Project identification	
Project's name	ENERGY SAVING AND EFFICIENCY IN PUBLIC FACILITIES THROUGH ACTIVE MANAGEMENT IN CATALONIA
Sector	Environment and Energy
Segment	Energy Efficiency.
Promoter	Infrastructures of the Generalitat de Catalunya
Project's amount/budget	4,559,980 €
Location	Catalonia (public equipments in Catalonia)
Short description (problem, objectives and results)	The purpose of the project is to achieve null energy consumption in public buildings through consumption active management, while developing an educational programme for the promotion of photovoltaic systems. Concretely, the project consists in presenting to third parties the possibility to install consumption monitoring systems aiming to reduce consumption as energy services contracts. This will allow a monetary saving for the Administration, induce private investment and produce a social output.
Coherence	
Internal	The problem and the objectives are jointly defined although the project's objectives are clear. The expected results have been clearly and accurately specified providing easily measurable values.
External (with regional or national strategies)	From the energy scope, the project is framed within the Catalan 2012-2020 Energy and Climate Change Plan and from its social scope in the Energy Sustainability Action Plan in the Municipal sphere and the Green Schools programme of departmental level. It is also related with the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation, environment protection and resource efficiency, as well as to a lower degree with the ICTs development and education Thematic Objectives.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	Infrastructures of Catalonia will be the main manager of the project and the companies awarded with the installation contracts will partially execute the project. It also foreseen the participation of other companies.
Maturity level	The project is at an intermediate phase with the feasibility study and business plan underway.
Replicability	The project is replicable.
Economic viability and sustainability	
Cost-impact ratio	4,559,980 € The project would be developed in 326 public premises over which the Infrastructures of Catalonia holds a surface right. From savings in the electricity consumption, gas and water bills.
Rentability	The plan is not clearly defined.
Timeframe	Medium / Long term
Financing	The first phase of the project has been realised over 105 public buildings defraying the costs as services maintenance marginal costs. In the energy services model, several investors identified are willing to participate in the project, without having agreed on the specific conditions
Grey area	Uncertainty in the National regulatory framework regarding investment categorisation (investment cannot be considered as debt) The economic model is not clearly defined, with uncertainty in the accounting treatment of the investment and its return.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined. On the other hand it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Mark: 68,7 Ranking position: 30

Project identification	
Project's name	ENERGY SAVING AND EFFICIENCY IN PUBLIC FACILITIES THROUGH THE REPLACEMENT OF CONVENTIONAL BOILERS BY BIOMASS BOILERS
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Infrastructures of the Generalitat de Catalunya
Project's amount/budget	5,224,800 €
Location	Cataluña (public equipments in the Catalonia)
Short description (problem, objectives and results)	The purpose of the project is to achieve null energy consumption through the replacement of conventional boilers by biomass boilers. This will allow a monetary saving for the Administration and promote the private investment.
Coherence	
Internal	The problem and objectives are defined in a clear and concise manner. The project expected results have been specified in a succinct manner (reduction of energy expenditure by 20%).
External (with regional or national strategies)	From the energy scope, the project is framed within the Catalan 2012-2020 Energy and Climate Change Plan and from its social scope in the Energy Sustainability Action Plan in the Municipal sphere and the Green Schools programme of departmental level. Also, it is framed in the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation, environment protection and resource efficiency.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	Infrastructures of Catalonia will be the main manager of the project and the companies awarded with the installation contracts will partially execute the project. It also foreseen the participation of other companies.
Maturity level	The project is at an intermediate phase with the feasibility study and business plan foreseen.
Replicability	The project is perfectly replicable in any administration.
Economic viability and sustainability	
Cost-impact ratio	5,224,800 €. The project would be developed in 56 public premises over which the Infrastructures of Catalonia holds a surface right. From savings in the gas or fuel consumption bills.
Rentability	The plan is not clearly defined.
Timeframe	Medium term
Financing	JESSICA funding will cover the risks associated to regulation uncertainties and to reverse increases in tolls fares or other taxes in the energy market. Likewise, it should be used to achieve profitability levels that could be considered attractive by private investors.
Grey area	Uncertainty in the National regulatory framework regarding investment categorisation (investment cannot be considered as debt) The economic model is not clearly defined, with uncertainty in the accounting treatment of the investment and its return.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined. On the other hand it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Mark: 68,5 Ranking position: 31

Project identification	
Project's name	HOUSING REGENERATION IN THE CANYELLES NEIGHBOURHOOD IN BARCELONA CITY
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Housing Agency
Project's amount/budget	36.342.000 €
Location	Barcelona, Nou Barris (Residential and commercial area).
Short description (problem, objectives and results)	The purpose of the project is to refurbish Canyelles neighbourhood housings, that is an area with energy problems, through the improvement of building façade insulation. For this, it is required the design of new financial mechanisms.
Coherence	
Internal	The problem identified is clear and accurate although the project's objectives are not well defined. The expected results have not been specified.
External (with regional or national strategies)	The project makes clear reference to the legislation and public planning: urban (Decree 274/2006 of 20 of June on public aids for the regeneration of public housing stocks in Barcelona city), energy, social infrastructure and economic development and competitiveness. On the other hand, it is frame in the Catalan 2012-2020 Energy and Climate Change.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy and climate change adaptation. It also has correlation with the SME Competitiveness objective as it fosters the employment and the specialisation of the SMEs in the construction sector towards energy renovation and building energy certification.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management 	
Articulation	
Actors/ Management System	The project foresees a PPP with the following actors: Administration (Catalan Housing Agency, Department of Territory and Sustainability of the Generalitat de Catalunya, Municipalities) as a promoter agent; regeneration construction companies; material suppliers companies for building renovation; external experts and financial agents.
Maturity level	The project is at a maturity stage.
Replicability	The project is replicable in other territories.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Information not available
Grey area	<ul style="list-style-type: none"> - Financial costs. - Few investors identified. - Scarcity of funds.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined and it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Mark: 67,4 Ranking position: 32

Project identification	
Project's name	IMPLEMENTATION OF AN ENERGY SMART GRID IN THE SANT JOAN INDUSTRIAL SITE
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Urbana area of Sant Cugat del Vallés
Short description (problem, objectives and results)	The Municipality wants to improve and optimise energy supply to companies placed in the industrial site, as well as public lighting in the area. This would be achieved through the creation of a multirenewable electric power plant that incorporates photovoltaic production, wind power production, etc.
Coherence	
Internal	The problem identified is clear, concise and well delimited. The project's objectives are well defined and specified although the expected results have not been specified.
External (with regional or national strategies)	The project is coherent with the ECAT 2020 (green energy, innovation and knowledge), within the Catalan 2012-2020 Energy and Climate Change Plan that is complemented with the Catalan Strategy for adapting to Climate change (ESCACC). It is also coherent with the new energy model of the public administration launched by the Generalitat through the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan, and with the Municipal Urban Plan that includes energy sustainability criteria. On the other hand, the project complements the results of the SMARTCITIES project within the FP7 and the Smart Specialisation Strategy (RIS3).
Thematic Objectives	
The project has a strong correlation with the shift towards a low carbon economy objective (60%) as well as the new technologies development.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	It is expected that the management system will be implemented through an administrative concession to provide heat and refrigeration services. The actors will be the Municipality, the external company and the companies of the sector that will consume green energy in their productive processes.
Maturity level	The project is at an intermediate phase with the feasibility study and business plan underway.
Replicability	The project is replicable in other territories.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Information not available
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy previously defined and it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Project identification	
Project's name	ENERGY SELF-SUFFICIENCY IN SANT CUGAT DEL VALLÉS MUNICIPALITY
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Sant Cugat del Vallés Town
Short description (problem, objectives and results)	<p>The purpose of the project is to turn the city of Sant Cugat a sustainable energy city. To that end, clean energy generation will be promoted through the following actions:</p> <ol style="list-style-type: none"> 1. To produce green energy (mainly through photovoltaic installations in Municipal buildings' roofs) 2. To promote active participation of Sant Cugat Citizenship in the project. 3. To involve the citizenship in the energy consumption management with the aim of reducing energy demand in the Municipality. 4. To increase the percentage of electric energy self-consumption. To establish collaboration agreements with energy selling companies To study the viability of creating a municipal cooperative to produce and sell clean energy
Coherence	
Internal	The problem is well identified and the objectives are well delimited. On the other hand, the project involved different actors such as citizens, Energy Services Companies, etc. Nonetheless, the project expected results are not systematised.
External (with regional or national strategies)	The project is coherent with the ECAT 2020 strategy (green energy), the Catalan 2012-2020 Energy and Climate Change, that is complemented with the Catalan 2012-2020 Strategy for adapting to Climate change (ECACC) and with the Municipal Urban Plan that includes energy sustainability criteria.
Thematic Objectives	
The project has a strong correlation with the following objectives: shift towards a low carbon economy, climate change adaptation and environment protection and resource efficiency.	
<ul style="list-style-type: none"> • Research and Innovation • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management 	
Articulation	
Actors/ Management System	The project foresees the participation of Energy Services Companies and the Municipality, while seeking citizenship involvement.
Maturity level	The project is at an idea phase.
Replicability	The project is replicable in other municipalities.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	The lack of investment and legal barriers hinders the community self-consumption. On the other hand, as technologies related to storage batteries are underdeveloped, the production timeframe has to be adequate to the consumption frame.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined and has a strong correlation with some TOs.	

Mark: 66,8 Ranking position: 34

Project identification	
Project's name	IMPLEMENTATION OF A DISTRICT HEATING AND COOLING SYSTEM IN SANT CUGAT DEL VALLÉS MUNICIPALITY
Sector	Environment and Energy.
Segment	Energy Efficiency
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Sant Cugat del Vallés urban area
Short description (problem, objectives and results)	The Municipality wants to reduce energy consumption in public and private facilities through the exploitation of geothermal energy generated by subterranean water currents, as well as the creation of a small biomass plant.
Coherence	
Internal	The problem is clear, concise and accurate. The project's objectives are relatively well defined and specified, and the expected results are not exposed.
External (with regional or national strategies)	The project is coherent with the ECAT 2020 strategy (green energy), with the Catalan 2012-2020 Energy and Climate Change Plan that has been complemented with the Catalan Strategy for adapting to Climate change (ESCACC). It is also coherent with the new energy model of the public administration launched by the Generalitat through the 2011-2014 Generalitat de Catalunya Buildings and equipment Energy saving and efficiency Plan, and with the Municipal Urban Plan that includes energy sustainability criteria.
Thematic Objectives	
The project has a clear correlation with the following Thematic Objectives: shift towards a low carbon economy (40%) and environment protection.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	It is expected that the management system will be implemented through an administrative concession to provide heat and refrigeration services.
Maturity level	The project is at an idea phase, with the feasibility study and business plan underway.
Replicability	The project is replicable in other municipalities.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Information not available
Financing	Information not available
Grey area	High initial investment required.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined and it has a strong correlation with some TOs. The project is susceptible of producing a return and is technically possible, requiring further analysis through the realisation of a feasibility study and a business plan.	

Mark: 66,4 Ranking position: 35

Project identification	
Project's name	IMPLEMENTATION OF STEAM PRODUCTION SYSTEMS THROUGH BIOMASS EXPLOITATION
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Sant Cugat del Vallés urban area
Short description (problem, objectives and results)	Sant Cugat is an important industrialised city, hosting more than 4,000 companies and 30,000 jobs. The city seeks to foster regional economy development by supporting innovation and sustainable initiatives, while improving citizenship welfare. With this dual objective, it is foreseen to develop a biomass management model. It is expected to produce green energy to cover steam and/or electricity low-cost energy demand from companies (particularly from the pharmaceutical industry) and citizens.
Coherence	
Internal	The problem is not identified although it can be extracted from the project's objectives, which are clearly delimited. The expected results are not developed thus not allowing the identification of the intervention logic. It only covers the project's objective of "green energy generation".
External (with regional or national strategies)	The project is coherent with the ECAT 2020 strategy (green energy), with the Catalan 2012-2020 Energy and Climate Change Plan, which is complemented with the Catalan Strategy for adapting to Climate change (ESCACC). The project is also coherent with the Municipal Urban Plan that includes energy sustainability criteria.
Thematic Objectives	
The project has correlation with the following TOs: shift towards a low carbon economy, environment protection and resource efficiency. Although it is not explicitly remarked, it is also linked to the following points in a lesser degree: sustainable transport, climate change adaptation and competitiveness.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project identifies three clear agents for the management of the project: Sant Cugat Municipality, an external company and pharmaceutical companies as energy managers. The management system foresees an administrative concession to cover the supply service of steam and/or electricity.
Maturity level	The project is at an initial development phase, and is currently elaborating the feasibility study and the business plan.
Replicability	The project is replicable in other territories, provided that there is a strong steam demand by local companies and a great amount of biomass to manage.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Information not available
Grey area	High initial investment required
Relevance in relation with JESSICA instrument	
In principle, the project could be finance under the JESSICA instrument as it has a clear impact in the territory and it can generate a return (through energy supply charges).	

Mark: 61,5 Ranking position: 40

Project identification	
Project's name	MUNICIPAL ENERGY SAVING IN BARCELONA AREA: PUBLIC STREET LIGHTING AND BIOMASS EXPLOITATION
Sector	Environment and Energy
Segment	Energy Efficiency
Promoter	Barcelona Provincial Council
Project's amount/budget	40,000,000 €
Location	Municipalities of Barcelona Province
Short description (problem, objectives and results)	<p>The Barcelona Provincial Council in coordination with four Catalan Provincial Councils is planning an Investment Programme for energy efficiency in Barcelona's Municipalities. The programme has 2 principal objectives:</p> <ol style="list-style-type: none"> 1) Reduction of the municipal public street lighting bill by changing the current technology used, the street lights, fostering a remote management systems as well as the entry of the private sector as service supplier. 2) Establishment of biomass systems (boilers and heating network) in municipal buildings of those areas that might have restrictions in the access to energy services.
Coherence	
Internal	The project presents a high internal coherence as it has been designed from the results and conclusions of the 175 Sustainable Energy Action Plans elaborated by the Barcelona Provincial Council. The problem and the objectives are well delimited. Still there is lack of information regarding the expected results.
External (with regional or national strategies)	The project is framed within the Catalan 2012-2020 Energy and Climate change Plan. At the municipal level, the project is related to the 175 Sustainable Energy Action Plans approved as well as the Majors Pact (that includes a total of 204 Municipalities of Barcelona).
Thematic Objectives	
The project has a strong correlation with the following TOs:	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	Project's involved actors are: from one side, Barcelona Provincial County and local authorities in a partnership scheme and, on the other side, local authorities and Energy Service Companies as beneficiaries.
Maturity level	Initial stage with project's programming and financing to be delimited, and the business plan and feasibility study to be developed.
Replicability	The project can be capitalised in other Catalan territories through participation and collaboration with the rest of Provincial Counties.
Economic viability and sustainability	
Cost-impact ratio	Total investment is of 40,000,000 €, including internal and external (other public and private actors) funding.
Rentability	Information not available.
Timeframe	Short term
Financing	Information not available.
Grey area	The project is part of the grey area, due to the lack of financing and the possibility that ESCO would not consider the project profitable in those locations with low electricity bills.
Relevance in relation with JESSICA instrument	
The project, considering the thematic, management system and financing requirements is susceptible of being financed under the JESSICA initiative.	

Mark: 52,5 Ranking position: 46

1.2. Waste management

Project identification	
Project's name	ALTERNATIVE ROUTE OF THE COLLECTOR IN THE BARCELONA PORT COAST AREA
Sector	Environment and Energy
Segment	Waste management
Promoter	Metropolitan area of Barcelona
Project's amount/budget	3,538,136 €
Location	Barcelona
Short description (problem, objectives and results)	The objective of the project is to change the Barcelona Port principal collector, currently presenting deficiencies in its structure.
Coherence	
Internal	There is a strong coherence between the project's problem, objectives and expected results.
External (with regional or national strategies)	In principle, the project is not framed within any particular regional or national strategy.
Thematic Objectives	
There is a strong correlation between the project and the targeted TO (environment protection and resource efficiency).	
<ul style="list-style-type: none"> Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The project foresees the collaboration of different public administrations.
Maturity level	The project is at a maturity stage, waiting for funding.
Replicability	The project is replicable. In fact, it mentions similar activities in Catalonia that have already been carried out.
Economic viability and sustainability	
Cost-impact ratio	3,538,136 €
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Information not available
Relevance in relation with JESSICA instrument	
The project meets in principle the requirements to be financed under the JESSICA instrument.	

Mark: 45.4 Ranking position: 48

Project identification	
Project's name	CONSTRUCTION OF COLLECTORS IN THE RESIDENTIAL AREAS OF CAN PAULET AND CAN RAFAEL, IN THE CERVELLÓ MUNICIPALITY
Sector	Environment and Energy
Segment	Waste management
Promoter	Metropolitan area of Barcelona
Project's amount/budget	1,137,285.05 €
Location	Cervelló
Short description (problem, objectives and results)	The purpose of the project is to improve the sewage disposal in some residential areas from the Cervelló Municipality, where its urban sewage networks are integrated among them but not with the general municipal network and, therefore the raw sewage pours into the stream.
Coherence	
Internal	There is a strong coherence between the project's problem, the established objectives and the expected results.
External (with regional or national strategies)	In principle, the project is not framed within any particular regional or national strategy.
Thematic Objectives	
There is a strong correlation between the project and the targeted TO (environment protection and resource efficiency).	
<ul style="list-style-type: none"> Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The project foresees the collaboration of different public administrations.
Maturity level	The project is at a maturity stage, waiting for funding.
Replicability	The project is replicable. In fact, it mentions similar activities in Catalonia that have already been carried out.
Economic viability and sustainability	
Cost-impact ratio	1,137,285.05 €: (tax free) Information regarding income is not available.
Rentability	The plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Information not available
Relevance in relation with JESSICA instrument	
The project meets in principle the requirements to be financed under the JESSICA instrument.	

Mark: 45.4 Ranking position: 49

Project identification	
Project's name	ODOUR TREATMENT IN THE PUMPING STATIONS OF ZONA FRANCA AND GINEBRA
Sector	Environment and Energy
Segment	Waste management
Promoter	Metropolitan area of Barcelona
Project's amount/budget	2,038,000 €
Location	Barcelona
Short description (problem, objectives and results)	The objective of the project is to refurbish the waste waters pumping stations in the Port of Barcelona area, with the aim to diminish odour emissions.
Coherence	
Internal	There is a strong coherence between the project's problem, the objectives and the expected results.
External (with regional or national strategies)	In principle, the project is not framed within any particular regional or national strategy.
Thematic Objectives	
There is a correlation between the project and the targeted TO (environment protection and resource efficiency).	
<ul style="list-style-type: none"> Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The project foresees the collaboration of different public administrations.
Maturity level	The project is at a maturity stage, waiting for funding.
Replicability	The project is replicable. In fact, it mentions similar activities in Catalonia that have already been carried out.
Economic viability and sustainability	
Cost-impact ratio	2,038,000 € Information regarding income is not available.
Rentability	Information not available
Timeframe	Information not available
Financing	Information not available
Grey area	Information not available
Relevance in relation with JESSICA instrument	
The project, due to its thematic coverage, would not fall within the requirements to be financed under the JESSICA instrument.	

Mark: 33.4 Ranking position: 51

2. Transport

Project identification	
Project's name	SMARTCOUNTRY: REGIONAL EXPRESS BUS NETWORK AND SMART INTERCHANGE STATIONS IN FOUR MAIN CITIES OF THE PROVINCE
Sector	Transport
Segment	Sustainable transport
Promoter	Directorate General for Transport and Mobility
Project's amount/budget	Estimation: 120,000,000 - 130,000,000 €. University area station (Barcelona): 98,000,000 €, Girona station: 10,000,000 €, Lleida station: 12,000,000 € and Tarragona station: to be estimated.
Location	Barcelona, Tarragona, Girona and Lleida cities; as well as the interurban bus corridors to access those cities where express.cat buses operate.
Short description (problem, objectives and results)	<p>Although the four capital cities of Catalonia (Barcelona, Tarragona, Lleida and Girona) are characterised by internal sustainable mobility, the access to those cities is mainly realised through the use of private vehicle (more than 50%), resulting in important traffic congestions intensified during peak hours. For this reason, the Generalitat de Catalunya has designed and launched a new bus network (expres.cat) to promote the use of public transport and prioritise collective over private transport.</p> <p>The network includes 40 express bus lines that will connect the main Catalan municipalities with the four capital cities. The buses will be 100% accessible to PRM (persons with reduced mobility) and will operate with alternative fuels. The interurban connexion with big cities would mainly be done through the establishment of hubs, either by building new intermodal stations, or renovating the existing ones. In any case, the stations will be devised as smart intermodal interchange points, where the user could alter the transport modality (metro, train, bus, high speed train, bicycle, electric vehicle, car sharing, etc.). They will be conceived with an attractive, sustainable and smart design. Other complementary services can be included in other to generate incomes.</p>
Coherence	
Internal	The project presents a high coherence. It designs an integral strategy (setting up of 40 bus lines and construction of smart intermodal stations) targeting a clearly detected problem (access to 4 main capital cities of province).
External (with regional or national strategies)	The project is framed within the Catalan 2013-2013 Passenger Transport Plan, that is currently being drafted and that has the objective of promoting public transport vs. private vehicle use.
Thematic Objectives	
<p>The project contributes to 4 TOs:</p> <ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees a PPP between public actors (Generalitat de Catalunya, Ministry of Public Works and ADIF) and private actors for the infrastructure's construction and/or exploitation.
Maturity level	The project is at an intermediate stage with the feasibility study realised and the procurement of administrative authorisations underway.
Replicability	The model is replicable in other regions of Spain and Europe.
Economic viability and sustainability	
Cost-impact ratio	Estimation: 120,000,000 - 130,000,000 €. University area station (Barcelona): 98,000,000 €, Girona station: 10,000,000 €, Lleida station: 12,000,000 € and Tarragona station: to be estimated.
Rentability	<p>The expected return comes from:</p> <ul style="list-style-type: none"> - Rents: rental of premises, shops, restaurants, etc. - Sales: Parking places (rent or sale)

	<ul style="list-style-type: none"> - Marketing: Publicity. - Others: station fees: technical fees and other incomes from fees or use.
Timeframe	Medium term
Financing	50% of the project will be financed by debt requested by the concessionaire, with the Generalitat de Catalunya's support.
Grey area	The economic-social profitability is significant in comparison to the foreseen investment. Launching the project will depend on the availability of funding.
Relevance in relation with JESSICA instrument	
The project fits under the JESSICA initiative due to its thematic coverage, its impact over the environment and territory and its capacity to generate return.	

Mark: 76.6 Ranking position: 10

Project identification	
Project's name	INTERMODAL INTERCHANGE IN THE BARCELONA HIGH SPEED RAIL STATION- FRENCH FRONTIER FOR GIRONA AIRPORT
Sector	Transport
Segment	Sustainable transport
Promoter	Directorate General for Terrestrial Mobility Infrastructure
Project's amount/budget	9,000,000 €
Location	Vilobí d'Onyar Municipality in the Province of Girona.
Short description (problem, objectives and results)	The purpose of the project is to establish a first level intermodal junction in Girona, through setting up a new railway station. The station would promote the traffic of the Girona airport, improve its mobility and extend the airport hinterland.
Coherence	
Internal	The project foresees the construction of a new railway intermodal station to link Girona airport with high train speed network between Barcelona and the French frontier. This will reduce the use of private transport while promoting the airport and improving its hinterland.
External (with regional or national strategies)	The project is framed within the Catalan 2013-2013 Passenger Transport Plan, that is currently being drafted and that has the objective of promoting public transport vs. private vehicle use.
Thematic Objectives	
The project contributes to the following TOs:	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project foresees a PPP between public actors (Generalitat de Catalunya, Ministry of Public Works and ADIF) and private actors for the infrastructure's construction and/or exploitation.
Maturity level	The project is at an intermediate stage with the feasibility study realised and the procurement of administrative authorisations underway.
Replicability	The model is replicable.
Economic viability and sustainability	
Cost-impact ratio	9,000,000 € Rental of premises, shops, restaurants, etc. Parking places (rent, sale or car rotation). Publicity. Payment from stations operation: technical fees. Incomes from fees or use.
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	No funding has been obtained.
Grey area	The economic-social profitability is significant in comparison to the foreseen investment. Launching the project will depend on the availability of funding
Relevance in relation with JESSICA instrument	
The project meets all the requirements to be financed under the JESSICA instrument (technically and financially viable, linked to regional development and framed within a Catalan strategy).	

Mark: 75.2 Ranking position: 12

Project identification	
Project's name	DEVELOPMENT OF A SUSTAINABLE TRANSPORT STRATEGY THROUGH THE RENOVATION OF THE FLEETS OF URBAN BUSES, POLICE VEHICLES AND MUNICIPAL VEHICLES AND IMPLEMENTATION OF A SMART SERVICE OF PARKING MANAGEMENT
Sector	Transport
Segment	Sustainable transport
Promoter	Terrassa Municipality
Project's amount/budget	30,000,000 €
Location	Terrassa
Short description (problem, objectives and results)	The purpose of the project is to reduce carbon emissions and produce energy savings through the substitution of vehicles.
Coherence	
Internal	The project presents high coherence between the identified problem, the established objectives and the expected results, which are clearly identified. The project has an integral approach, as it suggests two complementary actions consisting of the migration of the urban buses fleet towards vehicles with less polluting hybrid motors and a smart system management of the public car park.
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate Change Plan and the Catalan Urban Mobility Plan.
Thematic Objectives	
The project will contribute to different extent to the following 5 TOs.	
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Transport sustainability and removing bottlenecks in key network infrastructures • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project foresees the creation of a PPP.
Maturity level	The project is at an intermediate stage with the feasibility study foreseen and the business plan underway.
Replicability	The project can be capitalised in any urban area.
Economic viability and sustainability	
Cost-impact ratio	30,000,000 € Expected generated income is not identified.
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	Information not available
Grey area	Few identified investors. Scarcity available funds.
Relevance in relation with JESSICA instrument	
If the project's return formula is clarified, the project could be financed under the JESSICA instrument.	

Mark: 74.6 Ranking position: 14

Project identification	
Project's name	T- MOBILITAT.CAT
Sector	Transport
Segment	Sustainable transport
Promoter	Directorate general for Transports and Mobility
Project's amount/budget	60,000,000 €
Location	Barcelona Metropolitan Transport Authority (ATM). The objective is to extend the model to the rest of Catalan ATMs.
Short description (problem, objectives and results)	<p>At the current moment, there are 4 regions in the Catalan public transport with an Integrated Fare System: ATM Barcelona, ATM Girona, ATM Tarragona and ATM Lleida that counts with a wide range of products (T-10, T-MES). The technology used in the Barcelona ATM consists of a paper card with magnetic strips and in the rest of the ATMs a contact-free chip card (MIFARE CLASSIC).</p> <p>The main objective of the project is to change the fare system, the technology that is being used and the integrated fare system management. The project will first focus on the Barcelona area, and it will be subsequently extended to the rest of the Catalan ATMs. The 2 main actions foreseen are:</p> <ol style="list-style-type: none"> 1) switching from the current paper card with magnetic strips technology to the contact-free Smart card, that could also be used in other services such as parking, <i>bicing</i> and tolls, among others 2) switching from excessive range of tariffs (T-10, T-MES, etc) to a single card where the user payment depends on his travelling demand and where discounts are offered if travelling demand is high. Thus, creating customers loyalty.
Coherence	
Internal	There is a high internal coherence, as the project responds to the identified need of updating the Integrated Fare System, with the aim to promote public transport and retain customer's loyalty. With this purpose, the project proposes the development of an integrated scheme of magnetic cards with other services (parking, biking) where the user pays for the effective use of public transport. This will retain customers' loyalty and will promote the public transport use.
External (with regional or national strategies)	The project is framed within the Catalan 2013-2013 Passenger Transport Plan, that is currently being drafted and that has the objective of promoting public transport vs. private vehicle use.
Thematic Objectives	
The project clearly contributes to the following TOs:	
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project involves different administrations levels (Generalitat de Catalunya-ATM Area de Barcelona) and private agents through the launch of a competitive dialogue to award an administrative concession for a 13-15 years period.
Maturity level	The project is at an advanced stage, with the feasibility study and the business plan underway. The dates to launch and award the tendering procedure are already defined.
Replicability	It is a pilot project to be developed in Barcelona area and to be replicated in other ATMs
Economic viability and sustainability	
Cost-impact ratio	<p>60,000,000 €</p> <p>Expected return from:</p> <ul style="list-style-type: none"> - Marketing: publicity of the contact-free card. - Other: Payment of the administrative concession will be realised through a technical fee, exported from international models, the reduction of fraud in the public transport that will generate additional income.
Rentability	Information not available
Timeframe	Long term
Financing	More than 50% loan requested by concessionaire.
Grey area	The economic model is not clearly defined. There are uncertainties regarding the service payment
Relevance in relation with JESSICA instrument	

In principle, the project could be integrated in the JESSICA initiative. It is an integral project, with a strong territorial impact.

Mark: 73.6 Ranking position: 16

Project identification	
Project's name	DESIGN OF A CAR SHARING SERVICE WITH ELECTRIC VEHICLES IN FIGUERES
Sector	Transport
Segment	Sustainable transport
Promoter	Figueres Municipality
Project's amount/budget	5,000,000-6,000,000 €
Location	Figueres
Short description (problem, objectives and results)	The purpose of the project is to establish a car sharing service in Figueres Municipality with the aim of reducing the use of second family cars. The cars will be electric vehicles, operating with wind power. The project's expected return is safeguarded through the sale of energy generated and the vehicle rent (by hours).
Coherence	
Internal	There is a strong coherence between the project's problem, which is delimited taking into account the identified challenge, the objectives and the expected results. These are measured based on the estimated return and the carbon reduction.
External (with regional or national strategies)	The project is coherent with various strategies such as the Energy Sustainability Action Plan, the Plan for diversifying the structure of the local economy and the Figueres Urban Mobility Plan.
Thematic Objectives	
The project will coherently contribute to 5 TOs. Particularly, there is a high correlation with the sustainable transport objective and the infrastructure congestion in principal roads elimination.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The Administration will manage the project. It is also foreseen an administrative concession to a private.
Maturity level	The project is at an idea phase. The feasibility study and the business plan are not foreseen.
Replicability	For its replicability, the region should be windy to generate wind energy, although in any case, the energy can be produced from different renewable sources.
Economic viability and sustainability	
Cost-impact ratio	5,000,000-6,000,000 € Sale of energy produced: 100,000 € annually Rent of vehicles (by hours) 450,000 € annually
Rentability	The plan is not clearly defined.
Timeframe	Long / Medium term
Financing	Information not available
Grey area	Authorisation for the construction of wind turbines and land acquisition. A progressive, although slow penetrability of the service in the market, as the families should either opt for the amortisation of their vehicle or its substitution + Legal restrictions to local administration debt.
Relevance in relation with JESSICA instrument	
The project is highly relevant to be financed under the JESSICA instrument, as it meets all the requirements.	

Mark: 73 Ranking position: 18

Project identification	
Project's name	CONNECTION OF THE ADIF NETWORK PAPIOL-MOLLET LINE IN INTERNATIONAL GAUGE WITH THE FGC OPERATIONAL CENTRE IN RUBÍ
Sector	Transport
Segment	Sustainable transport
Promoter	Catalonia Railways
Project's amount/budget	3,000,000 €
Location	Rubí and Sant Cugat
Short description (problem, objectives and results)	The purpose of the project is to facilitate the connection of the Rubí maintenance centre to the international gauge network with two objectives: from one side, to enhance the Operational Centre's premises for the maintenance of locomotives, platforms, wagons, etc; while facilitating the access to freight transport by rail, thus promoting this transport mode, more sustainable and less polluting.
Coherence	
Internal	The project presents high coherence between the identified problem, the established objectives and the expected results.
External (with regional or national strategies)	The project is integrated in the final version of the Metropolitan area of Barcelona 2011-2020 Infrastructures Master Plan.
Thematic Objectives	
The project has a strong correlation with 2 TOs. Particularly, there is a high correlation with the sustainable transport objective and the elimination of infrastructure congestion in principal roads.	
<ul style="list-style-type: none"> • Transport sustainability and removing bottlenecks in key network infrastructures • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	Two different public institutions will co-manage the project.
Maturity level	The project is at a maturity stage. The feasibility study is currently being elaborated.
Replicability	The project is not easily replicable in other territories.
Economic viability and sustainability	
Cost-impact ratio	3,000,000 € Services to other freight rail operators (wheel turning, locomotive maintenance, etc. Cost reduction as it facilities freight rail transport. Access to the own mechanic shop, for roll stock maintenance and guard (savings).
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Scarce available funds.
Relevance in relation with JESSICA instrument	
The project is potentially relevant to be financed under the JESSICA instruments, considering its thematic coverage and its capacity to generate returns.	

Mark: 63.8 Ranking position: 37

Project identification	
Project's name	IMPLEMENTATION OF A SUSTAINABLE TRANSPORT SYSTEM IN SANT CUGAT DEL VALLÉS MUNICIPALITY
Sector	Transport
Segment	Sustainable transport.
Promoter	Sant Cugat del Vallés Municipality
Project's amount/budget	---
Location	Sant Cugat del Vallés Urban area.
Short description (problem, objectives and results)	The Municipality wants to optimise the current Public Transport System and make it more environmentally and economically sustainable. For this reason, the Municipality seeks to optimise the Urban transport system by incorporating electric vehicles to the system.
Coherence	
Internal	The problem is clear and concise. The project's objectives are well defined and specified although the expected results are not specified.
External (with regional or national strategies)	The project is framed within the Catalan Transport Infrastructure Plan (PITC).
Thematic Objectives	
The project has a strong correlation with the shift towards a low carbon economy objective (70%).	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The project foresees an administrative concession management system to cover the supply service of heat and refrigeration. The actors would be the Municipality and an external company.
Maturity level	The project is at an idea phase, with the feasibility study and the business plan foreseen.
Replicability	The project is replicable.
Economic viability and sustainability	
Cost-impact ratio	Information not available
Rentability	The plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	High initial investment required.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined. On the other hand it has a strong correlation with some TOs. Nonetheless, it is necessary to define the project estimated return to assess its viability in a more advanced maturity stage.	

Mark: 63.4 Ranking position: 38

Project identification	
Project's name	RENOVATION OF SANT JOAN FUNICULAR IN COLLBATÓ
Sector	Transport
Segment	Sustainable transport
Promoter	Catalonia Railways
Project's amount/budget	4,100,000 €
Location	Collbató (Barcelona Mountain)
Short description (problem, objectives and results)	The project's objective is to realise an integral renovation of Sant Joan Funicular premises with the aim to adapt them to the regulations, solve the technological obsolescence issue and increase their capacity. The funicular, along with the Montserrat rack train, supposes a sustainable transport mode for tourism and leisure while preserving Montserrat natural park, which is an important tourist attraction in Barcelona.
Coherence	
Internal	There is high and direct coherence between the delimited project's problem, the clear and precise objectives and the expected results, which are difficult to measure although they can be reasonably extracted from the project presentation.
External (with regional or national strategies)	The project is framed within the Barcelona city Tourism Strategic Plan, and the 2010-2015 Action programme for tourism and city, developed by the Barcelona Municipality.
Thematic Objectives	
The project has a strong correlation with 3 TOs although to a different extent. Particularly, there is a high correlation with the following: climate change adaptation, risk prevention and management, sustainable transport and elimination of infrastructure congestion in principal roads.	
<ul style="list-style-type: none"> • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project foresees a single actor from the public administration (Catalonia Railways).
Maturity level	The project is at an idea phase. The feasibility study and the business plan are not foreseen.
Replicability	The project's replicability depends on the existence of a funicular in a similar tourist environment.
Economic viability and sustainability	
Cost-impact ratio	4,100,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Scarce available funds.
Relevance in relation with JESSICA instrument	
The project is potentially relevant to be financed under the JESSICA instruments, considering its thematic coverage and its capacity to generate returns.	

Mark: 58.6 Ranking position: 41

3. Competitiveness, economic development and Innovation

3.1. Tourism

Project identification	
Project's name	ENHANCEMENT OF THE CATALAN COAST AS A TOURIST DESTINATION
Sector	Competitiveness, economic development and Innovation
Segment	Tourism
Promoter	Directorate General for Tourism
Project's amount/budget	180.000.000-200.000.000 €. Nonetheless, the project will be focused on specific priorities previously determined and defined.
Location	Catalan coast (pilot project in Costa Brava)
Short description (problem, objectives and results)	Catalonia is a mature tourist destination. Tourism continues to be an engine for the growth of the Catalan economy, although the model has to be switch to a new one based on the excellence, the quality and the sustainable development. . For this reason, the adoption of the 2013-2013 Strategic Tourism Plan and the 2020 National Tourism Guidelines have been approved. Regarding coast tourism, the project aims to convert the hotel sector and the tourist destination as a whole to achieve an improvement of the territorial cohesion and the business competitiveness. To give a response to the problem, an integral action is suggested: the first phase foresees the regeneration of the obsolescent hotel buildings improvement its energy efficiency; the following phase pursues the improvement and regeneration of the urban and commercial environment, accessibility and services and communication infrastructure provisions.
Coherence	
Internal	The problem is concrete, well delimited, described and based on a study elaborated. The objectives follow an integral approach to tackle the problem in two sequential steps, for the promotion of different sectors. The project aims to involve all actors concerned. There is a strong relation with the private sector (sectorial boards, Catalan Tourism Agency), the opinion of which has been taken into account to formulate the objectives. The expected results have not yet been delimited.
External (with regional or national strategies)	The project is integrated in the National Tourism Strategic Plan, recently approved. This Plan foresees a series of related actions: from a General Plan, (Enhancement of the Coast as a Tourist destination) to a specific intervention and a Pilot project in the Costa Brava. The project' formulation is in line with the ECAT 2020 strategy and the EU2020 strategy. Some of the foreseen actions (energy efficiency) are integrated in various strategies such as the Catalan 2012-2020 Energy and Climate change Plan.
Thematic Objectives	
The project will clearly contribute to 5 TOs:	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project foresees a collaborative scheme between the private sector and the different administrative levels (local and regional authorities). Nonetheless, there is a risk of lack of interest by the private sector to realise investment (most of the foreseen actions take place in private properties- hotels).
Maturity level	The project is at an intermediate phase, with the feasibility study and the business plan foreseen or underway. The global strategy is well delimited, but the project needs concrete administrative actions for its implementation, that could delay it (building or regeneration works licenses, urban plans)
Replicability	The model is clearly replicable in other coastal areas of Spain.
Economic viability and sustainability	
Cost-impact ratio	The proposed action includes a general plan with a total investment of 180-200 million Euros. The amount to be financed under JESSICA corresponds to the first phase; this is the regeneration of the obsolescent hotel buildings. Information regarding required investment for this first phase is not available. Estimation on the number of hotels to be refurbished is neither provided; therefore calculations to estimate the cost-impact ratio of the action are not possible.
Rentability	The project foresees the following returns: <ul style="list-style-type: none"> - Urban conversion added value - Increase of accommodation facilities' average price. - Increase of average tourism income
Timeframe	Long term
Financing	Hotel owners would finance building regeneration through loans of around 26-50 % of the total investment that will be repaid in a period of 3-15 years. Properties would serve as a loan guarantee. The strategic value of the hotels, both in terms of building and tourist premises, guarantees the project viability notwithstanding their age or state. On the other hand, there is the possibility (yet to be analysed) of complementing the investment with the Fund for Tourism

	Development, fed by the Catalan Tourist Tax incomes.
Grey area	Income level will depend on the economic development of the area and the investment capacity of the hotels. It will be important to further analyse the project in order to not contravene state-aid rules.
Relevance in relation with JESSICA instrument	
The project is highly relevant for the JESSICA instrument as it includes an integral action that comes from a regional (and national) strategy, previously defined. On the other hand it has a strong correlation with some TOs. The project is potentially susceptible of producing a return and is technically viable.	

Mark: 72.1 Ranking position: 21

3.2. Economic activity promotion

Project identification	
Project's name	AGRICULTURAL PARK IN THE HORTA DE LLEIDA
Sector	Competitiveness, economic development and Innovation
Segment	Economic activity promotion
Promoter	LLEIDA MUNICIPALITY
Project's amount/budget	1,500,000 €
Location	Lleida, Horta de Lleida, agricultural suburban location, situated in a 5km radius from the city centre.
Short description (problem, objectives and results)	<p>The purpose of the project is to promote agricultural activity in a deteriorated suburban location that has an old agrarian structure and numerous non-cultivated plots of land. The project's objectives are:</p> <ol style="list-style-type: none"> 1) To improve landscape and productive conditions in the suburban environment 2) To promote agricultural entrepreneurship and increase the supply of regional agricultural products <p>For this reason, the project foresees the setting up of 1,000 ha of abandoned lands for production purposes, the improvement of 10,000 ha of suburban spaces, the creation of agricultural business, the transformation and commercialisation of regional agricultural products, the creation of 50 new jobs and the potential involvement of social inclusion organisations to the project.</p>
Coherence	
Internal	The project provides an integral response to an identified need through the conversion of abandoned lands, the creation of new businesses and jobs and the improvement of soils. On the other hand, the involvement of social inclusion organisations is foreseen, which would increase the project's impact.
External (with regional or national strategies)	The project is framed within the Law 2/2004 (Neighbourhoods Law).
Thematic Objectives	
The project specifically contributes to SME creation, employment generation and social inclusion, and is linked in general terms to the environment protection objective.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Social inclusion and combating poverty 	
Articulation	
Actors/ Management System	The project foresees the participation of the Municipality, agricultural organisations and agricultural businesses through a Partnership agreement or a Management Consortium. It is important to emphasize the involvement of the agricultural organisations through capacity building activities, tutorial courses for agricultural entrepreneurs, educational trainings, etc.
Maturity level	The first phase of the project, this is creating pilot plots of land for agricultural entrepreneurs and social farms, has been already developed. At the current moment, a feasibility study for the second phase of the project is being elaborated, with the aim to analyse the project's enlargement to new typologies and ownership modalities of plots of land.
Replicability	The model is replicable in other suburban deteriorated areas.
Economic viability and sustainability	
Cost-impact ratio	Total cost is 1,500,000 €. There is a need to obtain 10% of this total amount. The revenues coming from the rent of the plots of land will be 90,000,000 € per year.
Rentability	The business plan is not clearly defined.
Timeframe	The project is already launched, currently in a pilot phase.
Financing	Information not available
Grey area	Income is not guaranteed.
Relevance in relation with JESSICA instrument	
The project is relevant for the JESSICA instrument as it combines the regeneration of a deteriorated and depressed area with the promotion of economic activity and environment improvement. The project clearly involves the private sector as well as organisations dealing with social inclusion.	

Mark: 82.6 Ranking position: 2

Project identification																																					
Project's name	STRATEGIC RESIDENTIAL AREA IN THE FORMER FACTORY OF LA ESTRELLA. INTERVENTION IN INDUSTRIAL SITE 1																																				
Sector	Competitiveness, economic development and Innovation																																				
Segment	Economic activity promotion																																				
Promoter	INCASOL																																				
Project's amount/budget	6,739,268.90 €																																				
Location	Badalona																																				
Short description (problem, objectives and results)	The project foresees the transformation of an old industrial site and old housing complex situated in Badalona to construct new housings, of which 57% will be subsidised. Other activities include the refurbishment of public spaces through the establishment of green areas, a road system, a public school.-This will stimulate the establishment of new commercial activities and business offices in the area that subsequently will contribute to economic activity promotion and employment generation.																																				
Coherence																																					
Internal	The project has a high coherence between the problem, the general and specific objectives and the expected results. These are thoroughly developed and detailed.																																				
External (with regional or national strategies)	The project is integrated in the Catalan 2012-2020 Energy and Climate Change Plan, although this is not explicitly mentioned in the project's presentation. The project is also coherent with the ECAT 2020 strategy.																																				
Thematic Objectives																																					
There is high, strong and detailed correlation with the TOs.																																					
<ul style="list-style-type: none"> • Research and Innovation • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 																																					
Articulation																																					
Actors/ Management System	The project foresees the participation of different administrations and housing's owners. The management system follows a compensation scheme for the reorganisation of plots of land.																																				
Maturity level	The project is at an intermediate maturity stage, with the feasibility study already realised.																																				
Replicability	The project can potentially be replicable to other Catalan areas as it has been formulated with this aim. Similar projects have been formulated simultaneously.																																				
Economic viability and sustainability																																					
Cost-impact ratio	The assessment of project's cost is of 6,729,268.90 €, including estimated construction costs, compensations and other management expenses.																																				
Rentability	<p>The project's return will come from housings' sales, as it is exposed in the following table:</p> <table border="1"> <thead> <tr> <th colspan="4">INCOME PA-1</th> </tr> <tr> <th>TYPOLGY</th> <th>LAND VALUE (€/m2)</th> <th>ROOF (m2)</th> <th>INCOME (€)</th> </tr> </thead> <tbody> <tr> <td>Free housing</td> <td>1,000.00</td> <td>11,304.65</td> <td>11,304,650.00</td> </tr> <tr> <td>Subsidised Housing- Special Scheme</td> <td>127.91</td> <td>1,615.00</td> <td>206,574.65</td> </tr> <tr> <td>Subsidised Housing- General Scheme</td> <td>291.07</td> <td>5,591.29</td> <td>1,627,456.78</td> </tr> <tr> <td>Subsidised Housing- Agreed price</td> <td>562.82</td> <td>2,810.59</td> <td>1,581,856.26</td> </tr> <tr> <td>Social housing- Subsidised</td> <td>562.82</td> <td>3,360.00</td> <td>1,891,075.20</td> </tr> <tr> <td>Others</td> <td>650.00</td> <td>5,582.79</td> <td>3,628,813.50</td> </tr> <tr> <td colspan="2">TOTAL INCOME PA-1</td> <td>30,264.32</td> <td>20,240,426.39</td> </tr> </tbody> </table>	INCOME PA-1				TYPOLGY	LAND VALUE (€/m2)	ROOF (m2)	INCOME (€)	Free housing	1,000.00	11,304.65	11,304,650.00	Subsidised Housing- Special Scheme	127.91	1,615.00	206,574.65	Subsidised Housing- General Scheme	291.07	5,591.29	1,627,456.78	Subsidised Housing- Agreed price	562.82	2,810.59	1,581,856.26	Social housing- Subsidised	562.82	3,360.00	1,891,075.20	Others	650.00	5,582.79	3,628,813.50	TOTAL INCOME PA-1		30,264.32	20,240,426.39
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Timeframe	Medium term																																				

Financing	Debt of more than 50%. Land or property mortgage.
Grey area	Difficulties to finance the intervention, both from public and private actors side. Scarcity available funds. Difficulties in the real estate market.
Relevance in relation with JESSICA instrument	
The project is highly relevant and totally susceptible of being financed under the JESSICA instrument.	

Mark: 81.5 Ranking position: 3

Project identification	
Project's name	CA N'ALEMANY INDUSTRIAL SITE IN VILADECANS
Sector	Competitiveness, economic development and Innovation
Segment	Economic activity promotion
Promoter	INCASOL
Project's amount/budget	42,600,000 €
Location	Viladecans
Short description (problem, objectives and results)	The project foresees and integral action to improve Barcelona urban fabric, through the improvement of land for economic, productive, commercial and tertiary exploitation. The action seeks to produce an impact on different urban and energy ambits, as well as to promote sustainable transport and economic development and competitiveness.
Coherence	
Internal	The project has a high coherence between the problem, the general and specific objectives and the expected results. These are thoroughly developed and detailed.
External (with regional or national strategies)	Although the project's fiche only specifies that the action is integrated in the Barcelona Metropolitan area 2009-2018 Collective Transport Infrastructures Master Plan and the Barcelona Metropolitan area 2010-2026 Territorial Plan, it can potentially be integrated in the Catalan Sustainable Development strategy for the horizon 2026 and the ECAT 2020 strategy.
Thematic Objectives	
There is high, strong and detailed correlation with the TOs.	
<ul style="list-style-type: none"> • Information and Communication Technologies (ICTs) • Small and Medium Enterprises Competitiveness (SMEs) • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures • Employment and supporting labour mobility • Social inclusion and combating poverty • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	The project foresees the participation of different administrations. The management system follows a collaboration scheme with housing's owners for the reorganisation of plots of land.
Maturity level	The project is at a maturity stage.
Replicability	The project's replicability is difficult, given its location and specific characteristics.
Economic viability and sustainability	
Cost-impact ratio	Cost: 42,600,000 €
Rentability	<p>The project's foresees the sale of plots of land to citizens and businesses for an estimate value of 69,900,000 €:</p> <ul style="list-style-type: none"> • 28.063 m2t industrial x 222,11€/m2t • 76.290 m2t industrial and logistics x 200,45 €/m2t • 38.750 m2t industrial x 298,02 €/m2t • 49.583 m2t commercial and commercial x 470,61€/m2t • 28.667 m2t tertiary x 470,12 €/m2t
Timeframe	The project is already launched.
Financing	50% of the project will be funded by debt with land or property mortgage. The other 50% of funds will come from the Consortium and the fees charged to owners.
Grey area	Difficulties to find investors. Difficulties in the Real Estate sector.
Relevance in relation with JESSICA instrument	
The project is of great relevance and is susceptible of being financed under the JESSICA instrument.	

Mark: 78.5 Ranking position: 7

Project identification	
Project's name	GREEN RING IN TERRASSA
Sector	Competitiveness, economic development and Innovation
Segment	Economic activity promotion
Promoter	Terrassa Municipality
Project's amount/budget	3,000,000 €
Location	Terrassa
Short description (problem, objectives and results)	The project foresees using a suburban space for the development of traditional agricultural activity through the promotion of local food varieties and the implementation of new products and added value cultivation modalities; with the purpose of positively stimulate self-consumption, forest management and ecological farming. . Likewise it is expected to foster sport and leisure activities as well as the tourism.
Coherence	
Internal	The project has a high coherence between the problem (defined as a challenge) and the objectives, which are explicitly specified and disaggregated. These are clearly linked to the expected results that are explicit and quantified.
External (with regional or national strategies)	The project is coherent with the Municipal Urban Planning Plan, the Catalan 2012-2020 Energy and Climate change Plan, Nature 2000 network and the ECAT 2020 strategy.
Thematic Objectives	
The project has a strong correlation with 5 TOs although to a different extent. Particularly, there is a high correlation with the environmental protection and resource efficiency objectives.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Social inclusion and combating poverty • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project foresees the creation of a Public Private Partnership and clearly delimits the level of involvement for each actor (Municipality, enterprises and new entrepreneurs and agricultural and forest owners).
Maturity level	The project is at an intermediate stage with the feasibility study foreseen and the business plan underway.
Replicability	The project is replicable in other cities provided that they have a significant industrial and services activity, an important presence of natural spaces with great ecological value and a compact and structured urban space.
Economic viability and sustainability	
Cost-impact ratio	3,000,000 €
Rentability	The plan is not clearly defined.
Timeframe	Short / Medium term
Financing	Information not available
Grey area	Issues to obtain the required funds. - Few identified investors. - Scarce available funds.
Relevance in relation with JESSICA instrument	
If the project's return formula is clarified, the project could be financed through JESSICA as the rest of criteria is met.	

Mark: 72.6 Ranking position: 20

Project identification	
Project's name	RESTORATION OF THE FORMER INDUSTRIAL COMPLEX "VAPOR CORTÉS" IN TERRASA
Sector	Competitiveness, economic development and Innovation
Segment	Economic activity promotion
Promoter	Terrasa Municipality
Project's amount/budget	28,700,000 €
Location	Terrasa
Short description (problem, objectives and results)	The purpose of the project is to rebuild an industrial area in the centre of Terrasa, through an urban restoration integral action in order to refurbish old constructions and adapt them to new uses. Furthermore the project seeks the development of new productive activities, the refurbishment and creation of new public spaces and equipment with the aim to promote a quality model of urban regeneration.
Coherence	
Internal	The project has a high coherence between the problem (defined as a challenge) and the objectives, which are explicitly specified and disaggregated. These are clearly linked to the expected results that are explicit and quantified.
External (with regional or national strategies)	The project is coherent with the Municipal Urban Planning Plan, the Catalan 2012-2020 Energy and Climate change Plan, the Architectural and Historical Heritage Protection Plan and the ECAT 2020 strategy.
Thematic Objectives	
The project has a strong correlation with 7 TOs although with different intensities. Particularly, there is a high correlation with the environmental protection, resource efficiency and employment and labour mobility objectives.	
<ul style="list-style-type: none"> • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees the participation of different public and private actors, such as the Municipality, the Vapor Cortès Management Board, financial institutions, enterprises and new entrepreneurs.
Maturity level	The project is at an intermediate stage with the feasibility study foreseen and the business plan underway.
Replicability	The project is replicable, provided that there is an obsolescence of the urban area and an architectural complex to host new activities.
Economic viability and sustainability	
Cost-impact ratio	28,700,000 € rent 3,800,000 €, sales 37,900,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Short / Medium term
Financing	Land or property mortgage.
Grey area	Issues to obtain the required funds for the improvement and refurbishment of new spaces for productive development. - Few identified investors. - Scarce available funds.
Relevance in relation with JESSICA instrument	
In principle, the regeneration of an industrial complex situated in the city's centre and its adaptation to new production activities in synergy with public spaces, equipments and residential areas is completely relevant and can be financed under the JESSICA instrument.	

Mark: 71.6 Ranking position: 23

Project identification	
Project's name	INTEGRAL PLAN FOR URBAN IMPROVEMENT AND NEW ACTIVITIES. TERRASA XXI
Sector	Competitiveness, economic development and Innovation.
Segment	Economic activity promotion
Promoter	Terrasa Municipality
Project's amount/budget	22.000.000 €
Location	Terrassa
Short description (problem, objectives and results)	The purpose of the project is to refurbish and rebuild the industrial architectural heritage to host productive activities with the aim to promote a quality urban model that fosters employment.
Coherence	
Internal	There is coherence between the problem and the objectives, clearly linked to the expected results. The results are explicit and quantified.
External (with regional or national strategies)	The project is coherent with the Municipal Urban Planning Plan, the Catalan 2012-2020 Energy and Climate change Plan, the Architectural and Historical Heritage Protection Plan and the ECAT 2020 strategy.
Thematic Objectives	
The project has a correlation with 8 TOs although to a different extent. Particularly, there is a high correlation with the SME competitiveness and employment and labour mobility objectives.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees the creation of a Public Private Partnership and clearly delimits the degree of involvement for each actor.
Maturity level	The project is at an intermediate stage with the feasibility study foreseen and the business plan underway
Replicability	The project is replicable provided that there is a consolidated business sector, new entrepreneurs, universities and urban spaces with important architectural structures to host new innovative and productive activities.
Economic viability and sustainability	
Cost-impact ratio	22,000,000 € Information not available.
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	Land or property mortgage.
Grey area	Issues to obtain the required funds for the improvement and refurbishment of new spaces for productive development.
Relevance in relation with JESSICA instrument	
If the project's return formula is clarified, the project could be financed through JESSICA.	

Mark: 70.6 Ranking position: 27

3.3. ICT

Project identification																															
Project's name	API FOR THE ACCESS TO METEOROLOGICAL DATA OF THE CATALONIA METEOROLOGICAL SERVICE																														
Sector	Competitiveness, economic development and Innovation																														
Segment	ICTs																														
Promoter	Catalonia Meteorological Service (SMC)																														
Project's amount/budget	300,000 €																														
Location	Catalonia																														
Short description (problem, objectives and results)	The access to georeferenced climatological information and climate predictions allow the tagging of the territory and the optimum use of renewable energy existing sources. On the other hand the predictions over the potential climate changes permit the implementation of anticipatory strategies and resources adaptation measures. The challenge is to guarantee organisations and business with access to meteorological information in a simple way by. For this reason, the project foresees the implementation of an API (Application Program Interface) to access meteorological data, independently from its visual representation, so the different business activities can easily have access to them and develop applications aligned to their necessities.																														
Coherence																															
Internal	There is a strong coherence between the problem identified, the established objectives and the project's expected results, as the project presents a concrete action. Nonetheless, even if the action has implications for the different administrations and the private sector, its regional impact is not clear.																														
External (with regional or national strategies)	The project is coherent with the Catalan 2012-2020 Energy and Climate change Plan, and to a lesser degree the ECAT 2020 strategy.																														
Thematic Objectives																															
The project clearly contributes to the following TOs: ICTs and climate change adaptation.																															
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency 																															
Articulation																															
Actors/ Management System	The project is fully developed by the SMC.																														
Maturity level	The project is at a maturity stage with the feasibility study and the business plan underway. The administrative authorisations have already been obtained.																														
Replicability	The project is replicable in other municipalities. It is only necessary to adapt the data structure to each centre.																														
Economic viability and sustainability																															
Cost-impact ratio	Cost 300,000 €																														
Rentability	<p>Expected incomes have been extracted from the Business plan estimation for the next 3 years:</p> <table border="1"> <thead> <tr> <th>Business plan estimation</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Sales increase (Estimated from the market evaluation and the analysis of meteorological data demand from different sectors)</td> <td>10,000 €</td> <td>20,000 €</td> <td>45,000 €</td> <td>75,000 €</td> </tr> <tr> <td>Publicity increase (the access to APIs enlarges SMC product and services catalogue which will indirectly have a positive impact in publicity. The increase is estimated in 10%)</td> <td>14,000 €</td> <td>20,000 €</td> <td>20,000 €</td> <td>54,000 €</td> </tr> <tr> <td>Reduction of overtime hours (the access to APIs will mean a saving of 60% in overtime hours costs due to the reduction of the system failure)</td> <td>1,500 €</td> <td>1,500 €</td> <td>1,500 €</td> <td>4,500 €</td> </tr> <tr> <td>Saving in development works hours (the simplification to get access to data, permits the optimisation of working hours for the development of products. This means a reduction of 20% in project's team working hours)</td> <td>25,000 €</td> <td>25,000 €</td> <td>25,000 €</td> <td>75,000 €</td> </tr> <tr> <td>Total Financing</td> <td>50,500 €</td> <td>66,500 €</td> <td>91,500 €</td> <td>208,500 €</td> </tr> </tbody> </table> <p>The contributions of the Generalitat to the SMC's annual budget could finance the rest of the project, this is a contribution of</p>	Business plan estimation	2014	2015	2016	TOTAL	Sales increase (Estimated from the market evaluation and the analysis of meteorological data demand from different sectors)	10,000 €	20,000 €	45,000 €	75,000 €	Publicity increase (the access to APIs enlarges SMC product and services catalogue which will indirectly have a positive impact in publicity. The increase is estimated in 10%)	14,000 €	20,000 €	20,000 €	54,000 €	Reduction of overtime hours (the access to APIs will mean a saving of 60% in overtime hours costs due to the reduction of the system failure)	1,500 €	1,500 €	1,500 €	4,500 €	Saving in development works hours (the simplification to get access to data, permits the optimisation of working hours for the development of products. This means a reduction of 20% in project's team working hours)	25,000 €	25,000 €	25,000 €	75,000 €	Total Financing	50,500 €	66,500 €	91,500 €	208,500 €
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Reduction of overtime hours (the access to APIs will mean a saving of 60% in overtime hours costs due to the reduction of the system failure)	1,500 €	1,500 €	1,500 €	4,500 €																											
Saving in development works hours (the simplification to get access to data, permits the optimisation of working hours for the development of products. This means a reduction of 20% in project's team working hours)	25,000 €	25,000 €	25,000 €	75,000 €																											
Total Financing	50,500 €	66,500 €	91,500 €	208,500 €																											

	30,500 € per year.
Timeframe	Short term
Financing	Debt of 75%.
Grey area	The project seems profitable, although funds are insufficient. External funding for this project has not been considered as the SMC has debt limitations, as the entity is classified under the SEC/95 regulation as a public administration organisation of the Generalitat.
Relevance in relation with JESSICA instrument	
The project is potentially relevant to be financed under the JESSICA instruments, considering its integral approach, public and private actors' involvement and its impact.	

Mark: 78.8 Ranking position: 6

Project identification	
Project's name	DESIGN, RENOVATION AND SETTING UP OF THE METEOROLOGICAL RADAR OF VALLIRANA (BARCELONA)
Sector	Competitiveness, economic development and Innovation
Segment	ICTs
Promoter	Catalonia Meteorological Service (SMC)
Project's amount/budget	640,000 €
Location	Barcelona Metropolitan Area
Short description (problem, objectives and results)	The project foresees the renovation of the meteorological radar of Vallirana, technically obsolete and out of service since 2011. The renovation is necessary for the availability of high resolution data in the Barcelona Metropolitan Area (AMB) to alert the AMB to meteorological risks (e.g. heavy rains) for the better management of emergency situations (civil protection, etc.).
Coherence	
Internal	There is a strong coherence between the problem identified, the established objectives and the project's expected results, as the project presents a concrete action.
External (with regional or national strategies)	The project contributes to the 2010-2015 Catalan river basin districts Management Plan, the Civil protection in floods risk situations in Catalonia Plan and the Catalan 2012-2020 Energy and Climate change adaptation strategy.
Thematic Objectives	
The project clearly contributes to the following TOs: ICTs and climate change adaptation.	
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency 	
Articulation	
Actors/ Management System	The project foresees the intervention of private companies with experience in the design and setting up of meteorological radars.
Maturity level	The project is at a maturity stage with the feasibility study and the business plan underway. The administrative authorisations have already been obtained.
Replicability	The design, installation, setting up and integration of the meteorological radar could perfectly be replicable in other territories, provided that there is a favourable environmental impact assessment and a feasibility study.
Economic viability and sustainability	
Cost-impact ratio	640,000 € (distributed in: antenna, base and radome 480,000 €, transmitting antenna 120,000 €, climate control 40,000 €) – 319,000€ are already financed. 40,000 € from sales, 30.000 € from marketing and 9,000 € from annual savings
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	Generalitat de Catalunya. Total amount requested 319,000€. Approved by the Government.
Grey area	Improvement of the service, but delays in submission deadlines and environmental conditions during the installation process.
Relevance in relation with JESSICA instrument	
The project objectives are not totally coherent with the TO. Given its thematic coverage the project would not be susceptible to be funded under the JESSICA instrument.	

Mark: 73.8 Ranking position: 15

Project identification	
Project's name	SMART REGION (CATALUÑA)
Sector	Competitiveness, economic development and Innovation
Segment	ICTs
Promoter	Directorate General for Telecommunications and Information society
Project's amount/budget	60,000,000 €
Location	Catalonia region, services areas and areas with accessibility problems.
Short description (problem, objectives and results)	The project foresees an important investment in ICTs to provide smart infrastructure to the region. The objective is to improve and simplify ICTs management and achieve economic development impact through the development of new added value information services. The project will also contribute to citizenship satisfaction, through a more effective, efficient and sustainable ICTs system.
Coherence	
Internal	The problem is not clearly defined. The established objectives demand the development of a smart infrastructure (e.g. communication modalities) to improve and simplify ICTs management and achieve economic development impact through the development of new added value information services while contributing to citizenship satisfaction, in a more effective, efficient and sustainable manner.
External (with regional or national strategies)	In general terms, the project is integrated in the ECAT 2020 strategy.
Thematic Objectives	
The project will coherently contribute to 5 objectives. Some of them have an indirect contribution to the main project's objective of ICTs investment.	
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project has an initial conception of public private-private collaboration and foresees a collaborative scheme between the regional and local government, the private sector and the citizenship.
Maturity level	The project is at an idea stage, with the feasibility study and financial plan to be defined.
Replicability	The project is conceived as a generic model that can be replicated in any territory.
Economic viability and sustainability	
Cost-impact ratio	60,000,000 € The feasibility study is not realised.
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Budget: the business model is neither sustainable nor feasible and there is no involvement of the different actors. The infrastructure implementation demands high initial investments and long term return. The current economic situation restricts big investments from public or private agents.
Relevance in relation with JESSICA instrument	
The project can clearly be financed under the JESSICA instrument due to its thematic and potential impact.	

Mark: 56.2 Ranking position: 44

4. Culture and Society

4.1. Heritage and Culture

Project identification	
Project's name	ACTIONS IN THE CULTURAL AND TOURISTIC HERITAGE OF EMPÚRIES (L'ESCALA)
Sector	Culture and Society
Segment	Heritage and Culture
Promoter	Catalonian Archaeology Museum, Department of Culture and l'Escala Municipality
Project's amount/budget	---
Location	L'Escala
Short description (problem, objectives and results)	Empúries archaeological site, located in the Costa Brava, is the only example of a Greek city in the Iberian peninsula and is the first tourist place of the region in terms of visitors (170,000 in 2012). Nonetheless, traffic congestion in the accessing road during the summer period is intense (as the road also conducts to the beaches), and supposes important environmental damages. The project foresees the construction of an open air parking to facilitate the access to the archaeological site and adjacent beaches, with the aim to improve the land and territory management, increase incomes and improve the visit experience.
Coherence	
Internal	The project foresees the construction of a parking space to give response to a concrete identified problem (difficult access to the archaeological site).
External (with regional or national strategies)	The project is clearly integrated in the Catalan 2012-2020 Tourism Plan and in the Catalan 2012-2020 Museums Plan.
Thematic Objectives	
The project clearly contributes to 2 TOs:	
<ul style="list-style-type: none"> • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project foresees the articulation between the private sector and the different administrative levels: Generalitat de Catalunya – Department of Culture, l'Escala Municipality and private investors.
Maturity level	The project is at an initial stage, with the feasibility study underway. The project's cost has not been defined.
Replicability	The model is replicable in other accessing areas to natural and cultural spaces that present collapses. The Municipality has developed similar actions in close areas.
Economic viability and sustainability	
Cost-impact ratio	Information regarding costs is not available. Sales 160,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Medium term
Financing	Land or property mortgage.
Grey area	The project's objective is to act as a motor of investment to produce economic sustainability and improve and extend the visit experience. In sum, the objective is to improve the tourist destination of the Costa Brava.
Relevance in relation with JESSICA instrument	
The project clearly fits under the JESSICA initiative, given its clear return and contribution to two TOs.	

Mark: 71.1 Ranking position: 26

Project identification	
Project's name	RESTORATION AND ADAPTATION OF THE OUTDOOR AREAS OF LA CARTOIXA OF ESCALADEI
Sector	Culture and Society
Segment	Heritage and culture
Promoter	DG of Libraries, Museums and Cultural Heritage, Department of Culture, Generalitat de Catalunya
Project's amount/budget	1,400,000 € (tax free)
Location	Escaladei-La Morera de Montsant (Priorat, Tarragona)
Short description (problem, objectives and results)	<p>The project foresees the restoration and adaptation of the services area of La Cartoixa of Escaladei in order to improve the economic sustainability of the Monument while contributing to the economic development of this demographically depressed area.</p> <p>The following actions are foreseen:</p> <ol style="list-style-type: none"> 1) To create a high tourist quality cultural space 2) To foster economic sustainability in the monument's management system through the adaptation to new uses while maintaining the cultural diffusion 3) To encourage excellence in the Priorat Appellation of Origin wine production as well as other agricultural products 4) To complete the World Heritage candidature
Coherence	
Internal	The project aims to give a response to the existing problem related to the lack of economic sustainability in the monument management system and the demographic problems the regions is suffering. The project suggests a series of integral and coordinated actions to tackle the problem: preservation of the historic complex, adaptation of the services area, creation of new hotel and the implementation of a Priorat AO representative centre. The foreseen actions are coherent with the region specificities (natural heritage and wine sector legacy) and consider energy efficiency measures.
External (with regional or national strategies)	The project potentially fits within the Catalan 2012-2020 Tourism Plan.
Thematic Objectives	
The project clearly contributes to 3 TOs:	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Employment and supporting labour mobility 	
Articulation	
Actors/ Management System	The project foresees a co-management scheme, between the Generalitat de Catalunya (75%) and private companies, such as the Regulatory Council of the D.O. Priorat and Private Service Companies (25%).
Maturity level	The project is at an intermediate stage.
Replicability	The project can be replicated in similar territories. In fact the project is a pilot case that, on the basis of the results achieved, can be implemented in other Catalan monuments.
Economic viability and sustainability	
Cost-impact ratio	1,400,000 € Sales: 75% of incomes, marketing: 25% of incomes plus public administrations contributions.
Rentability	The plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Land or property mortgage. Loans on real estate.
Grey area	Funding difficulties. Lack of economic attractiveness to appeal private investment. The project's objective is to act as an investment engine and makes the project economic feasibility and tourism attractiveness visible to potential private investors.
Relevance in relation with JESSICA instrument	
In principle, the project could be financed under the JESSICA instrument. The project combines the regeneration of historical heritage with economic development of a demographically depressed area. It is also formulated as a way of making historic heritage economically sustainable.	

Mark: 69.1 Ranking position: 29

Project identification	
Project's name	ECONOMIC AND TOURIST REVITALISATION OF THE CITY OF TARRAGONA (TARRACO)
Sector	Culture and Society
Segment	Heritage and Culture
Promoter	Department of culture of the Generalitat de Catalunya Tarragona Municipality Ministry of Education, Culture and Sports
Project's amount/budget	30,000,000 €
Location	Tarragona
Short description (problem, objectives and results)	<p>The project foresees Tarragona heritage (recognised as a UNESCO World Heritage Monument) as a way to foster its economic and tourist activity. The main objective of the project is to implement a single urban management model based on the architectural heritage and the management of monuments and properties. The specific objectives are:</p> <ol style="list-style-type: none"> 1. To build a cultural, commercial and leisure infrastructures complex around the former Tabacalera complex in order to decentralise tourist and heritage points to the outdoors of the city. 2. To offer new public spaces to the youth 3. To realise an urban plan for the single management, regulation and preservation of the World Heritage Monuments of the city. <p>The expected results foresee the regeneration of 45,000 m2 as well as the creation of a TARRACO Heritage Consortium integrated by the Ministry of Education, Culture and Sports, the Generalitat de Catalunya and Tarragona Municipality.</p>
Coherence	
Internal	The project has a strong coherence between the general and specific objectives and the expected results. Likewise, it is important to emphasise that the project has an integral approach seeking to promote economic activity focused in tourism, historical heritage preservation, leisure spaces creation and commercial spaces establishment.
External (with regional or national strategies)	The project potentially fits within the Catalan 2012-2020 Tourism Plan.
Thematic Objectives	
<p>The project contributes to the following TO. There is a clear link with the SME competitiveness improvement and institutional capacity enhancement objectives. The link with the other 3 TO is minor (in light with the information provided).</p> <ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Employment and supporting labour mobility • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project involves the Department of Culture of the Generalitat de Catalunya, Tarragona Municipality and the Ministry of Education, Culture and Sports through the creation of a consortium in charge of Tarragona heritage management.
Maturity level	The project is at an advanced stage.
Replicability	The project's replicability depends on the existence of similar specificities to the TARRACO project.
Economic viability and sustainability	
Cost-impact ratio	30,000,000 € Rents from commercial activities and contribution from different administrations.
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Scarcity of available funds.
Grey area	Funding capacity.
Relevance in relation with JESSICA instrument	
In principle, the project could be finance under the JESSICA instrument. The project has a clear objective towards economic growth through tourism promotion, historical heritage regeneration and cultural and commercial spaces creation for public use.	

Mark: 62.8 Ranking position: 39

Project identification	
Project's name	MONTJUÏC CLUSTER/MUSEUM CENTRE AND ARCHITECTURAL PROJECT FOR THE FUTURE VENUE OF THE NATIONAL HISTORYT MUSEUM OF CATALONIA
Sector	Culture and Society
Segment	Heritage and culture
Promoter	Department of culture
Project's amount/budget	70,000,000 € Phase I. Regeneration and adaptation of Pavilion 6 of the Fair of Barcelona (Palau d'Alfons XII) as a venue for the future National History Museum of Catalonia: 35,000,000 € Phase II. Regeneration and adaptation of Pavilion 7 of the Fair of Barcelona (Palau de Victòria Eugènia) as a venue to host new equipments and services for the enlargement of the National Art Museum of Catalonia: 36,000,000 €
Location	Barcelona, Sants-Montjuïc District, Montjuïc mountain area
Short description (problem, objectives and results)	<p>The purpose of the project is to contribute to the leisure, tourist and commercial development of the Montjuïc mountain area through the creation of a cluster/Museum centre at an international scale. The cluster will be located in the pavilions constructed for the 1929 International Exposition of Barcelona, currently managed by the Fair of Barcelona, once these not will be used any more as for exhibition purposes.</p> <p>It is foreseen:</p> <ol style="list-style-type: none"> 1) The enlargement of equipments and services of the National Art Museum of Catalonia, in the Palau de Victòria Eugènia Pavilion 2) The setting up of the future National History Museum of Catalonia, that will integrate the Archaeological Museum of Catalonia, the History Museum of Catalonia, the Science and Technology Museum of Catalonia in the Palau Alfons XII Pavilion 3) The establishment of facilities for dissemination activities (temporary exhibitions rooms), cultural and educational activities (library, auditorium, etc) and public services (restaurants, coffee shops, shops, etc.) for the three museums. <p>The project has the following expected results: regeneration of 30,000m2 public space for cultural and citizen use, the generation of 80-100 jobs (management and professional support services) and the creation of 3-5 enterprise of customer assistance services (coffee shops, restaurants and museum souvenir shops).</p>
Coherence	
Internal	The project has a high coherence between the specific activities related to the creation of the Cluster. At this regard, it is foreseen the use of current exhibitions rooms to host the enlargement of the National Art Museum of Catalonia and the New National History Museum of Catalonia along with the setting up of joint equipments and dissemination services.
External (with regional or national strategies)	The project is clearly integrated in the Catalan 2012-2020 Museums Plan and more generally in the 2011-2014 Generalitat the Catalunya Plan. On the other hand, it is aligned with the Montjuïc Mountain Metropolitan Plan that foresees the exploitation of Pavilion 6 and 7 of the Fair of Barcelona for exhibition use.
Thematic Objectives	
The project does not contribute to any TO in a clearly manner. In general terms, it could have some relation with the SME competitiveness and employment generation objectives.	
<ul style="list-style-type: none"> • Small and Medium Enterprises Competitiveness (SMEs) • Employment and supporting labour mobility 	

- Enhancing institutional capacity and an efficient public administration

Articulation

Actors/ Management System	The project involves different public and financial institutions: Generalitat de Catalunya, Barcelona Municipality, National Art Museum of Catalonia Consortium (Generalitat de Catalunya, Barcelona Municipality, Ministry of Culture), Fair of Barcelona, Caixa de Pensions "La Caixa". An agreement will be signed in order to establish the competencies and responsibilities for the actors. On the other hand, a partnership agreement has already been signed by the Major of Barcelona, the Culture Minister, the president of the National Art Museum, the president of La Caixa and the president of the Fair of Barcelona for the promotion of the museum space in the Montjuïc mountain as a first step for launching of project.
Maturity level	The project is at an intermediate stage, with the feasibility study underway.
Replicability	The cluster/museum centre has important examples of best practice at the international level (Museuminsel in Berlin, National Mall de Washington, Museumquartier in Vienna, etc).The structure and thematic can be replicated in other European cities that present cultural and heritage spaces that can be integrated in the urban organisation.

Economic viability and sustainability

Cost-impact ratio	70,000,000 € Phase I. Regeneration and adaptation of Pavilion 6 of the Fair of Barcelona of Barcelona (Palau d'Alfons XII) as a venue for the future National History Museum of Catalonia: 35,000,000 € Phase II. Regeneration and adaptation of Pavilion 7 of the Fair of Barcelona (Palau de Victòria Eugènia) as a venue to host new equipments and services for the enlargement of the National Art Museum of Catalonia: 36,000,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Medium / Long term
Financing	The information has not been detailed.
Grey area	Project's execution costs in the current economic context.

Relevance in relation with JESSICA instrument

The project is well delimited and developed as it is based on the success and experience of other cities (Museuminsel in Berlin, National Mall in Washington, Museumquartier in Vienna, etc.), with a solid management system and with the political support and the commitment of a Financial Institution. Nonetheless, as the project' thematic is mainly focused on culture, it does not have a clear link to the TOs.

Mark: 56 Ranking position: 45

Project identification	
Project's name	URBAN REGENERATION AND ENHANCEMENT OF THE BUSINESS, CULTURAL AND TOURISM ACTIVITIES
Sector	Culture and Society
Segment	Heritage and Culture
Promoter	FIRA 2000
Project's amount/budget	120,000,000 €
Location	Barcelona
Short description (problem, objectives and results)	The project is oriented towards the regeneration of industrial sites to promote cultural projects, business initiatives (entrepreneurship) and Research and Development, and open the urban space to tourism and citizenship activities.
Coherence	
Internal	Although the project's coherence is not delimited, the objectives are clearly presented and strongly linked to the project's expected results. These have been measured and quantified (they consider two factors: urban dimension and economic development and competitiveness).
External (with regional or national strategies)	The project is potentially framed within the ECAT 2020 strategy and the Catalan 2012-2020 Energy and Climate change Plan.
Thematic Objectives	
The project has a correlation with 5 TOs, although the link is generic.	
<ul style="list-style-type: none"> • Research and Innovation • Information and Communication Technologies (ICTs) • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management 	
Articulation	
Actors/ Management System	The project foresees principally the participation of private actors and, to a lesser extent, public actors. The management system (joint or coordinated participation) is not described.
Maturity level	The project is at an idea stage, although the feasibility study is already realised.
Replicability	The project is replicable in other municipalities, regarding improvement and urban space utilisation activities. Nonetheless, some special characteristics have to meet to be replicable such as the location with a high number of visits.
Economic viability and sustainability	
Cost-impact ratio	120,000,000 € ; Sales: 20,000,000 €, Rents: 60,000,000 €, others: 40,000,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Long term.
Financing	Land or property mortgage.
Grey area	Deadlines for permits are pending. Project' s rentability does not seem sufficient to attract private investors.
Relevance in relation with JESSICA instrument	
In principle the project is relevant for the JESSICA instrument, although this would be determined after the delimitation of the actions.	

Mark: 49.6 Ranking position: 46

Project identification	
Project's name	REGENERATION OF THE HISTORICAL AND CULTURAL HERITAGE TO PROMOTE THE CONSERVATION, TOURISM AND CULTURE IN BARCELONA
Sector	Culture and Society
Segment	Heritage and Culture
Promoter	FIRA 2000
Project's amount/budget	65,000,000 €
Location	Barcelona
Short description (problem, objectives and results)	The project foresees the regeneration of the cultural and historical heritage to promote the conservation, tourism and culture in Barcelona. The action seeks the regeneration of a cultural historic space of 20,000 M2.
Coherence	
Internal	The problem is not delimited, although the objectives are clearly established: the regeneration of the cultural and historical heritage to promote the conservation, tourism and culture. There is a clear correlation between the established objectives and the expected results that are clearly quantified.
External (with regional or national strategies)	The project fiche does not refer to any regional or national strategies. The project might be framed within the ECAT 2020 strategy.
Thematic Objectives	
The information provided is not sufficient to assess the project's correlation degree with the TOs. The project's presentation is focused on the contribution to 4 TOs.	
<ul style="list-style-type: none"> • Research and Innovation • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Transport sustainability and removing bottlenecks in key network infrastructures 	
Articulation	
Actors/ Management System	The project exclusively foresees the intervention of the private sector.
Maturity level	The project is at an idea stage, although the feasibility study is already realised.
Replicability	The project is not directly replicable, since it depends on the architectural and cultural element, that has to offer sufficient attractiveness and should be located in a tourist square.
Economic viability and sustainability	
Cost-impact ratio	65 ,000,000 € rent 65,000,000 €
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available.
Grey area	Few identified investors. Project rentability is not sufficient to attract private investors.
Relevance in relation with JESSICA instrument	
In principle, the project could be finance under the JESSICA instrument. The project has a clear objective towards the promotion of conservation, tourism and culture, with an economic return.	

Mark: 43.2 Ranking position: 49

4.2. Awareness raising

Project identification	
Project's name	MUSEUM OF SCIENCE, CLIMATE AND ENVIRONMENT IN LLEIDA
Sector	Culture and Society
Segment	Awareness raising
Promoter	LLEIDA MUNICIPALITY
Project's amount/budget	Total cost 3,000,000 €, of which already executed 1,519,742 €.
Location	Lleida, Mariola Neighbourhood
Short description (problem, objectives and results)	The project foresees the setting up of the Museum of Science, Climate and Environment in Lleida, dedicated to analyse current environmental issues and to raise awareness in the citizenship on the importance of biodiversity preservation. The works will be financed and developed together with the Generalitat de Catalunya Likewise, there is an agreement with the Obra Social La Caixa for the equipment refurbishment of the project "Here Planet Earth". The project has been launched but it has been paralysed due to the lack of funding.
Coherence	
Internal	The problem is not clearly delimited as it does not present a fundamental challenge to be tackled with the project. Nonetheless, the project's established objectives are coherent with the expected results, taking into account the different dimensions of the project.
External (with regional or national strategies)	The project is integrated in one of the calls for proposals of the Law 2/20004, namely Neighbourhoods Law.
Thematic Objectives	
The project's degree of correlation with TOs is medium.	
<ul style="list-style-type: none"> • Shift towards a low carbon economy • Climate change adaptation and risk prevention and management • Protecting the environment and promoting resource efficiency • Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	The project is co-managed by the Generalitat de Catalunya and Lleida Municipality (construction works) and the Obra Social La Caixa (museum exhibitions and management). The project foresees and administrative concession to cover complementary services.
Maturity level	The museum's construction has been initiated, but the building works have been paralysed due to the lack of funding.
Replicability	The project could be replicable to other neighbourhoods and cities.
Economic viability and sustainability	
Cost-impact ratio	Total cost 3,000,000 €, of which already executed 1,519,742 €.
Rentability	The business plan is not clearly defined.
Timeframe	The project has already been launched, but is paralysed until new funding is obtained.
Financing	Space rents: 50,000 € per year and ticket and products sale: 300,000 per year.
Grey area	Cultural activity funding.
Relevance in relation with JESSICA instrument	
In principle, the level of relevance in relation with the JESSICA instrument is low as the project does not clearly contribute to any TO.	

Mark: 78 Ranking position: 8

Project identification	
Project's name	INNOVATION AND KNOWLEDGE CENTRE FOR THE PROMOTION OF HEALTHY HABITS AND SUSTAINABILITY
Sector	Culture and Society
Segment	Awareness raising
Promoter	Santa Creu and Sant Pau Hospital Private Foundation
Project's amount/budget	2,950,000 € corresponding to the pending cost to complete the integral regeneration of the central pavilion. The external consolidation and restoration of the pavilion has already been achieved.
Location	Barcelona, Horta-Guinardó district
Short description (problem, objectives and results)	<p>The project is integrated in the Sant Pau Hospital Regeneration and Conversion Plan, which foresees the establishment of a space dedicated to innovative and flagship projects to promote the city in the international sphere while preserving its historical heritage. The objective is to refurbish the Central pavilion to host an innovation and knowledge centre for the promotion of healthy habits and sustainability.</p> <p>In particular, the centre foresees the creation of:</p> <ol style="list-style-type: none"> 1) An experience space 2) A knowledge and innovation ecosystem 3) A healthy habits school <p>The project foresees the following results:</p> <ul style="list-style-type: none"> - The regeneration of 1,005.13 m2 - The reuse of more than 15,000m2 of green space - The creation of 20 SME during the first activity year - The creation of 1-3 jobs per created SME
Coherence	
Internal	This project presents a global approach for the regeneration of the central pavilion with the aim of constructing an innovation centre. The problem described (bad food habits, disease, ecological crisis, etc.) is very broad and general. For this reason, the project can partially respond to the problem.
External (with regional or national strategies)	The project is integrated in the ECAT 2020 strategy, the 2012-2015 Strategy for Research and Innovation in the Health sector and the Catalan Sustainable Development strategy for the horizon 2026.
Thematic Objectives	
The project contributes to the following TOs. The correlation degree is medium.	
<ul style="list-style-type: none"> • Research and Innovation • Shift towards a low carbon economy • Employment and supporting labour mobility • Social inclusion and combating poverty 	
Articulation	
Actors/ Management System	The project will be managed by the foundation responsible for the property exploitation. At this stage, the project foresees the transfer/rent of the space to third parties.
Maturity level	The project is at an intermediate stage, with the feasibility study and business plan underway.
Replicability	Although the thematic is specific to the project, the model of historic building restoration and conversion for public use can be replicable.
Economic viability and sustainability	
Cost-impact ratio	2,950,000 € 198,386 € /year Costs 60,308 € /year Cost /m2/month 21 € Annual rent that allows the equilibrium over a period of 20 years and maintenance costs.
Rentability	The business plan is not clearly defined.
Timeframe	Medium / Long term
Financing	Land or property mortgage.
Grey area	The singular characteristics of the building make it an exclusive space in the city to host a knowledge and innovation centre. Nonetheless the project requires specific funding to achieve global results, while taking into account the premise of economic sustainability, added value generation and regional involvement
Relevance in relation with JESSICA instrument	
In principle, the project is susceptible of being financed under the JESSICA instrument as it has an integral approach that covers the regeneration of	

historical buildings and its conversion to public use. Nonetheless, it is necessary to further develop how the Innovation Centre would be implemented.

Mark: 63.9 Ranking position: 36

Project identification	
Project's name	RAILWAY INTERPRETATION CENTRE IN RUBÍ
Sector	Culture and Society
Segment	Awareness raising
Promoter	Catalonia Railways
Project's amount/budget	400,000 €
Location	Rubí
Short description (problem, objectives and results)	The purpose of the project is to provide the municipality with historical and cultural equipment in order to enhance the historic rail material and attract visitors to the city, which has an important unemployment rate.
Coherence	
Internal	The problem is not clearly delimited: the project does not present a fundamental challenge. Nonetheless, the project's established objectives are coherent with the expected results, taking into account the different dimensions of the project.
External (with regional or national strategies)	The project is framed within the Municipal Action Plan and the Strategy for the promotion of activities in Rubí urban area.
Thematic Objectives	
The project has a certain degree of correlation with the "Education, skills and lifelong learning" TO.	
<ul style="list-style-type: none"> Education, skills and lifelong learning 	
Articulation	
Actors/ Management System	The project foresees an administrative concession to provide the service by a private company. Additionally the project foresees the collaboration of the educational community for the elaboration of the pedagogical material.
Maturity level	The project is at an idea stage, with the feasibility study and business plan foreseen.
Replicability	To be replicable the project has to cover the following specific characteristics: cultural equipments and a historic railway no longer in use in the urban centre.
Economic viability and sustainability	
Cost-impact ratio	400,000 € Administration concession of the restoration and building management service- Detailed information not available.
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Information not available
Grey area	Administration concession of the restoration and building management service.
Relevance in relation with JESSICA instrument	
An urban regeneration action with the present characteristics, which also has an educational element to promote sustainable transport, could be financed under the JESSICA instrument. The return can also be safeguarded through the service exploitation.	

Mark: 58 Ranking position: 42

Project identification	
Project's name	MEDITERRANEAN KNOWLEDGE CENTRE FOR THE GREEN ECONOMY IN BARCELONA
Sector	Culture and Society
Segment	Awareness raising
Promoter	Santa Creu and Sant Pau Hospital Private Foundation
Project's amount/budget	5,350,000 € corresponding to the pending cost to complete the integral regeneration of the Carme pavilion.
Location	Barcelona, Horta-Guinardó district
Short description (problem, objectives and results)	<p>The project is integrated in the Sant Pau Hospital Regeneration and Conversion Plan, that foresees the regeneration of the former hospital and create a space dedicated to innovative and flagship projects to promote the city in the international sphere while preserving its historical heritage. The objective is to refurbish the Carme pavilion to host a Mediterranean Knowledge Centre for the Green Economy and promote sustainability and green economy in the Mediterranean region. The centre specific objectives can be summarised as it follows:</p> <ol style="list-style-type: none"> 1) To promote clean energy 2) To disseminate best available techniques and best environment practices. 3) To promote entrepreneurship with focus on the improvement of citizenship welfare and the reduction of natural environment degradation 4) To lead and support entrepreneurs through the creation of a nexus that gathers universities, multinational companies and investors 5) To promote the green public purchase concept 6) To introduce the sustainable concept in university and business schools curricula 7) To promote the inclusion of education workshops on consumption and sustainable life styles in the working plans of civil society organisations.
Coherence	
Internal	This project presents a global approach for the regeneration of a historical building with the aim of constructing a centre for the promotion of sustainable development and green economy. The problem described (natural resource consumption) is broad and general. For this reason, the project can partially respond to the problem. The project is in a preliminary phase; the activities are not well defined which does not allow the coherence assessment between these and the established objectives.
External (with regional or national strategies)	The project is integrated in the ECAT 2020 strategy, the Catalan Sustainable Development strategy for the horizon 2026 and the "Catalunya Emprèn" Plan.
Thematic Objectives	
The project contributes to 4 TOs. The degree of correlation is medium.	
<ul style="list-style-type: none"> • Research and Innovation • Small and Medium Enterprises Competitiveness (SMEs) • Shift towards a low carbon economy • Enhancing institutional capacity and an efficient public administration 	
Articulation	
Actors/ Management System	The project will be managed by the foundation responsible for the property exploitation. At this stage, the project foresees the transfer/rent of the space to third parties.
Maturity level	The project is at an idea stage.
Replicability	Although the thematic is very specific, the model of historic building restoration and conversion for public use can be replicable.

Economic viability and sustainability	
Cost-impact ratio	5,350,000 € Rent 307,240 € /year Costs 93,381 € /year Cost /m2/month 21 € Annual rent.
Rentability	The business plan is not clearly defined.
Timeframe	Long term
Financing	Land or property mortgage.
Grey area	Lack of funds. The singular characteristics of the building make it an exclusive space in the city to host a knowledge and innovation centre. Nonetheless the project requires specific funding to achieve global results, while taking into account the premise of economic sustainability, added valued generation and regional involvement.
Relevance in relation with JESSICA instrument	
In principle, the project is susceptible of being financed under the JESSICA instrument as it covers the regeneration of historical heritage for the setting up of a centre dedicated to the promotion of sustainable development and green economy. Likewise, it is foreseen that the centre also covers different areas such as research, SME and entrepreneurship or governance and institutional capacity enhancement.	

Mark: 57.5 Ranking position: 43