



Better infrastructure, better economy

Infrastructure projects play an important role in economic growth, sustainability and the creation of jobs, as well as ensuring competitiveness in Europe. As the EU bank, we have made it a top priority to continue investing in cleaner transport, energy efficiency and sustainable urban development. In 2015 alone, the European Investment Bank (EIB) provided **EUR 19.1bn** to support infrastructure projects inside and outside the EU.

Between 2005 and 2015,
the EIB invested more than

EUR 153bn in the transport sector.



Building resilient infrastructure

Transport is key to growth and competitiveness, providing the physical networks and services for the movement of people and goods. It is also the largest sector in which the EIB has been active since its foundation in 1958. Since 2005, the EIB has invested more than EUR 150bn in the transport sector. The EIB is also among the largest providers of **electricity grid investment** in the EU, supporting the implementation of **smart metering** schemes. Investment in grids to renovate or extend existing assets may contribute to the strengthening of the internal energy market. The modernisation of energy networks and improvement of energy storage may also help to integrate energy from renewable sources. As to the bank's lending in urban areas, it is not limited to network infrastructure but also includes the development of **social infrastructure, affordable housing and key**



public buildings. By financing comprehensive regeneration projects we aim to **make neighbourhoods and cities more**

inclusive in the way they provide citizens with services whilst also investing in cultural heritage.

Building a safe interconnected Europe

The Bank's transport lending policy highlights climate action and safety, resource efficiency and strategic infrastructure supporting cohesion and the single market. Although projects can meet several of these objectives, transport projects fall within two main eligibility criteria:

- Strategic transport projects, including those on the trans-European transport (TEN-T) network, within the EU and on the extended TEN-T network in neighbouring countries.
- Sustainable transport projects targeting urban transport as well as urban railways, road safety, regional railways, conventional and high-speed railways outside the TEN-T network.



The EIB finances projects across the **rail, road, aviation and maritime sectors, as well as supporting research, development and innovation**. Lending volumes are not capped by sector. EIB loan amounts are generally limited to 50% of the project's investment cost to avoid crowding out private lenders. All projects financed by the EIB must be technically and economically justified, and their procurement and environmental approval process must be in line with EU directives.

In Italy, for instance, the EIB is providing a EUR 300m loan to ANAS, the Italian state-controlled company that constructs and maintains Italy's motorway and national road network, to finance the construction of road safety and noise barriers, and for equipment and tunnel improvements on a total of 5 800 km of roads. The project will improve road safety and environmental performance, making progress towards the EU directives on road safety, tunnel safety and noise pollution. As the selected sections are heavily used, with some sections forming part of the TEN-T network, the project is expected to deliver significant benefits in terms of **reduced traffic congestion** and **fewer accidents, injuries**



and fatalities. In Ireland, a EUR 100m EIB loan will finance the development of Dublin's existing port infrastructure to accommodate traffic growth and larger ships. In Hungary, a EUR 200m loan will modernise Budapest's public transport network by financing the reconstruction of the metro and tramway, as well as some roads and bridges. In Croatia, the EIB is providing more than EUR 17m to support the development of Dubrovnik Airport, cater for future growth in traffic and enhance safety and service standards.

Expected outputs from operations signed in 2015



Road

Almost 2 000 lane kilometres of roads and highways upgraded or built



Rail

- Over 4 900 km of railway tracks upgraded or built
- Over 160 units of rolling stock purchased or rehabilitated
- Over 30 stations constructed or upgraded



Sea

Over 74 million tonnes of additional annual port cargo capacity



Air

Additional airport capacity of 2.5 million passengers per year



EIB financing – more than a loan

We provide financing on favourable terms. Our loans are often long-term in nature, with maturities sometimes exceeding 30 years. By making the most of our experience with public-private partnerships, our value added includes:

- **Confidence-building:** our support encourages other private and public investment
- **Structuring:** we can tailor financing to increase flexibility
- **Advice:** our experts offer support and advisory services to aid project implementation and preparation.



dotted around the streets of Paris, shared by well over 105 000 subscribers to the programme.

The Blue cars are also better for the environment than traditional fuel-powered vehicles. They are silent and have lower

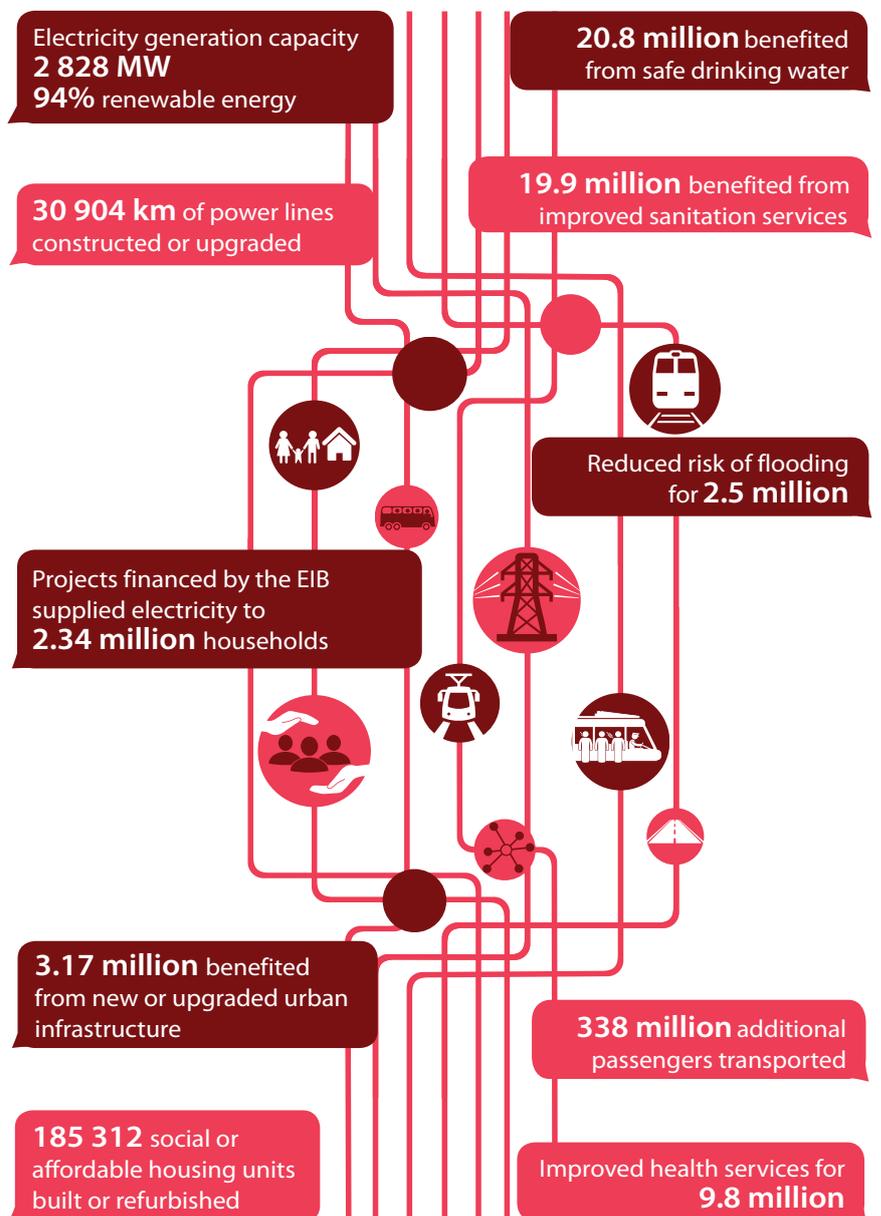
greenhouse gas and pollutant emissions. Once the full fleet of 3 000 is in service, it is estimated that they will travel a total of 60 million kilometres a year. This would be the equivalent of removing 22 500 regular cars from Parisian streets, saving 660 tonnes of CO₂ emissions every year.

Smart mobility in action

With the ever-increasing demand for mobility, factors such as severe congestion, poor air quality, noise and pollution emissions are becoming key challenges. The EIB promotes transport projects that are resource-efficient and economically sustainable. By constructing, extending or rehabilitating transport infrastructure, investing in alternative fuel vehicles as well as encouraging the creation of cycling and pedestrian networks and intelligent traffic management and information systems, the **EIB promotes the use of cleaner and safer transport as well as energy-efficient transport development**. For instance, the EIB backed Autolib', one of the first urban car sharing programmes for electric vehicles in Europe. EUR 130m went towards RDI for the car batteries, while a further EUR 75m was invested to support the practical installation and extension of the scheme, from the parking and charging network through to the billing system.

Autolib' formally began operations towards the end of 2011 in Paris, France with an initial fleet of 250 all-electric Bolloré Blue cars. This will rise to 3 000 over the coming years, with over 2 000 of the Pininfarina-designed cars currently

Our infrastructure investments make a difference (EU projects, 2015)



Energising the economy

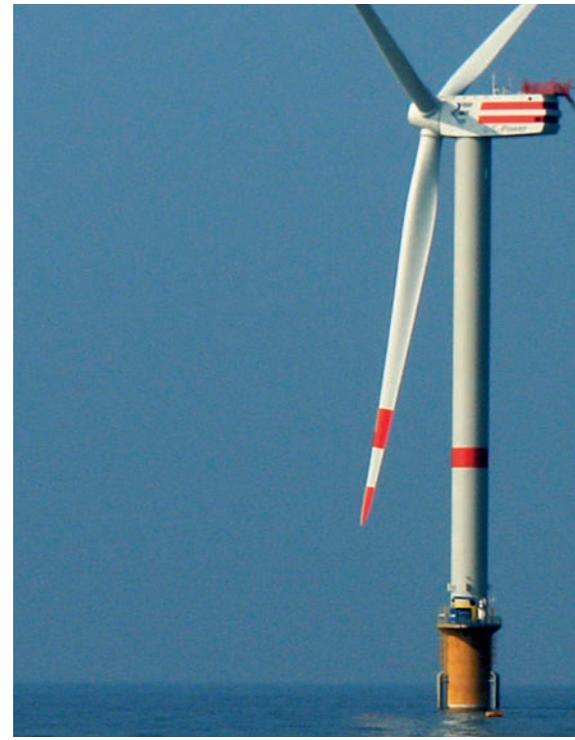
A secure and sustainable supply of energy at affordable prices is crucial to the EU's economic growth and competitiveness. By placing particular emphasis on key energy links, energy efficiency and renewable sources of energy, the EIB contributes to making energy supply sustainable for Europe's citizens and businesses. **In 2015, it provided EUR 13.8bn in finance for energy projects** of which around 83% was for energy projects in the EU.

Our Emissions Performance Standard is applied to all fossil fuel generation projects to screen out investments whose carbon emissions exceed a threshold level, in line with the EU Emissions Trading System (ETS). This ensures that lending is provided to projects that make a positive contribution to economic growth and are at the same time consistent with EU energy and climate policy.

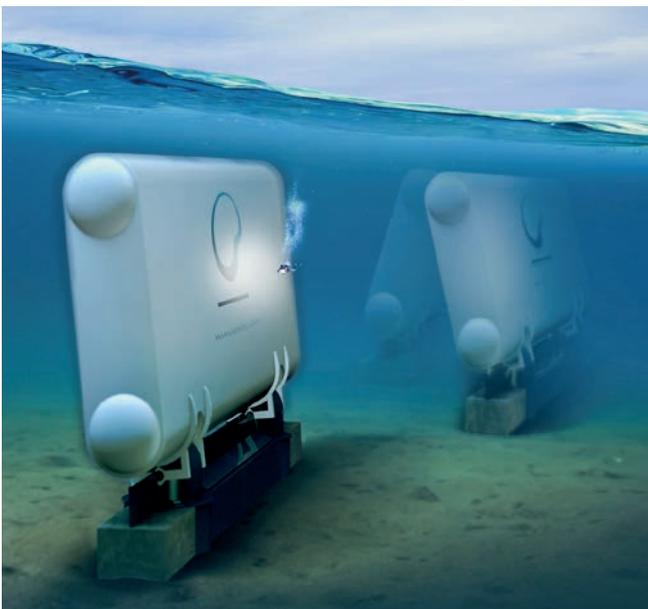
In 2015, for instance, the EIB and one of the largest power distribution companies in Spain, Iberdrola Distribución Eléctrica SA, signed a EUR 325m loan to reinforce

and modernise Iberdrola's electricity distribution network. A large number of new supply points covering the full range of voltages operated by Iberdrola will be connected to the existing network. Furthermore, the programme will comprise the installation of new digital electricity meters in compliance with Spanish legislation, which requires the deployment of digital meters for residential customers by 2018.

In a similar way, with a loan of EUR 500m to the French electricity transmission network operator, Réseau de Transport d'Electricité, the EIB is helping to upgrade France's electricity transmission network to integrate renewable energy supply, and to increase its overall safety, capacity, reliability and efficiency. The EU's drive to increase renewable energy generation and France's location at the crossroads of Europe's cross-border electricity transmission means that it has to handle increasingly variable cross-border flows. France itself is investing in significant renewable energy generation capacity, which will also need to be integrated into the current



transmission network. The project, which comprises 32 transmission schemes and IT modernisation, will help address these issues, as well as reinforcing the network to accommodate increased electricity demand.



EIB backs emerging ocean wave energy

It's not difficult to imagine what wind energy looks like. The same goes for solar power and the panels that are spreading across rooftops worldwide. But there is another form of renewable energy, available in huge quantities, that doesn't really call to mind anything at all: wave power energy. The EIB has recently provided a EUR 10m EIB loan to AW Energy, a pioneering start-up company from Finland that is developing such a project in Portugal. The latter will help the company demonstrate the commercial viability of its "WaveRoller" energy technology. In 2012, AW Energy installed three 100 kW demonstration units connected to the grid near Peniche, in Portugal. It will now install a full-scale 350 kW device in the same area. The company has identified commercial leads in six countries and estimates it has the potential to sell more than 50 units over the next four years.



Electrical evolution

To support Poland's ambitious renewable energy plans, the EIB provided a PLN 178m (EUR 45m) loan for the construction and operation of a wind farm, located on two sites to the east and west of the village of Margonin. The wind farm produces enough electricity to meet the demand of about 55 000 households and accounts for 5% of Poland's total installed wind capacity. Harnessing this much power from the wind enables CO₂ emissions savings of 260 000 tonnes per year compared with burning coal; a number that makes a difference in a coal-rich nation that is reliant on aged and polluting coal and lignite generation.

Cleaner and safer

The offshore wind industry could have been wiped out in 2008, when the global financial crisis made investors wary of risk. The EIB stepped in when private investment dried up, financing Belwind, a project to build one of Europe's biggest wind farms 46 km off the Belgian coast. The EIB's EUR 300m loan funded half the cost of Belwind, which now produces enough electricity to power 160 000 homes in Belgium.

Because the EU is highly dependent on imported sources of energy (the EU has set the target of reducing dependence on imported oil and cutting carbon emissions from transport by 60% by 2050), **energy security is another major pillar of its investment strategy**. Since 2011, the EIB has funded EUR 42.4bn in projects under the category of energy infrastructure contributing to energy security within the European Union. For instance, the EIB backed the 110 km gas pipeline under construction in Klaipėda to connect the port's liquid natural gas terminal to Lithuania's gas network. The pipeline will help

The EIB is financing roughly two-thirds of all European offshore wind capacity

Lithuania to be less dependent on Russian gas, because it will allow the full capacity use of the LNG terminal and will also enhance the gas transmission system for the supply of neighbouring Latvia and Estonia. In a similar way, the EIB supported

the Medgaz subsea pipeline that connects Beni Saf in Algeria and Almeria in Spain. The pipeline is underwater for 210 km and is the first to be built in the Mediterranean at a depth greater than 2 000 m. It should cover 55% of Spain's gas consumption by the end of the decade when the growth in demand is expected to recover. Considered as a strategic project for Algeria, Spain and Europe, since it does not pass through third countries, it has cost nearly EUR 1bn, half of which was financed by the EIB.



Building sustainable communities

Making cities smarter, greener and socially inclusive is at the heart of the EIB's lending priorities in urban areas, in order to build sustainable communities. The Bank supports projects that encourage low carbon, low waste, environmentally-friendly and resilient cities, taking advantage of smart infrastructure solutions. An

important goal of the EIB's investment approach in the urban sector is to finance social investment that generates valuable social outcomes and helps achieve other positive **social benefits such as better living conditions, stronger communities and improved employment opportunities.**



Urban resilience, Bologna, Italy

One city has many needs. A single EUR 50m EIB loan is supporting a range of projects in Bologna from school renovation schemes to bike paths and measures to prevent major damage from earthquakes.

The overall EUR 160m programme is based on the city's plan to make itself a better place to live and a more attractive location for businesses and visitors – as well as more resilient to earthquakes and climate risks. Known as a framework loan because it is used for more than one project, the EIB funds will back: the renovation of several municipal buildings, roads, public spaces and squares; the completion of a bike path encircling the historic city centre; and the restoration of the part of Bologna's famed medieval roadside *porticos* (arcades) rising to the San Luca Sanctuary that overlooks the city. The porticos are candidates for inclusion on UNESCO's World Heritage List.

Gewobag Social Housing, Berlin

The EIB has approved the financing of an investment programme of retrofitting and new construction of rented social housing in Berlin during the period 2015-2020. The operation also includes the provision of accommodation for refugees/asylum seekers.

Examples of Bank-financed urban projects include the revitalisation of city centres, regeneration of brownfield sites, energy efficiency improvements in buildings, modernisation of urban transport, and affordable housing. EIB lending in urban areas also focuses on initiatives that help cities respond or adapt better to unforeseen challenges such as migration, through the provision of flexible accommodation and the promotion of activities that foster the social and economic integration of the most vulnerable and disadvantaged.





Much of our urban lending is through long-term multi-sector loans direct to the city which are flexible enough to finance a share of a city's entire long-term capital investment plan over the following 3-4 years. This tool is especially suited to helping a city implement its urban development strategy, or to invest in themes such as climate adaptation which can cover investments across numerous sub-sectors.

Doing more for a high-quality education

Swansea University's Bay Campus gives Swansea the distinction of being home to one of the few universities of global standing with direct access to a beach and its own seafront promenade. In 2012, the EIB provided Swansea University with a GBP 60m loan to support the construction of the Bay Science and Innovation Campus. The Bay Campus, which opened in 2015, provides 93 000 m² of buildings including teaching, study and research facilities, a library, accommodation for 1 462 students, sports facilities, students' union facilities, a launderette and a crèche.



The campus is the largest knowledge economy infrastructure investment in the UK and one of the top five in Europe. All the research space has been developed through a series of agreements with industry and business. World-class RDI facilities in a range of areas – including structural materials, engineering and energy safety – will incubate and commercialise cutting-edge industry-led research, weaving ever-closer links between the university and industry. The site on which the Bay Campus now stands in Neath Port Talbot was

for many years used by the oil industry. Transforming the site for university usage represented a large-scale regeneration project, one of several aimed at revitalising the region's economy and community, and one which focused intensely on supporting local supply chains, jobs and skills. The total economic impact of the development is expected to be around GBP 3bn with the potential to create up to 10 000 new jobs across the 10-year lifetime of this project and beyond. 3 400 jobs were provided on site during construction.



Lisbon Urban Renewal

The EUR 250m EIB loan will co-finance the multi-annual investment programme of the City of Lisbon. The programme includes urban regeneration and renewal; flood management and prevention, bringing greater resilience against the effects of climate change; affordable housing; and sustainable urban transport projects. The envisaged EIB loan is designed under the European Fund for Strategic Investments EFSI and is considered to be a key contribution for the effective implementation of the investment programme, not only in view of the proposed amount but also in view of the long maturity required to be compatible with the long life span of the underlying capital expenditure. The envisaged EIB co-financing of the city's multi-annual investment programme would also be key to fostering the participation of other banks in the funding of the investment programme. EFSI is an initiative launched jointly by the EIB Group and the European Commission to help overcome the current investment gap in the EU by mobilising private financing for strategic investments.

Financing a broad range of areas

Besides our support for transport, energy and urban infrastructure, we also provide backing for **water infrastructure and waste management**, which corresponds to our environmental priorities. In Bulgaria, for instance, we provided technical assistance and a EUR 33m loan to the city of Sofia in order to develop an integrated waste management system that turns waste into a resource. Today, about 60% of the waste in Sofia is composted, recycled or energetically recovered. In Belgium, to prevent recurrent flooding problems in the capital city, the EIB supported the renovation of one third of Brussel's dilapidated sewer system.

Improving healthcare facilities all over Europe

Economic growth also requires investment in people and their wellbeing. The EIB backs the healthcare infrastructure that improves the quality of life of all Europeans, even more so as the EU faces a demographic challenge. In Italy, an EIB loan of EUR 118m supported the investment programme of Fondazione Don Gnocchi, an Italian not-for-profit organisation created in 1949 to provide care, rehabilitation and social integration to WWII orphans and severely injured children. Today, the Foundation does not focus only on care for children but covers the entire age spectrum of patients. The EIB loan will help it build, restructure, remodel and upgrade 27 of its facilities throughout Italy. The most notable component of the investment programme is that for the first time in Europe, the hospital was built ad hoc for rehabilitation, i.e. using functional concepts and an architectural design specific for

the purpose, different from the requirements for general hospitals. This centre, located in Florence, is also on the front-line of research and technological development of devices to replace lost human functionalities.

Culture as an essential piece of the puzzle

Valletta is a UNESCO cultural heritage site and will be the European Capital of Culture in 2018. The EIB loan supported the redevelopment of the Valletta City Gate, originally built in the 17th century, and its surroundings.

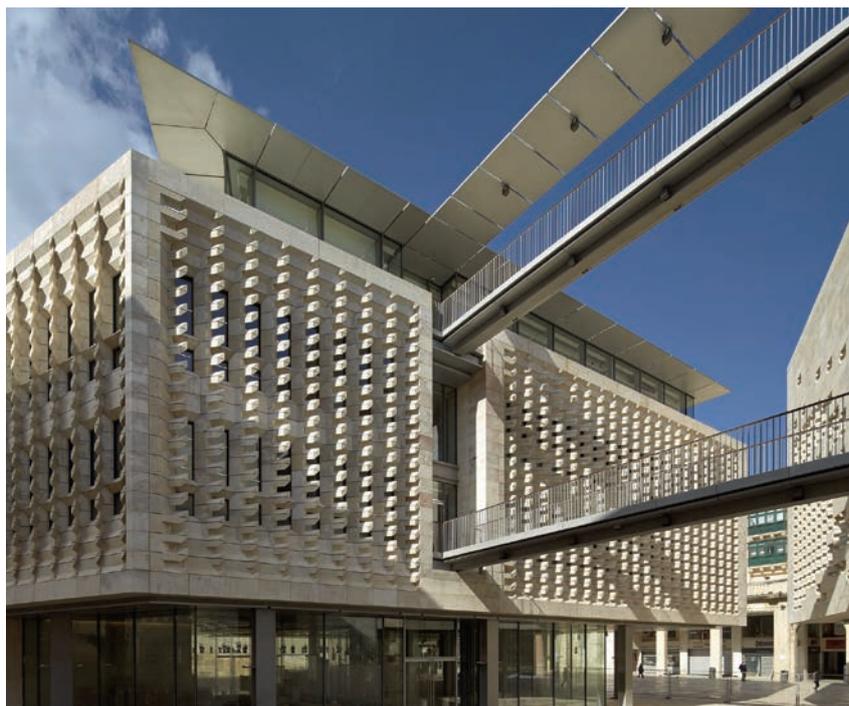
As a UNESCO world heritage site Valletta is a major attraction for many of the 1.5 million tourists who visit the islands of Malta each year. However, it is also a busy modern capital city where people live and work. The EIB provided a EUR 40m loan in support of plans to renovate the Valletta Gate area of the city's historic centre, home to the Maltese parliament. The main objectives of the project were to provide the

parliament with a purpose-built, modern building and piazza; build a new city gate; convert the site of the former Royal Opera House into an open-air theatre; and to revitalise the area by creating new green and pedestrian public spaces. The redevelopment will make the area more appealing to visitors while optimising the available space and creating a number of jobs in the new parliament and theatre facilities. The new open-air performance space, Pjazza Teatru Rjal, is already proving to be a major attraction, hosting 50-60 productions per year and bringing increasing numbers of visitors to the area.

Over 2011-2015, the EIB invested some

EUR **95**bn

in urban development within the EU





Infrastructure investment under the Investment Plan for Europe

In May 2016, the EIB made its biggest ever offshore wind investment with a GBP 525m loan for the GBP 1.9bn Beatrice Wind Farm off the Scottish coast. This is also the first project in Scotland to be supported by the new European Fund for Strategic Investments (EFSI), the heart of the Investment Plan for Europe, intended to generate EUR 315bn in new investment across Europe.

EFSI also backed a EUR 100m loan in December to a semi-private company that renovates old apartment buildings in the Paris region. Énergies POSIT'IF met the criteria for an EFSI loan because it filled a market gap in bank financing for the renovation of condominium housing. Before this deal, Énergies POSIT'IF staff had to negotiate separate loan agreements for every single owner in a massive condominium with commercial banks.

Now the company can offer condo owners attractive financing quickly and easily, allowing it to renovate many more apartments in a shorter time. That is important in the Paris region, where three-quarters

of the homes are either condominiums or social housing. Paris apartments built in the sixties and seventies – before the oil shock prompted energy efficiency regulations – simply leak heat. Énergies POSIT'IF renovations can save those buildings up to 75% in energy consumption.

A green answer to urban sprawl

The Investment Plan for Europe speeds up decontamination of old urban industrial sites and turns them into good places to live and work. General contractors, earth-movers and diggers will start the construction of 300 apartments and homes in spring 2017 on the site of a 19th-century paper mill in Mont-Saint-Guibert, south-east of Brussels. Not long after, buildings will go up on a disused foundry in the Paris suburb of Choisy-le-Roi, and then in the heart of Lyon on the grounds of the former Brandt washing machine factory. It is important for the sustainability of our environment to reclaim polluted industrial sites like these – there are 3.5 million in Europe's cities. "France loses the equivalent of one "département" to urban sprawl every ten years," says Bruno Farber, managing director of Ginkgo Advisor, the fund decontaminating these sites. "The solution is to build the city upon itself." Farber's Ginkgo Fund raised EUR 80m for seven decontamination and redevelopment projects in Belgium and France, all of which are on course to be cleared for construction by the end of 2018. The fund included EUR 15.6m from the EIB. This success led Farber to start raising money for a second fund, which would expand Ginkgo's reach to the UK, Luxembourg and Spain. But without the Investment Plan's EFSI, the EIB wouldn't have been able to invest as much in Ginkgo II as it has – and that would ultimately have held up the fund's decontamination work.

Infrastructure for those who need it most

The link between climate, development and infrastructure is indelible and engrained in the Sustainable Development Goals. The EIB's activities foster this holistic approach to development finance.

Morocco, which hosted the COP22 UN climate change conference in 2016 in Marrakech, has switched on the first phase of the world's largest solar plant. The Ouarzazate desert complex will provide electricity to more than 350 000 households when complete, helping this African

country to supply most of its energy from renewables by 2030. The EIB has financed EUR 217.5m for the three first phases of the project along with other investors, such as the French Agency for Development (AFD), the German Development Bank (KfW) and the World Bank (IBRD).

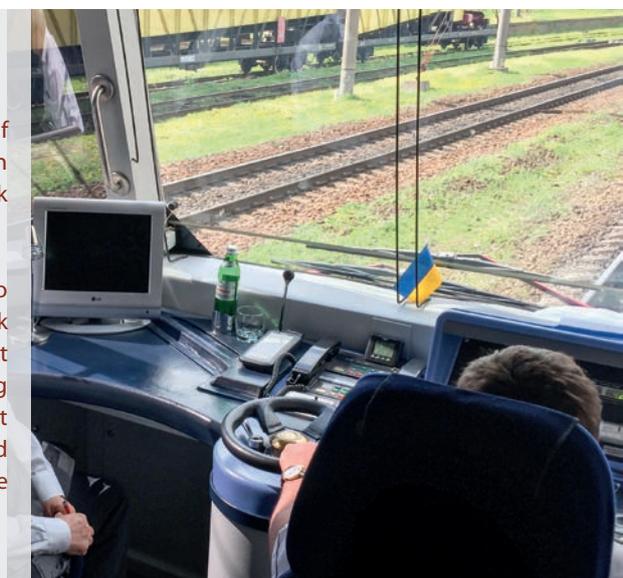
In March 2016, the Bank also signed its biggest-ever loan in India for the construction of a new metro in Lucknow, the capital of the sub-continent's most populous state. The metro will increase use of public transport in Lucknow from 10% to 27%.



Building closer ties with Ukraine

It took years for financing and other details to be arranged for the revamp of the 130-year-old Beskyd tunnel. The EIB signed a EUR 55m loan for the project in May 2014, even as fighting continued elsewhere in Ukraine. The European Bank for Reconstruction and Development also contributed USD 40m.

The new Beskyd Tunnel project started more than a decade ago. The aim is to replace the existing tunnel built in 1886. Before the works, it was a bottleneck because only a single track could run through the tunnel, forcing freight to wait at one end while trains passed in the opposite direction. By early 2018, with its lining and tracks complete, the new tunnel is expected to handle 60% of transit freight from Ukraine to Central Europe. The new tunnel will also promote a shift from road to rail as much of the freight that will use the new tunnel would otherwise have travelled to nearby Hungary and Slovakia, and then on to Austria by road.





Building sustainable infrastructure also touches on innovation. The EIB last year signed a EUR 20m loan to build high-speed internet access in Angola, and it is appraising a potential EUR 40m loan to roll out a mobile telecommunications network in Mali.

Later in June 2016, on the Central American stage, the Panama Canal Authority officially inaugurated the widened Panama Canal to showcase two of the world's

biggest locks – a project part-financed by the EIB. The new Panama Canal locks will enable a new generation of larger ships to cross the Central American isthmus and link ports in Asia, America and Europe. Prior to the expansion, 12% of the activity in the canal included commercial routes to and from Europe, making this an efficient trade route between Europe and the west coast of the Americas and part of Asia. Following the widening and deepening of the canal, this figure is very likely to increase.

Improving life in West Africa

Adequate water systems are a basic necessity, but many in West Africa go without access to clean, drinkable water. Niger is one of the poorest countries in the world and suffers from permanent water shortages due to low and unevenly distributed rainfall. A 2014 EUR 60m loan contribution from the EIB is changing this through the improvement and extension of storage and distribution of water infrastructure. This has ensured 200 000 people around the capital city, Niamey, now have access to clean drinking water.





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Information Desk

☎ +352 4379-22000

☎ +352 4379-62000

✉ info@eib.org

European Investment Bank

98-100, boulevard Konrad Adenauer

L-2950 Luxembourg

☎ +352 4379-1

☎ +352 437704

www.eib.org/infrastructure

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