

EFSI Operation Scoreboard¹

PROJECT PRESENTATION	
<u>Project name</u>	JUNGHEINRICH INTRALOGISTICS SOLUTIONS RDI
<u>Promoter and financial intermediary</u>	JUNGHEINRICH AG
<u>Country of implementation</u>	Germany
<u>Summary project description</u>	<p>The promoter is one of the world's leading solution providers for the intralogistics sector with a large product range spanning from manual to fully automated trucks (with load capacities of up to 9 tons and lifting heights of up to 18 metres) to stacker cranes and related load handling equipment.</p> <p>Industry 4.0 is having and will have a significant impact on the intralogistics business; decentralized, connected intelligence, advanced robotics and self-organized processes are expected to shape the future of intralogistics, allowing for improvements in productivity, flexibility and efficiency. Another important trend in the industry is the vehicle electrification. The growing focus on environmental matters combined with increasingly strict emission regulations results in an increased demand for electric trucks at the expense of IC-powered trucks.</p> <p>The proposed project originates from the intention of the promoter to further increase its innovative strength for the development of new solutions and services with a particular focus on electric intralogistics mobility, digitalisation of products and automation. The further development of the current product portfolio and the next truck generations as well as truck facelifts are also within the scope of the project.</p>

¹ This Scoreboard of indicators reflects the information presented to the EFSI Investment Committee (IC) for its decision on the use of the EU guarantee for this operation. Therefore, the document does not take into account possible developments that could have occurred after this decision.

Parts of this document that fall under the exceptions for disclosure defined by the EIB Group Transparency Policy, notably under articles 5.5 (protection of commercial interests) and 5.6 (protection of the Bank's internal decision-making process), have been replaced by the symbol [...].

PROJECT PILLAR ASSESSMENT

Pillar 1

Contribution to EU policy	Significant
Cross-cutting objectives	
Climate Action	14.20%
EFSI	
Contribution to EFSI	100.00%
EFSI: Research, development and innovation	100.00%
Projects that are in line with Horizon 2020	100.00%

Pillar 2

Quality and soundness of the project	Excellent
1. Growth	[...]
2. Promoter capabilities	[...]
3. Sustainability	[...]
4. Employment	[...]

This pillar evaluates the quality and soundness of the operation. This pillar is composed of up to four indicators, as relevant, among which:

- (i) "Growth" i.e. for example and where relevant the economic rate of return ('ERR'), which considers the project's socioeconomic costs and benefits, including its spillover effects;
- (ii) "Promoter capabilities" i.e. the capacity of the promoter/intermediary to implement the project and create the expected impact at the [final] beneficiary level;
- (iii) "Sustainability" i.e. environmental and social sustainability²;
- (iv) "Employment" i.e. the project's direct employment effect;
- (v) "Increasing access to finance and improving financing conditions including for final beneficiaries".

Pillar 3

EIB Technical and financial contribution to the project	Moderate
1. Financial contribution	[...]
2. Financial facilitation	[...]
3. Advice	[...]

This pillar measures the EIB's particular contribution to the project and its financing scheme in the form of financial and non-financial benefits which go beyond what commercial players would normally be able to offer. This dimension of value added is assessed through up to three indicators:

- (i) "Financial Contribution" i.e. improving the counterpart's funding terms compared to market sources of finance (interest rate reduction and/or longer lending tenor);
- (ii) "Financial Facilitation" i.e. helping to attract private financiers (for example through positive signaling effects), promoting synergies in co-financing with other public sources of funds including National Promotional Banks or EU financial instruments;
- (iii) "Technical Contribution and Advice" i.e. providing advice with a view to optimizing the financing package (financial structuring), or technical advisory services in the form of expert input / knowledge transfer - provided in-house by the EIB or in the form of assignments to external consultants - to facilitate the preparation or implementation of a project.

² For additional information on the EIB's assessment of the project's environmental and social aspects, please refer to the project's Environmental and Social Data Sheet (ESDS) published on the EIB website.

Pillar 4 - Complementary indicators

Additionality

This operation is in line with the EFSI objective of supporting research, development and innovation (RDI) in order to develop new solutions in the material handling equipment industry. The project will help the borrower to retain its innovative edge and long-term competitiveness in its market and thereby contribute to Europe's R&D, competitiveness and economic growth helping maintain highly skilled staff engaged in R&D activities in Europe. The project falls under the EU Horizon 2020 priority thematic areas of "Leadership in Enabling and Industrial Technologies" (notably the company's developments in the digital sphere), as well as "Smart, Green and Integrated Transport. Some 14% of the operation is also expected to contribute to the EIB climate action objective.

The financing of this project addresses a market failure by supporting RDI activities, which generate significant positive knowledge and technology externalities through the creation of innovative processes, products and services and through skills development. Furthermore, the developments in the areas of electrification and digitalisation are expected to create knowledge spill-overs not only through the collaborations with research centres and universities but also through cooperation with customers and related supply chains.

The capital and investment intensive material handling equipment industry is confronted with technological changes in the logistics sector due to advancing automation/digitalisation and a growing environmental awareness, i.e. electrification of material handling vehicles. The industry is hence in a phase of transformation that requires significantly higher efforts in RDI from market participants than before. Therefore, the project addresses a sub-optimal investment situation of a privately owned company stemming from the inherent and perceived investment risks associated with RDI activities in this market.

The project is expected to be classified under the EIB Special Activities category, in particular due to the long tenor of the unsecured loan and the inherent uncertainty of outcomes of the R&D investments and their future take-up by the market. As such, the EIB would not, or not to the same extent, be able to provide such type of unsecured long-term financing support without EFSI.

The operation will be the first for the EIB with the borrower.

Set of indicators related to the macroeconomic environment

Germany - Economic environment

Economic Performance

	DE 2018	EU 2018	US 2018	DE 2001-2007
GDP per capita (EUR, PPS)	37,956.14	30,935.11	43,569.11	33,490.41
GDP growth (%)	1.42	1.96	2.85	1.40
Potential GDP growth (%)	1.62	1.60	2.23	1.31
Output gap (% of potential GDP)	0.68	0.61	0.74	-0.17
Unemployment Rate (%)	3.30	6.60	3.90	9.42
Unemployment Rate (%) - Y/Y change (% points)	-0.30	-0.60	-0.20	0.05
Bank-interest rates to non-financial corporations (%)	1.02	1.26	--	4.11
Bank-interest rates to non-financial corporations (%) - Y/Y change (% points)	-0.13	-0.06	--	-0.04
Investment rate (GFCF as % of GDP) - Total	20.77	20.54	20.84	19.91
Investment rate (GFCF as % of GDP) - Public	2.32	2.85	3.30	2.04
Investment rate (GFCF as % of GDP) - Private	18.44	17.68	17.53	17.86

General Sector Indicators

	2014	2015	2016	2017	EU (latest available)
Value added in Manufacture of machinery and equipment n.e.c. (% of total VA)	3.52	3.48	3.47	--	1.86
Employment in Manufacture of machinery and equipment n.e.c. (% of total employment)	2.65	2.65	2.62	--	1.32

Research, development and innovation

	2014	2015	2016	2017	EU (latest available)
Gross domestic expenditure on R&D (GERD) (% of GDP)	2.87	2.91	2.92	3.02	2.06
Gross domestic expenditure on R&D (GERD) distance to EU 2020 target (% of GDP)	0.13	0.09	0.08	-0.02	0.94
Research and development expenditure - Government (% of GDP)	0.42	0.41	0.40	0.41	0.23
Research and development expenditure - Higher education (% of GDP)	0.51	0.50	0.53	0.52	0.45
Research and development expenditure - Business (% of GDP)	1.94	2.00	1.99	2.09	1.36
Research and development expenditure - Private non-profit sector (% of GDP)	--	--	--	--	0.02
Eco-innovation index (EU =100)	135.00	132.00	135.00	139.00	100.00

- Country average for "GDP per capita (EUR, PPS)" is calculated in real terms

- EU value for "Bank-interest rates to non-financial cooperations" corresponds to Euro Area average; Country average is the simple average between 2003 and 2007

- The EU value is displayed as the value in the year that corresponds to the latest value of the indicator in a particular country

Other indicators³

Key project characteristics	Expected value at PCR
Start of works	01.01.2020
End of works	31.12.2022
Project investment cost [MEUR]	211.00 MEUR
EIB/EFSI eligible investment mobilised [MEUR]	211.00 MEUR
External EFSI multiplier	2.11
External EIB (non-EFSI) multiplier	
Amount of private financing [MEUR]	111.00 MEUR
Quick start (% of expenditure during 2015-2018) [%]	
Co-financing with national promotional banks [MEUR]	0.00 MEUR
Co-financing with structural funds (ESIF) [MEUR]	0.00 MEUR
Co-financing with other EU instruments (i.e. Horizon 2020, Connecting Europe Facility, etc) [MEUR]	
Energy efficiencies realised [MWh/a]	0.00 MWh/a
Climate Action indicator	14.20% Mitigation - RDI (transversal)
Employment during construction - temporary jobs [person years]	1,887 person years
Employment during operation - new permanent jobs [FTE]	0 FTE

³ For additional information on the EIB's assessment of the project's environmental and social aspects, please refer to the project's Environmental and Social Data Sheet (ESDS) published on the EIB website. The abbreviation PCR stands for Project Completion Report. If applicable, a difference between the amount of Project investment costs and EIB/EFSI eligible investment mobilized might derive from the fluctuation of the underlying exchange rate.