Advancing Sustainable Energy for Europe
Quarterly Fact Sheet as of 30/09/2017

eeef highlights

August, 18th 2017 is a date to remember for the City of Santander, Spain. Elecnor S.A.and the eeef signed a forfaiting facility of over 9 million euro to utilise for the upgrade of the existing street lighting infrastructure in the Municipality, from old sodium vapour lamps to the state of the art on the scene of energy efficient and smart solutions.

In 2012, the Municipality of Santander received, as the first beneficiary, technical assistance from the European Commission Technical Assistance Facility (COM TA) attached to the eeef, to conduct feasibility studies and launch the PPP tender for the renovation works. As a result, the tender was awarded to Elecnor S.A., an international company from Bilbao with 60 years of experience in developing, building and maintaining infrastructure assets and experienced in renewable and energy efficiency projects.

The main objective of the Santander project is to upgrade around 22,300 lighting points using Philips LED luminaries, and wireless sensors to connect each luminaire with the municipality's digital communication network and the remote control system. Elecnor plans to finalise installations by December 2017. The project is expected to realise 80% in primary energy and CO2 savings annually compared to baseline, which is 39,848 MWh and 4,395 t p.a. in absolute terms and will result in €5.4m of monetary benefits for the municipality over a 15-year period of concession.

Santander is a member of the Covenant of Mayors and a founding member of the Spanish Smart Cities network (RECI), comprising 62 cities. The City of Santander is managing in fact a unique in the world city-scale experimental research facility in support of typical applications and services for a smart city, such as intelligent parking and smart trash containers. The Smart City Project started in 2010 and received funding from the European Community, with the leadership of University of Cantabria and Telefonica and the strong backing of the former Santander Mayor Inigo de la Serna. The City of Santander is a top example of Smart City applications making everyday life more efficient, economical and sustainable for its inhabitants. The street lighting upgrade financed by eeef and to be implemented by Elecnor is allowing Santander to make the next step in the path towards the cities of the future, towards the city Santander is already becoming.

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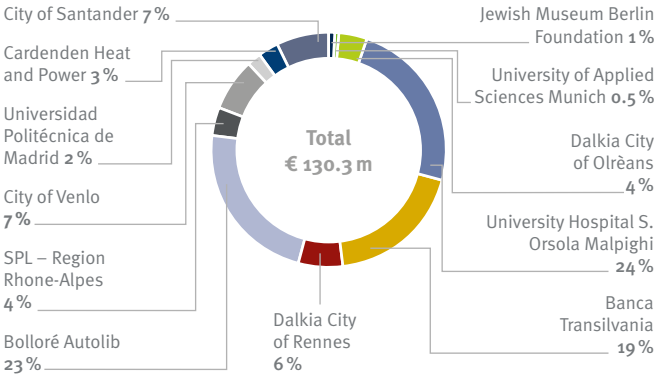
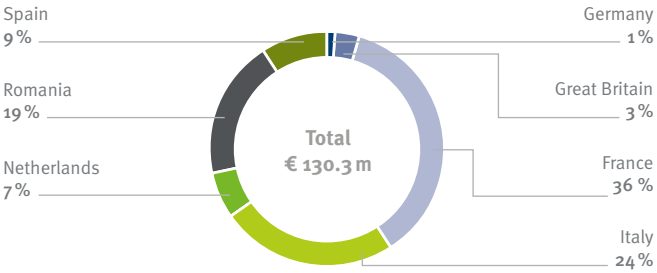
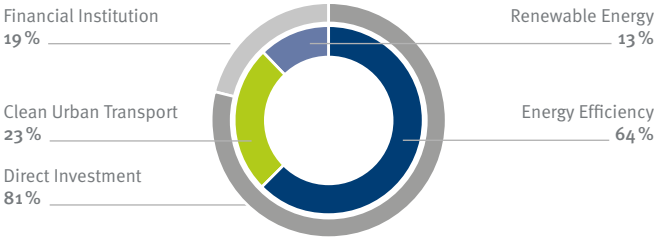
Investments by Partner Institution**



Investments by Country**

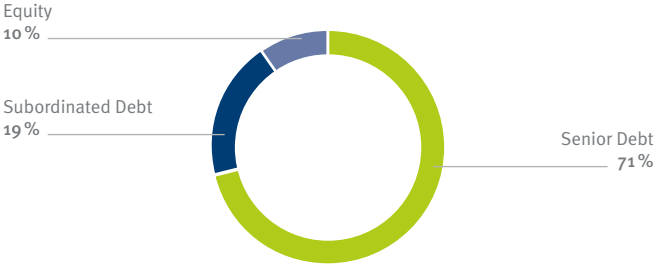


Investments by type of Partner Institution**

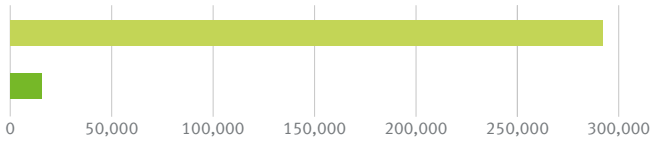


* This amount does not include repayments.
** Based on commitments signed to projects.

Investments by Financial Instrument



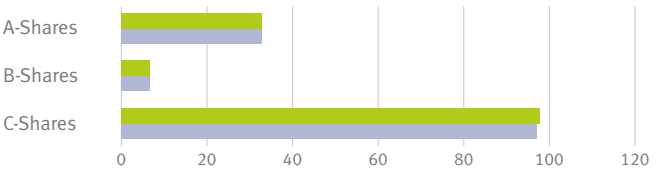
CO_2 savings (in tCO_2e)



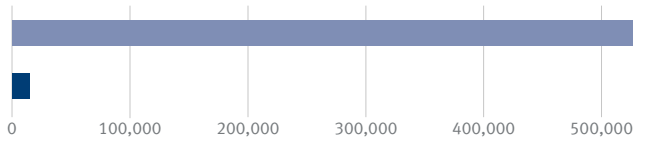
Cumulative CO_2e savings (tCO_2e)*
Quarterly CO_2e savings (tCO_2e)

Quarterly 15,673 CO_2e (t) savings
To date 292,926 CO_2e (t) savings

NAV as at 30/09/2017 (in € million)



Primary Energy Savings (PES)



Cumulative Primary Energy Savings (MWh)*
Quarterly Primary Energy Savings (MWh)

Quarterly (EE & CUT)	31,281 PES (MWh)
To date (EE & CUT)	522,455 PES (MWh)
Quarterly (all projects)	14,449 PES (MWh)

* Cumulative data includes calculations from financial close to loan maturity, based on estimations for projects under construction and less than one year of operations and actual data for projects which have been in operation for over one year. Savings are for total project investment volume (i.e. eeef and non-eeef investments). Portfolio Primary Energy Savings CUT & EE (absolute and percentage) is for 100% energy efficiency (EE), clean urban transport (CUT) and additional capacity RE projects only.

EE – energy efficiency.
CUT – Clean urban transport.

eeef closed transactions
Existing projects

Project: Jewish Museum Berlin

Country:	Germany
Sector:	Energy Efficiency
Type of Investment:	Forfeiting
Total project size (€ m):	1.4
eeef investment size (€ m):	0.9
Financial close:	20 March 2012
Maturity:	10 years
Status:	In construction

General description

Johnson Controls' Energy Service Company (ESCO) and the Jewish Museum Berlin entered into an amended Energy Performance Contract (EPC) for both buildings of the museum with a total EPC volume of € 1.4m. Agreeing on energy efficiency measures comprising of the optimisation of heating, ventilation & air conditioning and an efficient energy management system, the project is expected to achieve a 26% reduction of CO_2 emissions compared to the baseline. It is a lighthouse project because of its innovative financing structure using forfeiting as a funding source.

Recent developments

- Project performance in line with envisaged plan

Project: University of Applied Sciences Munich

Country:	Germany
Sector:	Energy Efficiency
Type of Investment:	Forfeiting
Total project size (€ m):	1.1
eeef investment size (€ m):	0.6
Financial close:	15 November 2012
Maturity:	10 years
Status:	In operation

General description

Johnson Controls' ESCO and the University of Applied Sciences Munich (UoM) entered into an energy performance contract (EPC) for both buildings of the UoM's campus in Munich-Pasing with a total EPC volume of € 1.1m. The ESCO and UoM agreed on energy efficiency measures comprising the acquisition of a 49.5 kW combined heat and power (CHP) plant, the optimisation of heating, lighting, metering, building management and pumping. The implementation of all measures achieves an 6% reduction of CO_2 emissions compared to the baseline. The ESCO guarantees the UoM certain energy savings p.a. and performs maintenance and building operation services for the 10 year contract period. This project is a role model for further energy efficiency investments in educational facilities such as schools, universities etc.

Recent developments

- Project performance in line with envisaged plan

Project: City of Orléans

Country:	France
Sector:	Energy Efficiency
Type of Investment:	Junior Funds
Total project size (€ m):	36.0
eeef investment size (€ m):	5.1
Financial close:	12 March 2013
Maturity:	Perpetual
Status:	In operation

General description

The CHP plant with an installed capacity of 7.5 MW in electricity and 17 MW in thermal heat supplies the heat to the City of Orléans and sells the electricity via a Power Purchase Agreement (PPA) to Electricité de France (EDF) at a negotiated tariff fixed over 20 years. The plant is fired by wood biomass (90,000 tonnes p.a.) from a supply radius of less than 100 km. This project is the first equity investment of eeef (majority owner of the plant with 84%). The operation of the CHP plant achieves a reduction of CO_2 emissions by 18,533 tonnes p. a., approx. 65% compared to the baseline.

Recent developments

- Project performance in line with envisaged plan

eeef closed transactions
Existing projects (continued)

Project: University Hospital S. Orsola Malpighi

Country:	Italy
Sector:	Energy Efficiency
Type of Investment:	Senior Debt
Total project size (€ m):	41.0
eeef investment size (€ m):	32.0
Financial close:	8 May 2013
Maturity:	20 years
Status:	In operation

General description

The project entity, Progetto ISOM S.p.A., a special purpose vehicle (SPV) which is the counterparty of eeef, signed a concession agreement with the University Hospital S. Orsola Malpighi (UHSOM) in Bologna. Planned initiatives are intended to raise the energy efficiency of the entire fluid production and distribution system and reduce energy consumption via adoption of energy efficient equipment such as centrifugal chillers and absorbers, reconstruction of heat distribution networks, renovation of heat exchange substations and inclusion of a tri-generation plant for the combined production of cooling, heat and power (CCHP) sized on the basis of the energy consumption of the hospital facility which is fuelled by methane gas. The project will achieve a reduction of CO_2 emissions by 7,881 tonnes p. a., approx. 26% compared to the baseline. It has been the largest energy efficiency upgrade in Italy under a public-private partnership (PPP) framework so far and is a lighthouse project which demonstrates the positive impact of energy efficiency measures in public healthcare.

Recent developments

- Project performance in line with envisaged plan.

Project: Banca Transilvania

Country:	Romania
Sector:	Financial Institution
Type of Investment:	Subordinated Debt
Total project size (€ m):	25.0
eeef investment size (€ m):	25.0
Financial close:	26 September 2013
Maturity:	10 years
Status:	Investment phase

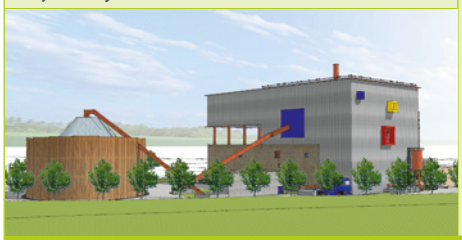
General description

Banca Transilvania (BT), one of the leading banks in Romania, and eeef signed a letter of intent regarding green lending to support energy efficiency and renewable energy investments in Romania. It is the first cooperation of the eeef with a financial institution and also its first transaction in Eastern Europe. With BT, eeef has a strong local partner with experience in financing several energy efficiency projects.

Recent developments

- N/A

Project: City of Rennes



Country:	France
Sector:	Energy Efficiency
Type of Investment:	Junior Funds
Total project size (€ m):	47.6
eeef investment size (€ m):	7.3
Financial close:	12 December 2013
Maturity:	Perpetual
Status:	In operation

General description

The fund has completed its second equity transaction, investing in Rennes Biomasse Energie, which operates a combined heat and power facility with an electrical output of 9.8 MWe and thermal output of 22 MWth over 20 years. This junior fund investment has been realised through the purchase of 85 % of the shares of Rennes Biomasse Energie by eeef. Dalkia France is co-investor along with eeef and is shareholder of the remaining 15 % of Rennes Biomasse Energie. The plant supplies 21,000 households in the city with green heat. The facility is estimated to save 13,258 tonnes of CO_2 per year.

Recent developments

- Project performance in line with envisaged plan

eeef closed transactions
Existing projects (continued)

Project: Bolloré

Country:	France
Sector:	Clean Urban Transport
Type of Investment:	Senior Debt
Total project size (€ m):	30.0
eeef investment size (€ m):	30.0
Financial close:	23 December 2013
Maturity:	5 years
Status:	In operation

General description

The French company Bolloré signed a bond subscription agreement for floating rate notes worth € 30m issued by Bolloré and purchased by the eeef with a maturity of 5 years. eeef's investment is used to finance electric cars and required infrastructure used in Bolloré's European electric car rental concession. This transaction is within the framework of a green transportation initiative for the cities of Paris, Lyon and Bordeaux.

Recent developments

- N/A

Project: Société Publique Locale Efficacité énergétique (SPL)

Country:	France
Sector:	Energy efficiency measures, public buildings upgrades
Type of Investment:	Senior Debt
Total project size (€ m):	approx. 25
eeef investment size (€ m):	5.0
Financial close:	3 April 2014
Maturity:	5 years
Status:	Implementation phase

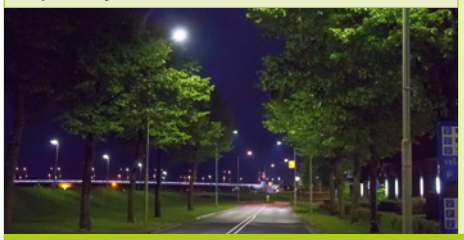
General description

The Société Publique Locale d'Efficacité Energétique (SPL) signed a mid-term loan agreement for € 5m to finance the refurbishment of public buildings during their construction phase and to pave the way for raising further long term financing. The SPL was initiated by the Région Rhône-Alpes as a private special purpose company under the French Commercial Code, but operating with public capital. It is associated with a number of public authorities in the region and is dedicated to implementing energy-efficient refurbishment projects of public buildings (high schools, schools and gymnasiums), including renewable energy production. By setting an example of upgrading public buildings, while going beyond standard thermal regulations, the SPL is thinking ahead and aims to achieve its long-term objectives of energy savings and greenhouse gas reduction.

Recent developments

- N/A

Project: City of Venlo



Country:	The Netherlands
Sector:	Energy Efficiency
Type of Investment:	Senior Debt
Total project size (€ m):	9.1
eeef investment size (€ m):	8.5
Financial close:	3 April 2014
Maturity:	15 years
Status:	In operation

General description

The City of Venlo signed a long-term financing contract for € 8.5m to finance street lighting upgrades with the objective of equipping a minimum of 16,000 lighting points with LED lights (73% of the total lighting points of the city) and achieving more than 56% energy savings. The existing public lighting is the largest consumer of electricity with approximately 36% of total consumption of the municipality. The large-scale street lighting upgrade is a further sign of the city's commitment towards environmental sustainability including, among other things, being one of the first cities in the world to support the principle of 'Cradle to Cradle' (C2C), a framework for using sustainable energy resources only, phasing out conventional energy sources.

Recent developments

- Project performance in line with envisaged plan

eeef closed transactions
Existing projects (continued)

Project: Universidad Politécnica de Madrid

Country:	Spain
Sector:	Energy Efficiency
Type of Investment:	Forfeiting
Total project size (€ m):	2.5
eeef investment size (€ m):	2.5
Financial close:	18 November 2015
Maturity:	9 years
Status:	In operation

General description

eeef provided financing for the replacement of existing oil boilers providing hot water and heating to the Universidad Politécnica of Madrid ("UPM"). The retrofit of new gas boilers, thermal valves and thermal PV solutions will be completed in 32 buildings of the UPM. The project will realise 22 % of Primary Energy Savings and 36 % CO_2e savings annually compared to baseline. The transaction resulted from the public tendering process launched by the UPM earlier this year. Ingenieria y Servicios de Eficiencia Energética S.L. ("Enertika") was awarded with the nine year mandate, and the Energy Management Contract ("EMC") was signed on the 4th of September 2015. The EMC will consist of measures to provide and install the technology required to upgrade existing infrastructure and perform operation and maintenance services as required to ensure optimal performance of the new technology.

Recent developments

- Project performance in line with envisaged plan

Project: Cardenden Heat & Power (CHAP)

Country:	United Kingdom
Sector:	Energy Efficiency, Renewable Energy
Type of Investment:	Senior Loan
Total project size (€ m):	5.5
eeef investment size (€ m):	4.34
Financial close:	31 October 2016
Maturity:	16 years
Status:	In operation

General description

The project involves the replacement of gas boilers in residential buildings owned by Ore Valley Housing Association (OVHA) and small wind farms in the Fife Region in Scotland developed by CHAP. OVHA is a Scottish Housing Association, a registered social landlord with charitable status operating in central Fife, while CHAP is a subsidiary of OVHA. The boilers will be leased to OVHA and the wind plants will benefit of the national Feed in Tariff. The senior debt facility provided by eeef is complemented by junior funds from the Scotland's Renewable Energy Investment Fund (REIF) and equity from OVHA/CHAP. Overall, the project's target is to achieve cumulative annual savings of 99% for primary energy and 96% for CO_2e compared to baseline.

Recent developments

- First disbursement in November 2016.
- Implementation of boilers and wind turbine completed in March 2017.

Project: City of Santander

Country:	Spain
Sector:	Energy Efficiency
Type of Investment:	Forfaiting Loan
Total project size (€ m):	9.2
eeef investment size (€ m):	9.2
Financial close:	18 August 2017
Maturity:	14 years
Status:	End of construction

General description

The project consists of the upgrade of the existing street lighting luminaires from predominantly high pressure sodium vapour lamps to the last generation PHILIPS LEDs. In the 12 months construction period, ending in November 2017, the number of lighting points replaced will come to a total of around 22,300 units. A system of UVEX wireless sensors will connect the whole infrastructure point-by-point with the City's digital communication network and the remote CEMILUX control system. Savings in CO2 and primary energy are envisaged to reach 80% compared to the baseline. The project emerges from the European Commission Technical Assistance, successfully completed in 2015, with the Municipality of Santander receiving €450k of funding to conduct energy audits, set up the street lighting investment programme and the tender documents. The project is one of the largest street lighting upgrades in Spain under a Public Private Partnership (PPP) framework.

Recent developments

- Financial close in August 2017. First draw down expected in November 2017

eeef Technical Assistance development

The new Technical Assistance (TA) Facility of the Fund, which has also received funding from the ELENA Facility under Horizon 2020 Programme of the European Union, was launched end of 2016 The objective of the new facility is to support public authorities to prepare investment programmes for a sustainable transformation in the areas of energy efficiency (mainly public building renovation and street lighting upgrades) as well as small scale renewable energy. eeef has selected a pool of consultants to work closely with the public authorities during the preparation of feasibility studies, energy audits, public tender processes etc. Up to now, two projects have been selected under this facility: City of Gijón and Ferrara Province.

Project: City of Gijón

Country:	Spain
Sector:	Energy Efficiency
Total investment volume (€ m):	21.7
TA amount approved (€):	400,000
Financial close:	24 April 2017

General description

City of Gijon is planning the implementation of an ambitious sustainable investment programme to complete energy audits for 98 public buildings and 40,000 street lighting points, identifying the appropriate set of energy efficiency and/or renewable energy related interventions, preparing and publishing the tendering documentation as well as preferably selecting an ESCO company to realise the measures within a two-year timeframe. As a Covenant of Mayor and RECI member (Spanish Association for Smart Cities), the city is fully committed to share its experience and best practices with other public authorities, thereby boosting the replication potential for such type of projects in Spain but also Europe-wide.

Recent developments

- Data collection for street lighting inventory completed
- Master lighting plan established, technical and economic analysis of proposed interventions in progress
- Energy inventory of facilities ongoing

Project: Ferrara Province – via SIPRO

Country:	Italy
Sector:	Energy Efficiency
Total investment volume (€ m):	15.3
TA amount approved (€):	389,500
Financial close:	31 May 2017

General description

Joining forces with SIPRO (Agenzia Provinciale per lo Sviluppo) – a development agency with a 40-year track record – the investment programme of the Province of Ferrara addresses the implementation of energy efficiency measures in several municipalities to prevent high energy consumption and heat loss going forward. Municipalities directly involved in this TA project are Ferrara, Cento, Argenta, Bondeno, Mesola, Copparo and Voghiera. The investment programme includes deep energy retrofitting measures (in 13 buildings such as schools, offices, town halls and sport facilities) and the replacement of 27,000 public lighting points to LED technology in the cities of Ferrara and Voghiera. The tender for a LED replacement is planned to be launched by the end of 2017.

Recent developments

- Energy audits carried out for 15 buildings, reports in progress
- Screening and validation of public lighting database for Voghiera finalised; reports in progress
- Planning of public lighting interventions for Ferrara completed; tender specifications finalised; tender publishing expected end of November 2017

EC Technical Assistance development

eeef provided grant money under the European Commission TA Facility (until 31 March 2014) facilitating nine investments with a total investment volume of around € 130 m. The projects are at various stages. While Région Rhône-Alpes, OVHA and Venlo successfully achieved the financing stage with eeef, further three projects (Santander, Terrassa and CIMAC) are currenty discussing financing with eeef. A number of projects are under completion using other sources of funding, thereby generating € 95 m worth of investment programmes.

Public authority	Country	Description of the investment programme	Total size of the investment programme (EURm)	TA volume approved (EUR)	Estimation of CO_2 reduction (tonnes per annum)	Estimation of Primary Energy Savings (mWh)	EEEF share (EURm)
City of Santander	Spain	EE – Public lighting/ building retrofit	9.2*	452,560	4,533	13,734	9.2
City of Cordoba	Spain	EE – Public lighting/ building retrofit	7.0	527,968**	to be determined	to be determined	other sources of funding
Cabildo of La Palma	Spain	Public lighting/ building retrofit/ clean urban transport	TA termination, funds to be returned				
City of Terrassa	Spain	Public lighting/ building retrofit/clean urban transport/PV	8.1*	623,467	3,907	12,173	8.1
City of Marbella	Spain	Public lighting/ building retrofit/PV	TA termination, funds to be returned				
Région Rhône-Alpes	France	EE – Building retrofit	25.0	1,125,000	1,000	4,244	financing closed (€5m)
Municipality of Ringkøbing-Skjern	Denmark	RE – Biomass	Based on TA outcome, project not feasible				
Ore Valley Housing Association	UK	EE – District heating	5.5	1,382,520	N/A***	N/A***	financing closed (€4.1m)
City of Elche	Spain	Public lighting/ building retrofit/ clean urban transport/ PV/biomass	TA termination, funds to be returned				
City of Venlo	Nether-lands	EE – Public lighting	9.1	425,000	810	3,966	financing closed (€8.5m)
University of Liège	Belgium	EE – Building retrofit	32.6	1,340,073	2,718	19,277	other sources of funding
Limerick and Clare Education and Training Board	Ireland	Building retrofit/ PV/micro wind	Based on TA outcome, project not feasible				
Groupement de Redéploiement Economique de la province de Liège	Belgium	EE – Building retrofit	59.0	2,000,000	1,449	32,043	other sources of funding
CIMAC (Comunidade Intermunicipal do Alentejo Central)	Portugal	Public lighting/ building retrofit/ clean urban transport/ PV/biomass	18.7	540,000	6,606	18,250	14
Municipality of Zaanstad	Nether-lands	EE – Open and smart energy network	Based on TA outcome, project not feasible				
Roscommon County Council	Ireland	EE – Biomass district heating	TA termination, funds returned				
		Total:	**174.2**	**8,416,588**	**21,023**	**103,687**	**49**

* Total size of investment programme decreased due to outcome of public tender with highly competitive offers on reduced cost-basis

** TA amount might be reduced due to non-achievement of agreed LF

***Since the initial project structure (which received TA funds) was not pursued saving data not applicable. For the new project scope savings of 8,968MWh and 1,732tCO_2 p.a. are expected

Investors

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