# Advancing Sustainable Energy for Europe Quarterly Fact Sheet as of 31/12/2016



## eeef highlights

November 2016 was featured by a new transaction in the Fund's portfolio. Ore Valley Housing Association (OVHA) has reached financial close with EEEF on a project worth £4.6million. The money will fund the development of wind turbine sites in Fife-Scotland, plus an innovative funding scheme replacing 200 heating systems for OVHA homes. This is EEEF's first community based transaction within the UK, and is the result of a four-year long co-operative effort between EEEF and OVHA. The project is the result of a collaboration among three financing parties, Cardenden Heat and Power (CHAP), a subsidiary of OVHA, the Renewable Energy Investment Fund (REIF) delivered by Scottish Investment Bank and EEEF.

The Société Publique Locale – Opérateur de Services Energétiques Régional of Rhône-Alpes (SPL-OSER, Regional Energy Service Public Company) has successfully ended the Technical Assistance program funded by the European Commission via the European Energy Efficiency Fund. After one year of start-up phase, SPL-OSER has begun at the end of 2015 the renovation program on 10 buildings owned by the municipalities of Bourg-en-Bresse, Cran-Gevrier and Montmélian and by the Région Rhône-Alpes totaling investments for €25.1 m. On top of the TA, EEEF directly provided also a revolving loan of EUR 5 m to further facilitate the transition of the program from pure design phase to final commissioning and operation. The outcome from the financial, legal and operational structure of SPL-OSER is a program finalized on time and on budget, pioneer to others already under development, which attracted new shareholders and created a benchmark for similar upcoming initiatives in other regions of the country.

In November 2016 the European Energy Efficiency Fund has also launched a new facility for Technical Assistance (TA). Following on from the previous European Commission's TA facility, managed by EEEF, the Fund has now set up a new tool to support ambitious public beneficiaries with bankable sustainable energy investment projects. Such projects shall relate to the energy efficiency sector, small-scale renewable energy and/or public transport initiatives. EEEF is supporting beneficiaries – regions, city councils, universities, public hospitals and other public entities located in the



28 EU Member States – by way of allocating consultancy services to the planned investments, for instance performing feasibility studies, energy audits, legal services and analysis of economic viability. EEEF TA Facility has received funding from the ELENA facility under the Horizon 2020 Programme of the European Union. The application period for the role of project's consultant ended on 31<sup>st</sup> January 2017. The applications for individual projects are open until 1<sup>st</sup> March 2017. All the information are available on the Fund's website (*http://www.eeef.eu/general-introduction.html*).

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## Investments by Partner Institution



## **Investments by Country**



## Investments by type of Partner Institution



## **Investments by Financial Instrument**



## CO<sub>2</sub> savings (in tCO<sub>2</sub>e)



- Cumulative CO<sub>2</sub>e savings (tCO<sub>2</sub>e)\*
   Quarterly CO<sub>2</sub>e savings (tCO<sub>2</sub>e)
- **Quarterly**  $16,737 \text{ CO}_2\text{e}$  (t) savings **To date** 248,974 CO<sub>2</sub>e (t) savings

## NAV as at 31/12/2016 (in € million)



Provisional values currently under year-end financial audit.

# Primary Energy Savings (PES) (in MWh)



Cumulative Primary Energy Savings (MWh)\*

- Quarterly Primary Energy Savings (MWh)
- Cumulative Primary Energy Savings, EE & CUT (MWh)

 Quarterly (all projects)
 3,586 PES (MWh)

 To date (all projects)
 18,324 PES (MWh)

 To date (EE & CUT only)
 308,802 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).

EE – energy efficiency. CUT – Clean urban transport.



**Existing projects** 



Country:GerSector:EnerType of Investment:ForfTotal project size (€m):1.4eeef investment size (€m):0.9Financial close:20Maturity:10 0Status:In c

#### Germany Energy Efficiency Forfeiting 1.4 0.9 20 March 2012 10 years 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  $\leq$  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<sub>2</sub> emissions compared to the baseline. It is a lighthouse project because of its innovative financing structure using forfeiting as a funding source.

### Recent development

• Project performance in line with envisaged plan



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status:

Germany Energy Efficiency Forfeiting 1.1 ): 0.6 15 November 2012 10 years 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  $\in$  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 11.6% reduction of CO<sub>2</sub> 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 developmen

• Project performance in line with envisaged plan



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status:

France Energy Efficiency Junior Funds 36.0 5.1 12 March 2013 Perpetual In operation

### General descriptior

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<sub>2</sub> emissions by 20,500 tonnes p. a., approx. 89.1% compared to the baseline.

Recent developments

• Project performance in line with envisaged plan



Existing projects (continued)



### **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, ren-ovation 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<sub>2</sub> emissions by 14,136 tonnes p. a., approx. 31% 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:RSector:FType of Investment:STotal project size ( $\in$  m):2eeef investment size ( $\in$  m):2Financial close:2Maturity:1Status:I

Romania Financial Institution Subordinated Debt 25.0 25.0 26 September 2013 10 years 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.

• N/A

**Recent developments** 

Project: City of Rennes

Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status:

France Energy Efficiency Junior Funds 47.6 7.3 12 December 2013 Perpetual 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 37,063 tonnes of CO, per year.

Recent developments

• Project performance in line with envisaged plan



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 Investment phase Status 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. • N/A Project: Société Publique Locale Efficacité Country: France énergétique (SPL) 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 vears Status: Implementation phase 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. • N/A **Project: City of Venlo** Country: The Netherlands **Energy Efficiency** Sector: Type of Investment: Senior Debt Total project size (€ m): 9.1 eeef investment size (€ m): 8.5 3 April 2014 Financial close: Maturity: 15 years Implementation phase Status: 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 40% 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. • Project performance in line with envisaged plan



**Existing projects (continued)** 



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status:

Spain Energy Efficiency Forfeiting 2.5 2.5 18 November 2015 9 years Construction

## 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 27 % of Primary Energy Savings and 45 % CO<sub>2</sub>e 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



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status:

United Kingdom Energy Efficiency, Renewable Energy Senior Loan 5.5 4.34 31 October 2016 16 years Construction

### 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<sub>2</sub>e compared to baseline.

ecent developments

• First disbursement in November 2016.

## EC Technical Assistance development

Please note eeef was providing grant money under the European Commission TA Facility until 31 March 2014. This facility came to an end using almost € 14.2m of the Facility, by committing the funds to project development works of 16 public beneficiaries in eight countries.

Publ	ic authority	Country	Description of the investment programme	Total size of the investment programme (EURm)	TA volume approved (EUR)	Estimation of CO₂ reduction (tonnes per annum)	Status	Probability of eeef funding	EEEF share (EURm)
	City of Santander	Spain	EE – Public lighting/ building retrofit	10.0	452,560	2,464	closed	50%	10
8	City of Cordoba	Spain	EE – Public lighting/ building retrofit	18.0	754,240	6,824	Q1/2017	0%	other sources of funding
ê	Cabildo of La Palma	Spain	Public lighting/ building retrofit/ clean urban transport	8.0	871,941	4,347	H1/2017	30%	other sources of funding
-	City of Terrassa	Spain	Public lighting/ building retrofit/ clean urban transport/ PV	18.1	623,467	9,113	H1/2017	90%	11
3 DE	City of Marbella	Spain	Public lighting/ building retrofit/PV	9.5	456,662	5,459	H1/2017	50%	5
	Région Rhône- Alpes	France	EE – Buildings upgrade	25.0	1,125,000	1,000	Q4/2016	100%	financing is closed
2	Municipality of Ringkøbing-Skjern	Denmark	RE – Biomass	173.3	1,917,500	21,600	terminated	0%	project is not realising
	Ore Valley Housing Association	UK	EE – Decentralised district heating	4.6	1,728,150	22,400	closed	100%	4.5
٨	City of Elche	Spain	Public lighting/ building retrofit/ clean urban transport/ PV/Biomass	20.4	782,367	8,983	terminated	0%	project not realising
	City of Venlo	Nether- lands	EE – Public lighting	9.1	425,000	672*	Q1/2017	100%	financing is closed
Université de Liège	University of Liège	Belgium	EE – Buildings upgrade	30.0	1,500,000	3,200	H1/2017	0%	other sources of funding
the sector of th	Limerick and Clare Education and Training Board	Ireland	EE – Buildings upgrade RE – PV/micro wind	16.4	335,835	2,850	H1/2017	25%	5
	Groupement de Redéploiement Economique de la province de Liège	Belgium	EE – Buildings upgrade	40.0	2,000,000	6,030	H1/2017	0%	other sources of funding
Cimac	CIMAC (Comunidade Intermunicipal do Alentejo Central)	Portugal	Public lighting/ building retrofit/ clean urban transport/ PV/Biomass	10.8	540,000	6,500	H1/2017	50%	9
SRZ	Municipality of Zaanstad	Nether- lands	EE – Open and smart energy network	9.3	463,860	4,500	terminated	0%	project not realising
	Roscommon County Council	Ireland	EE – Biomass district heating	6.6	184,275	333	TA refund	0%	project not realising
			Total:	454.6	14,160,000	106,894			59.5



### Investors











## Disclaimer

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