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# eeef highlights

Since 2011, the European Energy Efficiency Fund ('eeef', 'the Fund') has been involved in raising awareness to energy efficiency across Europe, launching investment programmes with public authorities to upgrade public infrastructure and provide financing for realisation of these programmes.

To aggregate energy efficiency related investments in various small and medium sized municipalities, the Fund supports eligible projects via different financing instruments, while attracting capital from private investors, which in combination with the public capital provided by the European Commission ensures realisation of these investments.

In the spirit of the Private Public Partnership model, eeef welcomes two new private investors contributing over €100 million to the Fund's capital.

New capital inflow marks an important milestone on the growth path of the eeef, underlines the innovative form of public-private partnership promoted by the European Commission with the goal of contributing to climate change mitigation and making European cities and regions more sustainable.

To date the Fund collaborated with more than 50 public and municipal authorities, while avoiding more than 600 thousand tonnes of CO2e emissions and saving more than 900 thousand MWh of primary energy. With a breadth of its market knowledge, eeef will continue to maintain its role as a thought leader within the European energy efficiency industry.

### eeef TAF



eeef welcomes new countries to its TA Facility programme. On 13 July 2022, eeef signed a new TA agreement with the Daugavpils City Municipality in Latvia to prepare and implement a street lighting modernization project. It targets to complete an economic feasibility model/energy audit for the street lighting system, which comprises between 7,665 to 9,000 luminaries. Daugavpils is the first municipality in Latvia working under the European Community programme to implement the investment; while targeting to use the PPP model, which is not widely used to date in Latvia, opening the market to further projects.



# Portfolio overview

# **Current Committed Investments\***

# Investments by Partner Institution



#### Outstanding amount by Partner Institution Dancer Mobility 0.8% Universidad Politécnica de Madrid 0.8% Ore Valley Housing Association Jewish Museum Berlin 0.4% 1.9% University of Applied **VIPA 2.1%** Sciences Munich 0.0% City of Orléans Gijon 0.0% 2.3% Total Banca Transilvania €94 m City of Rennes 3.8% 26.5% University Hospital S. Vila do Conde 5.3% Orsola-Malpighi 21.1% City of Santander 7.0% CIMAC 11.1% CIMAC 8.1% Illuminated Cities 7.8% City of Venlo 9.0%

# Investments by Country

Clean Urban Transport

Renewable Energy

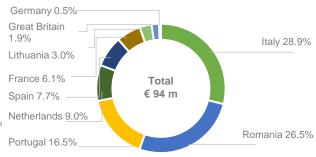
3%

20%



Total € 150 m

# Outstanding amount by Country



# Outstanding amount by Project Sector



Outstanding amount by Financial Instrument





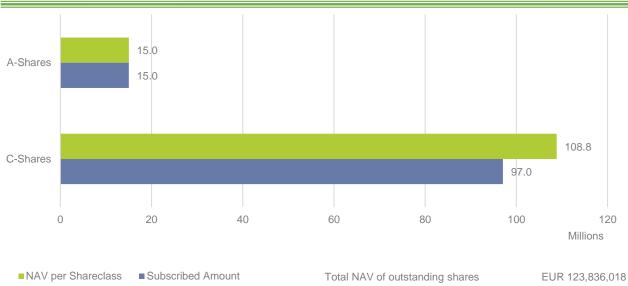


\*Based on commitments signed to projects excluding interest roll-up during construction, repayments or accrued interests. Does not include €35m of matured investments: Bollore Autolib (€30m) & SPL Region Rhone-Alpes (€5m). \*\* Provisional not audited figures to be repaid by active transactions. Not included cash position.

# Outstanding Amount\*\*

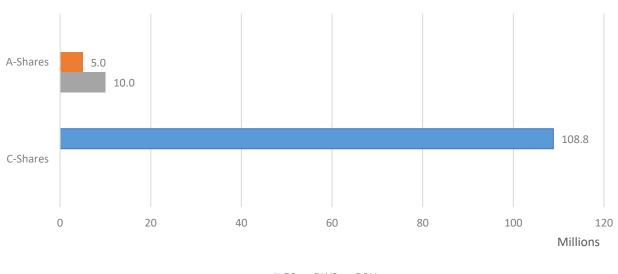


# **Investor Capital Structure**



# Net asset value (NAV)\* of outstanding shares as of 30/09/2022, in EUR million

# NAV split per investor as of 30/09/2022, in EUR million

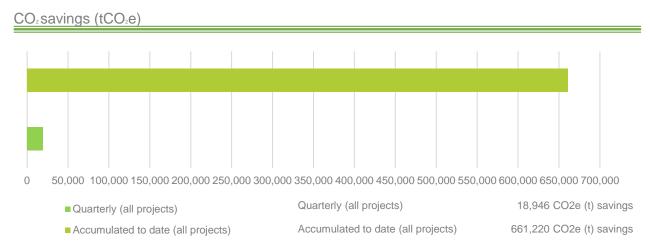


EC DWS DBU

Not including €107 million of committed capital .

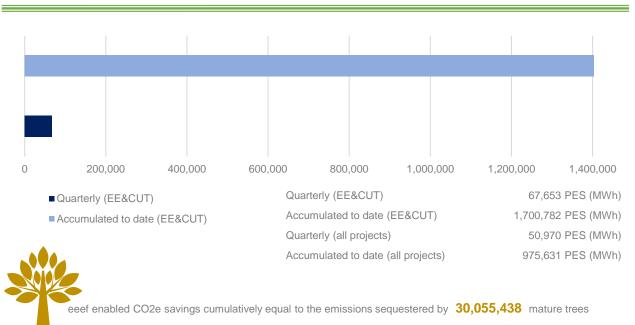


# Impact Assessment



All projects cover Energy Efficiency (EE), Clean Urban Transport (CUT) and Renewable Energy (RE) projects. RE projects contribute positively to carbon savings, but negatively to primary energy savings (PES). This is due to the higher primary energy demand of such technologies. In the case of biomass plants, the amount of heat released during the combustion of one unit of biomass is substantially lower than any fossil fuel. For illustrative purpose, the Lower Calorific Value (MJ/Kg) of biomass (17) lags behind that of diesel (43) and methane (50). Such thermal energy is needed for the combustion engine to produce electricity (and heat for cogeneration) and therefore leads to lower efficiency for biomass plants.

# Primary Energy Savings (MWh)



Loan maturity (LM) is the anticipated date the investment will be fully repaid. Economic maturity (EM) is the economic lifespan of a technology, which is dependent and aligned with EIB methodology. Cumulative savings are displayed for LM and EM, quarterly savings are based on LM. Cumulative PES are presented only for EE and CUT technologies. All tenors commence from financial close. Project data is based on estimations for projects under construction and with less than one year of operation and actual data for projects which have been operating for over one year. Savings are apportioned to eeef investment and non-eeef investment. The aggregation of these two values equates to entire project savings. Once maturity is reached, total aggregated savings for that project are still included within cumulative savings reported for the portfolio.



# Impact Assessment

Historic development of CO2 emissions reduction and energy savings

	2017	2018	2019	2020	2021
Cumulative CO2 e savings (tCOe)	314,938	389,852	530,454	557,363	605,312
Cumulative Primary Energy Savings (MWh) (all projects)	245,537	367,401	921,369	850,584	847,549
Cumulative Primary Energy Savings (MWh) (EE & CUT)	593,982	810,773	1,445,656	1,458,960	1,522,654

Cumulative savings are displayed for loan maturity and economic maturity, quarterly savings are based on loan maturity. Cumulative primary energy savings are presented only for Energy Efficiency and Clean Urban Transport technologies.

Energy savings statistics are restated for 2019 as Catfoss CHP project did not meet investment conditions. Hence, in 2020 the financing facility was closed and the impact on Primary Energy Savings from CHP project have been excluded starting 2019.

From 2018 to 2019, several other projects have adapted their savings estimations due to projects specifics, such as CIMAC, which also contributed to a clear upward trend from 2018 to 2019, as compared to the intervals. In the current report, we updated the 2021 carbon savings and energy savings data with IEA Emissions Factors 2021. Two projects (Wattosun and Smart H&U) were terminated during 2021. The 2021 yearly primary energy savings (all projects) for eeef's portfolio is lower than 2020's, as those two projects, large contributors to all project's primary energy savings, were excluded in the 2021 data.

# Social and Environmental Management System (SEMS)

eeef's Social and Environmental Management System ("SEMS") defines the respective roles and responsibilities of the Fund and its Partner Institutions ("PI") in promoting social and environmental ("S&E") sustainability. For eeef's S&E policy including SEMS questionnaire, please refer to: <a href="https://www.eeef.lu/social-environmental-standards.html">https://www.eeef.lu/social-environmental</a> ("S&E") sustainability. For eeef's S&E policy including SEMS questionnaire, please refer to: <a href="https://www.eeef.lu/social-environmental-standards.html">https://www.eeef.lu/social-environmental-standards.html</a> . The SEMS questionnaire covers specific ESG aspects re. the PIs and the funded project implementation process.

				SEMS questionnaire findings in			
Project Name Partner Institution		Country	Sector	General	Environment, Biodiversity, Climate Change	Social, Employee, Governance	
Jewish Museum Berlin	Johnson Controls	DE	EE				
University of Applied Sciences Munich	Johnson Controls	DE	EE				
City of Orléans	Dalkia	FR	RE				
University Hospital S. Orsola Malpighi	ISOM	IT	EE				
Banca Transilvania	Banca Transilvania	RO	EE				
City of Rennes	Dalkia	FR	RE				
City of Venlo	City of Venlo	NL	EE				
Universidad Politécnica de Madrid <sup>(1)</sup>	<sup>(1)</sup> Enertika		EE				
Ore Valley Housing Association	CHAP	GB	RE, EE			•	
City of Santander	Elecnor	ES	EE				
Illuminated Cities <sup>(2)</sup>	Siram	IT	EE				
CIMAC	I-Sete	PT	EE			۲	
Dancer Mobility	Dancer	LT	CUT				
Vila do Conde	I-Sete	PT	EE				
VIPA	VIPA	LT	RE,EE				
Gijon	Acciona		EE				

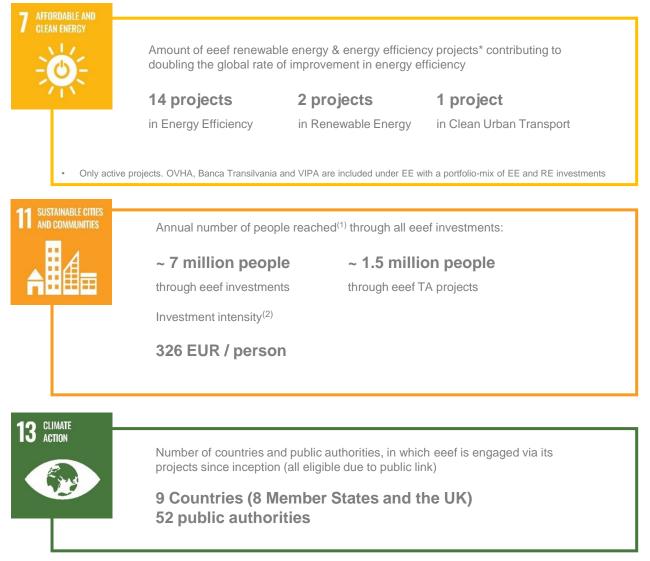
(1) Enertika has no written anti-corruption or anti-bribery policy in place. (2) Update on the ongoing investigation on Siram Veolia from the Court of Palermo for alleged corruption: one employee is acquitted, and the investigation is pending re. the other former employee. The hearing on two former employees of Siram Veolia for alleged fraud from the Court of Rome in April 2022. AIFM ensured no link with the eeef JV, however the event triggered a higher risk rating.



# eeef contribution to UN SDGs

The European Energy Efficiency Fund work actively to contribute to the internationally recognized United Nations (UN) goals for sustainable development, the so-called Sustainable Development Goals (SDGs). The fund registered its partnership for UN SDGs and mapped its impact against the following SDGs 7, 11, 13 in the beginning of 2020. The sustainable progress of each goal is now measured with eeef defined indicators which are closely aligned to SDGs framework.





(1) Number of population reached is calculated based on the estimation considered for each individual project. For eeef investment projects, estimation of people reached is based on the percentage amount of the population of the city or region achieved through eeef investments (e.g. calculation number of staff, students, professors, patients, etc.) For the TA projects, beneficiary population is calculated based on the city population where the TA projects takes place.

(2) Investment intensity measures total investment realized via eeef investments divided over the number of total population reached.



# Population reached through eeef investment activities

eee	ef investment projects	City / region	Annual population reached	Notes on population reached
AC	TIVE			
1	Jewish Museum Berlin	Berlin	700,000	Average number of visitors per year who visit the Jewish Museum Berlin since its opening in 2001.
2	University of Applied Sciences Munich	Munich	19,592	The total number of students, academic and non- academic staff as of 2019.
3	City of Orléans	Orleans	57,120	Part of population benefiting from either heat or power of the CHP project in the City of Orleans.
4	University Hospital S. Orsola-Malpighi	Bologna	20,000	The total number of academic staff (professors, lectures), students, patients and non-academic staff.
5	Banca Transilvania (BT)	Multiple cities in Romania	4,857,343	The population in the city or region which has benefitted from the sub-loan funding of BT.
6	City of Rennes	Rennes	85,680	Part of population benefiting from either heat or power of the CHP project in the City of Rennes.
7	City of Venlo	Venlo	100,536	The total population of city of Venlo (census 2015) is considered as reached population.
8	Universidad Politécnica de Madrid	Madrid	46,000	The total number of students, academic and non- academic staff working at campus of UPM.
9	Ore Valley Housing Association	Cardenden	6,533	The total number of residents and tenants who live in the project area (based on the reported figures from OVHA).
10	City of Santander	Santander	572,044	The total population of city of Santander including average number of tourists visiting the city of Santander each year.
11	Illuminated Cities	Rozzano	42,557	The total population living in the municipality included in pipeline at closing date.
12	CIMAC Portugal	CIMAC Region	167,000	The total population living in 14 municipalities (census 2011) that are located in the Alentejo Central Region in Portugal where upgrade of luminaries would be perform.
13	Dancer Mobility	Klaipeda	0	People reached will be estimated based on number of population using public transport. The project seek to replace 10 diesel buses in Klaipeda. There are no busses used from the project yet.
14	Vila do Conde	Vila do Conde	79,533	The total population of Vila do Conde as of census 2011.
15	VIPA	Multiple regions in Lithuania	1,033	The first project approved by the Investment Platform has reached 474 number of households. To reach the number of beneficiary people. this number has been multiplied by the average household size of 2.18 persons.*
16	Gijon	Gijon population	269,311	The total population of city of Gijon (census 2021) is considered as reached population.
MA	TURED			
17	Bollore France	Paris	n.a.	Bollore terminated car sharing project in France in 2020. The population reached is thus unavailable.
18	Regione Rhone- Alpes	Rhone-Alpes Region	3,579	Total estimated number of teachers, personnel of refurbished public buildings including 12 schools.
	Total		7,030,393	

\*Source : Oficialiosios statistikos portalas



# Population reached through eeef Technical Assistance (TA) Facility activities

eeef	TA projects	City / region	Annual population reached	Notes on population reached
ACT	IVE			
1	City of Gijon	Gijon	Incl. in eeef investments	
2	Province of Ferrara	Ferrara	345,691	
3	Ducal Palace of Modena	Modena	186,741	
4	Kaunas District Municipal Administration	Kaunas	96,441	
5	Autonomous Province of Bolzano	Bolzano	533,373	Population reached through eeef Technical Assistance (TA) projects is calculated
6	Ukmerge District Municipality Admistration	Ukmerge	33,471	based on the population of a city/region where the TA projects take place.
7	Administration of Silute District Municipality	Silute	14,968	
8	Klaipėda University Hospital	Klaipeda	162,690	
9	City of Sestao	Sestao	29,224	
10	Daugavpils City Municipality	Daugavpils	80,627	
	Total		1,483,226	

The population reached, for both eeef investment activities and eeef Technical Assistance Facility projects, is annualised number and is estimated with a prudent approach.

Number of reached population through eeef investment activities is calculated based on the estimation considered for each individual project as reported in the investment committee proposal.

For eeef investment projects, estimation of people reached is based on amount of the population of the city and/or the region achieved through eeef project activities (e.g., calculation number of staff, students, professors, patients, etc.)

For the TA projects, beneficiary population is calculated based on the city population where the TA projects takes place.





# Existing transactions



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

Country:

### **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 € 1.4 m. 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 CO2 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.



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

Germany Energy Efficiency

Forfeiting

13 years

In operation

20 March 2012

1.4

0.9

**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  $\in$  1.1 m. 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 a 6 % reduction of CO2 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.



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

#### General description

France Renewable Energy Equity & shareholder loan 47.6 5.1 12 December 2013 20 years In operation

Dalkia France and eeef invested in the Orleans Biomasse Energie project which operates a combined heat and power facility with an electrical output of 9.8 MW and thermal output of 22 MW over 20 years. This renewable energy project consumes the wood to generate heat and electricity and as such contributes to negative primary energy savings compared to fossil fuel (natural gas) that has considerably higher calorific value. The plant supplies 21,000 households in the city with green heat. The facility saves ca. 17,266 tonnes of CO2 per year.

#### **Recent developments**



# Existing transactions

Project: University Hospital S. Orsola Malpighi

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

Country:

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 CO2 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 at the time of financial close 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.



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

Romania Energy Efficiency, Renewable Energy, Clean Urban Transport Subordinated debt 25.0 25.0 26 September 2013 10 years In operation

Italv

41.0

31.8 8 May 2013

20 years

In operation

Energy Efficiency

Senior debt

### General description

Banca Transilvania (BT), one of the leading banks in Romania, has received green lending from eeef 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.



· 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 Renewable Energy Equity & shareholder loan 47.6 7.3 12 December 2013 20 years In operation

# **General description**

Dalkia France and eeef invested in the Rennes Biomasse Energie project which operates a combined heat and power facility with an electrical output of 9.8 MW and thermal output of 22 MW over 20 years. This renewable energy project consumes the wood to generate heat and electricity and as such contributes to negative primary energy savings compared to fossil fuel (natural gas) that has considerably higher calorific value. The plant supplies 21,000 households in the city with green heat. The facility saves ca. 12,695 tonnes of CO2 per year.



# Existing transactions



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

Country:

#### The Netherlands Energy Efficiency Senior debt 8.6 8.5 3 April 2014 15 years In operation

### General description

The City of Venlo signed a long-term financing contract for  $\in$  8.5 m 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.



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

### **General description**

eeef provided financing for the replacement of existing oil boilers supplying hot water and heating to the Universidad Politécnica of Madrid ("UPM"). The retrofit of new gas boilers, thermal valves and thermal PV solutions was completed in 32 buildings of the UPM. The project realised 22 % of Primary Energy Savings and 36 % CO2e 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 encompasses installing new technology as an upgrade to the 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: Ore Valley Housing Association** Country: United Kingdom Sector: Energy Efficiency, Renewable Enerav Type of Investment: Senior loan Total project size (€ m): 43 eeef investment size (€ m): 2.2 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. The project has achieved cumulative annual savings of 99 % for primary energy savings and 96 % for CO2e compared to baseline.

#### **Recent developments**



# Existing transactions



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

Country:

### **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. Within the 12 months construction period, the number of lighting points replaced are 22,300 units. A system of UVEX wireless sensors connects 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 79 % compared to the baseline. The project emerged 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.

# **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: Italy Energy Efficiency Equity & shareholder Ioan 20 16 27 September 2018 12 years portfolio ramp-up

Spain

9.2

9.2

14 years

In operation

Enerav Efficiency

Forfeiting loan

18 August 2017

## **General description**

Illuminated Cities (Città Illuminate S. r. l.) is a Joint Venture between eeef and Siram by Veolia. The JV targets a portfolio of street lighting projects in Italy, benefitting mainly municipalities of small-mid size. Primary energy savings are expected by 56 % at a portfolio level and, for some projects, up to 78 % when compared to the baseline. The implemented measures are designed according to a full smart city approach, where lighting integrates multiple services, thus not limiting to the upgrade to LED technology but also including other applications such as remote control and management systems, video surveillance, wi-fi and charging stations for electric vehicles.

• Project performance in line with envisaged plan.



Recent developments

Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status: Portugal Energy Efficiency Fortfaiting Ioan 16.6 12.1 27 December 2018 12 years In operation

# **General description**

The project consists of the upgrade of the existing street lighting luminaires from predominantly high-pressure sodium vapour lamps to the latest generation LEDs. During the construction period, ending mid-2020, the number of lighting points replaced will come to a total of around 56,345 units. Savings in CO2 and primary energy are envisaged to reach 74 % compared to the baseline. The project emerges from the European Commission Technical Assistance, successfully completed in 2017, with CIMAC receiving € 513,000 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 Portugal where eeef has been instrumental in development and financing.

#### **Recent developments**



Existing transactions



eeef collaborated with Vejo Projektai, a Lithuanian manufacturer of electric Dancer buses. The Fund and Dancer have established the company Dancer Mobility to provide all-inclusive operational lease services of electric buses manufactured in Lithuania to public authorities. Dancer Mobility will finance the purchase of e-buses and their operation, in the frame of all-inclusive operational leases provided by the company to public authorities and covering the bus usage, charging infrastructure, green energy supply and full maintenance.

#### **Recent developments**

• eeef & Dancer Mobility closed Shareholder Loan agreement to provide capital for producing 10 buses that would benefit public authorities for local transportation in Klaipeda. The production of buses to start shortly.



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status: Portugal Energy Efficiency Forfaiting Ioan 7.7 5.1 30 December 2020 12 years In operation

#### **General description**

The project envisages replacement of existing streetlights with energy efficient LED lighting points. The upgrade is expected to realize at least 77% in primary energy and CO2 savings annually compared to baseline, representing 11,678 MWh and 4,215 tCO2e, respectively. In addition, the project will also generate ca.  $\in$  3.2 million of monetary benefits for the municipality over a 12-year period of concession.

#### Recent developments

Country:

• Project performance in line with envisaged plan.



Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status: Lithuania Energy Efficiency, Renewable Energy, CUT Equity 37.0 10.0 04 October 2021 12 years Pre-operation

#### **General description**

Partnership between VIPA and eeef to finance projects via the Investment Platform set up by VIPA. VIPA is targeting different beneficiaries throughout Lithuania and a has a strong pipeline of projects that help to generate, respectively, primary energy and/or CO2 emission savings of at least 30% compared to the baseline. Such projects may include renewable energy (solar), hydro, biomass, biogas for heat production, district heating, building retrofits, street lighting modernization, electric mobility, among others. The current impact estimates based on the potential pipeline of projects identified by VIPA is as following: primary energy savings 107,336 MWh/year and carbon savings 6,590 tCO2e/year.

#### **Recent developments**

• Investment Platform approved 6 loan agreements totalling over €6m to finance solar projects in Lithuania.



Existing transactions



eeef and Acciona ESCO S.L. signed a forfaiting facility of up to 19 5 million with term of 11 years to finance the renovation of lighting points on public streets and buildings in the Municipality of Gijón Spain in alignment with a prepared Investment Programme within the Technical Assistance facility.

Gijon is eeef's 3d project with the off balance sheet structure in Spain. Post implementation of the Investment Programme, Gijón would immediately benefit from lower energy expenses and CO2 footprint. As per conservative estimates, the project is expected to deliver at least 48.02% in primary energy and CO2 savings annually compared to the current baseline, representing 37,005 MWh and 3,160 tCO2e, respectively. When compared to other similar projects financed by the eeef in Spain and in Portugal, the real annual savings in primary energy and CO2 emissions is likely to exceed 60%

# Recent developments

• The Fund has disbursed 25% of financing to support upfront installation. The project is progressing as planned. The second disbursement is anticipated in January 2023.



# Matured transactions



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

Country:

France Energy Efficiency Senior debt approx. 25 5.1 3 April 2014 12 February 2018 Ended

### General description

The Société Publique Locale d'Efficacité Energétique (SPL) signed a mid-term loan agreement for € 5 m 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

• Investment matured in February 2018.



Country: Sector: Type of Investment: Total project size (€ m): eeef investment size (€ m): Financial close: Maturity: Status: France Clean Urban Transport Senior debt 30 30 23 December 2013 3 January 2019 Ended

#### General description

The French company Bolloré signed a bond subscription agreement for floating rate notes worth € 30 m 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

• Investment matured in February 2019.



PROJECTS FINANCED BY eeef





The Technical Assistance (TA) Facility of the Fund has been set up by the eeef at the end of 2016. The objective is to support public authorities with energy audits, public procurement, and calculations of benefits to prepare investment programmes for a sustainable transformation in the areas of energy efficiency and small-scale renewable energy. eeef has selected a pool of consultants to work close to the public authorities during all the preparatory phases, from feasibility studies to energy audits to assistance in the public tender processes. By Q3/2022, ten public beneficiaries have been selected across Spain, Italy, Lithuania, and Latvia: a) City of Gijón (Spain), b) Ferrara Province - via SIPRO (Italy), c) Italian Ministry of Defense - Modena Ducal Palace (Italy), d) Kaunas District Municipal Administration (Lithuania), e) Autonomous Province of Bolzano (Italy), f) Ukmerge District Municipality (Lithuania), g) Administration of Silute District Municipality (Lithuania), h) Klaipėda University Hospital (Lithuania), i) City of Sestao (Spain), and Daugavpils City Municipality (Latvia). Additionally, six of these projects (Ferrara Province, Modena, Kaunas, Gijón, Ukmerge and Silute) have already published the tender.

In July 2022, the Fund has approved and signed the application of the Daugavpils City Municipality, located in the Republic of Latvia.

The eeef TA Facility has received total funds of €1.8m from the European Investment Bank ('EIB') - European Local Energy Assistance ('ELENA') TA Facility under the Horizon 2020 Programme of the European Union. In June 2021, eeef successfully completed its commitments to ELENA for funding project development services (PDS) under the ELENA Contract. From the TA Facility's inception to date, the eeef has also contributed a total of €2,2m (including the reimbursement for the Ferrara TA project of €408,975), supplemented by the ELENA funds. The eeef's TA Facility available for projects has in total reached over €4m by Q3/2022, from which around €2.7m have been committed to ten signed projects and other eeef costs, leading to ca €979,023 funds available for new projects.



The city of Gijón is planning the implementation of an ambitious sustainable investment programme, comprising energy audits of 157 public buildings and 42,808 street lighting points and identifying the appropriate set of energy efficiency and/or renewable energy-related interventions. The project promotes the comprehensive and intelligent management of the electricity and thermal supply of street lighting, municipal buildings and facilities, the development and operation of the neutral, open and interoperable network for IoT and the innovation of services for its green and digital development.

The total expected project volume is €23.01m, which is comprised of €19.4m street lighting investment (includes IoT nodes and getaways), and €3.5m building investment. The following preparation and publication of the call for tender will result in selecting preferably an ESCO company to realise the measures within a two-year timeframe. As a Covenant of Mayor and RECI member – the Spanish Association for Smart Cities – Gijón is fully committed to sharing its experience and best practices with other public authorities, thereby boosting the replication potential for such types of projects in Spain and Europe-wide.

- TA work has been completed and tender documents finalised.
- On 20 December 2020, the tender was published on the City of Gijón website and the Spanish State Contracting Platform.
- The City of Gijón awarded the service to a winner ESCO and signed the respective contract by Q4/2021.
- Currently, the Public Beneficiary's final report is under review by the Fund.



(continued)



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Italy Energy Efficiency 30.8 389,500 31 May 2017

## **General description**

Located in Emilia Romagna Region, the Province of Ferrara joined forces with SIPRO (Agenzia Provinciale per lo Sviluppo), a development agency with a 40-years track record, to prevent high energy consumption and losses going forward. The investment program addresses the implementation of energy efficiency measures in several municipalities, with deep energy retrofitting of 12 buildings such as schools, offices, town halls and sport facilities in Ferrara, Mesola and Cento and the replacement of 27,616 public lighting points with LED technology in Ferrara and Voghiera.

### **Recent developments**

- Ferrara Province TA programme has reached Closing and is finalised.
  - TA works have been completed for public street lighting and building renovation in all involved municipalities: Ferrara, Mesola, Cento and Voguiera, even though Cento and Voguiera did not launch any tender:
    - . Regarding public buildings, a) the Municipality of Ferrara published the tender on 29 April 2020, and the contract was awarded to an ESCO inSeptember 2020; b) the Municipality of Mesola published the tender in April 2018 and awarded the service to an ESCO; c) the Municipality of Cento decided not to publish the tender since its political framework had changed and the new government had other priorities.
    - ii. Regarding street lighting, a) the Municipality of Ferrara published the tender in March 2018, and the contract was awarded to an ESCO in July 2019, b) the Municipality of Voguiera did not launch a tender as it needed to involve a contracting authority and cover relevant costs for the tender process necessary for refurbishing the obsolete public lighting systems.



Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Italy Energy Efficiency 9 340,000 5 March 2018

#### General description

The Ducal Palace in Modena is owned by the Italian government and is currently used by the Italian Ministry of Defense (MoD). The total project volume is ca. €9m, which has increased compared to the initial assumption of €8.1m. This is comprised of €5.2m thermal systems and €3.8m building envelope. The upgrade of thermal systems is expected to include new pipes for the network distribution plus improvement of the existing ones, an advanced climate control system, replacement of old radiators and boilers, and retrofitting of the hot water system. For the building envelope, the MoD plans to reduce thermal losses by introducing insulation in internal opaque walls and air infiltration with improved sealing of window frames. The Ducal Palace of Modena is located in the City of Modena, in the Italian region of Emilia Romagna. The palace was the residence of the Este Dukes of Modena. The main part of the building is currently used by the MoD and houses the headquarters of the Military Academy. In this building, military students attend academic lessons of several university courses, held by professors from the public University of Modena and Reggio Emilia (UNIMORE). Part of the Eastern Tower of the palace houses the geophysical-meteorological observatory of UNIMORE, while the first floor is a public museum of the Military Academy with guided tours offered by the Municipality of Modena.

- TA works have been completed and tender documents finalised.
- In May 2020, the Italian Ministry of Defense published the tender.
- In October 2021, the definitive awarded ESCO was announced.
- The TA Consultant's final report is under review by the Fund.



(continued)



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Lithuania Energy Efficiency 4.2 180,000 27 December 2018

### **General description**

The Kaunas District Municipality surrounds the Kaunas City Municipality, the second-largest city in Lithuania. It is one of the country's biggest and most densely inhabited municipalities of the country, including 3 cities, 9 towns and 371 villages. eeef is supporting the Kaunas District Municipality Administration of the Republic of Lithuania to prepare and implement an ambitious investment programme for a street lighting upgrade, covering audits, technical and financial studies and assistance in the tender process. The project initially estimated LED installation on approx. 10.000 lighting points. The full implementation of the investment programme will achieve at least 1.76 GWh per year in primary energy savings.

### Recent developments

- TA works have been finalised.
- Initially, the tender was published in August 2020. However, the municipality relaunched the tender on 5 October 2020 due to the interest in including specifications regarding the bidder requirements. The new tender was published on the Lithuanian Central Procurement <u>website</u>.
- · Final bids were submitted and in October 2021, a provisional awarded ESCO was selected.
- In December 2021, a definitive winner ESCO was announced.
- The concession contract is expected to be signed by Q4/2022.



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Italy Energy Efficiency 38.5 400,000 13 June 2019

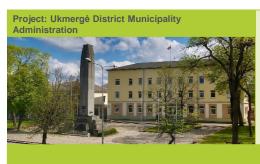
### **General description**

eeef signed the Technical Assistance Agreement to renovate 27 public buildings in the Autonomous Province of Bolzano (PBA), Italy, in June 2019. The buildings owned by the province are expected to consume less energy in the near future, thanks to planned investments of around  $\in$ 38.5m instead of the initial assumption of  $\notin$ 42m. Once the studies and audits are completed, the second phase of the project will begin with selecting the relevant companies for the renovation and management works. The first tender was published in 2020.

- Two procedures were analysed by the public authority for the publication of the tender: (i) an open public initiative procedure, and (ii) a private proposal of PPP project financing.
- PBA has decided to do a "call for a project promoter ", using a private proposal of PPP procedure.
- In August 2020, the notice for tender to select the project promoter was published. PAB received four proposals.
- In September 2021, a promoter was identified (economic operator with the highest score).
- In March 2022, the definitive promoter was announced.
- Draft of tender documents are finalised and shared with the PAB.
- Tender is expected to be published by Q4/2022.



(continued)



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Lithuania Energy Efficiency 3.9 160,000 09 September 2019

### **General description**

Ukmergė District Municipality is a municipality situated in Vilnius County, Lithuania. The capital of the municipality is Ukmergė and is the largest settlement in the municipality. In September 2019, the eeef signed a TA Agreement with Ukmergė District Municipality Administration to help them preparing and implementing an investment program for the renovation of five municipal public buildings: (i) Ukmergė Dukstynos Primary School, (ii) Ukmergė District Taujenai Gymnasium, (iii) Ukmergė District Vidiskes Basic School, (iv) Ukmergė children's nursery "Eglute", and (v) the Ukmergė Uzupis Primary School. The aim is to improve the buildings energy efficiency and ensure that they meet the national energy performance requirements to facilitate a positive contribution to the national strategic objectives in energy efficiency. The TA services, provided by experienced local consultants, will support the efforts of the Administration's employees to prepare the investment project.

### Recent developments

- TA works have been finalised and energy audits completed.
- The Investment Project (IP) study was approved by the Municipality Council in December 2020.
- Tender documents were finalised and published in October 2021. Three bidders presented offers.
- Tender process is in the final stage of the negotiation phase with two bidders to submit final proposals.
- A winner ESCO is expected to be selected by Q1/2023.



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Lithuania Energy Efficiency 9 195,000 10 July 2020

### **General description**

The Šilutė District Municipality is situated in the southern part of Klaipėda county, one of the most developing regions of the country. This is mainly determined by the Klaipėda port, which is the only northernmost ice-free port in the easter part of the Baltic Sea. The Šilutė District Municipality is planning the implementation of an ambitious investment program that will improve the energy efficiency of municipal public buildings and thus ensure that they meet the national strategic objectives and energy efficiency requirements. The aim is to modernise 11 public buildings, which are the following: (i) Rusnes Culture House, (ii) Šilutė nursery "Azuoliukas", (iii) Šilutė Pamario Primary School, (iv) Šilutė nursery "Gintarelis", (v) Kintai Primary School, (vi) Saugai Jurgis Miksas Primary School, (vii) Šilutė District Municipality Sveksnos nursery, (viii) Usenai Primary School, (ix) Šilutė District Municipality building, (x) Šilutė Hospital and (xi) Vilkyciai School.

- Energy audits have been finalised.
- In June 2021, the updated IP study was approved by the CPMA.
- In December 2021, tender documents were finalised.
- Tender was published in June 2022. There were some questions from potential bidders about the qualification requirements (technical requirements were modified).
- The pre-qualification stage is finished, and three bidders have been invited to submit their proposals.
- Preparation of the proposals is ongoing.
- The winner ESCO is expected to be selected by H1/2023.



(continued)



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Lithuania Energy Efficiency 7.2 195,000 22 October 2020

### **General description**

The Klaipėda University Hospital (KUH) is located in the Klaipėda City Municipality, near the Baltic Sea and Curonian Lagoon. It is one of the country's most developing municipalities. This is mainly determined by the Klaipėda seaport, the only northernmost ice-free port in the easter part of the Baltic Sea. On 22 September 2020, the eeef and the Klaipėda University Hospital signed a TA agreement to prepare an ambitious investment program that will enhance energy efficiency by upgrading three of its four hospital buildings and increasing high-quality microclimate conditions for patients and hospital personnel. The three hospital buildings falling under the scope of the project are the following: (i) the central building, (ii) the oncology building and the outpatient consultation department, and (iii) the infectious disease building.

## **Recent developments**

- · Energy audits and due diligence have been completed.
- The IP study is finalised. Updates were included and approved by the CPMA in June 2021.
- Development of tender documents was finished and approved by the municipality in December 2021.
- Tender is expected to be published by Q4/2022.



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Spain Energy Efficiency 13.7 199,000 22 April 2022

# **General description**

The City of Sestao is a Basque Municipality located in the North of Spain. It is one of the 26 municipalities that belong to the Greater Bilbao Metropolitan Area. In April 2022, the eeef signed a TA Agreement with the City of Sestao to prepare and implement a smart energy program to improve energy efficiency. It targets, within a year and a half timeframe to complete energy audits on 4 municipal sites (5 public buildings) and 2,586 street lighting points, a feasibility study for PV installation on 8 buildings/structures, and technical studies for the mobility program (8 electric vehicles and charging points) and a digitalization platform. Also, it seeks to prepare the savings calculation and economic feasibility model, prepare and publish the tender documents and select an ESCO company.

#### **Recent developments**

• TA works already started.

· Energy audits development is still ongoing. Data collection is completed.



(continued)



Country: Sector: Total project size (€ m): TA amount approved (€ m): eeef TA agreement close: Latvia Energy Efficiency 7.8 180,000 01 September 2022

### **General description**

Daugavpils is the second largest city, located in south-eastern Latvia, on the banks of the Daugavpils River. In July 2022, eeef signed a TA Agreement with the Daugavpils City Municipality to enhance energy efficiency in the city by upgrading its public street lighting infrastructure. The objective is to prepare and implement a street lighting modernization project. It targets to complete an economic feasibility model/energy audit for the street lighting system, which comprises 7,665 to 9,000 luminaries, 141 cabinets, ca. 80km cables, ca. 2000 (units) poles, and an intelligent lighting system, among others. Also, it seeks to prepare the savings calculation, prepare and publish the tender documents and select an ESCO company.

- TA agreement with the public authority was signed on 13 July 2022.
- eeef invited three consultancy firms to present their offers and selected the Consortium comprised by the Law firm Glimstedt Bernotas and partners, Ardenis, SIA, Karlis, SIA, and Ekotermija, UAB as the TA Consultant.
- TA works already started.





# Imprint

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