

## eeef highlights

As a result of the financial year 2017 activities, eeef's shareholders allocated additional funds to the eeef Technical Assistance programme, which targets to identify potential investments and improve each organisation's environmental footprint. The increased funding allows eeef to support up to four additional cities / regions / public entities to complete feasibility studies and outline investment plans. eeef encourages more cities to follow the path towards 'Advancing Sustainable Energy for Europe'. The City of Gijon in Spain, the Ministry of Defense in Italy and the City of Ferrara in Italy are already benefitting from the eeef's Technical Assistance and move fast towards more livable cities, which their local communities can appreciate first-hand.

Further details on eeef's Technical Assistance and how to apply as a beneficiary can be accessed at <https://www.eeef.eu/eeef-ta-facility.html>

To mark the end of the European Commission Technical Assistance operations by end of 2017, in May the eeef jointly issued a press release with the European Commission [https://ec.europa.eu/info/news/european-commission-supports-energy-efficiency-projects-2018-may-04\\_en](https://ec.europa.eu/info/news/european-commission-supports-energy-efficiency-projects-2018-may-04_en). The European Commission Technical Assistance Facility (EC TA), linked to the European Energy Efficiency

Fund, has successfully supported energy efficiency and small-scale renewable energy projects leading to a total investment volume of €194.4 million.

The facility has helped local and regional governments undertake energy efficiency improvements that can be examples to others and demonstrate how to develop projects, build appropriate financial models and develop local skills to invest in efficient energy – the best energy of all.

In June, eeef proudly contributed to the G7-pulication "Climate change – The New Economy", the official magazine of the G7 summit which took place on the 8th and 9th June 2018 (Charlevoix Canada).

In this publication, some of the greatest minds in the sector have assembled, from governments to industry, from NGOs to scientists. They advise, debate and formulate best practice to protect the planet from the devastating effects of climate change.

The e-book of this publication and our article about Smart Cities (pages 84 to 87) are available here <http://climatechange-theneweconomy.com/g7-summit-edition/>

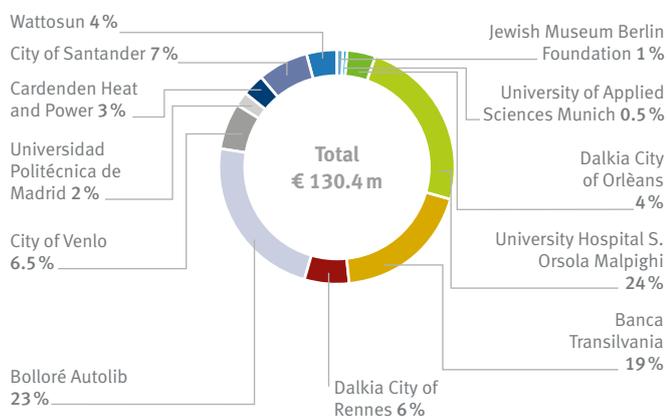


# Advancing Sustainable Energy for Europe

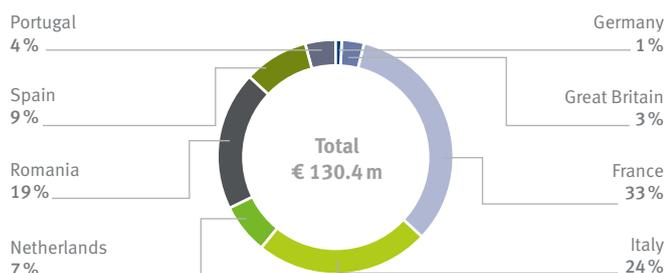
## Quarterly Fact Sheet as of 30/06/2018

### Active Investments

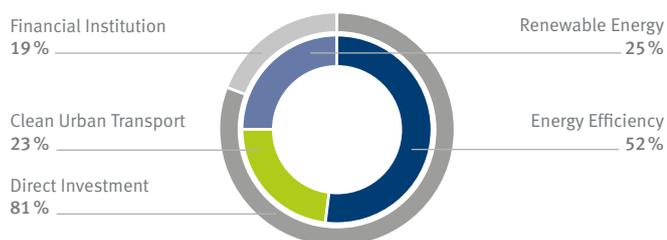
#### Active Investments by Partner Institution\*



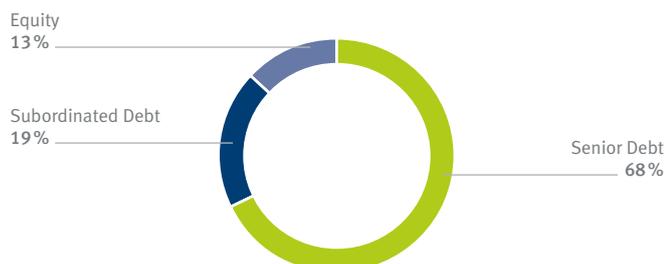
#### Active Investments by Country\*



#### Active Investments by type of Partner Institution\*

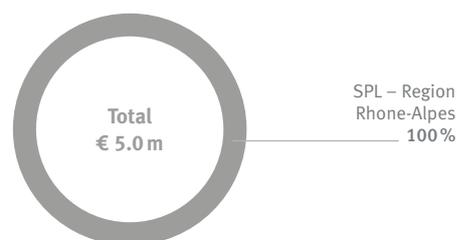


#### Active Investments by Financial Instrument

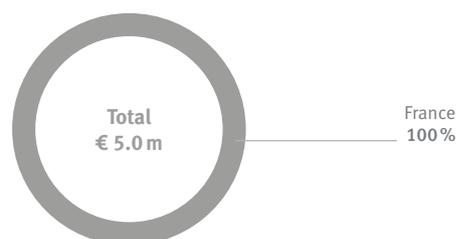


### Matured Investments

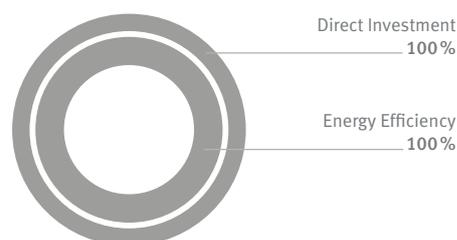
#### Matured Investments by Partner Institution\*



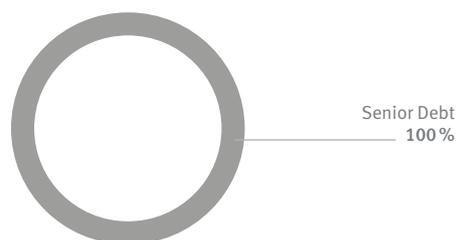
#### Matured Investments by Country\*



#### Matured Investments by type of Partner Institution\*



#### Matured Investments by Financial Instrument

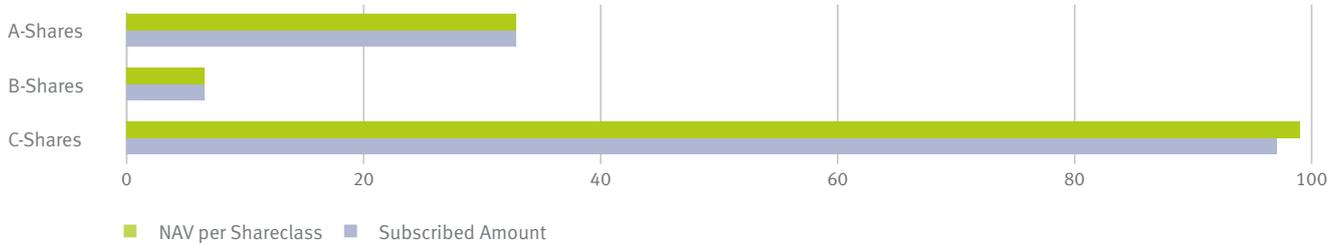


\* Based on commitments signed to projects, not including repayments or accrued interests.

# Advancing Sustainable Energy for Europe

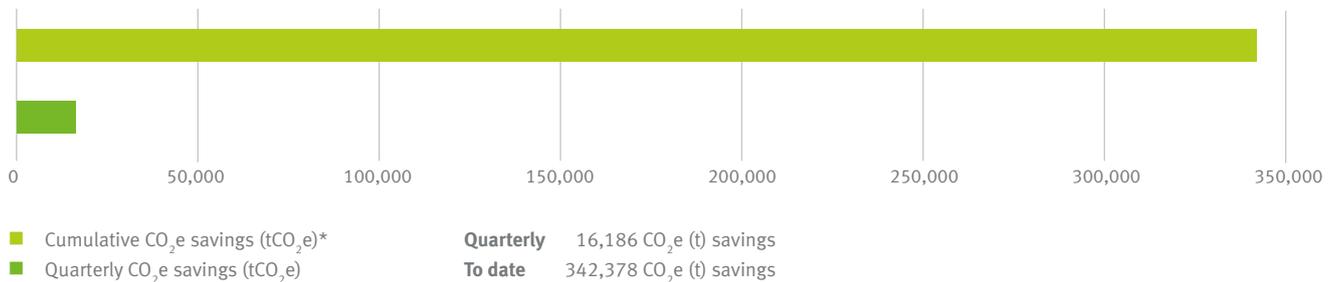
## Quarterly Fact Sheet as of 30/06/2018

### NAV as at 31/03/2018 (in € million)

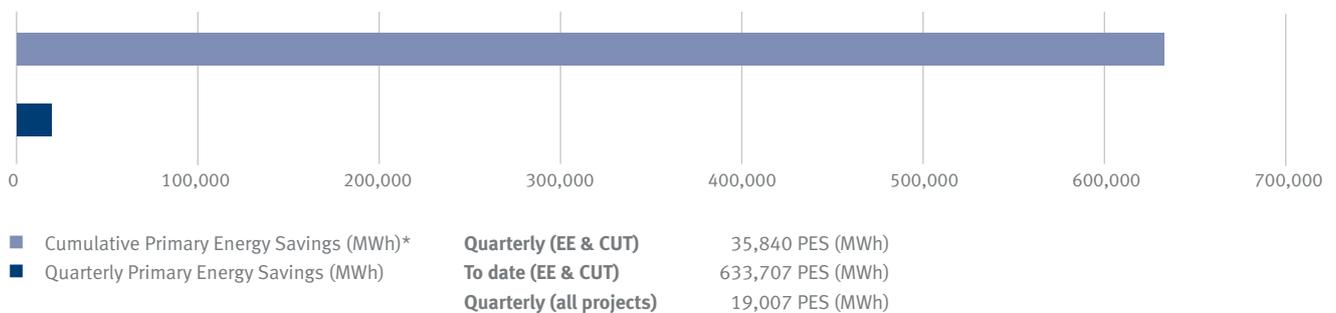


### Impact Assessment

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



#### Primary Energy Savings (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

eeef created a number of videos to show the projects evolution, please watch them on the eeef website <https://www.eeef.eu/home.html>

<p><b>Project: Jewish Museum Berlin</b></p> 	<table> <tr> <td>Country:</td> <td>Germany</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Forfeiting</td> </tr> <tr> <td>Total project size (€ m):</td> <td>1.4</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>0.9</td> </tr> <tr> <td>Financial close:</td> <td>20 March 2012</td> </tr> <tr> <td>Maturity:</td> <td>10 years</td> </tr> <tr> <td>Status:</td> <td>In construction</td> </tr> </table>	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
Country:	Germany																
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Total project size (€ m):	1.4																
eeef investment size (€ m):	0.9																
Financial close:	20 March 2012																
Maturity:	10 years																
Status:	In construction																
<b>General description</b>																	
<p>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 &amp; 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	

<p><b>Project: University of Applied Sciences Munich</b></p> 	<table> <tr> <td>Country:</td> <td>Germany</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Forfeiting</td> </tr> <tr> <td>Total project size (€ m):</td> <td>1.1</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>0.6</td> </tr> <tr> <td>Financial close:</td> <td>15 November 2012</td> </tr> <tr> <td>Maturity:</td> <td>10 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	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
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																
<b>General description</b>																	
<p>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 € 1.1 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 an 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	

<p><b>Project: City of Orléans</b></p> 	<table> <tr> <td>Country:</td> <td>France</td> </tr> <tr> <td>Sector:</td> <td>Renewable Energy</td> </tr> <tr> <td>Type of Investment:</td> <td>Junior Funds</td> </tr> <tr> <td>Total project size (€ m):</td> <td>36.0</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>5.1</td> </tr> <tr> <td>Financial close:</td> <td>12 March 2013</td> </tr> <tr> <td>Maturity:</td> <td>Perpetual</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	France	Sector:	Renewable Energy	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
Country:	France																
Sector:	Renewable Energy																
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																
<b>General description</b>																	
<p>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 CO2 emissions by 18,533 tonnes p. a., approx. 65% compared to the baseline.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	

# Advancing Sustainable Energy for Europe

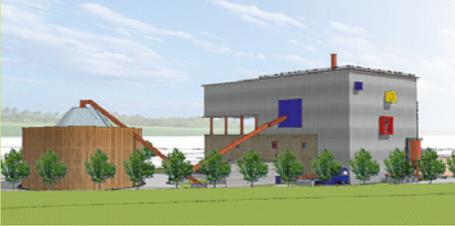
## Quarterly Fact Sheet as of 30/06/2018

### eef closed transactions

#### Existing projects (continued)

<p><b>Project: University Hospital S. Orsola Malpighi</b></p> 	<table> <tr> <td>Country:</td> <td>Italy</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Senior Debt</td> </tr> <tr> <td>Total project size (€ m):</td> <td>41.0</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>32.0</td> </tr> <tr> <td>Financial close:</td> <td>8 May 2013</td> </tr> <tr> <td>Maturity:</td> <td>20 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	Italy	Sector:	Energy Efficiency	Type of Investment:	Senior Debt	Total project size (€ m):	41.0	eef investment size (€ m):	32.0	Financial close:	8 May 2013	Maturity:	20 years	Status:	In operation
Country:	Italy																
Sector:	Energy Efficiency																
Type of Investment:	Senior Debt																
Total project size (€ m):	41.0																
eef investment size (€ m):	32.0																
Financial close:	8 May 2013																
Maturity:	20 years																
Status:	In operation																
<b>General description</b>																	
<p>The project entity, Progetto ISOM S. p.A., a special purpose vehicle (SPV) which is the counterparty of eef, 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<sub>2</sub> 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan.</li> </ul>																	

<p><b>Project: Banca Transilvania</b></p> 	<table> <tr> <td>Country:</td> <td>Romania</td> </tr> <tr> <td>Sector:</td> <td>Financial Institution</td> </tr> <tr> <td>Type of Investment:</td> <td>Subordinated Debt</td> </tr> <tr> <td>Total project size (€ m):</td> <td>25.0</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>25.0</td> </tr> <tr> <td>Financial close:</td> <td>26 September 2013</td> </tr> <tr> <td>Maturity:</td> <td>10 years</td> </tr> <tr> <td>Status:</td> <td>Investment phase</td> </tr> </table>	Country:	Romania	Sector:	Financial Institution	Type of Investment:	Subordinated Debt	Total project size (€ m):	25.0	eef investment size (€ m):	25.0	Financial close:	26 September 2013	Maturity:	10 years	Status:	Investment phase
Country:	Romania																
Sector:	Financial Institution																
Type of Investment:	Subordinated Debt																
Total project size (€ m):	25.0																
eef investment size (€ m):	25.0																
Financial close:	26 September 2013																
Maturity:	10 years																
Status:	Investment phase																
<b>General description</b>																	
<p>Banca Transilvania (BT), one of the leading banks in Romania, and eef 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 eef with a financial institution and also its first transaction in Eastern Europe. With BT, eef has a strong local partner with experience in financing several energy efficiency projects.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• N/A</li> </ul>																	

<p><b>Project: City of Rennes</b></p> 	<table> <tr> <td>Country:</td> <td>France</td> </tr> <tr> <td>Sector:</td> <td>Renewable Energy</td> </tr> <tr> <td>Type of Investment:</td> <td>Junior Funds</td> </tr> <tr> <td>Total project size (€ m):</td> <td>47.6</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>7.3</td> </tr> <tr> <td>Financial close:</td> <td>12 December 2013</td> </tr> <tr> <td>Maturity:</td> <td>Perpetual</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	France	Sector:	Renewable Energy	Type of Investment:	Junior Funds	Total project size (€ m):	47.6	eef investment size (€ m):	7.3	Financial close:	12 December 2013	Maturity:	Perpetual	Status:	In operation
Country:	France																
Sector:	Renewable Energy																
Type of Investment:	Junior Funds																
Total project size (€ m):	47.6																
eef investment size (€ m):	7.3																
Financial close:	12 December 2013																
Maturity:	Perpetual																
Status:	In operation																
<b>General description</b>																	
<p>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 eef. Dalkia France is co-investor along with eef 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<sub>2</sub> per year.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	

# Advancing Sustainable Energy for Europe

## Quarterly Fact Sheet as of 30/06/2018

### eeef closed transactions

#### Existing projects (continued)

<p><b>Project: Bolloré</b></p> 	<table border="0"> <tr> <td>Country:</td> <td>France</td> </tr> <tr> <td>Sector:</td> <td>Clean Urban Transport</td> </tr> <tr> <td>Type of Investment:</td> <td>Senior Debt</td> </tr> <tr> <td>Total project size (€ m):</td> <td>30.0</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>30.0</td> </tr> <tr> <td>Financial close:</td> <td>23 December 2013</td> </tr> <tr> <td>Maturity:</td> <td>5 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	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
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																
<b>General description</b>																	
<p>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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• N/A</li> </ul>																	
<p><b>Project: City of Venlo</b></p> 	<table border="0"> <tr> <td>Country:</td> <td>The Netherlands</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Senior Debt</td> </tr> <tr> <td>Total project size (€ m):</td> <td>8.6</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>8.5</td> </tr> <tr> <td>Financial close:</td> <td>3 April 2014</td> </tr> <tr> <td>Maturity:</td> <td>15 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	The Netherlands	Sector:	Energy Efficiency	Type of Investment:	Senior Debt	Total project size (€ m):	8.6	eeef investment size (€ m):	8.5	Financial close:	3 April 2014	Maturity:	15 years	Status:	In operation
Country:	The Netherlands																
Sector:	Energy Efficiency																
Type of Investment:	Senior Debt																
Total project size (€ m):	8.6																
eeef investment size (€ m):	8.5																
Financial close:	3 April 2014																
Maturity:	15 years																
Status:	In operation																
<b>General description</b>																	
<p>The City of Venlo signed a long-term financing contract for € 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	
<p><b>Project: Universidad Politécnica de Madrid</b></p> 	<table border="0"> <tr> <td>Country:</td> <td>Spain</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Forfeiting</td> </tr> <tr> <td>Total project size (€ m):</td> <td>2.5</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>2.5</td> </tr> <tr> <td>Financial close:</td> <td>18 November 2015</td> </tr> <tr> <td>Maturity:</td> <td>9 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	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
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																
<b>General description</b>																	
<p>eeef provided financing for the replacement of existing oil boilers providing hot water and heating to the Universidad Politécnica de 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<sub>2</sub>e savings annually compared to baseline. The transaction resulted from the public tendering process launched by the UPM earlier this year. Ingeniería 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Project performance in line with envisaged plan</li> </ul>																	

### eef closed transactions

#### Existing projects (continued)

<p><b>Project: Cardenden Heat &amp; Power (CHAP)</b></p> 	<table> <tr> <td>Country:</td> <td>United Kingdom</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency, Renewable Energy</td> </tr> <tr> <td>Type of Investment:</td> <td>Senior Loan</td> </tr> <tr> <td>Total project size (€ m):</td> <td>5.5</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>4.34</td> </tr> <tr> <td>Financial close:</td> <td>31 October 2016</td> </tr> <tr> <td>Maturity:</td> <td>16 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	United Kingdom	Sector:	Energy Efficiency, Renewable Energy	Type of Investment:	Senior Loan	Total project size (€ m):	5.5	eef investment size (€ m):	4.34	Financial close:	31 October 2016	Maturity:	16 years	Status:	In operation
Country:	United Kingdom																
Sector:	Energy Efficiency, Renewable Energy																
Type of Investment:	Senior Loan																
Total project size (€ m):	5.5																
eef 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 eef 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.

#### Recent developments

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

<p><b>Project: City of Santander</b></p> 	<table> <tr> <td>Country:</td> <td>Spain</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Type of Investment:</td> <td>Forfeiting Loan</td> </tr> <tr> <td>Total project size (€ m):</td> <td>9.2</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>9.2</td> </tr> <tr> <td>Financial close:</td> <td>18 August 2017</td> </tr> <tr> <td>Maturity:</td> <td>14 years</td> </tr> <tr> <td>Status:</td> <td>In operation</td> </tr> </table>	Country:	Spain	Sector:	Energy Efficiency	Type of Investment:	Forfeiting Loan	Total project size (€ m):	9.2	eef investment size (€ m):	9.2	Financial close:	18 August 2017	Maturity:	14 years	Status:	In operation
Country:	Spain																
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Status:	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 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 CO<sub>2</sub> 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

- €9.2m fully disbursed in December 2017 as planned, when more than 98% of installations were completed. The project is expected to achieve final commissioning in April 2018.

<p><b>Project: Wattosun</b></p> 	<table> <tr> <td>Country:</td> <td>Portugal</td> </tr> <tr> <td>Sector:</td> <td>Renewable Energy</td> </tr> <tr> <td>Type of Investment:</td> <td>Junior funds (equity and shareholder loan)</td> </tr> <tr> <td>Total project size (€ m):</td> <td>10</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>5.1</td> </tr> <tr> <td>Financial close:</td> <td>29 December 2017</td> </tr> <tr> <td>Maturity:</td> <td>15 years</td> </tr> <tr> <td>Status:</td> <td>Signed MoU, portfolio under construction</td> </tr> </table>	Country:	Portugal	Sector:	Renewable Energy	Type of Investment:	Junior funds (equity and shareholder loan)	Total project size (€ m):	10	eef investment size (€ m):	5.1	Financial close:	29 December 2017	Maturity:	15 years	Status:	Signed MoU, portfolio under construction
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#### General description

The project consists of a portfolio of small-scale PV plants, allowing self-consumption up to 5.6 MW in total to end-users in the public sector across Portugal. Beneficiaries will be public entities such as municipalities, state-owned companies and other public authorities. The portfolio developer is Wattosun, an agile player with a highly skilled management team, which comes to a total of over 50 years of experience in developing, financing and operating rooftop and ground mounted PV plants globally.

The portfolio, comprising seven sub-projects, foresees installation of circa 21,100 solar panels. When compared to the baseline and the Portuguese electricity grid, the project is expected to allow seven public authorities to save globally CO<sub>2</sub>e emissions of 2,650 tonnes per year and primary energy savings of 20,736 MWh per year. The self-consumed electricity would enable the public authorities to minimise or even exclude any exposure to changes in energy prices and benefit from effective electricity cost reduction.

#### Recent developments

- Signed MoU, portfolio under construction

### eeef projects financed

#### Matured facilities

<p><b>Project: Société Publique Locale Efficacité énergétique (SPL)</b></p> 	<table> <tr> <td>Country:</td> <td>France</td> </tr> <tr> <td>Sector:</td> <td>Energy efficiency measures, public buildings upgrades</td> </tr> <tr> <td>Type of Investment:</td> <td>Senior Debt</td> </tr> <tr> <td>Total project size (€ m):</td> <td>approx. 25</td> </tr> <tr> <td>eeef investment size (€ m):</td> <td>5.0</td> </tr> <tr> <td>Financial close:</td> <td>3 April 2014</td> </tr> <tr> <td>Repayment date:</td> <td>12.02.2018</td> </tr> <tr> <td>Status:</td> <td>Implementation phase</td> </tr> </table>	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	Repayment date:	12.02.2018	Status:	Implementation phase
Country:	France																
Sector:	Energy efficiency measures, public buildings upgrades																
Type of Investment:	Senior Debt																
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eeef investment size (€ m):	5.0																
Financial close:	3 April 2014																
Repayment date:	12.02.2018																
Status:	Implementation phase																
<b>General description</b>																	
<p>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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• SPL repayed the facility on the 12.02.2018</li> </ul>																	

# 13

*PROJECTS  
FINANCED BY eeef*



### eeef Technical Assistance development

The 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, three projects have been selected under this facility: City of Gijón, Ferrara Province and Italian Ministry of Defence – Ducal Palace.

<p><b>Project: City of Gijón</b></p> 	<p>Country: Spain Sector: Energy Efficiency Total investment volume (€ m): 21.7 TA amount approved (€): 400,000 Financial close: 24 April 2017</p>
<b>General description</b>	
<p>City of Gijón 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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• Main TA phase completed, with the delivery of all energy audit reports of the buildings and the validation of the public lighting infrastructure</li> <li>• Preparation of public tender documentation and strategy ongoing</li> </ul>	

<p><b>Project: Ferrara Province – via SIPRO</b></p> 	<p>Country: Italy Sector: Energy Efficiency Total investment volume (€ m): 15.3 TA amount approved (€): 389,500 Financial close: 31 May 2017</p>
<b>General description</b>	
<p>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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• Public lighting TA work package for Ferrara completed; tender published in April 2018</li> <li>• Screening and validation of public lighting database for Voghiera finalised; reports in progress</li> <li>• Energy audits carried out for 15 buildings, reports in progress</li> </ul>	

## eeef Technical Assistance development (continued)

<b>Project: Italian Ministry of Defense – Ducal Palace</b>	Country: Italy Total investment volume (€ m): 8.1 TA amount approved (€): 340,000 Financial close: 5 March 2018
	
<b>General description</b>	
<p>The Ducal Palace in Modena (Italy) is owned by the Italian government and is currently used by the Italian Ministry of Defense (MoD). With a total project volume of €8.1m, the upgrade of thermal systems (€5.0m) is expected to include new pipes for the network distribution plus improvement of the existing ones, advanced climate control system, replacement of old radiators and boilers and retrofitting the hot water system. For the building envelope (€3.1m) the MoD plans reducing thermal losses by introducing insulation in internal opaque walls and air infiltration with improved sealing of window frames. The 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 for more than two centuries and today is owned by the Italian government. 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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"><li>• Preliminary data screening for energy audits ongoing</li></ul>	

### EC Technical Assistance development

Between December 2011 and March 2016, the EC Technical Assistance Facility supported the project development activities of 16 public beneficiaries in eight Member States of the European Union, including Belgium, Ireland, Denmark, France, the Netherlands, Spain, the United Kingdom and Portugal.

By the end of 2017, the EC Technical Assistance successfully facilitated 10 projects leading to a total investment volume of €194.4 m, which are at various stages of implementation. Four Technical Assistance projects (€53.9 m) have already achieved financial close with the eef, including Région Rhône-Alpes (a building retrofit project in France), the City of Venlo (a street lighting project in the Netherlands), the Ore Valley Housing Association (a project related to energy conservation measures in the United Kingdom) and the City of Santander (a public lighting project based in Spain); while three further Technical Assistance projects (€94.2 m), including the Groupement de Redéploiement Economique Liège (a building retrofit project based in Belgium), the University of Liège (another building retrofit based in Belgium) and partly the City of Córdoba (a public lighting and building retrofit project in Spain), are under completion with the Technical Assistance beneficiaries' own fund-

ing and/or other regional sources. Further projects, including two Spanish cities and a Portuguese region, aim to reach completion soon, with eef financing under discussion.

These green investment programmes are expected to deliver around 26,701 tonnes of CO<sub>2</sub>e savings and estimated primary energy savings of 146,942 MWh per annum helping the public authorities to transform to resilient, cleaner and sustainable places.

The EC Technical Assistance Facility was a well-perceived project development opportunity in the European sustainable energy market and helped projects to finance energy audits, feasibility studies and the preparation of implementation plans, including procurement procedures. It closed its operations by the end of 2017. For further information please refer to the executive summary of the European Commission Final Report: [https://www.eef.eu/tl\\_files/downloads/eef\\_EC%20TA%20Facility\\_Final%20Report\\_Exc%20summary.pdf](https://www.eef.eu/tl_files/downloads/eef_EC%20TA%20Facility_Final%20Report_Exc%20summary.pdf)

Going forward, public authorities will receive Technical Assistance support from the eef's newly created Technical Assistance Facility.

Public authority	Provided TA amount (in EUR)	Size of the investment programme (in EUR)	Leverage factor (LF)	eef funding (in EUR)	Estimation of CO <sub>2</sub> e reduction (t/yr)	Estimated primary energy savings (in MWh/yr)
 City of Santander	452,560.00	14,308,988.00	31,6	9,200,000.00	4,396.00	39,848.00
 City of Cordoba	527,968.00 <sup>1</sup>	1,785,495.75	N/A	0	N/A <sup>2</sup>	N/A <sup>2</sup>
 City of Terrassa	623,467.00	16,227,350.00	26.0	Under discussion	3,952.00	12,695.00
 City of Marbella	417,596.21	8,831,588.89	21,1	Under discussion	3,725.00	8,466.00
 Région Rhône-Alpes	1,125,000.00	25,000,000.00	22,2	5,000,000	992.00	4,156.00
 Ore Valley Housing Association	1,382,520.00	5,479,520.00 <sup>3</sup>	0 <sup>4</sup>	4,347,880.00 <sup>3</sup>	1,612.00 <sup>4</sup>	8,968.00 <sup>4</sup>
 City of Venlo	425,000.00	9,100,000.00 <sup>5</sup>	21,4	8,500,000.00	948.00	4,632.00
 University of Liège	1,340,073.00	32,582,829.00	24,3	0	2,718.00	19,277.00
 Groupement de Redéploiement Economique de la province de Liège	2,000,000.00	59,853,303.00	29,9	0	1,449.00	29,900.00
 CIMAC (Comunidade Intermunicipal do Alentejo Central)	513,441.41	21,254,435.21	44,4	12.140.488,00	6,909.00	19,000.00
<b>Total:</b>	<b>8,807,625.60</b>	<b>194,423,509.90</b>	<b>Ø27.6</b>	<b>27,047,880.00</b>	<b>26,701.00</b>	<b>146,942.00</b>

<sup>1</sup> TA amount will be reduced due to non-achievement of LF.

<sup>2</sup> To be determined after project implementation phase.

<sup>3</sup> Based on a conversion factor of 1.1912 for GBP as of 10th May 2017.

<sup>4</sup> Since the initial project structure (which received TA funds) was not pursued, LF and saving data not applicable. For the new project scope savings of 8,968MWh and 1,732tCO<sub>2</sub> p.a. are expected.

<sup>5</sup> Project volume reduced by around 500k.