



Signing of the Technical Assistance agreement

## eeef highlights

The eeef signed the Technical Assistance Agreement to renovate 27 public buildings in Autonomous Province of Bolzano, Italy, in June 2019. The buildings owned by the province are expected to consume less energy in the near future, with planned energy efficiency volumes expected of around EUR 56 million in total. Massimo Bessone, representing the Provincial Government, signed the technical assistance agreement with eeef in June 2019, in Bolzano, together with General Secretary Eros Magnago and the Energy Manager of the Province Daniel Bedin.

The first tender for the investment programme is expected to be published by 2020. Once the studies and audits are complete, the

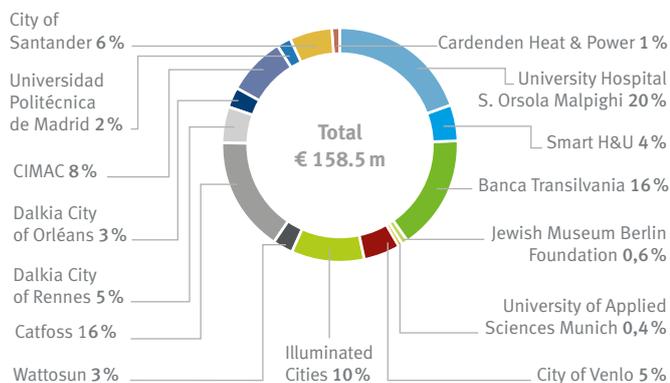
second phase of the project will begin, with the selection of the relevant companies for the renovation and management works. PensPlan Invest SGR (investment management arm of the Province) and the eeef will work together to find suitable instruments for funding. The winner of the tender for energy efficient refurbishment will be required to implement the work and assume the management of the buildings for a certain number of years, presumably around 20. The Province as the owner of the buildings pays the energy costs for the management of the buildings and has guaranteed annual savings, which will be specified as a requirement in the tender documents. At the end of the concession, the Province will manage its energy-renovated buildings itself.

# Advancing Sustainable Energy for Europe

## Quarterly Fact Sheet as of 30/06/2019

### Active Investments

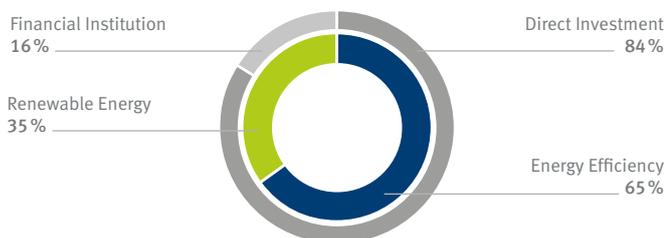
#### Active Investments by Partner Institution\*



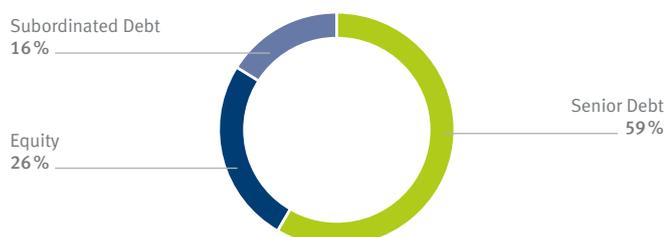
#### Active Investments by Country\*



#### Active Investments by type of Partner Institution and project sector\*



#### Active Investments by Financial Instrument

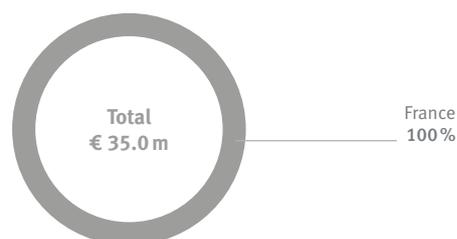


### Matured Investments

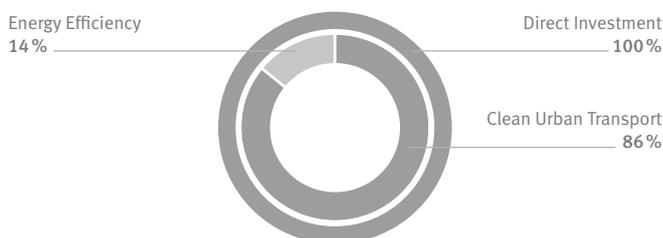
#### Matured Investments by Partner Institution\*



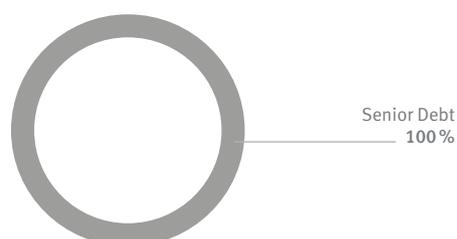
#### Matured Investments by Country\*



#### Matured Investments by type of Partner Institution and project sector\*



#### Matured Investments by Financial Instrument

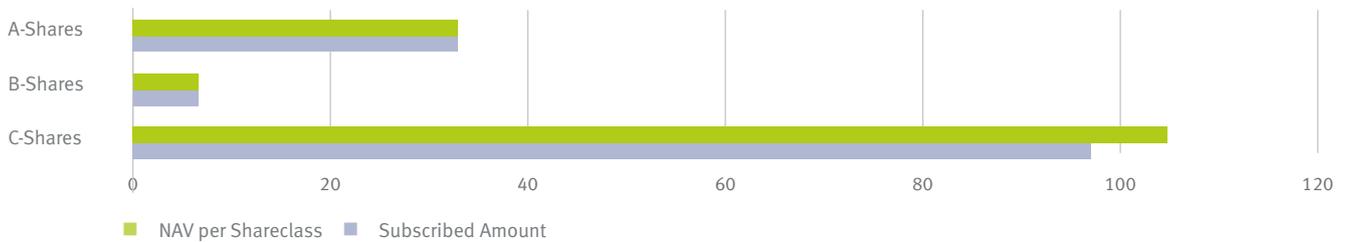


\* Based on commitments signed to projects, not including repayments or accrued interests.

# Advancing Sustainable Energy for Europe

## Quarterly Fact Sheet as of 30/06/2019

### NAV as of 31/06/2019 (in € million)

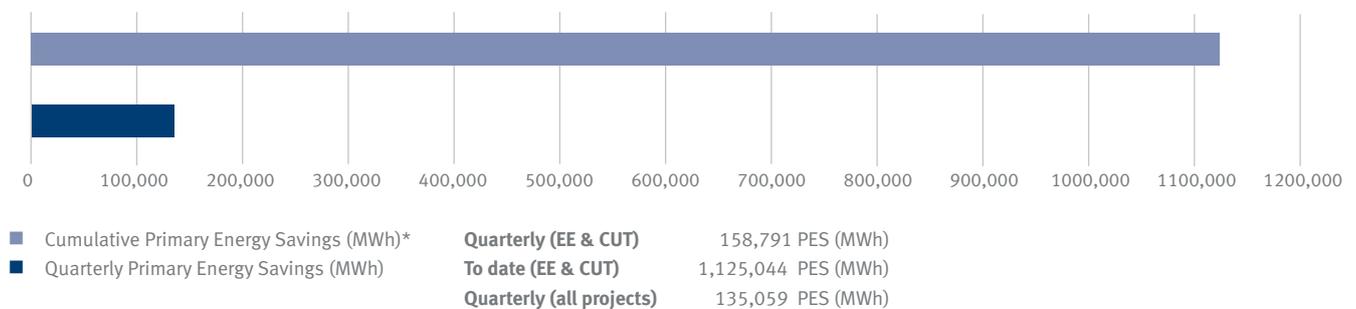


### Impact Assessment

#### 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: Catfoss Renewable Energy</b></p> 	<table> <tr><td>Country:</td><td>UK</td></tr> <tr><td>Sector:</td><td>Renewable Energy</td></tr> <tr><td>Type of Investment:</td><td>Senior Debt</td></tr> <tr><td>Total project size (€ m):</td><td>48</td></tr> <tr><td>eeef investment size (€ m):</td><td>25</td></tr> <tr><td>Financial close:</td><td>29.03.2019</td></tr> <tr><td>Maturity:</td><td>29.08.2029</td></tr> <tr><td>Status:</td><td>pre-construction</td></tr> </table>	Country:	UK	Sector:	Renewable Energy	Type of Investment:	Senior Debt	Total project size (€ m):	48	eeef investment size (€ m):	25	Financial close:	29.03.2019	Maturity:	29.08.2029	Status:	pre-construction
Country:	UK																
Sector:	Renewable Energy																
Type of Investment:	Senior Debt																
Total project size (€ m):	48																
eeef investment size (€ m):	25																
Financial close:	29.03.2019																
Maturity:	29.08.2029																
Status:	pre-construction																
<b>General description</b>																	
<p>The project consists of financing for a new combined heat and power (CHP) plant of a combined installed capacity of 28MW. The CHP plant will be constructed at the same site as an existing waste processing facility at Derwenthaugh Eco Parc, Gateshead, UK. The project will provide sustainable heat to a local district heating network as well as private heat and power connections. Once implemented, it is estimated that the project will realise 52,500 tonnes CO<sub>2</sub>e savings per year compared to baseline. This is equivalent to 97%. Furthermore, once the plant is in full operation, primary energy savings should exceed 315,000 MWh per year, the equivalent of 100% savings compared to baseline given the organic fuel currently is sent to landfill.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Undergoing formalization of the project structure and associated documentation.</li> </ul>																	

<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																
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																
<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 CO<sub>2</sub> emissions compared to the baseline. It is a lighthouse project because of its innovative financing structure using forfeiting as a funding source.</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 CO<sub>2</sub> emissions compared to the baseline. The ESCO guarantees the UoM certain energy savings p. a. and performs maintenance and building operation services for the 10 year contract period. This project is a role model for further energy efficiency investments in educational facilities such as schools, universities etc.</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: City of Orléans</b></p> 	<p>Country: France Sector: Renewable Energy Type of Investment: Junior Funds Total project size (€ m): 36.0 eef investment size (€ m): 5.1 Financial close: 12 March 2013 Maturity: Perpetual Status: In operation</p>
<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 eef (majority owner of the plant with 84%). The operation of the CHP plant achieves a reduction of CO<sub>2</sub> 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>	

<p><b>Project: University Hospital S. Orsola Malpighi</b></p> 	<p>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</p>
<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> 	<p>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</p>
<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>	

### eef closed transactions

#### Existing projects (continued)

<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 MWh 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>																	

<p><b>Project: City of Venlo</b></p> 	<table> <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>eef 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	eef 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																
eef 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> <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>eef 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	eef 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																
eef investment size (€ m):	2.5																
Financial close:	18 November 2015																
Maturity:	9 years																
Status:	In operation																
<b>General description</b>																	
<p>eef provided financing for the replacement of existing oil boilers providing hot water and heating to the Universidad Politécnica of Madrid ("UPM"). The retrofit of new gas boilers, thermal valves and thermal PV solutions will be completed in 32 buildings of the UPM. The project will realise 22 % of Primary Energy Savings and 36 % CO<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. ("Eneritika") 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>																	

# Advancing Sustainable Energy for Europe

## Quarterly Fact Sheet as of 30/06/2019

### eef closed transactions

#### Existing projects (continued)

	<p><b>Project: Cardenden Heat &amp; Power (CHAP)</b></p> <p>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</p>
<b>General description</b>	
<p>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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• First disbursement in November 2016.</li> <li>• Implementation of boilers and wind turbine completed in March 2017.</li> </ul>	

	<p><b>Project: City of Santander</b></p> <p>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</p>
<b>General description</b>	
<p>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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• The project achieved final commissioning and is fully operating</li> </ul>	

	<p><b>Project: Wattosun</b></p> <p>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</p>
<b>General description</b>	
<p>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.</p>	
<p>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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• Signed MoU, the first portfolio project under discussion for funding.</li> </ul>	

### eef closed transactions

#### Existing projects (continued)

<p><b>Project: Illuminated Cities</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>Junior funds (equity and shareholder loan)</td> </tr> <tr> <td>Total project size (€ m):</td> <td>20</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>16</td> </tr> <tr> <td>Financial close:</td> <td>27 September 2018</td> </tr> <tr> <td>Maturity:</td> <td>15 years</td> </tr> <tr> <td>Status:</td> <td>portfolio ramp-up</td> </tr> </table>	Country:	Italy	Sector:	Energy Efficiency	Type of Investment:	Junior funds (equity and shareholder loan)	Total project size (€ m):	20	eef investment size (€ m):	16	Financial close:	27 September 2018	Maturity:	15 years	Status:	portfolio ramp-up
Country:	Italy																
Sector:	Energy Efficiency																
Type of Investment:	Junior funds (equity and shareholder loan)																
Total project size (€ m):	20																
eef investment size (€ m):	16																
Financial close:	27 September 2018																
Maturity:	15 years																
Status:	portfolio ramp-up																
<b>General description</b>																	
<p>Illuminated Cities (Città Illuminate S.r.l.) is a Joint Venture between eef 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.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• The Rozzano project is progressing towards completion, expected in June 2019. The investors have injected the first tranche by total €4.4 m into the holding company Città Illuminate S.r.l., to support Rozzano and the other JV activities.</li> </ul>																	

<p><b>Project: CIMAC</b></p> 	<table> <tr> <td>Country:</td> <td>Portugal</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>16.6</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>12.1</td> </tr> <tr> <td>Financial close:</td> <td>27 December 2018</td> </tr> <tr> <td>Maturity:</td> <td>12 years</td> </tr> <tr> <td>Status:</td> <td>Installation to begin shortly</td> </tr> </table>	Country:	Portugal	Sector:	Energy Efficiency	Type of Investment:	Forfeiting loan	Total project size (€ m):	16.6	eef investment size (€ m):	12.1	Financial close:	27 December 2018	Maturity:	12 years	Status:	Installation to begin shortly
Country:	Portugal																
Sector:	Energy Efficiency																
Type of Investment:	Forfeiting loan																
Total project size (€ m):	16.6																
eef investment size (€ m):	12.1																
Financial close:	27 December 2018																
Maturity:	12 years																
Status:	Installation to begin shortly																
<b>General description</b>																	
<p>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 CO<sub>2</sub> 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 eef has been instrumental in development and financing.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Delivery of the execution plan agreed between CIMAC and I-Quatro. The renovation and drawdowns will begin shortly.</li> </ul>																	

<p><b>Project: Smart H&amp;U</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>Junior funds (equity and shareholder loan)</td> </tr> <tr> <td>Total project size (€ m):</td> <td>22</td> </tr> <tr> <td>eef investment size (€ m):</td> <td>7</td> </tr> <tr> <td>Financial close:</td> <td>21 December 2018</td> </tr> <tr> <td>Maturity:</td> <td>12 years</td> </tr> <tr> <td>Status:</td> <td>portfolio ramp-up</td> </tr> </table>	Country:	Italy	Sector:	Energy Efficiency	Type of Investment:	Junior funds (equity and shareholder loan)	Total project size (€ m):	22	eef investment size (€ m):	7	Financial close:	21 December 2018	Maturity:	12 years	Status:	portfolio ramp-up
Country:	Italy																
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Maturity:	12 years																
Status:	portfolio ramp-up																
<b>General description</b>																	
<p>Smart Hospitals and Universities (SmartH&amp;U) is a Joint Venture between eef and Sinloc. The JV will enable a portfolio of energy efficiency projects on public facilities in the healthcare and education sectors in Italy. Primary energy and carbon savings are expected to improve by half as an average the energy performance of those facilities and will globally embrace all set of measures in the energy efficiency space for smart buildings, spanning for instance from the state of the art of heating and cooling generators and distribution systems, to LEDs, to insulation, to building automation.</p>																	
<b>Recent developments</b>																	
<ul style="list-style-type: none"> <li>• Sinloc and eef have subscribed the Investment Agreement and are looking into the first project to onboard. Activities got started to further build the pipeline.</li> </ul>																	

## eef 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>eef 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	eef 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																
Total project size (€ m):	approx. 25																
eef 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>																	

<p><b>Project: Bolloré</b></p> 	<table> <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>eef 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	eef 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																
eef 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 eef with a maturity of 5 years. eef'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>• Investment matured in January 2019.</li> </ul>																	

# 17

PROJECTS  
FINANCED BY eef



## eeef Technical Assistance development

The Technical Assistance (TA) Facility of the Fund, which has also received ELENA funding under the Horizon 2020 Programme of the European Union, was launched at the end of 2016. The objective of this new facility is to support public authorities 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 author-

ities during all the preparatory phases, from feasibility studies to energy audits to assistance in the public tender processes.. So far, four projects have been selected: City of Gijón in Spain, Ferrara Province in Italy, the Italian Ministry of Defense – Modena Ducal Palace and recently the Kaunas District Municipality Administration in Lithuania. Other TA applications are under evaluation by eeef and could be signed in the following months.

<p><b>Project: City of Gijón</b></p> 	<table> <tr> <td>Country:</td> <td>Spain</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Total investment volume (€ m):</td> <td>21.7</td> </tr> <tr> <td>TA amount approved (€):</td> <td>400,000</td> </tr> <tr> <td>eeef TA agreement close:</td> <td>24 April 2017</td> </tr> </table>	Country:	Spain	Sector:	Energy Efficiency	Total investment volume (€ m):	21.7	TA amount approved (€):	400,000	eeef TA agreement close:	24 April 2017
Country:	Spain										
Sector:	Energy Efficiency										
Total investment volume (€ m):	21.7										
TA amount approved (€):	400,000										
eeef TA agreement close:	24 April 2017										
<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 delivery of all energy audit reports of the buildings and validation of the public lighting infrastructure.</li> <li>• The TA Consultant has prepared financial studies and public tender documentation and is reviewing them with the TA beneficiary.</li> <li>• The call for tender publication is envisaged in Q2/2019.</li> </ul>											

<p><b>Project: Ferrara Province – via SIPRO</b></p> 	<table> <tr> <td>Country:</td> <td>Italy</td> </tr> <tr> <td>Sector:</td> <td>Energy Efficiency</td> </tr> <tr> <td>Total investment volume (€ m):</td> <td>15.3</td> </tr> <tr> <td>TA amount approved (€):</td> <td>389,500</td> </tr> <tr> <td>eeef TA agreement close:</td> <td>31 May 2017</td> </tr> </table>	Country:	Italy	Sector:	Energy Efficiency	Total investment volume (€ m):	15.3	TA amount approved (€):	389,500	eeef TA agreement close:	31 May 2017
Country:	Italy										
Sector:	Energy Efficiency										
Total investment volume (€ m):	15.3										
TA amount approved (€):	389,500										
eeef TA agreement close:	31 May 2017										
<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>• TA work package for Ferrara public lighting has been completed and the tender published in April 2018.</li> <li>• Five bidders presented valid offers as a result of the tender process. The public authority has completed the evaluation of the offers and a provisional award has been issued. Whether there will be no objections of any sort, the award decision will become final and effective at the beginning of May 2019.</li> </ul>											

## eef Technical Assistance development (continued)

<p><b>Project: Italian Ministry of Defense – Ducal Palace</b></p> 	<p>Country: Italy Total investment volume (€ m): 8.1 TA amount approved (€): 340,000 eef TA agreement close: 5 March 2018</p>
<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 €8.1 m, the upgrade of thermal systems (€5.0 m) 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 (€3.1 m) the MoD plans reducing 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 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>• The main TA phase has been completed and all energy audit reports delivered.</li> <li>• The TA Consultant prepared financial studies and public tender documentation and reviewed them with the TA beneficiary.</li> <li>• The call for tender publication is envisaged in Q2/2019.</li> </ul>	
<p><b>Project: Kaunas District Municipality Administration</b></p> 	<p>Country: Lithuania Sector: Energy Efficiency Total investment volume (€ m): 5–10, depending on the final project scope TA amount approved (€): 180,000 eef TA agreement close: 27 December 2018</p>
<b>General description</b>	
<p>On December 27th 2018, the eef signed a new TA Agreement with the Kaunas District Municipality Administration of the Republic of Lithuania, to help them to prepare and implement an ambitious investment programme for street lighting upgrade, covering audits, technical and financial studies and assistance in the tender process. The Kaunas District Municipality surrounds the Kaunas City Municipality, the second-largest city in Lithuania, and is one of the biggest and most densely inhabited municipalities of the country including 3 cities, 9 towns and 371 villages. According to the pre-feasibility assessment, the total investment needed from the project ranges between €5 m and €10 m depending on the programme scope chosen, including 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.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• The inventory of the street lighting equipment has been completed. At the beginning of May 2019, the TA Consultant will present the investment plan for the replacement of the existing lamps with LED technology, including the economic and financial analysis.</li> </ul>	
<p><b>Project: Autonomous Province of Bolzano</b></p> 	<p>Country: Italy Sector: Energy Efficiency Total investment volume (€ m): 56,000,000 TA amount approved (€): 400,000 eef TA agreement close: 13.06.2019</p>
<b>General description</b>	
<p>The eef signed the Technical Assistance Agreement to renovate 27 public buildings in Autonomous Province of Bolzano, Italy, in June 2019. The buildings owned by the province are expected to consume less energy in the near future, with planned total investment volume of around EUR 56 million. The first tender for the investment programme is expected to be published by 2020. Once the studies and audits are complete, the second phase of the project will begin, with the selection of the relevant companies for the renovation and management works.</p>	
<b>Recent developments</b>	
<ul style="list-style-type: none"> <li>• The Technical Assistance contract has been signed.</li> </ul>	