



European Energy Efficiency Fund

Advancing Sustainable Energy for Europe

Annual Report 2015



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Welcome



Dear Reader,

Welcome to another year of European Energy Efficiency Fund's (eeef) activities, which we would like to review with you in this report.

The European energy market continues to evolve and develop, shaped by volatile global fossil fuel markets and growing competition in European gas and electricity markets, all within a framework of ongoing decarbonisation. To address the challenges of this complex sector, the European Union (EU) created the Energy Union, which provides a coherent policy framework for tackling five dimensions of the sector: ensuring security of supply (keeping the lights on and the gas flowing), creating a fully integrated internal market (to maximise competition and keep costs down), promoting energy-efficiency (to reduce pollution, energy costs and our import dependence), reducing emissions (to help meet our Paris climate change commitments), and expanding research and innovation (to boost our growth and competitiveness). All of these dimensions require changes in the sector and investment in change – new energy systems, smart equipment, clean power generation, and more energy efficient housing, buildings and equipment.

The eeef was created in 2011 to spur investments in energy efficiency projects by the public sector. It does this by providing debt or equity capital for projects which would not receive funding elsewhere due to the risk or the special social, environmental or innovative purpose of the project. To date, 10 projects across six Member States have received financing of almost \leq 117 m for projects worth a total of almost \leq 220 m. These have generated CO₂e savings of 181 Mt and primary energy savings of 20 GWh.

The eeef is a pilot programme, exploring together with the European Investment Bank and the Investment Manager Deutsche Bank how to develop public-sector energy efficiency projects. Projects include efficient street lighting, hospital heating systems, museum/building renovations and renewable energy CHP systems. These all serve to help local and regional governments undertake energy efficiency improvements that in turn can be examples to others and demonstrate how to develop projects, build appropriate financial models and develop local skills to invest in the cheapest energy of all – efficient energy.

The programme also explores how "financial instruments" rather than traditional grants can be used to stimulate investment from the private sector (which is necessary if we are to achieve our ambitious energy policy objectives). Loans and equity shares, for projects which have clear paybacks, help to turn the energy efficiency sector into a commercial market. Only if we build up the skills of the institutions and organisations, the administrative practices and the financial expertise in energy efficiency services and equipment can we hope for private investment to enter and drive forward the growth we need. Growth that will help us meet our energy objectives whilst at the same time providing jobs, stimulating commercial and technical innovation and providing a model of burgeoning energy efficiency that can be exported around the world.

I am confident that the eeef will grow, develop new projects and bring in new regions and investors. This will help spread the skills of creating commercial energy efficiency projects and deliver on Europe's energy efficiency ambitions.

lest hild hirdef

Mechthild Wörsdörfer Chair of the Supervisory Board and Director at the European Commission

Letter from the Chairman



Dear Reader,

The European Energy Efficiency Fund (eeef) has completed yet another successful year, increasing both its profitability and geographical diversification.

The eeef generated a total income of $\leq 3.9 \text{ m}$ with total expenses of $\leq 2.8 \text{ m}$, resulting in a $\leq 1.1 \text{ m}$ net profit. Despite a challenging environment, no downgrading or defaults were recorded on its investment portfolio. The Fund met its target dividend obligations. In addition, it distributed complementary dividends to its investors and replenished the eeef's TA Facility.

As per 31 December 2015, the eeef portfolio (financial closing achieved) consisted of 10 different projects with a volume of \leq 110.0 m and overall fund commitments of \leq 117.0 m. eeef is currently completing due diligence processes for several potential investments for a total amount of over \leq 50.0 m.

The Fund has kept a strong focus on project development, intensifying its relationships with public authorities and facilitators and launching several mutual initiatives with the Covenant of Mayors and the Council of European Municipalities and Regions.

Throughout various project development cycles, 16 public authorities have been closely supported by the European Commission TA Facility (EC TA Facility) with over \leq 14.0 m in funds. These projects offer attractive future investment opportunities for the Fund, with a total potential investment of \leq 454.6 m in eight different EU Member States. A total of \leq 15.0 m has been earmarked for financing by the eeef's Technical Assistance Facility (eeef TA Facility) in 2016, assuming that the projects materialise. Between 2011 (Fund inception) and the end of 2014 1,200 requests were received by the Investment Manager, and in 2015 and additional 150 requests were reviewed. Most of the new requests were submitted to the Fund at a relatively early stage of project development, reflecting the Fund's reputation in the market as an established partner, and its flexibility to accommodate the various needs of European local and regional communities for energy efficiency and renewable energy solutions.

The Fund continues to pursue its varied project-sourcing approach and will focus on its relationships with the European public sector. It will intensify coverage through regional European authorities and development agencies and the Investment Manager's regional coverage units, as well as further mobilising private-sector entities and energy service companies (ESCOs) and their associations that may provide services to public authorities.

Established in July 2011, eeef is an innovative public-private partnership (PPP) dedicated to mitigating climate change through financing energy efficiency measures and renewable energy projects. The Fund operates under the Advancing Sustainable Energy for Europe agenda, which invests in climate change projects for municipal, local and regional authorities as well as public and private entities which act on behalf of those authorities. eeef operates in all 28 Member States of the European Union. The Fund was capitalised with an initial volume of €265.0 m by the European Commission (EC), the European Investment Bank (EIB), Cassa Depositi e Prestiti (CdP) and Deutsche Bank (DB). In addition, eeef is linked to a €20.0 m technical assistance facility – for which the application phase ended in March 2014 – which was provided by the European Commission (EC TA Facility). eeef's sustainable fund structure also allows for creating its own technical assistance facility (eeef TA Facility). In 2014, initial funding was allocated to the eeef TA Facility. Based on the income waterfall of 2015, further funds were allocated to the facility, enabling it to provide new TA grants to entitled public beneficiaries.

The Fund benefits from an exemption from the Luxembourg Alternative Investment Fund Managers Law (the AIFM Law) of 12 July 2013. Pursuant to article $3(2)^{\circ}$ thereof, the Fund is registered with the Commission de Surveillance du Secteur Financier (CSSF) in Luxembourg as an AIFM.

I am confident that on the basis of this year's performance, eeef will be able to continue to act as an important player in the European energy efficiency market.

I would like to thank the clients and investors for their continuous trust in the Fund, the service providers – especially the Investment Manager – and the entire board for their excellent work in 2015.

Best wishes,

Peter Coveliers Chairman of the Management Board

Letter from the Investment Manager

Dear Reader,

At the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris, 195 countries adopted the first ever universal, legally binding global climate deal. One of the key targets is the long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels. The European Union (EU) is taking steps to implement its target to reduce emissions by at least 40% by 2030.

The European Energy Efficiency Fund (eeef) was initiated by the EU in 2011 as a self-funded solution to provide financing for energy efficiency, renewable energy and clean urban transport projects in the public sector across all 28 countries to achieve EU targets.

As a consequence of the COP21 event, it is expected that the demand for financing solutions will further increase from both the public sector and the private sector, including from Energy Service Companies (ESCOs) act on behalf of public authorities, to achieve national and EU targets.

The eeef had achieved a new all-time high in invested capital by the end of this year. As the Investment Manager of the Fund, we are proud to have been actively involved in shaping the Fund's sustainable route to combat climate change.

The Fund achieved financial close for its first project in Spain: the eeef provided an innovative financing solution for the implementation of energy efficiency measurements at the Universidad Politécnica de Madrid (UPM) by signing agreement with UPM and Enertika, the involved ESCO, for the new heating infrastructure in 32 buildings belonging to the university. The Investment Manager sees a strong demand from the public sector to implement such projects in Spain in the upcoming years, supported by new financing solutions.

As seen in 2014, the main challenges to the further development of the eeef are the current low interest-rates environment and available projects not matching the investment criteria of the Fund. A potential challenge for the Fund is the new EUROSTAT rulings for the accounting treatment of public-private partnerships (PPPs) in the public sector. We can already see uncertainty at a municipal level. Initiatives are being put on hold by the public sector until further clarification is received regarding if PPP structures will be accounted for as public debt at a municipal level.

At present, the Investment Manager, in its role as the Technical Assistance Manager for the existing EC TA Facility, is supporting 16 public authorities across Europe. Encouraged by the successful results achieved – the eeef has already financed two EC TA Facility projects – a total investment volume of more than €454.6 m is expected still to come. The Investment Manager sees a strong benefit to all parties to support the further development of energy efficiency projects in the public sector via new technical assistance funds.

At the end of last year (2015), the Fund put aside €0.3 m of its own profits to start the eeef's own Technical Assistant Facility (the eeef TA Facility). The eeef TA Facility supports the development of new energy efficiency projects across the 28 EU member states and supports the development of a project pipeline for financing via the Fund. The Investment Manager expects that interested local and regional authorities will be able to apply for the eeef TA program in the second half of 2016 via the Fund's website.

In 2015, the eeef was seen as a major market participant in the European energy efficiency market and a welcome stakeholder in shaping the way toward future developments. The Investment Manager was present at major expert conferences and promotional events for energy efficiency in 2015 to promote the eeef and its activities.

Looking forward, the eeef will continue to support public authorities in realising realise their projects and will seek projects which provide further regional split and diversification within the portfolio. Focus will also be given to diversify the underlying technologies within the portfolio. In line with the growth strategy of the Fund, existing investor commitments and the current project pipeline, preparation for new fundraising will be an important topic in 2016. The eeef envisages raising private-sector capital to leverage the development of initial investors' seed capital, thereby increasing the total financing available to cover public investment needs in the energy efficiency and small-scale renewable energy sectors.

We are looking forward to another inspiring year, and we hope you enjoy reading this report.

L. Helecile

Lada Strelnikova

Zarpana Signor

Matthias Benz

Paola Rusconi

Deutsche Bank AG, Sustainable Investments Europe

The European Energy Efficiency Fund at a Glance



Mission

The eeef's mission is to contribute to advancing sustainable energy for Europe, in the form of a public-private partnership (PPP) with a layered risk/return structure, to enhancing energy efficiency and fostering renewable energy within the European Union, primarily through the provision of dedicated financing to municipal, local, regional or national authorities or public or private entities acting on their behalf. Financing is generally provided directly or through partnerships with financial institutions.



The eeef's Objectives

The eeef aims to support the 20/20/20 goals of the European Union to promote a sustainable energy market and foster climate protection by:

- Contributing to the mitigation of climate change
- Achieving economic sustainability for the Fund
- Attracting private and public capital for climate financing

The Fund's Setup

Geographic Scope

The eeef targets investments in the Member States of the European Union, currently: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Operational Structure

The Fund's shareholders are represented by the Management Board, which oversees the eeef's activities and is responsible for strategic decisions. The Management Board is the legal representative of the Fund, with the exclusive power to administer and manage it. The Management Board appoints the Investment Committee, which reviews the investment decisions proposed by the Investment Manager and provides recommendations to the Management Board. It has an advisory role regarding investments, divestments and other management decisions.

The Investment Manager conducts the Fund's business on behalf of the Management Board. The Investment Manager also manages the EC TA Facility as well as the eeef's own TA Facility.

The Supervisory Board controls the management of the Fund and provides strategic advice to the Management Board regarding the overall development of the eeef's activities.



The eeef's Business Proposal

How to Qualify for eeef Funding

The final beneficiaries of the eeef are municipal, local and regional authorities or public and private entities acting on behalf of those authorities, such as utilities, public transportation providers, social housing associations, energy service companies (ESCOs), etc. Funding can be provided in Euros and in certain cases also in local currencies.

The General Eligibility Criteria:

- Municipal link
- Commitment of the municipality to mitigating climate change (e.g., via Covenant of Mayors initiative)
- Primary energy savings and CO₂e emission savings of at least 20 %
- Investment tickets for the eeef should preferably be between €5.0 m and €25.0 m
- Alignment with relevant EU legislation
- Use of proven technologies; each technology may have its own specific eligibility criteria



Investment Process



6 months



Development of the eeef since Inception

2012

January

• Operational and procedural setup of the Fund finalised

March

• The Jewish Museum Berlin joins the eeef as its first partner institution via the ESCO of Johnson Controls

November

• Financing of building retrofit project at the University of Applied Sciences Munich

December

• The City of Santander cooperates with the eeef on technical assistance

July

2011

• The eeef was created and capitalised by the initiators EC and EIB and the founding investors CdP and DB

2011

2012

2013

2013

May

- Financing of energy efficiency upgrade of the University Hospital S.Orsola-Malpighi in Italy
- The City of Córdoba benefits from the EC TA Facility

June

- The eeef achieves financial closing on its first equity investment, the City of Orléans' CHP plant in France
- La Palma cooperates with the eeef on technical assistance

September

 The eeef enters into a green on-lending facility with Banca Transilvania in Romania

November

- The municipality of Ringkøbing-Skjern signs a technical assistance agreement
- The Ore Valley Housing Association and the Region of Rhône-Alpes benefit from the EC TA Facility

December

- The eeef achieves financial close for its second equity investment, the City of Rennes' CHP plant, and the Bolloré transaction (green transportation initiative for the cities of Paris, Lyon and Bordeaux)
- The cities of Marbella, Terrassa and Elche cooperate with the eeef on technical assistance

2014

April

- Financing of street lighting upgrades for the City of Venlo
- The eeef achieves financial closing for a senior financing facility for the Société Publique Locale d'Efficacité Energétique (SPL) in the Rhône-Alpes region

June

 The University Hospital of Liège and the University of Liège sign technical assistance agreements

July

• The Limerick and Clare Education and Training Board benefits from the EC TA Facility

August

• GRE-Liège cooperates with the eeef on technical assistance

September

• Alentejo Central signs a technical assistance agreement

December

• The municipality of Zaanstad and the Roscommon County Council benefit from the EC TA Facility

2014

2015

2015

January

 Irish Education Minister Jan O'Sullivan launches technical assistance project with the Limerick and Clare Education and Training Board in Ireland

September

- The eeef sponsors the Smart Countries and Smart Cities Congress 2015 in Paris
- The eeef's University Hospital S. Orsola-Malpighi transaction wins the CESEF Energy Efficiency Award

November

 The eeef closes its first transaction in Spain in cooperation with Universidad Politécnica de Madrid

December

- The eeef completes financing to Publique Locale d'Efficacité Energétique (SPL), which has launched 10 refurbishment programs for schools with four different local authorities in the Region Rhône-Alpes in France, in total a €25.0 m investment
- The eeef completes the construction-phase financing of the energy efficiency upgrade to the University Hospital S. Orsola-Malpighi in Italy

2015 Activities Report: Investments

NETHERLANDS (VENLO)

€8.5 m senior debt facility to the City of Venlo

FRANCE (ORLÉANS, RENNES, REGION RHÔNE-ALPES**)**

€47.5 m

- €5.1 m shareholder loan and equity for the City of Orléans' CHP plant
- €7.3 m shareholder loan and equity for the City Rennes' CHP plant
- €30.0 m senior debt to Bolloré
- €5.0 m senior debt to Société Publique Locale d'Efficacité Energétique (SPL) in the Rhône-Alpes region

ITALY (BOLOGNA)

€**31.8** m

senior loan and VAT facility to Progetto ISOM for the upgrade of the University Hospital S. Orsola-Malpighi

SPAIN (MADRID)



forfaiting loan to the Universidad Politécnica de Madrid via Enertika

ROMANIA (CLUJ NAPOCA)



subordinated loan to Banca Transilvania

€1.66 m

• € 1.0m forfaiting loan to the Jewish Museum Berlin via the ESCO of Johnson Controls

GERMANY (BERLIN, MUNICH)

• € 0.6 m forfaiting loan to the University of Applied Sciences via the ESCO of Johnson Controls

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Roscommon Limerick Ringkøbing-Skjern

• Zaanstad • Venlo Liège •

Rhône-Alpes

Alentejo Terrassa

Santander

Cardenden

● Córdoba ● Elche ● Marbella

a Palma

TA project cities

Since its inception, the eeef has committed a total of €117.0 m to 10 partner institutions, for which disbursements of €115.0 m have so far been achieved. A further €14.0 m in grant funding has been allocated to 16 technical assistance projects via the EC TA Facility, which will lead to attractive investment opportunities for the eeef.

Project development activities have been carried out in the following locations:

Santander (Spain), Córdoba (Spain), Rhône-Alpes (France), La Palma (Spain), Ringkøbing-Skjern (Denmark), Cardenden (Scotland), Marbella (Spain), Terrassa (Spain), Elche (Spain), Venlo (Netherlands), Liège (Belgium), Limerick (Ireland), Alentejo (Portugal), Zaanstad (Netherlands), Roscommon (Ireland). Please see map on page 16.



Jewish Museum Berlin Foundation



Project Profile

The Jewish Museum Berlin and the energy service company (ESCO) of Johnson Controls entered into an energy performance contract (EPC) for the museum buildings with a total EPC volume of ≤ 1.4 m. The eeef's initial investment totalled ≤ 1.7 m – construction work is ongoing.

The Jewish Museum Berlin and the ESCO agreed to a revised approach in 2015 which reduced the overall scope of the project and as a consequence also the eeef's investment size, from $\leq 1.4 \text{ m to } \leq 1.0 \text{ m}$.

The museum owns two buildings in Berlin which are both used for various cultural events. Since its opening in September 2001, several million peoplehave visited the Jewish Museum Berlin, making it one of Berlin's most visited museums. Offering guided tours, temporary exhibition and a diverse calendar of events, the museum is a lively centre for Jewish history and culture.

The project includes a number of energy efficiency measures, comprising the optimisation of the heating, ventilation and air conditioning and an efficient energy-management system. The project is currently under construction and is expected to achieve an annual reduction of 933 tCO₂e emissions, or 26.1 % compared to baseline. The revised project also expects to achieve 3,855 MWh of primary energy savings annually.

Key figures	
Country	Germany
Sector	Energy efficiency – building retrofit
Type of investment	Forfaiting loan
Total project size (€m)	1.4
eeef investment size (€m)	1.0
Financial close	20 March 2012
Estimated tCO ₂ e emission savings (p. a.)	933

Project Highlights

The JMB transaction is an innovative publicprivate partnership (PPP) building sustainable communities for a better environment and facilitating small and medium-sized investments in the energy efficiency sector.

It was the winner of the European Energy Service Initiative's Award for the best European energy efficiency service project in 2011, conferred by the European Energy Service Initiative 2020.



University of Applied Sciences Munich

Project Profile

The University of Applied Sciences Munich and the energy service company (ESCO) Johnson Controls entered into an energy performance contract (EPC) for both of the buildings on the university's campus in Munich-Pasing, with a total EPC volume of €1.1 m. The university was founded in 1971 and is the largest university of applied sciences in Bavaria, with approximately 17,500 students, 475 professors, 750 lecturers and 745 non-academic staff.

The ESCO and the university agreed to energy efficiency measures comprising the optimisation of the heating, lighting, metering, building management and pumping, as well as the installation of a 49.5 kW combined heat and power (CHP) plant.

The project was implemented in 2013, and in 2015 it achieved an annual reduction of $47 \text{ tCO}_2\text{e}$ emissions and 1,986 MWh of primary energy savings.

The cumulative savings of the project to the end of 2015 are 178 t of CO_2 e emissions and 5,697 MWh of primary energy savings.

The ESCO has guaranteed the university these energy savings per annum and is completing maintenance and building operation services for a contract period.

Key figures	
Country	Germany
Sector	Energy efficiency – building retrofit
Type of investment	Forfaiting loan
Total project size (€m)	1.1
eeef investment size (€m)	0.6
Financial close	15 November 2012
Maturity	10 years
Observed tCO ₂ e emission savings (p. a.)	47

Project Highlights

This constitutes an innovative forfaiting structure for financing energy efficiency measures in a public building, with a focus on low-carbon solutions, which will improve the learning environment for students as well as staff. Although it is a small project, it demonstrates the concept of combating climate change through a smarter use of energy which also benefits the public budget. It even includes a small component of decentralised energy production for the university's own use.

This project serves as a model for further energy efficiency investments in educational facilities such as universities, schools and kindergartens.

Munich



University Hospital S. Orsola-Malpighi

Project Profile

The project entity Progetto ISOM signed a concession agreement with the University Hospital S. Orsola-Malpighi. The concessionaire, the university hospital, is one of the biggest Italian hospitals, with approximately 5,300 employees and 1,700 beds.

Initiatives are planned in order to improve the energy efficiency of the entire fluids production and distribution system and to reduce energy consumption. Such measures include the adoption of energy-efficient equipment such as centrifugal chillers and absorbers, the reconstruction of the heat-distribution networks, the renovation of heat-exchange substations and the inclusion of a tri-generation plant for the combined production of cooling, heat and power (CCHP), based on the energy consumption of the hospital facility, which is fuelled by methane gas.

The new technological centre for highly efficient energy production and distribution is expected to achieve a reduction in CO_2e emissions of approx. 23% compared to baseline.

The major construction works on the different sites of the project are complete. The project has been operational and is expected to achieve final commissioning in H2-2016.

Key figures	
Country	Italy
Sector	Energy efficiency – upgrade of entire energy system
Type of investment	Senior funds
Total project size (€m)	41.0
eeef investment size (€m)	31.8
Financial close	08 May 2013
Maturity	20 years
Estimated tCO ₂ e emission savings (p. a.)	8,574

Bologna

Project Highlights

This upgrade of the entire energy system of the university hospital has been the biggest energy efficiency upgrade in Italy completed as part of a PPP.

For the local public healthcare it is a significant step forward, as the university hospital is one of the biggest hospitals, making it a model for other hospitals in Italy. This is a major project which demonstrates the positive impact of energy efficiency measures in public buildings that have to be run 24/7, showing how energy efficiency can improve the underlying conditions for providing healthcare services to citizens of the region Emilia-Romagna.



City of Orléans

Project Profile

The CHP plant has an installed capacity of 7.5 MW in electricity and 17 MW in thermal heat. The plant supplies heat to the City of Orléans and sells electricity via a power purchase agreement (PPA) to Electricité de France (EDF) at a fixed tariff set over 20 years. This project was the first equity investment by the eeef (the majority owner of the plant with 84.4 %). Dalkia France is co-investing with eeef and holds the remaining 15.6 %.

The plant is fired by wood biomass (90,000 tons per annum) which is from a sustainably source (woodlands located less than 100 km from the plant). The CHP plant commenced operation in March 2014. During 2015, the plant operated at a rate equivalent to an annual reduction of 18,855 tCO₂e emissions and -37,578 MWh of primary energy savings compared to baseline. Carbon savings are 71% (compared to baseline).

This CHP biomass plant achieves significant carbon savings whilst still generating heat aligned with baseline requirements. Annual CO_2e emissions vary from those stated in the eeef Annual Report 2014; due to an accurate calculation methodology, provided by the project developers. 2015 savings have been calculated and validated in accordance with the internation-

Key figures	
Country	France
Sector	Energy Efficiency
Type of investment	Junior funds
Total project size (€m)	36.0
eeef investment size (€m)	5.1
Financial close	12 March 2013
Maturity	Perpetual
Observed tCO ₂ e emissions	18,855

al energy standard International Performance Measurement and Verification Protocol (IPMVP).

Project Highlights

The project enables a decentralised energy supply for the City of Orléans using an existing district heating network. The plant allows 15,000 households in the city to achieve annual savings of around €200.0 with the new energy source and increases the environmental sustainability.

🔵 Orléans



Banca Transilvania

23 Cluj-Napoca
3 Spring
Bucharest 1

Project Profile

The eeef provided a refinancing facility to Banca Transilvania (BT), one of the leading banks in Romania, for a green on-lending programme to support energy efficiency and renewable energy investments by the public sector in Romania.

It is the first cooperation between the eeef and a financial institution and also it is first investment in Eastern Europe. The eeef is supporting BT in sourcing and evaluating underlying projects where needed. BT is ensuring that the financed projects comply with the eeef's requirements with respect to a CO_2e emission/primary energy consumption reduction of at least 20%. Furthermore, the eeef can jointly finance projects with BT if larger financing amounts are required.

At the end of 2015, BT has completed the financing of seven projects, three of which are covered in detail within the Project Highlights section. The cumulative savings of the projects implemented up to the end of 2015 are 41,296 in tCO_2 e emissions and 171,751 MWh in primary energy savings.

Project Highlights

In BT, the eeef has gained a strong local partner with a history of financing several energy efficiency projects and which has a solid footprint in financing small and medium-sized enterprises (SMEs).

Key figures	
Country	Romania
Sector	Energy efficiency/ renewable energy
Type of investment	Subordinated debt
Total project size (€m)	25.0
eeef investment size (€m)	25.0
Financial close	26 September 2013
Maturity	10 years
Estimated tCO ₂ e emission savings (p. a.)	26,426

This value represents annual savings for all BT's sub-projects

BT is the 3rd-largest Romanian bank by assets. This cooperation will help to strengthen the Romanian banking sector by providing financing to energy efficiency and smaller-scale renewable energy projects, primarily through the provision of financing to public and private building owners, homeowner/ condominium associations and municipalities, public-sector entities and private sector companies acting on behalf of the public-sector.

Banca Transilvania – sub-loans until the end of 2015 under the eeef's subordinated debt facility

BT's projects include public transportation, building retrofitting and street lighting on-lending over €21.0 m from the eeef facility. The following highlight three projects from BT's eeef portfolio:

1 RETROFIT OF RESIDENTIAL FLAT BLOCKS IN BUCHAREST, DISTRICT 6

Background

Constructii Erbasu is one of the main Romanian construction companies, founded in 1991, with expertise in the construction of both residential and industrial buildings. The company also has a good track record in the municipal sector with the reconstruction of roads and the renovation of sewer networks.

Project description

Constructii Erbasu is the leader of the association of construction companies that won the tender organised by the Bucharest District 6 Town Hall for the renovation of 273 blocks of flats. Most of the blocks of flats in Romania were built between 1950 and 1990 and need insulation and the replacement of doors and windows. The building envelope improvements include insulation being added to the exterior walls, exterior joints, balconies, basements and terraces.

Banca Transilvania financed this phase of the project by providing a nonrecourse factoring limit of €12.6 m from the eeef facility. Bucharest Town Hall, District 6, one of the largest Romanian town halls with a good financial standing, is the assigned debtor. 50% of the investment is being financed by the national budget, 50% by the local budget.

Transilvania consists of replacing five old

trolleys with new Astra trolley- buses. The

average electric consumption of the new

trolleys is almost 50% lower than the

3.4 kwh/km average electric consump-

The investment is supported by the City Council of Cluj. The project has an eco-

nomic rationale - increasing the compa-

ny's profitability which will lead to few-

er subsidies from the local budget - but

tion of the existing trolleys.

Further investments

Subsequently in 2015, Banca Transilvania continued to finance further phases of building retrofit projects with Constructii Erbasu. In 2015, a shortterm loan was granted to Constructii Erbasu for approximately €4.5 m for the building retrofit of 90 blocks of flats in Bucharest Districts 3 and 6.

Key figures	
Disbursement date	23 September 2013
Sub-loan size *	€12,635,801
Estimated annual tCO ₂ e savings	15,105tCO ₂ e
Estimated annual primary energy savings	62,220 MWh

2 FLEET MODERNISATION FOR A PUBLIC TRANSPORTATION COMPANY IN ONE OF ROMANIA'S LARGEST CITIES

Background

Cluj-Napoca is one of the largest cities in Romania, with a population of over 300,000; the public transport is provided by Ratuc, a company held by the City Council of Cluj. Ratuc owns a fleet of over 50 trolleybuses, most of them over 20 years old.

Project description

The company intends to renew its trolleybus fleet; the project financed by Banca

3 STREET LIGHTING MODERNISATION FOR TWO TOWN HALLS

Background

Mies Energy and Lighting SRL is a company offering street-lighting maintenance services, including electrical installation work. The company have secured the public tender to fully modernise the public lighting systems for two town halls, Ceanu Mare, Cluj County and Spring, Alba Iulia County. Both town halls are to the south of Cluj-Napoca.

Project description

Mies Energy have received a medium-term loan from BT of circa €130 k to modernise the street-lighting systems in Ceanu Mare and Spring to the following specifications:

Ceanu Mare

The current lighting program has 414 existing lighting devices, 75% mercury lamps and 25% sodium lamps. Over 25% of the lamps do not have reflectors, which reduces efficiency. The project provides financing to replace all the lamps with LEDs, with estimated energy reductions of over 40%.

Spring

Spring's current lighting system includes 447 devices using mercury and sodium lamp technologies. The devices are over 20 years old. The project will replace all existing lamps with LEDs, with estimated energy reductions of over 75%.

terms of mitigating climate change. The CO_2e emissions savings are predicted to be over 60%.

it also has an important advantage in

Key figures	
Disbursement date	29 November 2013
Sub-loan size *	€2,022,472
Estimated annual tCO ₂ e savings	301 tCO ₂ e
Estimated annual primary energy savings	1,431 MWh

When combining both the estimated savings from both assets, a 67 % total reduction in CO₂e and primary energy savings is estimated.

Key figures	
Disbursement date	20 November 2015
Sub-loan size *	€132,758
Estimated annual tCO ₂ e savings	20 tCO ₂ e
Estimated annual primary energy savings	104 MWh

* Calculated from Romanian Leu using up to date exchange rate.



City of Rennes



Following a bid for tenders launched by the French Commission de Régulation de l'Energie (CRE3) for the production of green energy using a biomass cogeneration plant, Rennes Biomasse Energie SAS was authorized to build and operate a combined heat and power facility with an electrical output of 10.4 MW and a thermal output of 22 MW for the next 20 years.

As its second equity investment, the eeef has purchased 85% of the shares in Rennes Biomasse Energie while Dalkia France owns the remaining 15%. Dalkia France is also permitted to technically operate the plant.

Based on actual data through annual energy audits, in 2015 the plant saved 14,434 tCO₂e (compared to baseline). This relates to carbon savings equating to 59% compared to baseline.

This CHP biomass plant achieves significant carbon savings whilst still generating heat aligned with baseline requirements. Annual CO_2e emissions vary from those stated in the eeef Annual Report 2014, due to 2014 figures being estimates and 2015 figures being actual and an improvement in calculation methodology, provided by the project developers. 2015 savings have been calculated and validated in accordance with the international energy standard International

Key figures	
Country	France
Sector	Energy efficiency/ CHP plant
Type of investment	Junior funds
Total project size (€m)	47.6
eeef investment size (€m)	7.3
Financial close	12 December 2013
Maturity	Perpetual
Observed tCO ₂ e emissions savings (p. a.)	14,434

Rennes

Performance Measurement and Verification Protocol (IPMVP).

Project Highlights

The project enables a decentralised energy supply for the City of Rennes using an existing district network. The plant will allow 21,000 households in the city both to save money with the new energy source and to increase their environmental sustainability.

The biomass required is locally sourced within a 100 km radius of the plant.



Bolloré

Project Profile

The French company Bolloré, which provides car-sharing services for electric cars via Autolib'in Paris, Bluely in Lyon and Bluecub in Bordeaux, signed a bond agreement worth€30.0 m with the eeef in 2013. The bond has a maturity of five years and was issued by Bolloré and purchased by the eeef.

The eeef's investment will be used to finance electric cars and the infrastructure (i. e., charging stations, rental places, etc.) required for Bolloré's European electric car rental concessions, which the company won via public tenders.

This transaction forms part of an urban transportation initiative for the cities of Paris, Lyon and Bordeaux.

Project Highlights

The project started in Paris, providing the city with environmentally friendly electric cars with the support of the city council. After the trial period and when a track record had been established, Bolloré targeted Lyon and Bordeaux for the initiative. The funding from the eeef's bond has mainly been used in these regions.

Key figures	
Country	France
Sector	Public urban transportation
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
Estimated tCO ₂ e emission savings (p. a.)	10,758

Paris, Lyon and Bordeaux are paving the way for other cities to follow their example of an environmentally friendly car-sharing cheme to combat climate change and contribute to the use of innovative forms of alternative technology.

At the end of 2015, Bolloré had 3,944 cars and 6,493 charging stations installed across the project's three locations.

1 Paris

Lyon 2

Bordeaux



Société Publique Locale d'Efficacité Energétique

Project Profile

The Société Publique Locale d'Efficacité Energétique (SPL) signed a mid-term loan agreement for €5.0 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 Rhône-Alpes region 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 for public buildings (secondary schools and gymnasiums), including renewable energy production.

SPL has been in the implementation phase of retrofitting the first eight schools, five in the region of Rhône-Alpes and three in the city of Bourg-en-Bresse, in cooperation with local authorities. The implementation is expected to be completed in September 2016.

Two additional projects are currently under implementation, including a library and a city hall. The total project value for the 10 retrofits is expected to be around ≤ 25.0 m. The annual CO₂e savings are expected to be 1,001 t, with primary energy savings of 4,244 MWh.

Key figures	
Country	France
Sector	Energy efficiency/retrofit
Type of investment	Senior debt
Total project size (€m)	25.0
eeef investment size (€m)	5.0
Financial close	3 April 2014
Maturity	5 years
Estimated tCO ₂ e emission savings (p. a.)	1,001

Rhône-Alpes

Project Highlights

The SPL is expected to lead a new and ambitious thermal renovation initiative – an area commonly seen to attract few investments. By setting the example of upgrading the public buildings and going beyond standard thermal regulations, the region aims to achieve its 2050 objectives for energy consumption and greenhouse gas reduction.

On the left picture: Amblard School before renovation On the right picture: Amblard School after renovation



City of Venlo

Project Profile

The City of Venlo is financing a street lighting upgrade which will equip around 16,000 lighting points with light emitting diode (LED) lights, representing approx. 73% of the total lighting points of the city.

Venlo has 100,000 inhabitants and was among the first cities in the Netherlands to initiate climate and energy programmes, starting in 2004. The city's existing public lighting is the biggest consumer of electricity on its electricity bill. The city therefore prioritized upgrading its street lighting in order to reduce its energy consumption and CO_2 e emissions as well as to save costs for the public budget.

The project is further proof of the city's commitment to environmental sustainability, including its support for the principle of "cradle-to-cradle" as one of the first cities in the world.

Key figures	
Country	Netherlands
Sector	Energy efficiency/street lighting
Type of investment	Senior debt
Total project size (€m)	9.1
eeef investment size (€m)	8.5
Financial close	03 April 2014
Maturity	15 years
Estimated tCO ₂ e emission savings (p. a.)	673

Project Highlights

The Venlo transaction is the Fund's first direct lending structure to a municipality, and it demonstrates the wide variety of financial products the eeef can offer.

This street lighting project is linked to the preparation works resulting from technical assistance, Venlo benefited from funding from the European Commission technical assistance facility (EC TA Facility). This enabled the city to tender and select the equipment manufacturer for the provision of the LED equipment.



Universidad Politécnica de Madrid



Project Profile

UPM is a prestigious university in the Comunidad de Madrid with 20 schools across two sites and is recognised as a Campus of International Excellence. In total its Campus includes 32 buildings in total for the current 18 faculties and governing buildings, which over 35,000 students use annually.

Following directive 2012/27/UE of the European Parliament, in June 2015 UPM invited energy service company (ESCO) to present their proposals to improve the system of heat and water supply across the campus and to reduce CO_2e emissions while switching to a cleaner fuel source. In August 2015, the project was awarded to Enertika – Ingeniería y Servicios de Eficiencia Energética S. L., an engineering company specialising in energy generation, energy efficiency and remote management services.

Within three months of the financial close, Enertika delivered an integrated balanced heat system combining natural gas boilers, distributed valve mesh and solar thermal-heating systems for uniform water and space heating.

The existing 63 gas oil boilers, consuming on average 946,479 litres per year of gas oil, were replaced with 66 natural gas boilers in all 32 buildings of the campus. To ensure uniform

Key figures			
Country	Spain		
Sector	Energy efficiency – building retrofit		
Type of investment	Forfaiting loan		
Total project size (€m)	2.8		
eeef investment size (€m)	2.5		
Financial close	18 November 2015		
Maturity	9 years		
Estimated tCO ₂ e emission savings (p. a.)	1,326		

heating of water and space, 6,800 thermal valves were installed, along with 34 thermal solar panels for hot water production. UPM also benefits from the installation of a remote monitoring system to ensure 24/7 reporting and control of the new installations, including a total guarantee for these measures and Enertika's corrective and preventive maintenance services for the entire nine years of the project duration.

Estimated annual project savings include primary energy savings of 3,379 MWh per year (35 % in comparison to baseline) and 1,326 tCO₂e per year (51 % in comparison to baseline).



There were no delays to the project implementation.

The project demonstrated the ability of public and private players to align efforts to quickly improve energy efficiency.



2015 Activities Report: Funding



The European Energy Efficiency Fund S. A., SICAV-SIF was initiated by the European Commission in cooperation with the European Investment Bank. The initial capital provided by the European Commission (≤ 125.0 m) was increased by contributions from sponsors European Investment Bank (≤ 75.0 m) and Cassa Depositi e Prestiti (≤ 59.9 m) as well as the Fund's Investment Manager, Deutsche Bank (≤ 5.0 m).

The eeef then started its fundraising activities, aiming to ensure constant investor commitments from the private and public sectors and to grow the Fund sustainably.

Funding Situation

Deutsche Bank (DB) 1.4 m 1.0 % European Cassa Depositi e Prestiti SpA (CDP) 16.9 m 12.4 % European Commission (EC) 97.0 m 71.1 % European Furopean Sank (EB) 21.2 m 15.5 %

Shareholder structure based on called amounts







CURRENT DIVISION OF SHARE CLASSES ACCORDING TO CALLED AMOUNTS AND REMAINING COMMITMENTS

	Total commitment in €	Drawn in €	Undrawn in €
Notes	-	-	-
A Shares	116,900,000	32,881,087	84,018,913
B Shares	23,000,000	6,602,435	16,397,565
C Shares	125,000,000	97,044,383	27,955,617
Total	264,900,000	136,527,905	128,372,095

The eeef funds itself across three different share classes: class C Shares, which represent the Fund's first loss piece and how shares are referenced, class B Shares, which rank senior to the class C Shares, and class A Shares, which rank senior to the other two share classes but junior to all of the Fund's other creditors.

All these share classes bear voting rights. While class C Shares are essentially designed to corre-

spond to the expectations of governments, the other two share classes are of a more commercial nature and are currently held by development banks and the Investment Manager Deutsche Bank.

The Fund can issue notes designed for private investors. Private investors are senior to all share investors but bear no voting rights.

Report on the European Commission Technical Assistance Facility



The Fund has been benefiting from the European Commission technical assistance facility (EC TA Facility), which supports the mission and strategic direction of the Fund and is primarily for assisting public partner institutions in their project development activities in preparing valuable investments. The application phase for securing grants under the EC TA Facility ended on 31 March 2014. In total, over €14.0 m in EC TA Facility funds have been allocated to support the project development work of 16 public beneficiaries in eight different countries.

European Commission Technical Assistance Facility

Purpose

To raise municipal awareness of lowering or even neutralising their carbon footprints, the European Commission provided the eeef with a technical assistance facility (EC TA Facility). This facility aims to accelerate investments in the fields of energy efficiency, small-scale renewable energy and clean urban transport.

The EC TA Facility supports its beneficiaries, which are exclusively public entities, in developing their green project ideas further by providing grants for up to 90% of the total development costs, subject to subsequent partial financing by the eeef.

The technical assistance grants aim to facilitate project implementation by supporting the preparation of feasibility studies, business plans, tendering processes, etc.

Activities

By 31 December 2015, the Fund had provided technical assistance funds to 16 public authorities for their project development activities to the total sum of €14.2 m.

Please see below for the technical assistance projects:

- Ore Valley Housing Association (Scotland) decentralised district heating powered by biomass
- City of Santander (Spain) public lighting, building retrofit
- City of Córdoba (Spain) public lighting, building retrofit
- 4. Rhône-Alpes (France) building retrofit
- Cabildo of La Palma (Spain) public lighting, building retrofit, clean urban transport
- Ringkøbing-Skjern (Denmark) decentralised district heating powered by biomass
- City of Marbella (Spain) public lighting, building retrofit, photovoltaic

Total volume of technical assistance grants allocated since the Fund's inception:

0,857.15 m

36 eeef Annual Report 2015


Potential project volume of €454.6 m created by the European Commission technical assistance funds by 31 December 2014

- City of Terrassa (Spain) public lighting, building retrofit, clean urban transport, renewable energy
- City of Elche (Spain) public lighting, building retrofit, clean urban transport, renewable energy
- **10.** City of Venlo (Netherlands) public lighting
- University of Liège (Belgium) building upgrades
- **12.** Limerick and Clare Education and Training Board (Ireland) – building upgrades, renewable energy, micro wind
- Groupement de Redéploiement
 Economique de la province de Liège
 (Belgium) building upgrades
- 14. Alentejo (Portugal) public lighting, building retrofit, clean urban transport, renewable energy, biomass
- **15.** Zaanstad (Netherlands) open, smart energy network
- **16.** Roscommon (Ireland) biomass district heating

Outlook

The eeef successfully provided funds for the project development works of public authorities under the European Commission technical assistance facility (EC TA Facility) through 31 March 2014. These investment programmes represent attractive investment opportunities for the Fund in the upcoming years.

In addition, the Fund's sustainable structure allows for creating the eeef's own technical assistance facility (eeef TA Facility), depending on the income waterfall of the Fund. In 2014, the Management Board decided to allocate initial funding to the eeef TA Facility to kickstart it. Based on the 2015 income waterfall of the Fund, further funds were allocated to the eeef TA Facility. It is envisaged that the facility will provide these new TA funds to entitled public beneficiaries via a call for tender in 2016. Over the coming years, it is expected that the eeef TA Facility will further grow via the income waterfall of the Fund, as well as potentially by receiving contributions from donors.

Overview of Technical Assistance Beneficiaries

CITY OF SANTANDER (SPAIN)	
Location	Region of Cantabria, Spain
Total investment volume	€13.0 m
TA amount by eeef	€452,560
Closing date	26 December 2012



Project description

Upgrading the municipality's outdoor lighting network and public buildings

Project development services financed by the eeef

- Comprehensive inventory of the street-lighting infrastructure
- Energy audit for municipal buildings
- Definition of the masterplan for the lighting strategy
- Preparation and evaluation of ESCO tender, procuring the legal advice to prepare the contract with the ESCO
- Measuring and verification of savings by establishing a protocol for monitoring energy management

Expected results

Energy savings: 8,795 MWh GHG emissions reduction: 2,465,406 kg CO₂e/year

CABILDO OF LA PALMA (SPAIN)	\$	
Location	Canary Islands, Spain	Read in the second second
Total investment volume	€30.1 m	
TA amount by eeef	€871,941	
Closing date	19 June 2013	
Project description		

Upgrading of public lighting to LED technology; further refurbishment of lighting installations in public buildings and upgrading of cooling systems; installation of rooftop PV; partial replacement of high-pollution public vehicles

Project development services financed by the eeef

- Technical analysis of the energy facilities used in buildings (measurement of energy parameters, estimation of baseline consumption, proposition of savings measures)
- Inventory of outdoor public lighting
- Preparation of a tender process for the ESCO selection and outlining of the contractual basis
- Elaboration of the Sustainable Urban Mobility Plan and provision of a study to implement charging points for electric cars Establishment of measurement and verification (M&V) in accordance with the International Performance Measurement and Verification Protocol (IPMVP)

Expected results

Energy savings: 6,353 MWh GHG emissions reduction: 3,297,739 kg CO₂e/year

CITY OF CÓRDOBA (SPAIN)		A + M
Location	Region of Andalucía, Spain	
Total investment volume	€18.0 m	
TA amount by eeef	€754,240	
Closing date	10 May 2013	
Project description		

Upgrade of the municipality's outdoor lighting network and public buildings; installation of rooftop PV

Project development services financed by the eeef

- Defining the upgrade requirements (derived from quantified savings measures in street lighting and public buildings sector)
- Support in preparing, conducting and evaluating tenders
- Measuring and verification of the savings by establishing a protocol for monitoring energy management

Expected results

Energy savings: 25,569 MWh **GHG emissions reduction:** 6,823,690 kg CO₂e/year

CITY OF TERRASSA (SPAIN)	*	SE LANGE
Location	Region of Catalonia, Spain	
Total investment volume	€18.5 m	
TA amount by eeef	€623,467	
Closing date	6 December 2013	
B. C. M. L. M. M.		

Project description

Upgrade of the street lighting; public building renovation; small-scale renewable energy installations and electric vehicle charging stations for public transportation

Project development services financed by the eeef

- Tender to contract a consulting company to conduct a feasibility analysis on the street lighting and municipal buildings, renewable energy installations and mobility
- Completion of energy audits in order to define the minimum measures to be carried out by the ESCO
- Procurement of legal advice in order to establish a contract with the ESCO
- M&V plan, to be outlined in accordance with the IPMVP

Expected results

Energy savings: 20,886 MWh GHG emissions reduction: 8,801,544 kg CO₂e/year

Overview of Technical Assistance Beneficiaries

(continued)

CITY OF MARBELLA (SPAIN)	B	
Location	Region of Andalucía, Spain	
Total investment volume	€12.5 m	
TA amount by eeef	€456,662	
Closing date	18 December 2013	

Project description

Installation of rooftop PV; retrofitting of public lighting and traffic lighting systems; municipal building refurbishment; installation of communication network, controls and monitor systems

Project development services financed by the eeef

- Launch energy efficiency programme with the city authority in order to achieve CO₂e reductions
- Promotion of public-private partnership to boost the investments required to make the energy efficiency improvements
 Investment programme is centred on a street lighting upgrade, efficiency upgrades in all public schools, intelligent management of the energy used and renewable energy installations

Expected results

Energy savings: 11,271 MWh GHG emissions reduction: 4,962,417 kg CO₂e/year

CITY OF ELCHE (SPAIN)	۱	
Location	Region of Valencia, Spain	A-2
Total investment volume	€20.2 m	
TA amount by eeef	€782,367	
Closing date	20 December 2013	
Project description		

Installation of rooftop PV; vehicle replacement; retrofitting of the street lighting infrastructure; municipal buildings refurbishment; establishment of the savings verification mechanism

Project development services financed by the eeef

- Support for energy efficiency projects and renewable energy installations, as well as upgrades in the area of transportation
- Replacement of currently used diesel boilers and implementation of the use of agricultural waste
- City plans to install PV systems to produce electricity for own use
- Renewal of street lighting infrastructure
- Replacement of 100% of police vehicles with hybrid vehicles, if feasibility study shows positive outcome

Expected results

Energy savings: 19,521 MWh **GHG emissions reduction:** 9,905,954 kg CO₂e/year

COMUNIDADE INTERMUNICIPAL DO ALENTEJO CENTRAL (CIMAC) (PORTUGAL)	O cimac	The section of
Location	Alentejo, Portugal	PD ITT AS
Total investment volume	€12.0 m	
TA amount by eeef	€540,000	
Closing date	2 September 2014	

Project description

Building retrofit; upgrade of street lighting; public vehicle replacements; implementation of micro renewable energy plants

Project development services financed by the eeef

- Technical development in project development phase (completion of initial studies, energy audits, etc.)
- Legal advice to define the public procurement process
- · Definition of a measurement and verification system to measure savings

Expected results

Energy savings: 30,718 MWh GHG emissions reduction: 5,316,272 kg CO,e/year

RHÔNE-ALPES REGION (FRANCE)		
Location	Region of Rhône-Alpes, France	BERTS ATTENDED
Total investment volume	€25.0 m	A SALA BOA MARANA MARANA
TA amount by eeef	€1,125,000	the second second
Closing date	4 November 2013	Server al m
Project description		

Establishing a public ESCO Société Publique Locale d'Efficacité Enérgetique (SPL) to promote energy efficiency investments – primarily for the renovation of public school buildings

Project development services financed by the eeef

- Support for the legal setup of the ESCO SPL, financial and business planning and SPL's accounting and administrative requirements for setup (especially to cover personnel costs)
- Technical feasibility studies to prepare total potential investments of €50.0 m, outline technical specifications, manage the tender process and prepare contractual documentation with the companies to realise the renovations and maintenance work

Expected results

Energy savings: 4,244 MWh GHG emissions reduction: 10,010,00 kg CO₂e/year

Overview of Technical Assistance Beneficiaries

(continued)

Total investment volume €43.5 m TA amount by eeef €2.000.000	GROUPEMENT DE REDÉPLOIEMENT ECONO- MIQUE (GRE) OF LIÈGE (BELGIUM)		
TA amount by eeef €2.000.000	Location	Liège, Belgium	THE REAL PROPERTY AND ADDRESS OF THE PARTY O
	Total investment volume	€43.5 m	Construction of the local division of the lo
Closing date 14 August 2014	TA amount by eeef	€2.000.000	
	Closing date	14 August 2014	

Project description

Retrofit projects using EPC models for a minimum of 90 public buildings as well as upgrade of street lighting

Project development services financed by the eeef

- · Development of a customised project structure; preparation of the business plan, operational and contractual schemes
- Completion of energy audits to select buildings for the retrofit program
- Preparation of tender documents, review of offers
- Acting as facilitator preparation of draft project documents, supporting selected technical solutions, analysis of offers and negotiations

Expected results

Energy savings: 28,208 MWh GHG emissions reduction: 6,030,000 kg CO,e/year

UNIVERSITY OF LIÈGE (BELGIUM)	Université 👢	
Location	Liège, Belgium	CONTRACTOR OF THE PARTY OF
Total investment volume	€30.0 m	Same and a second se
TA amount by eeef	€1,500,000	Containing with many
Closing date	18 June 2014	- and a second
Project description		

Retrofitting of 15 buildings on the university campus as a pilot project; remaining 85 buildings to follow in the next step

Project development services financed by the eeef

- Establishment of an energy audit to identify actions leading to potential energy savings in heat consumption and CO,e emissions
- Complete energy audits for selected buildings
- Expert legal and financial assistance to organise the works
- Configuring the technical requirements and specifications to be included in the public procurement and identified during the energy audit

Expected results

Energy savings: 33,556 MWh GHG emissions reduction: 3,201,000 kg CO,e/year

CITY OF VENLO (NETHERLANDS)		
Location	Venlo, the Netherlands	
Total investment volume	€9.1 m	1 A 44
TA amount by eeef	€425,000	and the second as
Closing date	6 January 2014	AND STRATES

Project description

Retrofitting of public lighting (approximately 16,000 lighting points) and traffic light systems

Project development services financed by the eeef

Support for the additional efforts of the city authority's employees to implement street lighting upgrade
Coordination of the tender process for selecting the equipment manufacturer and installation works with the ESCO

Expected results

Energy savings: 1520 MWh/year Primary energy savings: 3,542 MWh/year GHG emissions reduction: 673,000 kg CO,e/year



Project description

Extension of the existing district heating system, including a biomass-fired combined heat and power plant (CHP)

Project development services financed by the eeef

- Development of an open, smart energy and heat network
- Elaboration of the feasibility and tender preparation of the project
- Inventory of the demand and supply side, principle design works, economic analysis of the business plan,
- preparation of draft contracts and tendering procedures and dissemination of knowledge to the Amsterdam Economic Board

Expected results

GHG emissions reduction: 4,500,000 kg CO,e/year

Overview of Technical Assistance Beneficiaries

(continued)

ORE VALLEY HOUSING ASSOCIATION (UK)	۵	
Location	Cardenen, UK	
Total investment volume	€35.0 m	
TA amount by eeef	€1,728,150	
Closing date	20 November 2013	- Louis and a street of
Project description		
Installation of a CHP to provid	e district heating	
Project development services	financed by the eeef	
 Preparation of further mode financial partners Due diligence work for capi Ongoing CDM support for tl Project development work, 	tal financiers' project assessmen	of capital financial options, recruitment of suitable t activity
Energy savings: 787 MWh/ye GHG emissions reduction: 21		
MUNICIPALITY OF RINGKØBING-SKJERN (DENMAR	к) 🛃	
Location	Midtjylland, Denmark	
Total investment volume	€173.3 m	
TA amount by eeef	€1,917,500	
Closing date	25 November 2013	A CARLES CONTRACT
Project description		

Construction of three new biogas plants to be connected with two existing plants in a biogas grid, using animal manure to produce biogas

Project development services financed by the eeef

- Approval of actions and implementation within the framework of municipal legislation, contracts, tenders, etc.
- Tenders of biogas plants, gas grid and other services
- Data collection, financial prospect preparation, approval of accounting data, business model
- (for the sale of gas, biomass purchase platform, analysis and evaluations) • Technical analysis of the biogas plants, grid, grid components
- Environmental, technical, municipal energy planning, visualisation, infrastructure, transport, etc.

Expected results

Energy savings: 89,730,000 kWh GHG emissions reduction: 17,663,000 kg CO₂e/year

LIMERICK AND CLARE EDUCATION AND TRAINING BOARD (IRELAND)	setb	A REAL PROPERTY OF
Location	Limerick, Ireland	Turner All Prime
Total investment volume	€16.4 m	
TA amount by eeef	€335.835	
Closing date	2 July 2014	

Project description

Public building renovation, installation of renewable energy components (biomass and heat-pump systems as well as micro wind generators)

Project development services financed by the eeef

- · Support for the management and provision of project development and technical services
- Design/carrying out of technical review of current energy performance
- Completion of energy audits
- Strategic development and energy-management action plan
- Development of tender specifications and public procurement
- Selection of preferred suppliers and preparation for financing application

Expected results

Energy savings: 5,323 MWh **GHG emissions reduction:** 2,850,000 kg CO₂e/year

ROSCOMMON COUNTY COUNCIL (IRELAND)	3	
Location	Roscommon, Ireland	
Total investment volume	€6.6 m	
TA amount by eeef	€184,275	
Closing date	23 December 2014	
Project description		

Development of a town-wide biomass-fired district heating scheme

Project development services financed by the eeef

- Development of the project, in particular the legal and contractual structures required
- Completion of the procurement process
- Design and scope of the district heating network
- · Confirmation of the biomass fuel supply
- Development of a pre-tender cost plan
- Stakeholder- and customer-base development
- Development of ESCO tender documents/framework
- Procurement of the biomass ESCO via tender documents

Expected results

GHG emissions reduction: 333,000 kg CO₂e/year

Report on the Energy and Greenhouse Gas Emission Savings



eeef projects aim to achieve at least 20% primary energy savings on an annual basis (higher for the building sector) and a 20% reduction of CO_2 equivalents for transport and renewable energy projects.

The quality of the methodology used to calculate the expected savings of projects is crucial. This allows the eeef to ensure its projects satisfy international standards regarding CO_2e and primary energy saving reporting.

Due to the wide variety of technologies included in the eeef's portfolio, the Investment Manager has developed a standardised approach to calculating the project's energy, primary energy and carbon savings for the eeef's most common project technologies.





Primary Energy and Greenhouse Gas Emission Savings 2015

CO₂e and primary energy savings were reported for the entire portfolio of 10 investments for a range of energy efficiency and renewable technologies including CHP biomass, building retrofits and electric vehicles. Once a project has been in operation for a full year, the eeef receives annual audits stating its actual energy consumption. Year-on-year consumption variances are expected due to a number of factors, such as weather and static data, and therefore project savings can change annually. As shown below, these projects achieved total accumulated savings of $181,391 \text{ tCO}_2$ e and 19,541 MWh of primary energy savings through the end of 2015.

	REPORTING THROUGH THE END OF Q4 2015⁵			
PROJECT NAME	CUMULATIVE CARBON SAVINGS (tCO ₂ e)	CARBON SAVINGS (%)	CUMULATIVE PRIMARY ENERGY SAVINGS (MWh)	PRIMARY ENERGY SAVINGS (%)
Jewish Museum Berlin Foundation	3,732	26%	15,420	23 %
University of Applied Sciences Munich	178	6%	5,697	34%
City of Orléans ¹	50,271	71%	-101,020	-41%
University Hospital S. Orsola-Malpighi	23,579	23%	-2,156	-1%
Banca Transilvania ³	41,297	45%	171,751	42%
City of Rennes ¹	40,055	59%	-100,355	-44%
Bolloré	19,021	91%	15,868	16%
Société Publique Locale d'Efficacité Energétique	1,752	60%	7,427	45%
City of Venlo	1,174	59%	6,084	59%
Universidad Politécnica de Madrid	332	51%	845	35%
Totals ²	181,391	57%4	19,541	40 % ⁴

¹ Both the Rennes and Orléans CHP biomass plants are in full operation. In both facilities, the CHP biomass plants are achieving significant carbon savings when compared to baseline (Rennes 59% and Orléans 71%). Both facilities negative primary energy savings are predominantly due to a switch from highly efficient fossil fuel boilers and CHP plants (80% or more) to CHP biomass boilers of around 65–70% efficiency. It is understood that primary energy savings for these projects may improve over time as the biomass plant efficiencies reach their optimum.

² All project savings are calculated following international protocols, including the International Performance Measurement and Verification Protocol (IPMVP) for energy accounting and ISO 14064 for carbon accounting. All methodologies used by the eeef are validated by a global engineering company. Currently, all projects with concrete data are reporting in alignment with these guidelines, and all new projects are aligned with these frameworks. Project savings represent total project investment volumes.

³ The cumulative BT savings represent seven sub-projects. The portfolio's percentage savings are calculated based on all sub-projects using a weighted average methodology.

⁴ For carbon, percentage savings are based on the entire portfolio and calculated using a weighting methodology. For primary energy, percentage savings are calculated using a weighting methodology, but only include projects from the portfolio which provide primary energy savings i.e. renewable energy projects are not included.



CO₂e/Primary energy savings*



* This is a combination of estimated and real data for all projects within the current portfolio.

All projects within the portfolio are reporting CO_2e and/or primary energy savings. Reporting commences from each project's financial close. A total of 16 projects have been reported in 2015 (Banca Transilvania has reported on seven sub-projects).

⁵ There have been changes in numbers from previous version of AR 2015 due to updated data received from Bollore and transition to greenstem[™] reporting tool.

Financial Statements



With a total income of $\leq 3.9 \text{ m}^1$ and total expenses of $\leq 2.8 \text{ m}$, the eeef generated a positive cash result of $\leq 1.1 \text{ m}$ in 2015. 2015 confirmed the Fund's ability to achieve an attractive and sustainable performance. The eeef paid its agreed target dividends to its A and B shareholders. In addition, it paid the first-time complimentary dividends to its shareholders. Due to the eeef's good profit situation, additional cash was available for the eeef TA Facility.

¹ Data has been adjusted to exclude changes in fair value of investments in subsidiaries as well as unrealised profit/loss on derivative instruments. For full details, please refer to the Income Statement.

Balance Sheet

STATEMENT OF FINANCIAL POSITION

(EXPRESSED IN €)

	31 December 15	31 December 14	Difference
ASSETS			
Loans and receivables	106,970,597	87,258,860	19,711,737
Investments in subsidiaries	3,135,573	5,209,747	(2,074,174)
Receivables on subscription	22,358,042	_	22,358,042
Interest receivable	602,064	607,449	(5,385)
Prepaid expenses and other receivables	22,122	42,764	(20,642)
Cash and cash equivalents	6,608,549	7,147,517	(538,968)
Total assets	139,696,947	100,266,337	39,430,610
LIABILITIES			
Derivative financial instruments	1,017,163	1,248,708	(231,545)
Payable on eeef technical assistance facility	287,157	91,177	195,980
Accounts payable and accrued expenses	1,389,058	888,325	500,733
Distribution to holders of redeemable ordinary shares	641,797	509,041	132,756
Net assets attributable to holders of redeemable ordinary A Shares	32,881,080	27,666,770	
Net assets attributable to holders of redeemable ordinary B Shares	6,602,445	5,577,245	
Net assets attributable to holders of redeemable ordinary C Shares	96,878,247	64,285,071	
Total liabilities	139,696,947	100,266,337	39,430,610

Income Statement

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	SED II	

	For the year ending 31 December 2015	For the year ending 31 December 2014
INCOME		
Interest income	3,853,473	3,517,479
Commission and fees income	61,332	193,809
Change in fair value of investments in subsidiaries	-	2,435,117
Change in unrealised gain on derivative instruments	231,545	-
Other income	22,000	-
Total income	4,168,350	6,146,405
EXPENSES		
Direct operating expenses	(2,036,711)	(1,628,479)
Change in fair value of investments in subsidiaries	(2,074,174)	_
Change in unrealised loss on derivative instruments	-	(1,248,708)
Performance fees	(360,133)	(154,342)
eeef technical assistance facility fees	(195,980)	(91,177)
Interest expenses	(212,116)	(82,500)
Other expenses	-	(20)
Total operating expenses	(4,879,114)	(3,205,226)
Operating profit	(710,764)	2,941,179
Distribution to holders of redeemable ordinary A Shares and B Shares	(641,797)	(509,041)
Attributable to holders of redeemable ordinary C Shares	1,352,561	(2,432,138)
Total comprehensive income for the year	_	_

Statement of Changes in Net Assets

STATEMENT OF CHANGES IN NET ASSETS ATTRIBUTABLE TO HOLDERS OF REDEEMABLE ORDINARY SHARES (EXPRESSED IN €)

	Net assets attributable to shareholders
As of 31 December 2013	36,114,071
Issue of redeemable shares	58,982,877
Redemption of redeemable shares	_
Increase in net assets attributable to shareholders from transactions in shares	58,982,877
Increase in net assets from operations attributable to holders of redeemable ordinary C Shares	2,432,138
As of 31 December 2014	97,529,086
Issue of redeemable shares	40,185,247
Redemption of redeemable shares	-
Increase in net assets attributable to shareholders from transactions in shares	40,185,247
Increase in net assets from operations attributable to holders of redeemable ordinary C Shares	(1,352,561)
As of 31 December 2015	136,361,772



SUPPLEMENTARY INFORMATION

	31 December 2015	31 December 2014	31 December 2013	
NUMBER OF SHARES OUTSTANDING				
Class A Shares – Tranche 1	328.8108	276.6677	104.1473	
Class B Shares – Tranche 1	132.0489	111.5449	43.7053	
Class C Shares – Tranche 1	1,569,960.9156	1,029,853.9117	391,695.4687	
NET ASSET VALUE PER SHARE CLASS (EUR)				
Class A Shares – Tranche 1	32,881,080	27,666,770	10,414,730	
Class B Shares – Tranche 1	6,602,445	5,577,245	2,185,265	
Class C Shares – Tranche 1	96,878,247	64,285,071	23,514,076	
NET ASSET VALUE PER SHARE (EUR)				
Class A Shares – Tranche 1	100,000.00	100,000.00	100,000.00	
Class B Shares – Tranche 1	50,000.00	50,000.00	50,000.00	
Class C Shares – Tranche 1	61.71	62.42	60.03	

Cash Flow Statement

STATEMENT OF CASH FLOWS

(EXPRESSED IN €)

	For the year ending 31 December 2015	For the year ending 31 December 2014
Operating profit after distributions to holders of redeemable ordinary A Shares and B Shares	(1,352,561)	2,432,138
NET CHANGES IN OPERATING ASSETS AND LIABILITIES		
(Increase) in fair value of investments in subsidiaries	2,074,174	(2,435,117)
(Increase)/decrease in prepaid expenses and other receivables	20,642	28,268
(Decrease)/increase in accounts payable and accrued expenses	500,733	(7,585,526)
Increase in unrealised loss on derivative financial instruments	(231,545)	1,248,708
Increase in contribution to the technical assistance facility	195,980	91,177
Increase in interest receivables	5,385	(550,937)
Receivables on subscription	(22,358,042)	-
Distributions paid to holders of redeemable ordinary shares	132,756	395,005
Net cash flow (used in)/from operating activities	(21,012,478)	(6,376,284)
CASH FLOWS USED IN INVESTING ACTIVITIES		
Increase in loans and receivables financial assets	(19,711,737)	(48,319,370)
Net cash flow used in investing activities	(19,711,737)	(48,319,370)
CASH FLOWS FROM FINANCING ACTIVITIES		
Issue of redeemable ordinary shares	40,185,247	58,982,877
Net cash flow from financing activities	40,185,247	58,982,877
Net increase/(decrease) in cash and cash equivalents	(538,968)	4,287,223
Cash and cash equivalents at beginning of the year	7,147,517	2,860,294
Cash and cash equivalents at end of the year	6,608,549	7,147,517

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