



EU Mapping of Financial Instruments



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Priority-Objective 1-2

Axe 1: Strengthening innovation capacities

Objective 1.2: Strengthening strategic cooperation between economic development actors and public authorities

Mapping of EU-level Programmes, Financial Instruments, Institutions and Networks Report 3.1A- EU Mapping

By



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Introduction

Energy sector SMEs in MED area are considered a strategic development asset for the region because of their strong link with natural resources available (from sun, to wind or water) and the increasing demand of energy coming from the industrial sectors and human communities.

The link between energy sectors SMEs and sustainable development is clear to all actors working for the economic development of MED countries, and the alignment of National Energy Plans to the EU2020 Energy Plan is ongoing. Moreover, over the past number of years, the sectors have been fully supported both by EU and National funds (mainly through grant instruments) and many incentives – both related to the implementation of innovative technology processes and the production of RES – triggered the birth of energy saving and energy efficiency SMEs and clusters in many areas together with companies in charge to provide energy services (ESCOs) both to businesses and citizens. It is according to this context that Public (EU and National/Regional Authorities) and Private investors (mainly venture capital, business angels network and Banks) have approached the sectors, even if with mainly generic risk evaluation instruments. Generally speaking, the market of capitals and subsidies for the sector is well developed in Europe (even if less so in southern Europe). On the other hand, it was clear to all investors that the energy sector development capacity is strictly related to their dependence on regulation and subsidies by EU, National and local institutions, and this variable has a limiting factor on the decisions to be taken. In fact, this scenario, particularly in France, Spain, Italy and Greece, is now changing due to the financial crisis and the following reduction of public spending and decrease in availability of money to investment in the sectors. Due to this situation, policy makers and investors are forced to stop or drastically reduce investments and incentives.

The FIREMED project intends to approach both Local Development Plans and Operators in charge to assist energy sector SMEs. For the former, the Project is intending to elaborate innovative models of funding instruments to be introduced in their Local Development Plans according to the Innovative Financial Instruments that are going to be set up at EU Level for the Programme Period 2014-2020. For the latter, FIREMED intends to stimulate both a high level of attention, thanks to dedicated services and instruments, and an increased and favourable attitude to investment in the sectors, thanks to a more detailed knowledge of the energy sectors capacities and potentialities. The financial schemes developed by the Project and transferred through feasibility studies into development plans, and the services implemented – dedicated both to financial operators and energy sectors SMEs – will constitute an overall model elaborated by the FIREMED partnership, in order to support the development of entrepreneurship in MED Area combining private and public efforts.

In order to successfully do so, the FIREMED project must have a coherent and efficient communication plan in place in order to reach the intended targets and inform regularly of the work being carried out in the project, as well as the benefits that these stakeholders can reap from the successful implementation of the project, as well as their strong implication in its success.

While the political and economic agents are crucial to the project execution, and will therefore be actively informed on the execution of the different phases of the project, it is of the utmost importance that the project communicates its objectives and results to the larger public, on the one hand, in order to reaffirm the importance of consumer choice in the energy sector and the array of sustainable energy suppliers on the market, while, on the other hand, to emphasize the work being

undertaken by public and private actors in their territories aimed at finding innovative solutions to global issues. This document will lay out the communication plan for the FIREMED project, detailing precise objectives and specific target groups, which will ensure the effective communication of the projects activities and results. It will elaborate on the roles of each partner in order to attain these objectives and will specify the tools at the disposal of the consortium to reach these target audiences, as well as how best to employ these communication tools. In addition, this document will also specify the indicators which will be essential to ensure the accurate continual evaluation of the work package activities, and the appropriate monitoring of quality in conjunction with the annual reports. This will allow the detection of potential weaknesses and to apply corrective measures in a timely manner, all the while ensuring a strong, clear and coherent message at the heart of the FIREMED project.

1. Context

This section will situate the project in terms of economic and geographic context, elaborating on the need of the project and identify the stakeholders and economic agents who will benefit from and/or influence the project. The FIREMED project covers the territories of 12 MED Regions (Veneto, Lombardy, Provence-Alpes-Côte d'Azur, Rhône-Alpes, Andalucía, Catalonia, Valencia Peloponnese, South Aegean, Cyprus, Istria, Podgorica) from 8 countries (6 EU & 1 IPA): Italy, France, Spain, Greece, Cyprus, Slovenia, Croatia, all aiming to cope with the challenges posed by energy demand increases, securing supply and environmental sustainability, via energy solutions concerning renewable energy and energy efficiency, according to the targets set by Europe 2020 flagship initiative for a resource-efficient Europe, the new Energy Efficiency Action Plan and the Roadmap 2050 process to further transform the European economies towards carbon reduction and resource efficiency.

Furthermore, the areas participating are characterized by complementary profiles with high number of SMEs, out of which a significant amount is linked directly or indirectly in the energy supply chain. These areas have different experiences concerning initiatives, tools, services & financial instruments targeted to strengthen the competitiveness and innovation of the SMEs & strategic cooperation between economic development actors and public authorities. The attitude to applying financial instruments to energy supply chain SMEs in order to enhance technological & non-technological innovation is different in the selected participating areas, but the partnership identified common needs to improve the SMEs practices and the quality of financial instruments & services offered, as well as to enhance the public strategic planning & public-private investments towards renewable energy solution & energy efficiency related activities. The sharing of common needs and the joint vision on a sustainable & flourishing economic future by taking advantage of new innovative tools & models brought together all fifteen partners to work in close collaboration designing and implementing added value activities to generate synergies at transnational level. Wide geographical coverage will leverage the dynamic effect of FIREMED project and ensure its sustainability.

Finally, the selected partners will involve regional, national & EU stakeholders of the energy supply chain, have direct access to SMEs & policy makers at local, regional & EU-MED levels and access to networks, making them able to capitalise and transfer knowledge and practices at national and transnational level.

2. Objectives

The overarching communication objectives of the FIREMED project are the following:

- Promote an ever-more innovative and favourable business climate in the renewable energies sector.
- Facilitate access to finance for renewable energy sector SMES.
- Raise awareness among energy sector agents and political institutions of the positive results and potentialities generated by the project.
- Creating synergies with other similar initiatives to create multiplier effects through strong cooperation.
- Communicating both internationally and locally in order to ensure the highlighting the positive contributions and impact of initiatives co-financed by the EU in the MED area.

Specific Objectives:

- Engaging with energy sector stakeholders, encouraging their active interaction and participation in the projects activities.
- Enabling relevant civil-servants and elected regional/local politicians to become aware of, and to apprehend the results of the FIREMED initiatives to develop similar projects at the local level.
- Communicate the project extensively and efficiently on a programme level, by joint communication activities with similar initiatives from the MED, Alpine Space and ENPI programmes, and by coordinating closely with the MED Programme communication team in order to disseminate upcoming activities and results.
- Generating awareness and shifting perceptions among the general public regarding available, market-ready, alternative energy solutions.
- Ensuring the appropriate communication by all projects partners of the MED programme and EU/ERDF co-financing.

3. Scope

The purpose of this report is to identify and map the different financial instruments and programmes in the EU as well as the financial providers such as Institutions and Organisations for the Energy Sector, with the aim to facilitate access to finance for SME's in that sector.

Financial Instruments deployed in the different EU programmes are key enablers of EU policy, providing financial support but, at the same time, attracting private investors with the aim of promoting and contributing to inclusive and sustainable economic growth.

One of the EU strategic regions for the Renewable Energy Sector is the Mediterranean Region, with its rich, accessible natural resources particularly in terms of solar and wind energy. However, increased investment and targeted financial levers are necessary to fully tap the potential of the region. Furthermore, increased linkages with the southern shores of the Mediterranean are creating fertile grounds for cooperation and investment projects of mutual benefit for the development of the entire Mediterranean basin. Some important key programmes help to remove barriers to trade and invest between both the EU and the Southern Mediterranean as the Euro-Mediterranean partnership, led by the Union for the Mediterranean, in aim to establish a common area of peace, stability, and shared prosperity in the Euro-Mediterranean region, with its “Mediterranean Solar Plan” of particular interest. The ENPI CBC MED Programme is also making very positive steps in this direction, promoting joint initiatives, transfer of knowledge and technology, as well as sharing best practices among EU states and the Mediterranean Partner Countries.

In this regard, the scope of this document intends to identify the panorama of instruments and support service and organisations available to EU SMEs, but also extends to instruments which can also be accessed by SMEs from the southern Mediterranean.

4. Methodology

This EU mapping report of financial instruments has been drawn up jointly by the work of different desk research done by PP2 Chamber of Commerce of Venice, PP3 – Finlombarda, PP5 - Agence Régionale du Développement et l’Innovation (ARDI) -Rhones – Alpes, PP9 – Cyclades Chamber of Commerce and PP12- Association of Mediterranean Chambers of Commerce and Industry (ASCAME).

From the research of the different partners, this mapping activity has been able to identify the state of the art of the existing EU-level programme networks and institutions that operate financial instruments and provide services intended to support energy efficiency and renewable energy sources.

This mapping has been done by identifying the panorama of EU-wide stakeholders composed of programmes, funds, institutions, networks, industry bodies, KICs, clusters etc., which were suitable for inclusion in this report and by cataloguing the different initiatives found and presenting them in the form of a synthetic report.

Furthermore, different European Financial Institutions such as the EIG and the European Bank for Reconstruction and Development (EBRD) have been approached in order to accurately present the financial information included in this report.

A. INSTRUMENTS

Introduction

Financial instruments of the different EU Institutions are placed at the service of SME's with the aim of facilitate access to finance for investment projects. The main instruments identified for SME's of the Energy Sector are: Grants, Credit Guarantee Schemes, Microfinance Loans, Intermediate Loans, Soft Loans, Mezzanine Capital, Seed Funding and Venture Capital.

Moreover, it should be noted that blended instruments are becoming an important financial mean in the funding large-scale projects, using a different combination of financial instruments in order to provide effective and efficient mechanisms of finance. This practice is outside of the scope of this mapping, as most part of these blended instruments are not accessible for SMEs.

i. Grants

Grants are direct financial contributions from the EU Budget, led by the European Commission, in the form of non-repayable funds, intended to third parties that are engaged in external activities, such as businesses, research centres and universities with the aim of moving certain Renewable Energy Technologies such as wind / wave / tidal forward to commercialization.⁴

ii. Credit Guarantee Schemes

Credit Guarantee Schemes are a financial instruments used to provide guarantees to groups which have difficulty accessing credit in the financial markets, by covering a share of the default risk of the loan. Covering the risk of default from the borrower, the lender's risk is lower and allows recovering all or part of the value of the guarantee.

There are four different forms of Credit Guarantee Schemes:

- Public Credit Guarantee Schemes are established by public policy. They are managed by private organizations or administrative units of the government. In case of a loan default, the guarantee is paid by the government.
- Corporate Credit Guarantee Schemes are normally operated by the private sector as banks or chambers of commerce.
- International Schemes are combining the Public and Corporate Credit Guarantee Schemes with technical assistance.
- Mutual Guarantee Schemes are operated by private and independent organisations directed by borrowers to limited access to bank loans.

⁴ Website of the European Commission

In Europe, the European Investment Fund is the leading provider of Guarantee & credit enhancement Securisations, providing financing to SME's or guarantees. The EIF provides two lines of products:

- Credit Enhancement / Securisations
- Guarantee / Counter guarantees for portfolios of micro-credits, SME loans and leases.

In Europe, the European Investment Fund is the leading provider of triple **A-rated** credit enhancement in SME securitisations.⁵

iii. Loans

Loans are often lent by Institutions to individual projects that serve strategic interests (i.e. renewable technologies, clean tech etc.). Generally speaking, the objective of the loan is not to cover the costs of the project, but in order to leverage private funds and reduce risk to investors.

Soft Loans/Direct

A Soft Loan is loan with no interest or below market rate of interest, made by multinational development banks to developing countries that would be unable to borrow at the market rate. Soft loans are typically long term amortization schedules and lower interest rates than conventional banks loans.

The European Investment Bank invests in programmes intended for national or local public sector bodies, most frequently regarding infrastructure, energy efficiency/renewables, transport and urban renovation. The projects in which the EIB invest, typically has a total investment cost of over EUR 25m, and are supported with the objective to attract other investors. These loans can cover up 50% of the total cost for both public and private sector promoters, but on average this share is about one-third.⁶

Intermediated Loans

Intermediated loans are loans granted by banks and other intermediaries which subsequently “on-lend” to final beneficiaries as SME's, Mid-Caps, large businesses, local authorities, with a total investment cost less than EUR 25m.⁷

The objectives are to increase growth and employment potential, economic and social cohesion, environmental sustainability and action for climate resident growth. The involvement and support from EU financial Institutions as the EIB or the EIF through the financial Intermediaries are crucial to ensure and protect the financial guarantees in case of a default or bankruptcy from the borrowers.

⁵ Website of the EIF

⁶ Website of the EIB

⁷ Website of the EIB

Microfinance

Microfinance is a small loan up to €25 000, granted to businesses with fewer than 10 employees to generate income and engage productive activities and individuals (unemployed in aim to start their own businesses⁸ or low-income individuals). The EU only provides to financial intermediaries guarantees, loans and equity in order to make equity finance available.⁹

The definition of “microcredit” by the European Commission (EC) is twofold:

- A business microloan is a loan under 25.000 Euro to support the development of self-employment and microenterprises.
- A personal microloan (under 25.000 Euro) for covering clients’ personal or consumption necessities such as rent, personal emergencies, education, and personal consumption needs.

An important key player in the European microfinance sector is the European Investment Bank (EIB). Since 2003 the EIB Group has committed EUR 881m to microfinance activities, in nearly 50 countries, inside the European Union, in EU Neighbouring and Candidate countries, and outside the European Union, where the Bank is active across the sub-Saharan African, Caribbean and Pacific regions as well as in the Mediterranean partner countries.

iv. Equity

Equity investment means the provision of capital to a firm, invested directly or indirectly in return for total or partial ownership of that firm, and where the Equity investor may assume some management control of the firm and may share the firm's profits.¹⁰

Seed Funding

Seed Funding, or also known as *Seed Capital*, is financing provided to study and develop an early stage business or projects. The initial capital can come coming from the founder’s personal assets, but increasingly public programmes are becoming key funding actors for the SME’s in aim to develop the market in early stage equity finance.

What sets Seed Funding apart from later stage Venture Capital is:

- Less complexity in the contracts and procedures for the investments.
- Higher risk of investment due to the conceptual stage of the business and difficulty for the investor to evaluate the funding.
- The amount of money invested is usually small because of the stage of the project is initial, such as market research or product development.

⁸ European Commission employment policy

⁹ Website of the EIB

¹⁰ Website of the EIB

Venture Capital

Venture Capital is a financial instrument provided by investors to start-up small companies with long-term potential growth, in other terms, in higher expectations than the average return on the investment.

In EU, Venture Capital Funds are an important actor for the long-term economic growth as well as competitiveness, innovation and production.¹¹

A main player in EU is the European Angels Fund, programme advised by the EIF to provide Private Equity and Venture Capital funds for investment in SME's.

Mezzanine Finance

Mezzanine Finance is type of high-yielding debt finance often seen in leveraged buy-out transactions and often featuring an option or right to acquire shares in a firm at a preferential rate. Mezzanine finance often takes the form of subordinated convertible loans.

It is an alternative financing to support shareholding reorganization and for expansion of mature business. Renewable Energy Funds in many countries are now being targeted by private and public funds.¹²

The EIB has an important role, providing Mezzanine Finance under the EU programme Risk Sharing Finance Facility (RSFF) in form of subordinated debt, combining features of equity financing and classical debt features.¹³

v. Supporting Initiatives

Clusters and Networks are increasingly becoming important assistance initiatives for business companies, with the objective of prosperity and economic growth in the EU.

Clusters

Clusters are geographic concentrations of related companies, organizations and institutions, notable as the "Triple Helix structure" (Companies, Government and Educational Institutions), in a particular field that can be present in a region, state or nation. Clustering can raise a company's productivity due to the presence of local assets and like firms, institutions and infrastructure that surround it. Clusters increase productivity and operational efficiency, stimulate and enable innovation, facilitate commercialization and new business formation.¹⁴

Cluster policy is highly developed in the EU, with examples such as the AEI¹⁵ in Spain, the *Pôle de Compétitivité* in France or the *Politica dei Distretti* in Italy, while most regions and countries of Europe operate policy in his field.

¹¹ Website of the EIF

¹² Website of the EIF

¹³ Website of the EIB

¹⁴ Harvard Business School, Institute for Strategy & Competitiveness. PORTER, E. Michael Clusters Deifintion

¹⁵ Agrupamiento Empresariales Innovadoras (Innovative Business Group)

Networks

Networks are group of individuals or business companies connected through a partnership agreement with the aim to promote economic growth, to provide business support and to generate business opportunities.

The European Business Network¹⁶ brings together business support organisations from more than 50 countries. The objective of the EBN is to help SMEs find International Business partners, access EU funding or finance, and provide legal advice in EU law or intellectual property.

¹⁶ Website of the European Commission

B. ACTORS

Institutional organisations in Europe, led by the European Commission, provide financial instruments and programs with the aim of promoting long-term sustainable growth for the EU economy.

The European Investment Bank and the European Investment Fund are the principals Institutions in the EU in this regard, with the objective of facilitating access to finance for SME's in order to create and develop their businesses, providing financial instruments and support.

Classification of Main Actors

1) European Commission: The main actor identified is European Commission. The EC is the EU's executive body and represents the interests of Europe as a whole. The Commission's main roles are to set objectives and priorities for action, propose legislation to Parliament and Council, manage and implement EU policies and the budget, enforce European Law (jointly with the Court of Justice), represent the EU outside Europe (negotiating trade agreements between the EU and other countries, etc.).¹⁷

The notables funding mechanisms and organisations identified are:

- *HORIZON 2020*

The programme Horizon 2020, managed by the Directorate-General for Research and Innovation's, is the biggest EU research and Innovation programme in the history of the EU, with nearly EU 80bn of funding available over the 7 years from 2014 to 2020. Horizon 2020 will help companies and organisations engaged in research and innovation to gain access to financial Instruments such as grants with a funding rate of up to 70%, and as much as 100% for non-profit legal entities.

There are three overarching priorities in the programme:

1. Excellence Science
 - Develop, attract and retain research talent
 - Best infrastructures for research
 - To obtain a world class science
2. Industrial leadership
 - Strategic investments in key technologies
 - Attract private investment for R&I
 - The need to have more innovative SME's to create growth and jobs.
3. Societal Challenges
 - To promote innovation to achieve EU policy objectives.
 - Multi-disciplinary collaborations, including social sciences & humanities.
 - Solutions to be tested demonstrated and scaled up.

¹⁷ Website of the European Commission

- *LIFE +*

The LIFE + programme is an important funding mechanism for the Environment in the EU. Managed by the Directorate - General for the Environment, LIFE + aims to facilitate access to funds for SME's, providing Grants, with an estimated budget, for the period 2014-2020, of EUR 3.4bn. There are two priorities in the programme consisting on:

1. Nature and Biodiversity, formed by Biodiversity issues, habitats, management tools and Species.
2. Environment, formed by air and noise, climate change, environmental management, industry –production, information-communication, land-use and planning, risk management , services and trade, waste and water.

- *COSME (Competitiveness of Enterprises And Small And Medium –Sized Enterprises (COSME)*

The management entity will be the European Commission's Directorate-General for Enterprise and Industry with the main objective to encourage an entrepreneurial culture and promote the creation and growth of SME's in the form of equity, debt and improving access to markets and . The planned budget estimated will be of EUR 2.3bn financing, providing Grants as a financial instrument.

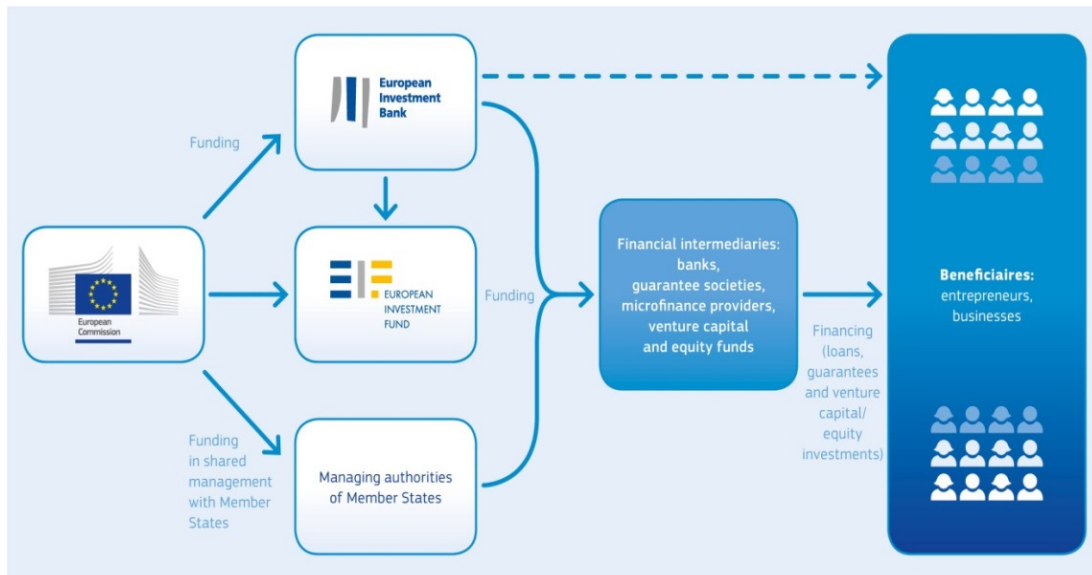
The objectives of the programme are focused on:

- ✓ The improvement of access to financial instruments for SME's:
 - a) Loans Guarantee Facility
 - b) Equity Facility for Growth
- ✓ The access to markets through the following services:
 - a) Information on EU legislation and participation in EU programmes.
 - b) Assistance to find a business partner abroad
 - c) Advice on EU access to finance
 - d) Support for innovation and technology transfer
 - e) Obtaining SME's opinion on EU legislation.
- ✓ The support to entrepreneurs:
 - a) Entrepreneurship education
 - b) Role models and outreach to specific groups
 - c) Improve the business environment
- ✓ The search of more favourable conditions for businesses creation and growth:
 - a) Reduction of administrative and regulatory burden
 - b) Identification and exchange of best practices among national administrations to improve SME's policy
 - c) Analytical tools

- *Structural funds*

The management entity is the European Commission's Directorate General (DG) for Regional and Urban Policy, providing funds through, mainly, the European Regional Development Fund, it aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. The ERDF focuses its investments on several key priority areas as: Innovation and research, supporting small and medium-sized Enterprise, the digital agenda and the low-carbon economy.

Institutional Organisations as the EIB and the EIF collaborate closely with the EC, providing financial funding mechanisms to the beneficiaries as SME's in the EU.



Source: European Commission, *Financial Instruments*

2) European Investment Bank: The EIB is the European Union's bank. It is the only bank owned by and representing the interests of the European Union Member States, to implement EU policy.¹⁸

Notable Institutional funding mechanisms:

- *European Investment Bank Structured Finance Facility*

The target beneficiaries are SME's providing them with typologies of financing such as Mezzanine finance, senior loans and guarantees incorporating pre-completion and early risk, subordinated loans and guarantees and project-related derivatives. The financing volume provided is EU 3.75 bn.

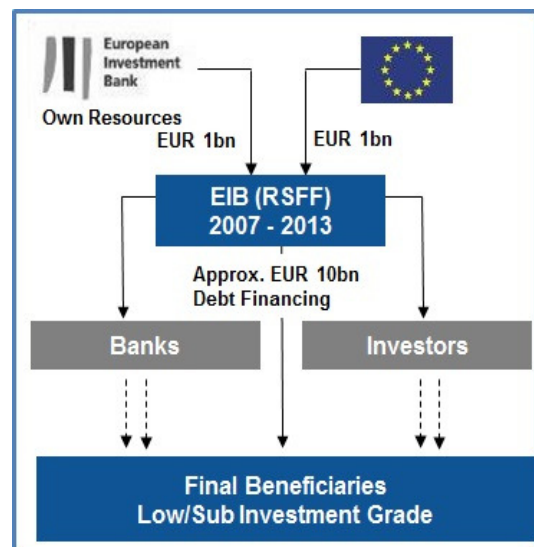
- *Risk Sharing Finance Facility (RSFF)*

RSFF facilitate access to debt financing for all types and size of private company and public institution undertaking RDI projects.

The target beneficiaries are SME's, public and private organizations, research institutes, universities, foundations and other legal entities. The typology of the financing provided are corporate debt financing, project financing and mezzanine financing. The financing volume provided is EU 2bn.

The main lines of RSSF resources to use are:

- Developing new financial products.
- Strengthening the promoter's financial profile enables them to attract additional funding.
- Risk Sharing Instrument (RSI) is a portfolio guarantee product complement to scope of the RSFF; the RSI is focused in SME's and Small Mid-caps while RSFF is focused in Large Corporates and Mid- Caps. (RSFF)



Source: European Commission

The management entity is shared by the EIG (EIB and EIF) and the European Commission, but directly delivered by the BEI and also by financial intermediates.

¹⁸ Website of the EIB

- *Joint European Support For Sustainable Investment In City Areas (JESSICA)*

JESSICA is a Joint policy initiative, launched by the EC and EIB. The type of financing provided are Credit Guarantees Schemes, Intermediate Loans and Equity Funds in aim to make repayable investments in projects forming part of an integrated plan for sustainable urban development. JESSICA funds could be targeted specifically at projects such as: urban infrastructure, heritage or cultural sites, redevelopment of brownfield sites, office space for SME's, IT and and/or R&D and energy efficiency improvements.

- *European Energy Efficiency Fund's*

The EEEF was initially formed by the European Commission in cooperation the European Investment Bank, later on complemented with the *Cassa Depositi* and the *Deutsche Bank* as the Investment Manager. The target beneficiaries are municipal, local and regional authorities as well as public and private such as Energy Service Companies (ESCO's) and small companies in efficiency and renewable energy markets. The typologies of financing provided are Senior Debt, Mezzanine Instruments and loans.

- *Energy Sustainability and Security of Supply Facility (ESF)*

The management entity is the BEI. The target beneficiaries are EU Candidate and neighbourhood countries, African, Caribbean and Pacific (ACP), South Africa, Asia and Latin America. The volume of financing provided is EUR 3bn for financing projects in renewable energy, energy efficiency, carbon capture, transportation or storage projects in aim to reduce greenhouse gas emissions and projects to secure EU Energy supply. The target beneficiaries are EU candidates and neighbourhood countries, African, Caribbean and Pacific countries, South Africa, Asia and Latina America.

- *European Investment Bank Loans*

The EIB deliver through financial Intermediaries loans, in aim to create working capital and facilitate the access to financial funds to the SME's. The duration of the EIB's loans are frequently between 2 and 12 years and the amount are EUR 12.5 million per year.

3) European Investment Fund: the EIF supports Europe's small and medium-sized businesses (SMEs), facilitating access finance. The objective is design innovative financial products addressed to their partners (banks, guarantee, leasing and microfinance institutions, private equity and venture capital funds, among others), acting as our financial intermediaries.¹⁹

Notable Institutional funding mechanisms:

- *European Progress Microfinance Facility*

The target beneficiaries are public and private eligible intermediates institutions in order to provide micro-credit guarantees (direct or counter-guarantees) and funded instruments (loans and equity investments) to individuals or micro-enterprises established in the EU Member States. The financing volume provided is EUR 205 million.

- *Joint European Resources For Micro To Medium Enterprises (JEREMIE)*

JEREMIE is a joint initiative of the European Commission developed with the EIF, in aim to target financial intermediates, never directly to SME's, to improve access to finance for SME's through financial instruments. The contributions from the European Regional Development Fund (ERDF) are intended for loans, guarantee or venture capital funds to invest in enterprises. Holding Funds can be used, in some cases, by the managing authorities to invest in different Intermediate Funds. These Financial Intermediates provide SME's with Loans, Credit Guarantee Schemes, Microfinance, Venture Capital, Seed Funding and Equity participation. In June 2010, the volume of financing provided in Holding Funds was above EUR 1 bn.

- *Joint Action to Support Micro-finance Institutions in Europe (JASMINE)*

JASMINE is a joint initiative of the EC, the EIB and the EIF in a complementary way of the JEREMIE programme, with the objective to support the development of the microcredit providers in the EU and to become sustainable and viable operators on commercial terms.

4) European Bank for Reconstruction and Development (EBRD): The EBRD is an international financial institution that supports projects from central Europe to central Asia and southern and eastern Mediterranean. Investing primarily in private sector clients whose needs cannot be fully met by the market, the Bank fosters transition towards open and democratic market economies.²⁰

Notable Institutional funding mechanisms:

- *Sustainable Energy Initiative (SEI):*

The European Bank for Reconstruction and Development is the management entity of the SEI. The main objectives of this programme is to finance sustainable energy projects with all the EBRD's financial instruments such as Grants, Direct Loans or Intermediate Loans, Mezzanine Finance, Credit Guarantee Schemes and Equity Funds in order to provide Sustainable Energy Financing Facilities to local financial institutions lending their funds to their clients, usually SME'S and corporate and residential borrowers.

¹⁹ Website of the EIF

²⁰ Website of the EBRD

C. STATE OF THE ART

Introduction

The financial instruments identified have been selected in order to provide a better picture of the Institutional funding mechanisms and programmes for the SME's of the energy sector in the EU, and in accordance with the objectives of this Mapping report, mentioned earlier.

In the first part of this mapping report, the instruments used by the different Institutions and programmes are defined, including some examples of Institutions using these instruments.

In the second part, the main instruments used in 47 different programmes have been identified with the objective to understand what instruments are the most used and the fewer used, in order to represent the current state of play with regards to financial instruments available to SMEs.

In the third part of this mapping report, the selection of the principal's Institutions and programmes has been made studying carefully the different financing schemes, taking as a reference the Volume of financing provided, the target beneficiaries, the type of financing provided and the management entity.

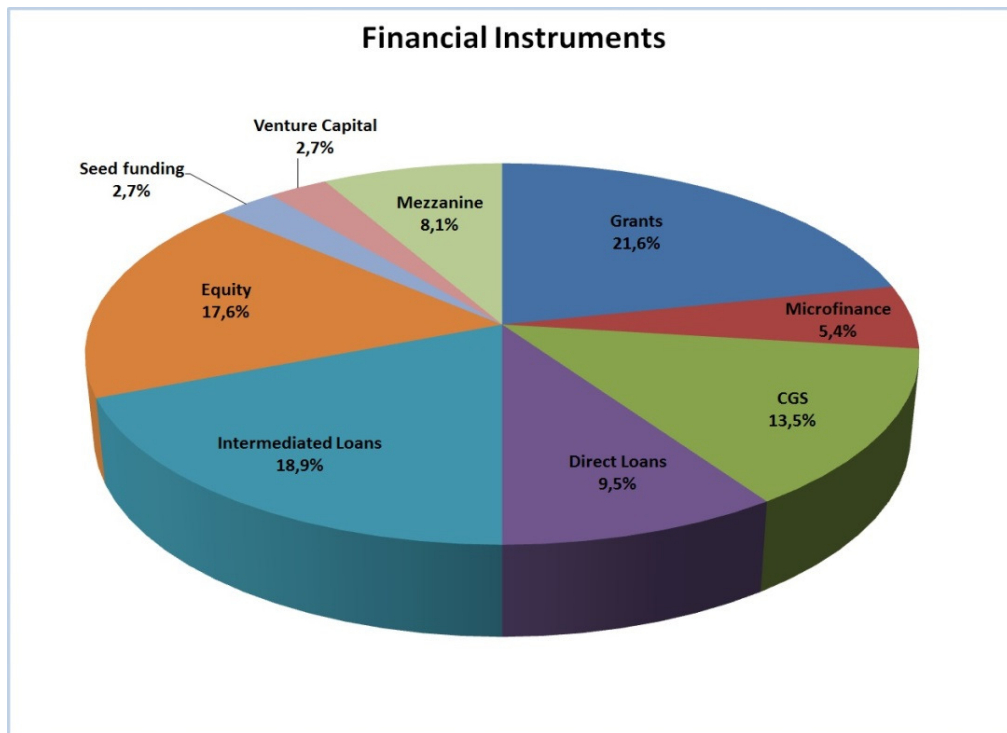
The relevance to understand the structure of the different financial funding programme with these four references was considered in order to obtain a better representation of the financial instruments.

Finally, it has been possible to present the current state of the art of financial instruments, analysing the most pertinent results and classifying them under the following rating: the most used financial instruments.

i. Description

Main Instruments

The financial instruments identified to offer financial and support services to Energy's SME are 9 distinct types of instrument, with a total amount of 74 usages in 47 different Institutional funding mechanisms and programmes identified during this analysis:



Graphic 1. Financial Instruments.

As can be appreciated on the graphic above, Grants are the principal financial instrument used by 16 Institutional funding mechanisms, most of them concentrated in ongoing or forthcoming programmes such as H2020 and COSME, representing a total of 21,6% of the Financial Instruments used. The intermediated loans are the second Institutional funding mechanism most used, with 14 instances identified, representing 18,9% of the financial instruments. Thirdly, the Equity Funds are used in 13 Institutional funding mechanisms, accounting for 17,6 % of total financial instruments deployed.

Further commonly used financial instruments are Credit Guarantee Schemes with a 13,5%, Direct loans with 9,5% and Mezzanine Finance with 8,1%. The least instruments used are Seed Funding and Venture Capital, with only 2 Institutional funding mechanisms identified, representing each one a 2,7% of the financial instruments identified.

Classification of the most flexible programmes:

Studying the different programmes on offer, a total of 8 programmes and mechanisms have been identified offering a minimum of 4 different types of financial instruments (from a total of 9) to SMEs or financial intermediates, with the aim to facilitate access to finance.

The importance to offer the largest type of financial instruments to the SME's by the EU programmes, directly benefits the SME's. Adapting to their needs by offering different solutions is the best way to help the Small and Medium Enterprises.

As the graphic below illustrates, JEREMIE and SEI programmes offer 6 different financial instruments to SME's, the EEEF and the SFF have 5 different financial instruments to be used by their target beneficiaries. Finally programmes as the RSI, the Equity investment and development Advice, the ESF and the European Progress Microfinance Facility can provide 4 financial instruments.

FINANCIAL INSTRUMENTS

Programmes	Grants	CGS	LOANS			SECURITIES			
			Direct	Intermediated	Microfinance	Equity	Seed Funding	Venture Capital	Mezzanine
ESF		X	X	X	X				
EEEF		X	X	X		X			X
SEI	X	X	X	X		X			X
JEREMIE		X		X	X	X	X	X	
EIB Structured Finance Facility (SFF)		X	X	X		X			X
EIF European Progress Microfinance Facility		X		X	X	X			
RSI	X	X		X	X				
EIF Equity Investment and development advice			X	X		X	X		

Graphic 2. Classification in terms of number of Programmes provided.

ii. Case studies

Some cases studies have been selected with aim to present examples of financial instruments implemented in Energy projects, specially focused in SME's.

CASE 1

Programme: JEREMIE
Country: Cyprus
Region: Cyprus
Instrument Co-financing Loans -The maximum amount of any such loan may not exceed €100,000 -The minimum repayment period is 24 months -The maximum repayment period is 120 months -Grace period (for capital repayments) of 1/3 of the initial loan duration, with a maximum period of 2 years -These loans must be repaid on a monthly basis and not by a one-off payment. -Currency: EURO Other important financial Instrument to be mentioned is the portfolio of Guarantee Instruments, as Guarantees and Securisations, representing a total of EUR 25.3m of mobilised resources.
Objectives Micro enterprise Staff: < 10 and Turnover: < € 2 million or Balance sheet total: < € 2 million Small enterprise Staff: < 50 and Turnover: < € 10 million or Balance sheet total: < € 10 million -Investment projects involving tangible and intangible assets (such as the purchase or upgrade of company infrastructure or machinery, extensions to existing offices warehouses and other existing premises, meeting costs relating to R&D, costs relating to the setting up of a new company, etc.). -Working capital related to the establishment, strengthening or expansion of new or existing business activity of the Customer (such as purchase of raw materials, stocks and other manufacturing inputs, labour, inventories and overheads, funding to finance trade receivables, non-consumer sales receivables).
Description A Holding Fund agreement of EUR 20M was signed under the JEREMIE initiative and managed by the EIF, co-financed by the Government of the Republic of Cyprus and the ERDF, allowing the Bank of Cyprus to provide co-finance instruments as new loans, of

amounts of up to 100.000€, to Small and Micro Enterprises only to those companies belonging to the EC sectors allowed²¹, in aim to support, expand and strengthen of those businesses.

Priority was given to projects of renewable energy sources, R&D, information and communication technologies, upgrading technology in industrial services, solid waste, liquid waste (water saving systems, consultancy services relating to the setting up of biological treatment plants, etc.), cultural and social services.

CASE 2

Programme: European Energy Efficiency Fund
Project Name: City of Rennes ²²
Country: France
Region: Bretagne
Financial Instrument Junior Funds. Total Project Size (€ m): 47,6 EEEEF Investment Size (€ m): 7,3
Objectives The construction of a biomass energy plant in the City of Rennes (France) with the following objectives: ✓ A significant contribution for the securisation of the region. ✓ An important impact in terms of improving the environmental balance sheets. ✓ Positive economic inputs
Description The Fund has completed its second equity transaction, investing in Rennes Biomass Energy, which has been authorised to operate a combined heat and power facility with an electrical output of 9.8 MWe and thermal output of 22 MWth over the next 20 years. This junior fund investment has been realised through the purchase of 85% of the shares of Rennes Biomass Energy by EEEF. Dalkia France is co-investing along with EEEF and is shareholding of the remaining 15% of Rennes Biomass Energy. The plant will supply 21,000 households in the City with green heat. The facility is estimated to save 37,063 tons of CO2 per year.

²¹ see details at – Commission Regulation (EC) No. 1998/2006 of 15 Dec 2006 – Article 1

²² Source: EEEF programme

CASE 3

Programme: Risk Sharing Finance Facility
Project Name: Andasol Solar Thermal Power 1&2 ²³
Country: Spain
Region: Andalucía
Financial Instrument Loan Total Project Size (€ m): 594.000.000 RSFF Investment Size (€ m): 120.000.000
Objectives The construction of the latest generation of solar thermal power plants in Europe.
Description The project named Andasol is the first large-scale commercial thermal solar power facility in Europe, covering 1.5 million square meters and can potentially produce an average of 150 gigawatt hours of electricity per year. The power plant arises from the partnership of Spanish and German companies using the RSFF as financial funding, incorporating innovative technical approaches, operating efficiencies, reducing costs and helping to overcome the EU targets for renewable energy sources and combating climate change.

²³ Source: RSFF programme

Conclusions

Over the last few years energy research and innovation has become an important key objective for the EU Policy, reinforced by energy laws and supported by a market-based tools strategy (such as subsidies, taxes...) which is based in research, innovation and innovative financial instruments with the aim to contribute to the performance of a better economy and society.

The Financial Instruments and funding programmes provided by EU Institutions have been identified in this report, being defined as crucial actors for the EU Policy, incrementing the support for the Small and Medium Enterprises of the Energy sector, not only in terms of financial instruments but also in forms of support services, in order to attract private investments and therefore boost an economic growth of the EU regions.

The main actors in the EU offering funding mechanisms and programmes for the SME's are the EC, the EIB and the EIF, with a total amount of 47 different institutional funding mechanisms and programmes. The main programmes identified providing financial instruments are the SEI and JEREMIE offering 6 different financial instruments followed by the EEEF and the RSF programmes with 5 different financial instruments, the RSI, the Equity Investment and development Advice, the ESF and the European Progress Microfinance Facility providing 4 financial instruments to the SME's.

Financial instruments also have been identified in order to present the panorama of the EU's funding instruments, bringing a total 74 usages of 9 types of instruments provided by the different Institutional funding mechanisms for the SME's of the Energy Sector. Grants are the principal financial instruments used by the Institutional funding mechanism in the EU, followed by Intermediated Loans and Equity funds. Other financial instruments used are Credit Guarantee Schemes, Direct Loans and Mezzanine finance. Finally, the least instruments used are Seed funding and Venture capital.

As an example, the new EU policy orientation to the Energy sector such as the ongoing European programme HORIZON 2020 has the objective to invest in Research and Innovation for the Energy Sector with the Biggest R&I budget in the history of the EU, with nearly EUR 80bn of funding available over the next 7 years (2014 to 2020).

The Energy sector remains an important challenge for the EU in the coming years in terms of how to ensure full cooperation between the EU countries and neighbourhood regions, how to increase public programmes and promote entrepreneurship and entrepreneurial culture, while supporting a transition towards a green economy and a sustainable development.

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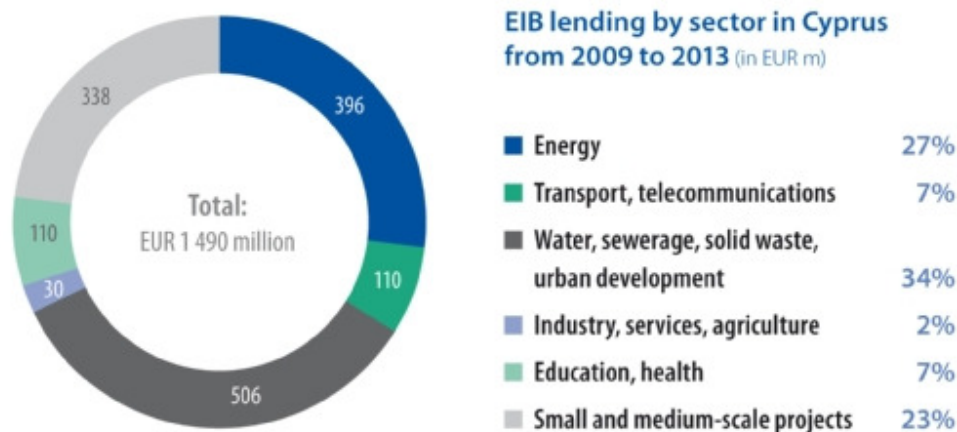
Annexes

Annex 1.

The EIB in Cyprus

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EIB financing in Cyprus came to a total of EUR 250m in 2013. Funding for SMEs accounted for 60% of this, while investments in water, sewerage, solid waste and urban development projects took up a further 37%. 2013 also marked the launch of the Trade Finance Facility for Cyprus, an innovative product to support export-minded SMEs. The past five years (2009-2013) have seen the Bank invest EUR 1.5bn in the Cypriot economy.



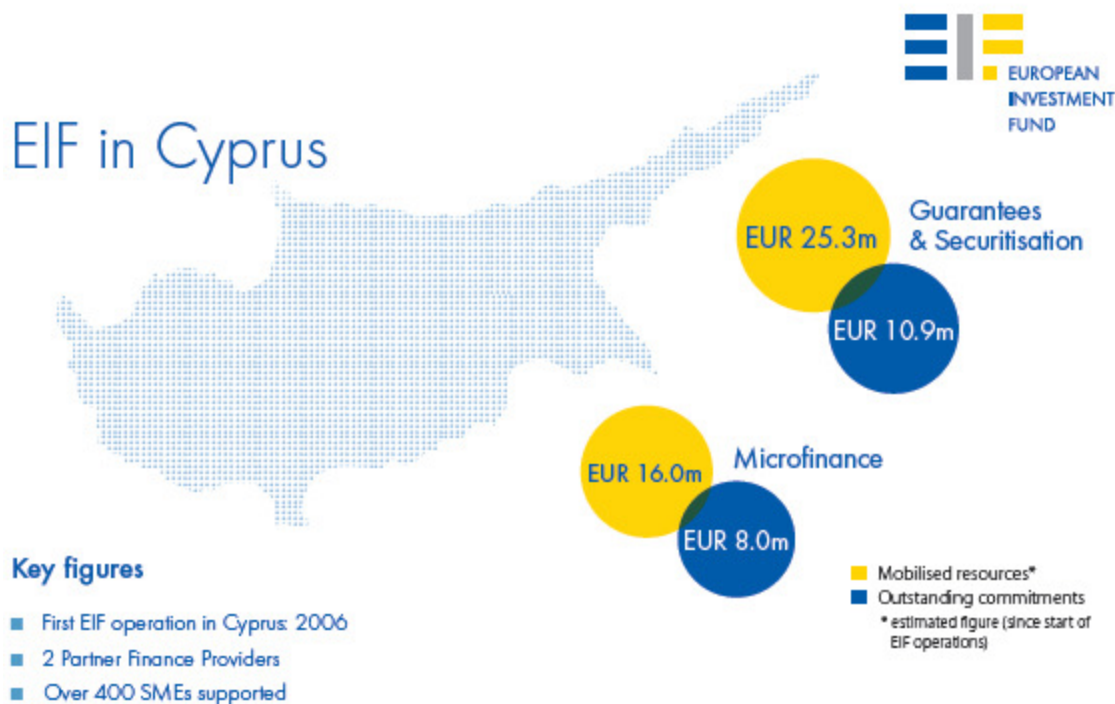
Major wastewater project progresses

Our support will help extend the on-going Limassol-Amathus wastewater project, as well as an upgrade of existing systems. This will include a treatment plant able to serve a further 100 000 people. We are lending EUR 68m, half of the total cost of this work.

Preserving architectural heritage

We are supporting efforts to revitalise the historic centre of Nicosia such as building renovation and new infrastructure projects. This work will benefit the country's tourist industry as well as improving the quality of life for residents.

Annex 1.2:



Support to SMEs in regionally specific ways

Under the JEREMIE initiative (Joint European Resources for Micro to Medium Enterprises), EIF manages a EUR 20m Holding Fund co-financed with EU structural funds in Cyprus. JEREMIE is significantly contributing to the general objective of the Cypriot Government to enhance entrepreneurship in the country by covering part of the financing needs of local businesses, which has considerably increased due to the effects of the financial crisis. Through JEREMIE, loan finance is made available to Cypriot SMEs via the Bank of Cyprus which has been selected by EIF following a Call for Expression of Interest.

Guarantees & Securitisation

In the context of JEREMIE, EIF has designed and implemented a loan co-financing and a portfolio guarantee instrument in collaboration with the Bank of Cyprus to finance micro and small enterprises. An amount has been specifically earmarked to support businesses in their start-up or early growth phase. Through JEREMIE, a total amount of EUR 21.4m has so far reached Cypriot SMEs which benefit from loans at lower interest rates and extended repayment and grace periods.

Microfinance

EIF has partnered up with the Cooperative Central Bank under the Progress Microfinance Initiative to provide support to local micro-entrepreneurs and the self-employed.

EIF at a glance

EIF's mission is to support Europe's micro, small and medium sized businesses (SMEs) by helping them to access finance. EIF primarily designs equity and debt financial instruments which specifically target this market segment through a wide range of selected financial intermediaries across Europe. In this role, EIF fosters EU objectives in support of innovation, research and development, entrepreneurship, growth, and employment.

EIF is a public-private partnership whose tripartite shareholding structure includes the European Investment Bank (EIB, 61.9%), the European Union represented by the European Commission (30%) and 23 financial institutions from 15 European Union Member States, including Turkey and Croatia (8.1%).

The EIF manages resources on behalf of the European Commission, the EIB and further national institutions. Since 2000, EIF is part of the EIB Group. EIF has an authorized capital of EUR 3 billion, divided into 3,000 shares of EUR 1m each.

CASE STUDY

Solar power: investing in sunlight

A partnership of Spanish and German companies used RSFF funding to build the latest generation of solar thermal power plants in Europe. Incorporating innovative technical approaches, the Andasol project raises operating efficiencies and reduces costs, thus helping meet EU targets for renewable energy sources and combating climate change.

The special-purpose vehicle Andasol-1 Central Termosolar Uno S.A. is a partnership between ACS from Spain and Solar Millennium AG, a German technology company specialised in large-scale thermal power plants. Supported by an RSFF loan, they constructed the first large-scale commercial solar thermal power plant in Europe – Andasol-1, – which came online in the Spanish province of Granada in December 2008. This new power plant uses innovative parabolic trough technology which concentrates the sun's rays to produce heat that is converted to electricity.

Andasol-1 consists of many rows, each several hundred metres long, of precisely aligned, six-metre-high parabolic troughs. These act as mirrors to focus sunlight on to a pipe carrying a fluid which is heated to around 400 degrees centigrade. The fluid flows along the pipes and into a steam

At the time of completion, Andasol was the first large-scale commercial thermal solar power facility in the Europe, covering 1.5 million square metres – equal to 210 football pitches

turbine facility where its energy (heat) is extracted and converted into electricity. There are over 7 000 collector elements in Andasol-1 producing around 50 megawatts (MW) of electricity. Production even continues after sunset or when it rains owing to an innovative heat-storage technology developed by the partners which uses molten salt to store heat and release it gradually during the night.

Powering innovation

Andasol-1 is one of the flagship projects of the RSFF. Incorporating European innovations into solar power generation, the RSFF helped the industrialisation of a new Euro-

pean technology, which involved many other EU companies in its development and construction.

The success of the RSFF-supported Andasol-1 demonstrator led directly to plans for expansion. Andasol-2 has been built and commissioned and the EIB has since financed other innovative CSP projects, such as Abengoa's PS 10 and PS 20, Solnova 1 and 3, Gemasolar and a number of additional operations in this sector which are under preparation. Significantly, much of this expansion is funded by private-sector sources of finance – demonstrating the leverage effect of the original RSFF investment.

Andasol is the first large-scale commercial thermal solar power facility in Europe, covering 1.5 million square metres – equal to 210 football pitches – and can potentially produce an average of 150 gigawatt hours of electricity a year. When running at full capacity it can supply up to 40 000 households with reliable and environmentally friendly electricity, and it supports the peak energy demands seen during the summer months in southern Spain usually due to increased use of air-conditioning units.

The solar power technology successfully demonstrated in the original Andasol-1 project is also being exported around the world by the companies that developed it, with plans for installing over 2 000 MW of plant worldwide utilising this innovative approach.



Project name: **Andasol Solar Thermal Power 1 & 2**

Total cost: EUR 594 000 000

RSFF financing: EUR 120 000 000

Signature date: 22 June 2006

Beneficiary: Andasol-1 Central Termosolar Uno S.A., Andasol-2 Central Termosolar Dos S.A.

www.solarmillennium.de

Annex 4:

Advancing Sustainable Energy for Europe Quarterly Fact Sheet as of 31/03/2014



eeef closed transactions

Project: City of Rennes 	Country: France Sector: Energy Efficiency Type of Investment: Junior Funds Total project size (€ m): 47.6 eeef investment size (€ m): 7.3 Financial close: 12 December 2013 Maturity: Perpetual Status: Operation
General description The Fund has completed its second equity transaction, investing in Rennes Biomasse Energie, which has been authorised to operate a combined heat and power facility with an electrical output of 9.8 MWe and thermal output of 22 MWh over the next 20 years. This junior fund investment has been realised through the purchase of 85% of the shares of Rennes Biomasse Energie by eeef. Dalkia France is co-investing along with eeef and is shareholder of the remaining 15% of Rennes Biomasse Energie. The plant will supply 21,000 households in the City with green heat. The facility is estimated to save 37,063 tons of CO₂ per year. Recent developments • Construction completed, plant is operating	
Project: Bolloré 	Country: France Sector: Clean Urban Transport Type of Investment: Senior Debt Total project size (€ m): 30 eeef investment size (€ m): 30 Financial close: 23 December 2013 Maturity: 5 years Status: Investment Phase
General description The French company Bolloré signed a bond subscription agreement for floating rate notes worth € 30m issued by Bolloré and purchased by the eeef with a maturity of 5 years. eeef's investment will be used to finance electric cars and required infrastructure used in Bolloré's European electric car rental concession, which the company ensured in the past. This transaction is with in the framework of a green transportation initiative for the Cities of Paris, Lyon and Bordeaux. Recent developments • Full disbursement at the end of January 2014 • Bolloré is working on the first projects under the electric car rental concession	