

D. 3.3.3. Guideline for financial tools



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1. Abstract

These guidelines are intended to provide partner organizations with useful indications on the technical and administrative steps needed to effectively plan, design, implement, manage and monitor joint actions for energy efficiency, preferably within the framework of joint SEAPs.

The ENERJ project builds on the awareness that a joint approach to energy planning, especially for small local authorities, can allow achieving more effective results than an isolated one, since – as it was also acknowledged for by the EU Commission (see i.e. the Quick Reference Guide for Joint Sustainable Energy Action Plan issued within the framework of the Covenant of Mayors) – aggregated municipalities can:

- more easily identify opportunities for high-impact actions
- benefit from economy of scale
- more effectively tackle the problem of lack of human and financial resources
- bundle efforts on SEAP preparation, implementation and monitoring.

A joint SEAP (or, in the more recent formulation, SECAP - Sustainable Energy & Climate Action Plan) is carried out collectively by a group of neighbouring local authorities, which engage in building a common vision, preparing an emission inventory and defining a set of actions to be implemented both individually and jointly in the concerned territory. This joint approach is specially designed for small-sized municipalities within the same territorial area, with indicatively less than 10,000 inhabitants each, but can be also suitable for urban agglomerations (i.e. a metropolis and its suburbs).

The joint SEAP document, containing both individual and shared measures, is common to all signatories and should be approved by each City Council, but can be prepared according to two different options:

 Option 1 - individual CO2 reduction commitment: each signatory in the group individually commits to reducing CO2 emissions up to a common target and is thus required to complete its own SEAP template. Impacts on energy savings, renewable energy production and CO2 emissions reduction corresponding to the joint measures should be divided among each municipality sharing these measures in their individual templates. • Option 2 - shared CO2 reduction commitment: the group of signatories collectively commits to reducing CO2 emissions up to a common target. Only a single common SEAP template is to be filled-in by the group of signatories.

In both cases, the group of signatories is encouraged to appoint a body/authority responsible for coordinating the SEAP development and implementation: this role can be delegated to the respective Covenant Territorial Coordinator or to the most active/advanced municipality within the group.

2. Introduction

The European Parliament and Council have adopted most horizontal EU funds relevant to Energy Efficiency and Renewables like Horizon 2020 and LIFE.

This document is useful to local authorities, companies, NGOs, Intergovernmental organisations, social entrepreneurs and the general public. All target groups are addressed by most of the available funding tools for Energy Efficiency and Renewables. Care should be taken therefore on eligibility criteria in the text of each call for proposals.

It is also important to note that most EU financial instruments are in the form of grants, loans, holding funds and technical assistance. However there exist also other types of funds like private funds, crowd funding and risk sharing facilities.

Lastly, the origin of funds may vary and can come from outside the European Union, the United Nations, USA and Switzerland.

It was decided therefore on the outset by the Expert Working Group that the approach and structure this document would take would be by types of funds. It is not our intention to create syllabi that are either too theoretical or target group specific. Also our approach by type of fund was favoured instead of a by origin of funds approach as it was not our intention to make by country comparisons on amounts of funding they make available on energy issues.

A final point to make is that case study – Joint Actions contributions were offered by all experts but they are not all implemented, some are still intention looking forward the of funding opening.

3. STRUCTURAL FUNDS

Together with the Common Agricultural Policy (CAP), the Structural Funds and the Cohesion Fund make up the great bulk of EU funding, and the majority of total EU spending.

4.1. European Regional Development Fund (ERDF)

The ERDF aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions.

The budget for the period 2014-2020 is € 185,374 billion.

The ERDF focuses its investments on several key priority areas. This is known as 'thematic concentration':

- Innovation and research;
- The digital agenda;
- Support for small and medium-sized enterprises (SMEs);
- The low-carbon economy.
- The ERDF resources allocated to these priorities will depend on the category of region.
- In more developed regions, at least 80 % of funds must focus on at least two of these priorities;
- In transition regions, this focus is for 60 % of the funds;
- This is 50 % in less developed regions.

Furthermore, some ERDF resources must be channelled specifically towards low-carbon economy projects:

More developed regions: 20%;

• Transition regions: 15%; and;

Less developed regions: 12%.

European Territorial Cooperation

Under the European Territorial Cooperation programmes, at least 80 % of funds will be concentrated on these four priority areas mentioned above.

Specific Territorial Characteristics

The ERDF also gives particular attention to specific territorial characteristics. ERDF action is designed to reduce economic, environmental and social problems in urban areas, with a special focus on sustainable urban development. At least 5 % of the ERDF resources are set aside for this field, through 'integrated actions' managed by cities.

Areas that are naturally disadvantaged from a geographical viewpoint (remote, mountainous or sparsely populated areas) benefit from special treatment. Lastly, the outermost areas also benefit from specific assistance from the ERDF to address possible disadvantages due to their remoteness.

European Social Fund (ESF)

The ESF invests in people, with a focus on improving employment and education opportunities across the European Union. It also aims to improve the situation of the most vulnerable people at risk of poverty.

The ESF investments cover all EU regions. More than € 80 billion is earmarked for human capital investment in Member States between 2014 and 2020, with an extra of at least € 3.2 billion allocated to the Youth Employment Initiative.

For the 2014-2020 period, the ESF will focus on four of the cohesion policy's thematic objectives:

- · promoting employment and supporting labour mobility;
- promoting social inclusion and combating poverty;
- investing in education, skills and lifelong learning;
- enhancing institutional capacity and an efficient public administration.

In addition, 20 % of ESF investments will be committed to activities improving social inclusion and combating poverty. This is known as thematic concentration.

European Agricultural Fund for Rural Development (EARDF)

The EAFRD finances the rural development programmes of the Member States. These programmes constitute one of the two pillars of the Common Agricultural Policy (CAR), the first being the European Agricultural Guarantee Fund (EAGF), financing direct payments to farmers and measures to regulate agricultural markets such as public or private storage and export refunds.

The EAFRD funds for 2014-2020 are distributed through programmes run by national governments: the government appoints the Managing Authority whose task at project management level is to inform potential beneficiaries of how to get support, which rules apply and what EU contribution is available. Member States will have to build their RDP's based upon at least four of the six common EU priorities, as mentioned as follows:

- 1) Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas
- 2) Enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and sustainable management of forests

- 3) Promoting food chain organization, including processing and marketing of agricultural products, animal welfare and risk management in agriculture
- 4) Restoring, preserving and enhancing ecosystems related to agriculture and forestry
- 5) Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors
- 6) Promoting social inclusion, poverty reduction and economic development in rural areas. Also, for the first time a common and coherent overall EU policy framework is established for all European Structural and Investment (ESI) funds including EAFRD to improve coordination between them and to strengthen the complementarity of the different programs. To this end Member States will have to prepare Partnership Agreements, followed by the corresponding programmes, based on common priorities.

The budget for EAFRD for the period 2014-2020 is EUR 95,58 billion, the total for the CAP policy being EUR 408,31 billion.

European Maritime and Fisheries Fund (EMFF)

With a budget of €7,535 billion for the period 2014-2020, the European Maritime and Fisheries Fund (EMFF), aims to promote sustainable and competitive fisheries and aquaculture, foster the development and implementation of the Union's Integrated Maritime Policy, promote a balanced and inclusive territorial development of fisheries areas and contributes to the implementation of the Common Fisheries Policy.

The EMFF is structured on four pillars; Smart Green Fisheries, Smart Green Aquaculture, Sustainable and Inclusive Territorial Development and Integrated Maritime Policy. It is up to each Member State to draw up a single operational programme to implement the Union priorities to be co-financed by the EMFF.

The new fund will:

- help fishermen in the transition to sustainable fishing
- support coastal communities in diversifying their economies
- finance projects that create new jobs and improve quality of life along European coasts
- make it easier to access financing.

The new Fund will be used to co-finance projects, along with national funding.

- Each country will be allocated a share of the total Fund budget, based on the size of its fishing industry.
- Each country will then draw up an operational programme, saying how it intends to spend the money.
- Once the Commission approves this programme, it is up to the national authorities to decide which projects will be funded.

INTERREG EUROPE

The INTERREG EUROPE programme, financed by the European Regional Development Fund (ERDF), is designed to support policy learning among public authorities to improve the performance of policies and programmes for regional development. It allows public authorities across Europe to exchange practices and ideas on the way public policies work thus finding solutions to improve their strategies for their own citizens.

The INTERREG EUROPE programme has a budget of €359 million ERDF for the 2014-2020 period.

INTERREG EUROPE work on the following four topics, all related to regional development:

- 1. Research, technological development and innovation
- 2. Competitiveness of SMEs
- 3. Low carbon economy
- 4. Environment and resource efficiency

INTERREG EUROPE will finance two actions:

- a) Cooperation projects: partnerships of public organisations coming from different countries in Europe work together for 3 to 5 years to exchange their experiences on a particular policy issue. Each region involved in the cooperation project will produce an Action Plan. This specifies what will be done in the region to ensure that the lessons learnt from the cooperation are put into action. Projects are also asked to monitor what happens to the Action Plan, to see how well the cooperation has worked.
- b) Calls for project proposals will be launched throughout the programming period.
- c) Policy Learning Platforms: a space for continuous learning where any organisation dealing with regional development policies in Europe can find solutions to improve the way they manage and implement their public policies in the four topics above.

Who can access funding?

- Organisations based in the 28 EU member states, Norway or Switzerland are eligible for INTERREG EUROPE funding if they are:
- National, regional or local public authorities
- Other institutions governed by public law (e.g. universities, regional development agencies, business support actors, etc.). Each country defines which institutions are eligible according to national regulations.

INSTRUMENT FOR PRE-ACCESSION (IPA)

Instrument for pre-accession assistance (IPA) is a legal and financial instrument of European Commission created in order to help and assist non EU member countries engaged in accession process to EU. Entities that are eligible for IPA are the EU candidate countries (the Former Republic of Macedonia, Turkey and Montenegro) and potential candidate countries (Albania, Bosnia and Herzegovina, Serbia including Kosovo, Iceland), as well as EU member countries through cross-border programs.

IPA is made up of five components:

- 1. Assistance for transition and institution building;
- 2. Cross-border cooperation (with EU Member States and other countries eligible for IPA);
- 3. Regional development (transport, environment, regional and economic development)
- 4. Human resources (strengthening human capital and combating exclusion);
- 5. Rural development.

The greatest possibility of using IPA funds for energy efficiency and use of renewable energy are within the:

- II. components Cross-border cooperation;
- V. components Rural development.

The beneficiaries of IPA funds are:

- Public bodies: national, local and regional authorities;
- Private bodies: profit making organizations, SMEs and individuals, NGOs and nonprofit organizations.

Considering that IPA 2008-2013 has expired at the end of 2013, EU will continue to offer to candidates countries and potential candidate countries technical and financial assistance through IPA 2014-2020.

The proposed budget for the new IPA is €14.110 billion in current prices for the period 2014-2020. This represents a budget at the same level of the IPA 2013.

The budget commitments for each year are the following (million of euros in current prices):

IPA	2014	2015	2016	2017	2018	2019	2020	2014-2020
	1898,0	1935,9	1974,6	2014,1	2054,4	2095,5	2137,4	14110,1

A priority for the Commission in this financial program is to simplify the regulatory environment and facilitate assistance to beneficiary countries and regions, civil society organizations, SMEs, etc.

The objectives of the assistance will be defined in the country and multi-country strategy papers established by the Commission during the new Multi-annual Financial Framework in partnership with the beneficiary countries, based on their specific needs and enlargement agenda.

Commission services are responsible for managing and implementing the assistance in the different policy areas. However, in the new financial program coordination, communication and implementation on the ground will be advanced through simplification of a number of aspects, including closer joint monitoring of the progress of implementation in the beneficiary countries and fewer processes for accreditation and conferral of management powers.

Overall, the current proposal for IPA II and future implementing rules envisage the following revisions to the design of the instrument and its implementation modalities:

- The delivery of assistance will be made more coherent, strategic and result-oriented
- The delivery of assistance will be made more flexible and tailored to address needs
- The deployment of assistance will be made more efficient and effective.

EU strategy 2020 for smart, sustainable and inclusive growth

In the EU strategy 2020 for smart, sustainable and inclusive growth the Commission put forward seven flagship initiatives among which is one referring to energy issues "Resource efficient Europe". Through this initiative EU will help to foster economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernize transport sector and promote energy efficiency.

The aim is to support the shift towards a resource efficient and low-carbon economy that is efficient in the way it uses all resources. The aim is to decouple our economic growth from resource and energy use, reduce CO2 emissions, enhance competitiveness and promote greater energy security.

At EU level, the Commission will work:

To mobilize EU financial instruments (e.g. rural development, structural funds, R&D framework program, TENs, EIB) as part of a consistent funding strategy, consisting of EU and national public and private funding;

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http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0838:FIN:EN:PDF

- To enhance a framework for the use of market-based instruments (e.g. emissions trading, revision of energy taxation, state-aid framework, encouraging wider use of green public procurement);²
- To present proposals to modernize and decarbonizes the transport sector thereby contributing to increased competitiveness. This can be done through a mix of measures e.g. infrastructure measures such as early deployment of grid infrastructures of electrical mobility, intelligent traffic management, better logistics, pursuing the reduction of CO2 emissions for road vehicles, for the aviation and maritime sectors including the launch of a major European "green" car initiative which will help to promote new technologies including electric and hybrid cars through a mix of research, setting of common standards and developing the necessary infrastructure support;
- To accelerate the implementation of strategic projects with high European added value to address critical bottlenecks, in particular cross border sections and inter modal nodes (cities, ports, logistic platforms);
- To complete the internal energy market and implement the strategic energy technologies (SET) plan, promoting renewable sources of energy in the single market would also be a priority;
- To present an initiative to upgrade Europe's networks, including Trans European Energy Networks, towards a European supergrid, "smart grids" and interconnections in particular of renewable energy sources to the grid (with support of structural funds and the EIB). This includes to promote infrastructure projects of major strategic importance to the EU in the Baltic, Balkan, Mediterranean and Eurasian regions;
- To adopt and implement a revised Energy Efficiency Action Plan and promote a substantial program in resource efficiency (supporting SMEs as well as households) by making use of structural and other funds to leverage new financing through existing highly successful models of innovative investment schemes; this should promote changes in consumption and production patterns;
- To establish a vision of structural and technological changes required to move to a low carbon, resource efficient and climate resilient economy by 2050 which will allow the EU to achieve its emissions reduction and biodiversity targets; this includes disaster prevention and response, harnessing the contribution of cohesion, agricultural, rural development, and maritime policies to address climate change, in particular through

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² http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF

adaptation measures based on more efficient use of resources, which will also contribute to improving global food security.

South East Europe 2020 Strategy

The pillar of the New Development Model disclosed in SEE 2020 Strategy, among other is sustainable growth. Following the EU's own sustainable growth path SEE 2020 identifies the following key strategy measures, activities and instruments regarding the energy sector:

- Increase efficient use of energy by achieving a minimum 9% energy saving target by 2018, in line with commitments to the Energy Community (Implement the countries' National Energy Efficiency Action Plans, by 2018 and ensure that the institutional and legal frame, as well as enough financial resources is in place e.g. Energy Efficiency Agencies and other relevant institutions, public and private funds for investments, policy measures to create energy services market, etc; Introduce energy efficiency criterion in public procurement for goods and services; Renovate public buildings at a rate of 2% year, to achieve the minimum energy performance level, in line with the Ministerial Council Recommendation on the adoption of Energy Efficiency Directive). The institutions and agencies responsible for these activities are: Ministries responsible for communal infrastructure; Ministries of economy; Ministries responsible for energy and environment; Local authorities; Authorities in charge of public procurement.
- Achieve national share of renewable energy in gross final energy consumption by 2020, in line with the targets adopted in 2012 (Allow priority access or guaranteed access to the grid for renewable energy (RE); Adopt and implement National Renewable Energy Action Plans, by 31 December 2020; Simplify and accelerate the authorization procedures for RE plants and grid connections; Introduce and/or revise (if necessary) existing support schemes for RE in order to assure continuity and stability for investors). The institutions and agencies responsible for these activities are: Ministries responsible for energy; Professional associations; City authorities; Energy companies; Energy regulators.
- Develop instruments to inform and empower consumers in order to achieve behavioural changes that would accrue in affordability and safety. The institutions and agencies responsible for these activities are: Ministries responsible for social protection; Associations of consumers; Civil society; Energy companies; Energy regulators.
- Create an investment friendly climate and stimulate energy infrastructure development (Implement a set of policy measures that involve: accelerated and coordinated permit granting and licensing procedures for new energy investments,

coordinated regulatory authorizations and coordinated tariff methodologies, support from relevant European Union funds; Phase out price regulation for large customers in line with the Treaty and measures taken by the Ministerial Council; Adopt prices that reflect fully the cost of supply for all tariff customers, in line with the Treaty and measures taken by the Ministerial Council; Implement Projects of Energy Community Interest that were adopted by the Ministerial Council in October 2013). The institutions and agencies responsible for these activities are: Ministries responsible for energy; Energy regulators; Energy companies; Authorities in charge of EU funds; Ministries of Finance; Investment promotion agencies.

- Develop instruments to create a well functioning SEE energy market that would provide affordable but cost reflective and reliable supplies; remove energy subsidies and replace these with safety nets for vulnerable consumers.). The institutions and agencies responsible for these activities are: Ministries responsible for energy; Ministries responsible for social protection; Energy regulators; Consumers Associations.
- Complement the ongoing regional energy cooperation in relation to strengthening the
 cooperation with parliamentarians, reduction of green-house-gases emissions and
 sustainable energy development through implementation of sustainable energy
 development regional initiative (SEDRI). The institutions and agencies responsible for
 these activities are: Ministries responsible for Energy; Ministries responsible for
 environment; Parliaments; Local Authorities; Civil Society.

MAIN FINANCING FACILITIES AND ACTORS FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY FUNDING (IPA COUNTRIES)

The Western Balkans Investment Framework

The Western Balkans Investment Framework (WBIF) supports socio-economic development and EU accession of IPA countries through the provision of finance and technical assistance for strategic investments, particularly in infrastructure, energy efficiency and private sector development. The financial supporters of WBIF are: European Commission, International Financial institutions, bilateral donors and the governments of the Western Balkans. Precisely, the WBIF consists of two key components:

Joint Grant Facility (JGF), which pools grants from the European Commission's budget,
 CEB, EBRD, EIB and bilateral donors;

 Joint Lending Facility (JLF), based on loans provided by CEB, EBRD and EIB and increased cooperation with other multilateral development and bilateral financial institutions.

The WBIF focuses on sectors of the Western Balkan economies such are energy, environment, transport, social issues and private sector development. Calls for proposals are organized on a regular basis, usually twice a year (with deadlines in February and September). Projects must be nominated or endorsed by the National IPA Coordinator of the respective country.

Targeted countries are: Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Montenegro and Serbia (including Kosovo).

Eligible projects are energy efficiency in industrial and commercial sector, renewable energy investment and building sector energy efficiency improvements, municipal infrastructure or building energy efficiency programs and municipal infrastructure or building renewable energy projects. Loans doesn't exceed 2 million euros for private sectors and 2.5 million euros for municipalities.

The WBIF Secretariat has issued the 11th Call for Project Proposals with a deadline on 11 March 2014. WBIH support, among others, energy efficiency projects. Applications from the municipalities and private sectors for energy projects should be directed through Regional efficiency program REEP.

Specialized Financial Assistance Programs or Financing Facilities are complex assistance programs that support implementation of government policies in particular sectors and that target specific, well defined end-user. To date these have been used for³:

- EDIF (Enterprise Development and Innovation Facility) This provides equity and/or loan financing for innovative and high growth SMEs along with technical assistance to improve the regulatory environment.
- Energy Efficiency Provision of loan financing for governments, local municipalities and public companies for energy efficiency related investments along with technical assistance for government, municipalities and financial intermediaries.

Projects in energy sector include projects for electricity generation (hydro power, thermal power and heat power plants, wind parks, etc.) and for electricity, gas and oil infrastructure. Western Balkans Sustainable Energy Financing Facility

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³ http://www.wbif.eu/uploads/lib_document/attachment/362/WBIF_Guidelines_Round_11.pdf

Western Balkans Sustainable Energy Financing Facility (WEBSEFF) is a credit line facility window, which provides credit lines to partner banks in the Western Balkans to private sector and municipalities who want to invest in energy efficiency and small-scale renewable energy projects. The EU is supporting WEBSEFF by providing grants.

WEBSEFF is available to provide financing of up to EUR 2 m to private businesses looking to invest in:

- Modern technologies that cut energy consumption or CO2 emissions by at least 20%
- Retrofitting of buildings, provided the investment will make them at least 30% more energy efficient
- Stand-alone renewable energy projects
- Such investments help businesses
- Reduce costs and make enterprises more competitive
- Provide opportunities to replace old equipment and modernize production
- Expand output, or the range of production
- Improve quality standards and meet demands of export markets

WEBSEFF provides financing of up to 2.5 m to municipalities, ESCOs, providers of municipal services and owners of public buildings looking to invest in:

- Modern technologies that cut energy consumption or CO2 emissions by at least 20%
- Retrofitting of buildings, provided the investment will make them at least 30% more energy efficient
- Stand-alone renewable energy projects

The purpose is to help them become them more energy efficient and save on the cost of:

- Providing municipal services, such as transport, utilities and waste management
- Heating and cooling public buildings.

Municipalities, ESCOs, providers of municipal services and owners of public buildings will receive grant incentives of 10% - 15% of the loan amount upon successful completion and verification of eligible projects. The percentage applied is based on the environmental impact of the project measured either by the reduction of CO2 emissions or the choice and scale of technology (for projects in the Building Sector).

Western Balkans Sustainable Energy Direct Funding Facility

Western Balkans Sustainable Energy Direct Funding Facility (WEBSEDFF) presents a unique opportunity for private companies and developers to get free technical assistance in financing and launching of their projects.

The technical assistance is funded by grants from the European Union, from the Western Balkan Fund and from the EBRD's Shareholder Special Fund. Technical assistance is provided by project consultants who will:

- Support project sponsors to define the scope of their projects (including by performing an Energy Audit) and assist them in applying for financing.
- Verify the compliance of the project with the technical and other eligibility criteria. Estimate the potential CO2 emission reductions by each project on the basis of which the incentive payments can be calculated.
- Provide guidance to the project sponsors about the best practices in the field and support them in project implementation.

In order to qualify for a WEBSEDFF loan, the companies and projects have to meet certain eligibility criteria.

- 1. Technical criteria:
 - at least 20% of energy savings for industrial energy efficiency projects
 - minimum efficiency (utilization) rate for renewable energy projects.
- 2. Financial criteria: a sound financial and economic structure with sufficient equity capital contributed to the project by the sponsor.
- 3. Other criteria: for projects requiring concessions, licenses and permits, those should be obtained in compliance with the relevant EBRD requirements (transparent and competitive process, among others).

Green for Growth Fund for Southeast Europe

Green for growth Fund for Southeast Europe is an investment company with a mission to enhance energy efficiency and foster renewable energy in Southeastern including Turkey and European Neighborhood Region.

Targeted countries are: Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Montenegro, Serbia (including Kosovo), Moldova and Ukraine.

EU is participating in GGF and its shares are invested under the IPA.

As an initiative of international financial institutions already active in energy efficiency and renewable energy projects in the region (such as wind farms, hydropower plants, and biomass projects), the Fund is designed to complement existing program and funding sources and

contribute to further innovations in financing and expanding the industries in Southeast Europe.

Private Sector Support Facility for Western Balkans window for Sustainable Energy Financing Facility (WBPSSF - SEFF)

EU/EBRD Private Sector Support Facility for Western Balkans – WBPSSF – SEEF is a part of a larger framework which consists of loans to participating banks up to EUR 110 million and includes Sustainable Energy Financing Facility – supporting investments in energy efficiency and renewable energy. The framework is available to participating banks in Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro and Serbia. EU/EBRD Private Sector Support Facility for Western Balkans – Window for Sustainable Energy Financing Facility (WBPSSF – SEEF) will be used to finance sustainable energy investments in the private SME sector, covering industrial (including commercial building) and residential energy efficiency and small-scale renewable energy investments. The Sustainable Energy Financing Facility (SEFF) is dedicated to improving the supply of long term finance for investments in energy efficiency and renewable energy for private sector enterprises of all sizes and residential customers. Investments of up to 5 million euro per company can be funded by SEFF. Energy Services Companies (ESCO) are also eligible for funding under the program. Incentives are available covering up to 20% of the loan amount.

Energy sustainability for Adriatic small communities - ALTERENERGY

Alterenergy is strategic project established within the cross-border cooperation program IPA-Adriatic 2007-2013. Its budget is 12.5 million euros and it will last until August 2015. Eligible partners are organizations, regions, ministries and energy agencies from the countries that belong to Adriatic area: Italy, Albania, Bosnia and Herzegovina, Croatia, Greece, Montenegro, Serbia and Slovenia.

The work program of ALTERENERGY consists of several projects aimed to set up an Adriatic community of the renewable energies, by sharing knowledge initiatives, technologies and financial instruments, regional energy planning, production and use of renewable energies.

4. COHESION FUNDS

The Cohesion Fund is aimed at Member States whose Gross National Income (GNI) per inhabitant is less than 90 % of the EU average. It aims to strengthen economic and social

disparities and to promote sustainable development. The Cohesion Fund finances major projects in the fields of transport, energy and environmental protection.

The Budget for the period 2014-2020 is € 74 928,36 billion.

It is subject to the same rules of programming, management and monitoring as the ERDF and ESF though the Common Provisions Regulation.

Beneficiaries

Compared to 2007-2013, Spain will no longer be eligible for funding from the Cohesion Fund (Spain is currently eligible to a phase-out fund because its GNI is less than the EU-15 average). In 2014-2020 Cyprus will receive phasing-out support. For the rest, all other country beneficiaries are the same as in 2007-2013 (http://www.insideurope.eu/node/455#sthash.ivfbxdzY.dpuf).

In the new period, the Fund will contribute alongside the ERDF to multi-annual investment programmes managed in a decentralised way, rather than being subject to individual project approval by the Commission.

The financial assistance of the Cohesion Fund can be suspended by a Council decision (taken by qualified majority) if a Member State shows excessive public deficit and if it has not resolved the situation or has not taken the appropriate action to do so.

Objectives The Cohesion Fund shall, while ensuring an appropriate balance and according to the investment and infrastructure needs specific to each Member State, support:

- Investments in the environment, including areas related to sustainable development and energy which present environmental benefits;
- Trans-European networks in the area of transport infrastructure;
- Technical assistance.

Supported activities

Supporting the shift towards a low-carbon economy in all sectors by:

- promoting the production and distribution of renewable energy sources;
- promoting energy efficiency and renewable energy use in small and medium-sized enterprises;
- supporting energy efficiency and renewable energy use in public infrastructures;
- developing smart distribution systems at low voltage levels;
- promoting low-carbon strategies for urban areas;

Promoting climate change adaptation, risk prevention and management by:

- supporting dedicated investment for adaptation to climate change;
- promoting investment to address specific risks, ensuring disaster resilience and developing disaster management systems;

Protecting the environment and promoting resource efficiency by:

- addressing the significant needs for investment in the waste sector to meet the requirements of the Union's environmental acquis;
- addressing the significant needs for investment in the water sector to meet the requirements of the Union's environmental acquis;
 - protecting and restoring biodiversity, including through green infrastructures;
- improving the urban environment, including regeneration of brownfield sites and reduction of air pollution.

Promoting sustainable transport and removing bottlenecks in key network infrastructures, by:

- supporting a multi-modal Single European Transport Area by investing in the Trans-European Transport Network;
- developing environment-friendly and low-carbon transport systems including promoting sustainable urban mobility;
- developing comprehensive, high quality and interoperable railway systems;

Enhancing institutional capacity and an efficient public administration by strengthening of institutional capacity and the efficiency of public administrations and public services related to implementation of the Cohesion Fund.

Part of the Cohesion Fund allocation (€11.3 billion) will be ring-fenced to finance core transport networks under the "Connecting Europe" Facility. The Cohesion Fund can also support projects related to energy, as long as they clearly present a benefit to the environment, for example by promoting energy efficiency and the use of renewable energy.

Implementation

The Fund is implemented at a national level by a managing authority. Calls for proposals and tenders are published in the national language and potential applicants should contact the managing authority in his/her country for more information. The size of individual allocations for each country is determined on the basis of population, total area of the country, GDP per capita and socio-economic factors related to the transport infrastructure system.

Eligibility * Member States, whose GNI per inhabitant is less than 90% of the EU27 average in making investments in TEN-T transport networks and the environment.

TEN-T

As of January 2014, the European Union has a new transport infrastructure policy that connects the continent between East and West, North and South. This policy aims to close the gaps between Member States' transport networks, remove bottlenecks that still hamper the smooth functioning of the internal market and overcome technical barriers such as incompatible standards for railway traffic. It promotes and strengthens seamless transport chains for passenger and freight, while keeping up with future technological trends. This project will help the economy in its recovery and growth, with a budget of €26 billion up to 2020.

The Environment

The Cohesion Fund can also support projects related to energy or transport, as long as they clearly benefit the environment in terms of energy efficiency, use of renewable energy, developing rail transport, supporting intermodality, strengthening public transport, etc.

5. HORIZONTAL FUNDS

Horizon 2020

Horizon 2020 is the biggest EU research programme to date. Some \in 79 billion of funding is available for 2014-2020. The programme's three focus areas are excellent science (\in 24.4 billion), industrial leadership (\in 17 billion) and tackling societal challenges (\in 29.7 billion). Energy research and innovation is one of the key priorities in Horizon 2020. Addressing the key societal challenge "Secure, clean and efficient energy" it has been conceived to support the transition to a reliable, sustainable and competitive energy system.

To make the transition to a competitive energy system, we need to overcome a number of challenges, such as increasingly scarce resources, growing energy needs and climate change.

The Energy Challenge is structured around seven specific objectives and research areas:

- Reducing energy consumption and carbon footprint
- Low-cost, low-carbon electricity supply
- Alternative fuels and mobile energy sources
- A single, smart European electricity grid
- New knowledge and technologies
- Robust decision making and public engagement
- Market uptake of energy and ICT innovation.

There is also a separate but complementary programme for nuclear energy research activities adopted under the Euratom Treaty. In terms of budget, Horizon 2020 will dedicate €5 931

million for non-nuclear energy research for the period 2014-2020 and \in 1 603 million for nuclear research for the period 2014-2018.

Public Private Partnerships

Horizon 2020 may be implemented partly through public-private partnerships (PPPs), both to support industrial leadership and to address specific societal challenges.

The aim of the Public Private Partnerships (PPPs) is to fund research and innovation in several key industrial sectors - manufacturing, construction and automotive - in order to boost competitiveness and support employment, while at the same time significantly contributing towards a more green and sustainable economy.

The PPP calls of Horizon 2020 will be launched under the pillar "Leadership in Enabling Industrial Technology" (LEIT).

The first series of PPPs will include the three existing PPPs plus one new one:

- Factories of the Future (FoF)
- Energy-efficient Buildings (EeB)
- Green Vehicles (GV; replacing Green Cars) and new Sustainable Process Industry through Resource and Energy Efficiency (SPIRE).

The LIFE Programme

The LIFE programme is the EU's funding instrument for the environment. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental policy and legislation by co-financing pilot or demonstration projects with European added value.

LIFE began in 1992 and to date there have been four complete phases of the programme (LIFE I: 1992-1995, LIFE II: 1996-1999, LIFE III: 2000-2006 and LIFE+: 2007-2013). During this period, LIFE has co-financed some 3954 projects across the EU, contributing approximately €3.1 billion to the protection of the environment.

LIFE 2014-2020 regulation and funding

The LIFE 2014-2020 Regulation (EC) No 1293/2013 was published in the Official Journal L 347/185 of 20 December 2013. The LIFE 2014-2020 Regulation establishes the Environment and Climate Action sub-programmes of the LIFE Programme for the next funding period, 2014-2020. The budget for the period is set at €3.4 billion in current prices.

The LIFE programme will contribute to sustainable development and to the achievement of the objectives and targets of the Europe 2020 Strategy, the 7th Union Environmental Action Programme and other relevant EU environment and climate strategies and plans.

The 'Environment' strand of the new programme covers three priority areas: environment and resource efficiency; nature and biodiversity; and environmental governance and information. The 'Climate Action' strand covers climate change mitigation; climate change adaptation; and climate governance and information.

The programme also consists of a new category of projects, jointly funded integrated projects, which will operate on a large territorial scale. These projects will aim to implement environmental and climate policy and to better integrate such policy aims into other policy areas.

The new regulation also establishes eligibility and the criteria for awards as well as a basis for selecting projects. The programme is open to the participation of third countries and provides for activities outside the EU. It also provides a framework for cooperation with international organisations.

6.3. EUROPEAID

Development and Cooperation – EuropeAid is a new Directorate-General which is established with an aim to design EU development policies and assists countries worldwide through programs and projects. The partners of EuropeAid are civil societies, both in Europe and developing countries, international organizations, such as United Nations, OECD and World Bank, EU National Parliaments and EU Institutions. EuropeAid delivers aid through a set of financial instruments for different fields of human and economic development issues including energy as a key development challenge in the world.

Policies on energy efficiency and renewable energy of EuropeAid - European Union Energy Initiative for poverty eradication and sustainable development (EUEI) was established at 2002 World Summit for Sustainable Development in Johannesburg in order to achieve poverty eradication and sustainable development in developing countries by giving the important role to energy.

The instruments that EUEI has created for addressing the energy issues are:

- The ACP-EU Energy Facility support projects on increasing access to sustainable energy sources for rural and peri-urban areas in African, Caribbean and Pacific countries;
- The COOPENER Program an external component of Intelligent Energy Europe which support projects addressed the role of sustainable energy for poverty alleviation in developing countries (Sub-Saharan Africa, Latin America and South-East Asia).

- COOPENER was implemented through grants, which were awarded in response to open Calls for Proposals on an annual basis;
- The EUEI Partnership Dialogue Facility support investments in a creation of environment for investments in sustainable energy market across Africa, Southeast Asia, Latin America and Pacific.

Council conclusions on access to sustainable energy sources at local level in developing countries from May 2009, the EU stressed its firm commitment to three specific targets in this context: ensuring energy security and sustainability for all, cutting greenhouse gas emissions to a level which will not cause irreparable damage to the climate; and helping developing countries to have access to modern, affordable and reliable energy services in order to ensure basic human needs, accelerate economic growth and improve the livelihoods of their people.

The Sustainable Energy for All Initiative - The European supports the UN initiative with the three interlinked objectives: ensuring universal access to modern energy services, doubling the rate of improvement in energy efficiency, doubling the share of renewables in the global energy mix.

Programs energy efficiency and renewable energy of EuropeAid - Global Energy Efficiency and Renewable Energy Fund (GEEREF) is a public-private fund created by European Commission in 2008, with an aim of attracting commercial investors to become shareholders of the fund and multiply transferring the renewable energy technologies to developing countries, which should result in cutting greenhouse gas and transferring low carbon technologies. The partners of GEEREF are European Commission, Public investors from Germany and Norway, European Investment Bank and European Investment Fund. Through its investment in private equity funds, GEEREF finances energy project such are small hydropower, biomass, wind farms etc.

GEEREF invests in emerging markets outside the European Union and particularly focuses in ACP or African, Caribbean and Pacific developing countries. It also invests in Latin America, Asia and neighbouring states of the EU (except in Candidate Countries). Priority is given to countries with policies and regulatory frameworks on energy efficiency and renewable energy. The thematic program for Environment and Sustainable Management of Natural Resources including Energy (ENRTP) helps developing countries and partner organizations to address environmental and natural resource management issues. The priorities of this program are the following:

- To assist developing countries to make better progress on integrating environmental sustainability in decision making,
- To promote the implementation of initiatives and commitments made at both European and international level,
- To increase the prominence of environmental issues in EU external policy,
- To strengthen international governance on the environment and make EU actions a key part of the process,
- To broaden the options as regards sustainable energy, in particular by developing a legislative and administrative framework, which favours investments and businesses, and by stimulating international cooperation.

These funds may be used by the following entities:

- partner countries and regions, and their institutions,
- decentralized bodies in the partner countries (municipalities, provinces, departments and regions),
- joint bodies set up by the partner countries and regions with the Community,
- · international organizations,
- EU agencies.

EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) – support investments in a creation of environment for investments in sustainable energy market across Africa, Southeast Asia, Latin America and Pacific.

EUEI PDF consists of two service lines:

- Energy policy and Strategy Development provides energy policies and strategies by conducting a studies in cooperation with governments and regional organizations that are active in energy sector;
- Support to the Africa-EU Energy Partnership provides meetings, partnership documents and monitor AEEP 2020 political targets.

European neighborhood and partnership instrument

European neighborhood and Partnership Instrument (ENPI) is financial instrument Regional cooperation – energy cooperation with the southern neighborhood Investment Facility.

The Neighborhood Investment Facility (NIF) is an innovative financing mechanism which provides funding for the investment needs of the neighboring region for infrastructure in a number of sectors, including energy.

It aims to pool grant resources from the EU budget and the EU Member States, using them to leverage loans from European finance institutions as well as contributions from partner countries. It has helped to make a considerable difference in the field of energy: the amount of support in 2011 was provided for infrastructure projects with a total of €112.3 million approved, with the sectors of transport and energy together receiving the largest share (69%). Since June 2008, the NIF has approved 12 projects in Southern Mediterranean countries representing a total investment of over €5 billion.

Mediterranean Solar Plan (MSP) is one of the major tangible initiatives of the Union for Mediterranean endorsed both at the Summit in Paris on 13-14 July 2008 and at the UfM Foreign Affairs Ministerial in Marseilles on 3-4 November 2008. MSP has two main objectives: Developing 20 GW of new renewable energy production capacities:

Achieving significant energy savings around the Mediterranean by 2020.

The European Commission supports the objectives of the MSP through capacity-building projects (e.g. the technical assistance project 'Paving the way for the MSP ' which started in 2010 , etc) as well as through financial support from the European Investment Bank's Facility for Euro-Mediterranean Investment and Partnership (FEMIP) and the Neighborhood Investment Facility. The MSP complements a number of interconnecting energy projects implemented in the Mediterranean region, funded under the European Neighborhood and Partnership Instrument (ENPI).

Energy Regulators cooperation - project to support the cooperation between the Euro-Mediterranean energy regulators (MEDREG) was launched to facilitate information exchanges between EU and partner countries' regulators, assist these countries in establishing and empowering independent energy regulators and develop the technical capacities of their staff. Following a successful first phase covering the 2008-09 period, the MEDREG II project has an overall budget of €1 119 200 for the 2010-2013 period.

Energy efficiency in construction - Launched in 2005, the Euro-Mediterranean project encouraging energy efficiency in the construction sector (MED-ENEC) project was launched to raise public awareness and involve civil society in climate-oriented building techniques, energy efficiency and renewable energy use in buildings. The project focuses on strengthening

business services, supporting markets and building institutional capacities and favourable institutional structures. The project received a budget of €5 million for the 2009-13 period.

5. LOANS

5.1. European Local ENergy Assistance – ELENA

The ELENA facility is run by the European Investment Bank (EIB) and funded through the European Commission's Intelligent Energy-Europe programme. This joint EIB-European Commission initiative helps local and regional authorities to prepare energy efficiency or renewable energy projects. Since 2012, it mobilises more than EUR 1.6bn in relevant investments.

Supporting sound energy investments in cities and regions

Urban areas account for around 70% of the energy consumption of the EU, yet a lot still remains for the potential for sustainable energy-related investments to be fully exploited. The ELENA facility aims to help public authorities to these ends by improving the chances that their plans will be able to attract external finance.

In the last few years, many cities and regions have started to prepare major energy efficiency and renewable energy proposals and have signed up to the Covenant of Mayors initiative (www.eumayors.eu), under which they undertake to go beyond the EU's planned 20% cut in CO2 emissions by 2020.

When it comes to implementation, the problem is not so much availability of finance as lack of know-how or capacity to implement large-scale projects. ELENA aims to encourage authorities to think ambitiously and develop energy efficiency and renewable energy projects that can be replicated across the EU.

Investment Programmes under ELENA

Funding for ELENA comes from the European Commission's Intelligent Energy Europe II (IEE) programme. The money is used to provide technical assistance to local and regional authorities seeking to implement their energy plans.

ELENA funds can be used for structuring programmes, business plans and additionally needed energy audits, preparing tendering procedures and contracts, and paying for project implementation units. The EU contribution can cover up to 90% of eligible costs. Investment programmes can involve the improvement of energy efficiency in buildings or street lighting, the integration of renewable energy sources in buildings or the renovation or installation of

district heating systems using combined heat and power or renewable sources. Urban transport programmes relating to enhanced energy efficiency, such as the introduction of energy-efficient buses or increased renewable energy use in transport (e.g. infrastructure for alternative fuel vehicles), are also eligible.

The aim is to generate bankable investment projects that can attract outside finance, for example from local banks or other financial institutions, such as the EIB. These projects can also be implemented by energy service companies (ESCOs), which are service providers that guarantee future savings made on energy bills and can fund projects upfront that are refinanced through the savings achieved.

The development of ESCOs in Europe is expected to help implement the EU's Energy Services Directive, which obliges public authorities to improve energy efficiency and encourages the use of financial instruments for energy savings, such as third-party financing contracts and energy performance contracts. As the Commission's Energy Efficiency Plan underlines, ESCOs can help public authorities to upgrade buildings by grouping them into scalable projects under energy performance contracts.

Funds are currently available to support projects under the ELENA Facility. When funds will be exhausted, a notice will be posted on the EIB's webpage (www.eib.org/elena).

5.2. European Energy Efficiency Fund (EEEF)

The European Energy Efficiency Fund (EEEF) was initiated as a new sustainable energy facility that the European Parliament and Council of Ministers agreed to launch using unspent funds from the European Energy Programme for Recovery for a new sustainable energy facility. It will support the EU Member States in meeting their objective to, by 2020, reduce greenhouse gas emissions by 20%, increase renewable energy usage by 20% and lower energy consumption through a 20% improvement in energy efficiency.

The EEEF aims to provide market-based financing for commercially viable public energy efficiency and renewable energy projects within the 28 EU Member States. It contributes with a layered risk/return structure to enhance energy efficiency and foster renewable energy by unlocking the substantial potential in the European public sector in the form of a targeted public private partnership.

Objectives of the Fund are:

- 1) Contribute to the mitigation of climate change
- 2) Achieve economic sustainability of the Fund
- 3) Attract private and public capital into climate financing

Eligible Investments

The European Energy Efficiency Fund (EEEF) targets investments in the member states of the European Union.

The final beneficiaries of EEEF are municipal, local and regional authorities as well as public and private entities acting on behalf of those authorities such as utilities, public transportation providers, social housing associations, energy service companies etc. Investments can be made in Euro, or local currencies, however the latter is restricted to a certain percentage.

To reach its final beneficiaries, EEEF can pursue two types of investments:

Direct Investments

These comprise projects from project developers, energy service companies (ESCOs), small scale renewable energy and energy efficiency service and supply companies that serve energy efficiency and renewable energy markets in the target countries.

- Investments in energy efficiency and renewable energy projects in the range of €5m to €25m
- Investment instruments include senior debt, mezzanine instruments, leasing structures and forfeiting loans (in cooperation with industry partners)
- Also possible are equity (co-)investments for renewable energy over the lifetime of projects or equity participation in special purpose vehicles, both in cooperation directly with municipalities, or with public and private entities acting on behalf of those authorities.
- Debt investments can have a maturity of up to 15 years, equity investments can be adapted to the needs of various project phases
- The Fund can (co-)invest as part of a consortium and participate through risk sharing with a local bank

Investments into Financial Institutions

These include investments in local commercial banks, leasing companies and other selected financial institutions that either finance or are committed to financing projects of the Final Beneficiaries meeting the eligibility criteria of EEEF.

- Selected partner financial institutions will receive debt instruments with a maturity of up to 15 years
- These instruments include:
 - senior debt
 - o subordinated debt
 - o quarantees
- No equity investments in financial institutions

Financial institutions on lend to the beneficiaries of the Fund meeting the eligibility criteria to finance energy efficiency and/or renewable energy projects.

JOINT EUROPEAN SUPPORT FOR SUSTAINABLE INVESTMENT in City Areas – JESSICA

This initiative is being developed by the European Commission and the European Investment Bank (EIB), in collaboration with the Council of Europe Development Bank (CEB). Member States are being given the option of using some of their EU grant funding, their so-called Structural Funds, to make repayable investments in projects forming part of an integrated plan for sustainable urban development. These investments, which may take the form of equity, loans and/or guarantees, are delivered to projects via Urban Development Funds and, if required, Holding Funds.

What types of projects are eligible?

Rules on the eligibility of project expenditure, using JESSICA, are the same as those on the use of Structural Funds as a whole, and need to take account of any specific national constraints. Apart from specific non-eligible items listed in the Regulations, such as housing in some of the Member States, JESSICA may allow for more flexible management of projects, respecting at the same time eligibility rules, provided always that the projects being supported form part of "integrated and sustainable" urban development plans. Ineligible expenditure components might, for example, be included as part of a larger, multi-sector urban project, provided sufficient additional funding is attracted from other private or public sources to finance these ineligible components.

When considering which projects could make use of JESSICA funding, an integrated approach is necessary.

JESSICA funds could be targeted specifically at projects such as urban infrastructure - including transport, water/wastewater, energy etc. - energy efficiency improvements.

The main benefits of JESSICA

- To make Structural Fund support more efficient and effective by using "non-grant" financial instruments, thus creating stronger incentives for successful project implementation.
- To mobilise additional financial resources for public-private partnerships and other urban development projects with a focus on sustainability/recyclability.

• To use financial and managerial expertise from international financial institutions such as the EIB.

6. CROWD FUNDING

Anyone over the age of 18 and who is a citizen of the EEA (European Economic Area) or Switzerland can invest on crowd funding. Crowd funding platform offers investments in the form of debentures. A debenture⁴ is a certificate or contract that represents a loan you have made to a company. A debenture is similar to a bond but pays a proportion of your capital back every 6 months, rather than all at the end. Unlike most bonds which pay a fixed 'coupon' or amount of interest each year, debenture returns can take different forms as outlined above. Owning a share (or stock) in a company makes you an owner of the company and gives you a right to vote. Your returns paid as a dividend and the value of your share will vary depending on the company's fortunes and its success in the market.

Because debentures are not listed on a stock exchange, their value does not fluctuate with the financial markets and are therefore a way of diversifying your portfolio risk. You can invest in as many or as few projects as you like, this because I there are no fees that you will have to pay directly on crowd funding platform. Some people like to spread their money across a number of projects to lower the investment risk.

Example you can hold a crowd funding platform debenture in a Self-Invested Pension Plan (SIPP). To do this you have to work with the specialist SIPP providers to allow you to invest through your crowd-funding platform account. If the platform does not already work with your SIPP provider they will normally develop synergies directly with them to facilitate the inclusion of debentures in your SIPP. Most of the platforms are currently offering a bonus equal to 3% of your first investment made through your SIPP (for investments over £10,000).

Debentures are designed to be long-term investments, but if you do need to sell early platform operate a bulletin board that works a bit like eBay. You put your debentures up for sale, wait

⁴ A debenture is a document that either creates a debt or acknowledges it, and it is a debt without collateral. In corporate finance, the term is used for a medium- to long-term debt instrument used by large companies to borrow money. In some countries the term is used interchangeably with bond, loan stock or note. A debenture is thus like a certificate of loan or a loan bond evidencing the fact that the company is liable to pay a specified amount with interest and although the money raised by the debentures becomes a part of the company's capital structure, it does not become share capital.[1] Senior debentures get paid before subordinate debentures, and there are varying rates of risk and payoff for these categories.

Debentures are generally freely transferable by the debenture holder. Debenture holders have no rights to vote in the company's general meetings of shareholders, but they may have separate meetings or votes e.g. on changes to the rights attached to the debentures. The interest paid to them is a charge against profit in the company's financial statements.

for offers and then choose which you would like to accept. This allows you to invest for friends, family and even children, for children under 18 a designated account is set up, where you can hold debentures in a sub account until the child is 18.

Selling and buying completed Debentures

CF platform expect most people who buy debentures to hold them for their full term, however they also recognize that circumstances change and some people will need to sell during a debenture's life. CF platform have therefore designed a process to make it as easy as possible to buy and sell debentures. The process works in a similar way to eBay but without the auction function. Via the funded projects page you can connect with people who want to sell debentures that have already been issued. Historically, buying and selling unlisted securities such as debentures has been an expensive thing to do, and is another reason why the public has often been excluded from more interesting parts of the investment market. CF platform have therefore designed a simple process that avoids unnecessary costs and enables them to offer an effective service without levying additional transaction charges on their customers.

Their bulletin board is an easy way for buyers and sellers to connect with each other in order to agree terms of sale Because debentures are transferable you do not have to use their service to conduct trades, but it will provide the simplest and most secure way to connect buyers and sellers.

Conversely, any Early Bird Bonus is held by the debenture rather than the debenture holder and is therefore transferred when a bulletin board trade is made. Then to sell a completed debenture you will need to create a sell offer from within the portfolio section of your account. Select the debenture you wish to sell and enter the amount you are selling, your asking price, a preferred method of payment and a close date for the offer. Potential buyers will be able to make initial offers to buy your debentures until the offer closes. You can also indicate a minimum amount of debentures you'd be prepared to sell, which might be useful to buyers interested in less than the full amount on offer. Sell offers will be reviewed by an administrator before being listed to potential buyers. You can withdraw a sell offer at any time. Each time someone makes you an initial offer to buy you will receive an email with details of the offer, plus a summary of all the offers you have received to date. People who want to sell debentures create sell offers, which are listed on individual project pages. If you see a sell offer you like, the next step is to connect with the seller by making them an initial offer. This will send details of your initial offer to the seller and enable them to correspond with you directly in order to negotiate and conclude a binding agreement. Once you have agreed a binding contract of

sale, you can pay using money in your crowd funding platform cash account, PayPal, cheque, or any other means satisfactory to both parties. If you agree to pay using money in your crowd funding platform cash account, CF platform will need the buyer's authority to transfer the money to the seller. You will only be able to connect with sellers and send initial offers if you are signed in to your crowd funding platform account and have passed their identity checks. Once the seller has received an initial offer they may contact the prospective buyer immediately, but are more likely to wait until the sell offer closes. At this point they will contact buyers with the most attractive initial offers in order to conclude the trade of their debentures. Once a buyer and seller have been introduced, they are free to negotiate and conclude the sale via email or telephone.

There are, however, two key things both parties need to agree: a) Price and amount of Debentures to be traded, b) Method of payment.

In concluding a trade it is important to remember two things. First, it is the responsibility of both you and your counterparty to agree the price and terms of any completed debenture sale. Crowd funding platform only operates an introduction service enabling sellers to connect with potential buyers of debentures. Second, sell offers and corresponding initial offers do not constitute an agreement; they are simply expressions of interest. You and your counterparty will need to discuss and agree the offer via email or telephone in order to come to a binding agreement. There should be a legally binding agreement between you and your counterparty. This can take many forms - a single email, an email exchange culminating in an agreement, or a full-blown written document - but it must be in writing. It is essential that you record in writing the evidence of the agreement, so that should a dispute arise regarding the transaction there is evidence of what was agreed. Crowd funding platform will run checks to ensure both you and your counterparty are happy with the trade before we update the debenture register. However, crowd-funding platform cannot be held responsible or liable for any disputes stemming from trades that have come about due to introductions made through the bulletin board. If you have any concerns about conducting a trade or the terms of any binding agreement to buy or sell debentures, is suggest to be supported by a lawyer. You may consider it important to obtain legal advice in particular if you are selling a large quantity of debentures. Once you have agreed a trade the seller should send to crowd funding platform a notification email, copying in the buyer and including the following details:

- Name of both the buyer and seller
- Name and quantity of Debentures being sold
- The price
- Proof of payment; or

 Notification that the payment will be made from the buyer's crowd funding platform cash account

Before transferring the ownership of the debenture, CF Platform will contact both you and your counterparty to confirm that the details and instructions are correct. If you post a Sell Offer, you are in complete control of the process and are not obligated to respond to Initial Offers received. If you do correspond, it is up to either party to decide how much or little they reveal about themselves. Buyers and sellers should never know where there counterparty lives or how many debentures they own in total. CF platform expects members who are using the bulletin board service to treat counterparties with respect and conduct their trades in a courteous manner. If either a buyer or seller feels that another party is not using the system appropriately or is being abusive, they normally report this to the crowd-funding platform immediately and they will investigate the matter.

Community investment on renewable energies and energy efficiency

There are a number of reasons that renewables make a sound investment choice. The EU has committed to strict CO2 reduction targets, which mean that renewables are going to play an ever-increasing role in our energy future. By investing in renewables you are helping this to happen, as well as offsetting some of your own CO2 emissions. Furthermore, by investing directly in renewables, you and local communities are enjoying the profits rather than big corporations and financial institutions. As with any investment, your money is at risk, although crowd-funding platform have done all they can to ensure the risk to us is minimal. However, an energy project could get into trouble if there is lower than expected output, operational failure or a collapse in the price of energy. This might result in you receiving lower returns than expected. CF platform charge the energy project raising money two fees, one for raising the money and one for managing the investment and their investors on a yearly basis. All estimated returns on the website are quoted after these fees have been paid by the project, so you know exactly what you should expect to get back. There are normally three different types of return attached to energy projects:

1. Variable Return Debentures, where the incomes you receive on top of your capital is linked to how much energy and therefore profit is generated. Two main factors affect the predictions of your estimated returns: the annual energy production for the project and the price the energy project achieves for selling its electricity. Each of these will vary slightly from project to project but the principle is the same. By focusing on mature technologies, you can more confidently predict how the estimated sun and wind energy in a given year will convert into electricity. This is then applied to the price of the energy,

which is essentially fixed for the life of the project and rising with inflation for projects that are eligible for the Feed-in Tariff.

- 2. Fixed Return Debentures where the amount you receive by way of interest is fixed at the outset and remains the same for the life of the investment. As well as using conservative estimates to predict the amount of revenue projects will generate and the costs they will incur, cash 'buffers' are used to protect against any short-term shortfall.
- 3. *Inflation-linked debentures*, where both your capital and any additional interest are both increased in line with inflation each year. As well as using conservative estimates to predict the amount of revenue projects will generate and the costs they will incur, cash 'buffers' are used to protect against any short-term shortfall.

Understanding the risks

As with any investment product there are risks, normally listed in the offer document that will cover the risks specific to the individual energy project, There is a risk, if something goes wrong or if the energy project fails during the life of the debenture, that you may not get back all or any of your original investment. Money sitting in your crowd funding platform account is normally covered by a Financial Services Compensation Scheme (FSCS) – but once you have bought and been allocated debentures in a energy project, the money is transferred to them and you are reliant on their ability to pay it back. Any returns, which have already been paid to you, are not affected if the energy project gets into trouble. The sorts of things that could result in an energy project getting into trouble are:

- A significant collapse in the price of energy
- Extended periods of lower than expected energy production
- Extended operational failure not covered by normal maintenance warranties and contracts

Debentures are very long term investments, depending which energy project you choose, it's a 20-25 year investment and you should expect to hold it for its full term. The debentures are transferable which means you can sell them, but they will be harder to sell than some investment products. If you are forced to sell them in a hurry, there is a risk you may not get all of your money back. There is no regulated marketplace6 and the options to sell the debenture are limited. Crowd funding platform provides normally a bulletin board, which works in a way similar to eBay without the auction, to allow buyers and sellers to find each other. Normally all the CF platform allocate a pledge bonus to a person for pledging their support to an energy project and is not transferred if they sell a debenture in that project via the bulletin board.

7. PUBLIC PRIVATE PARTNERSHIPS, TYPES AND STRUCTURES

A PPP is a partnership between the public sector and the private sector for the purpose of delivering a project or a service traditionally provided by the public sector. PPPs recognise that both parties have certain advantages relative to the other in the performance of specific tasks. By allowing each sector to do what it does best, public services and infrastructure can be provided in the most economically efficient manner. Designed appropriately, PPPs can generate substantial benefits for consumers and taxpayers. The scope of potential benefit will, however, depend on the type of project being undertaken and the exact terms of the contract governing the PPP. It is important to note that public bodies have a critical role to play in the management and regulation of PPP during their design, construction and operation. PPPs also require effective contract monitoring procedures to ensure that contractual obligations continue to be met in terms of both quality and timing. It is also essential to recognize that the nomenclature used to describe the partnership process has not been standardized. There are several terms often used. There are also single terms that are used loosely and can be applied to situations that are fundamentally different. As such, it is necessary for PPP practitioners to delve beyond the terms and concepts and become familiar with the way in which the partnership process itself works. The following figure presents the interaction between public and private responsibility in combination with the various types of PPPs.

Under the traditional public procurement model, government agencies can utilize the services of the private sector for design and construction, with the award of individual contracts made on a competitive basis. However, private sector participation usually does not extend beyond these functions. The above-mentioned type involves cases where limited responsibilities assumed by the public sector are passed to private companies. However, the functions involved are at once discrete and relatively isolated. Integrated partnerships involve transferring responsibility for the design, construction, and operation of a single facility or group of assets to a private sector partner. This project delivery approach is known by a number of different names, including "turnkey" procurement and the build operate- transfer (BOT) system. The advantage of the BOT approach is that it combines responsibility for usually disparate functions – design, construction, and maintenance – under one single entity. This allows the partners to take advantage of a number of efficiencies. First of all, the project design can be tailored to the construction equipment and materials that will be used. In addition, the contractor is also required to establish a long-term maintenance program up

front, together with estimates of the associated costs. The contractor's detailed knowledge of the project design and the materials utilized allows it to develop a tailored maintenance plan over the project life that anticipates and addresses needs as they occur, thereby reducing the risk that issues will go unnoticed or unattended and then deteriorate into much more costly problems.

The structures described above provide new opportunities for the private sector to perform tasks that would otherwise be undertaken by the public sector. However, PPP arrangements can also involve private sector financing for projects that would otherwise be fully financed by the state. These types of PPP arrangements are particularly attractive as they afford all the implementation and operational efficiencies described early, together with new sources of capital. Access to additional sources of capital allows owners to implement important projects sooner by avoiding the need to wait for future government budget cycles for funding. The primary vehicle for PPP opportunities involving direct private sector investment is the design build- finance-operate (DBFO) concession agreement. These agreements enable a private investment partner to finance, construct, and operate revenue generating infrastructure improvement in exchange for the right to collect the associated revenues for a specified period of time. Concessions can be awarded for the construction of a new asset or for the modernization, upgrade, or expansion of an existing facility. Concessions often extend for a period of 25 to 30 years, or even longer, and are awarded under competitive bidding conditions. Under a concession approach the ownership of all assets, both existing and new, remains with the public sector. It is their responsibility to ensure that the assets are properly used and maintained during the concession period and that they are returned in good condition when it is over. Concessions are generally awarded on following criteria:

The end price offered to users

- The level of financial support required from the government and other grantors
- Ability to implement the project

Private divestiture involves the sale of assets or shares of a state-owned entity to the private sector (build-own-operate). Divestitures can be approached in many different ways, and can be either partial or complete. Divestiture is also often an integral part of the transformation of state-owned enterprises in Candidate Countries and can be used as a vehicle to transfer the ownership of assets from the central government to local governments and / or to private utility companies. The following discussion on divesture addresses the sale of assets to private investors only. In the case of a complete divestiture, the entire assets of a utility would be sold either to a single investor, a group of investors, or possibly through a management buyout. In certain cases a divestiture can also be accomplished by making shares in the

company available for purchase on the national stock market. A complete divestiture is similar to a concession in certain ways, as it gives the private investor complete control over investment in, and the operation and maintenance of whatever assets the company possesses. However, unlike concessions, divestiture also gives the private sector ownership of the assets themselves, and that ownership is permanent. As such, the government relinquishes further control with a divestiture approach, maintaining only a regulatory role, protecting consumers from monopolistic pricing and, in some cases, perhaps requiring a minimum maintenance and investment regimen. With a partial private divestiture, the government would retain ownership of a certain portion of the former public company's assets. This is often a more attractive alternative to those governments or authorities who wish to maintain a certain level of control in the management of the assets. In such cases, the interplay of responsibilities between the public and private sectors is blended. A partial divestiture is an excellent way for the public sector to attract private capital and encouraging improvements in operational and management efficiency, while also protecting the public consumers as well as assets of national significance. The individual arrangements for sharing responsibility for management and investment decisions depend on the division of assets, as well as the sharing of costs. Therefore, they would need to be established on an individual basis. It is likely that the public sector would transfer as much of the costs as possible to its private partner. However, in order for a partial divestiture to be attractive to private investors there would have to be a reasonable scope for making a fair profit on its investment.

Financial Instruments:

Climate Bonds

There are various definitions of climate bonds, ranging from those covering any 'climate themed' activity (e.g. funding renewable energy infrastructure or public mass transit systems) through to the creation of specific financial instruments called 'climate bonds'.

The Climate Bond Initiative, amongst others, argues that climate-specific bonds would need to be large-scale, with deals of over \$500 million, and 'investment grade' (above the BBB scoring issued by ratings agencies) to attract investors. They suggest that this could be achieved by structuring climate bonds as asset-backed securities, which would package together loans for renewable energy or energy efficiency. Proposals have also been made to structure climate bonds as Collateralized Debt Obligations (CDOs), or to offer carbon credits as a revenue stream, in addition to interest payments on the sum borrowed.

Proponents of climate bonds have also proposed various means to guarantee investments, including governments or international financial institutions offering risk insurance (in effect, playing the role of monoline insurers).

Critics argue that climate bonds are another form of financialization, instrumentalizing climate change for the creation of new vehicles for financial speculation. Climate bonds could repeat many of the mistakes that led to the 2008 financial crisis, loading significant risks onto public institutions in the interest of new opportunities for private gain – thereby undermining the basis for long-term, sustainable public investment.

A recent report co-authored by HSBC and the Climate Bonds Initiative, titled Bonds and Climate Change: The State of the Market in 2013, is a strong indication that the climate for climate bonds has improved. In the report, HSBC estimates that to transition to a low-carbon economy, \$10 trillion needs to be invested globally between 2010 and 2020. At the same time, many global investors now consider the carbon footprint of prospective investments as a part of their analyses when just a few years ago this was a concern for only a fringe segment of investors.

How else is the climate for climate bonds different? Many changes are afoot.

More Stringent Definition of Climate Bonds

Thanks to the Climate Bond Initiative, a climate bond now must meet strenuous criteria for how its proceeds are ultimately invested to receive the "climate bond" label. This emphasis on actual use of proceeds marks an important analytical shift away from considering a bond "green" based solely on its stated intention to use proceeds to lower carbon output. Standard setting around nomenclature now allows investors to buy a bond marked "climate bond" with confidence that it will meet the rigors of investment policy statements and charters. Furthermore, diligent and continuous evaluation by the Climate Bonds Initiative ensures that an issuer's claim to be a "green bond" is accurate. By comparing a firm's revenue breakdown and description of "use of proceeds" on Bloomberg with company disclosures, as well as other market sources, the Climate Bonds Initiative is able to affirm that climate bonds meet tough underwriting standards.

Improving Liquidity and Credit Quality

Early in the history of climate change investing, bond financing was a distant second to equity financing. Climate change investments were perceived as too risky and too volatile to generate the steady stream of cash flows that bond investors covet. But now we seem to have reached a tipping point, with climate-themed bonds totaling \$346 billion globally. What's more, fully 89% of these bonds are considered investment grade, with approximately \$163

billion considered benchmark-type investment grade. This amount is double the amount outstanding at year-end 2012.

With both of the classic concerns of bond investors — liquidity and credit quality — improving, investors are beginning to turn their attention to more hierarchical needs. What additional steps need to be taken for climate bonds to evolve further?

Public Sector Support of Climate Bonds Market

- Public sector support is already in place in the climate bonds market, for example:
- Some governments provide credit enhancement to certain bonds
- Governments are investing in climate bonds directly

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What else could be done to help mature the climate bonds market? The authors of "Bonds and Climate Change" suggest:

- Providing tax incentives
- Providing retail pension incentives
- Providing discount rates for green mortgages based on improved credit scores stemming from lower monthly utility bills for borrowers
- Allowing climate bonds to have a risk preference rating under Basel III standards

Diversification of Industries and Geographies

More diversity is needed. By far the most represented industry in the world of climate bonds is transportation, which is estimated to account for 76% of the entire universe. That's because railroads, the classic technology solution of the nineteenth century, has found new life in the transformation to a low-carbon emissions economy. Railroads are far and away the cleanest, most scalable transportation technology excluding coal transportation. Compared with railroads, energy and climate finance represent 11.8% and 9.2% of the climate bond universe, respectively. Investors will doubtless want additional industry breadth from the climate bond universe going forward.

Geographic diversity is also a challenge. China dominates the low-carbon bond universe at 36.7%, or \$127 billion. A distant number two is the United Kingdom (UK) at \$50 billion. For the climate bond universe to be considered deep and broad, and to generate additional investor interest, more geography will likely need to be represented.

What's Next for Climate Bonds?

Although they have clearly turned a corner, in order for the market to be considered fully mature some key additional positive factors need to be put in place, such as:

- Greater scale in particular, this would help with creating portfolio benchmarks
- Aggregation to allow for securitization, standardization of climate bonds needs to be put in place so that they may be aggregated
- Assurance the Climate Bonds Initiative is already providing due diligence for the space, but additional assurance of the qualification of bonds as definitive "climate bonds" should be provided by other parties to attract new investors and, ultimately, greater deal flow.

In just the last two years, climate bonds have moved beyond the existential question of "to be, or not to be." Still, some more important mile markers need to be surpassed before these instruments become a truly a mainstream product. Even supporters still have questions and doubts. For example, enthusiasts believe that the asset class remains very small relative to others, especially US dollar-denominated climate bonds. In addition, greater participation from non-governmental entities and pure-play climate issuers — that is, conglomerate-type corporate issuers — is a watershed moment that still has not shed water. Even so, climate bonds seem here to stay.

Private Investors

- The Institutional Investors Group on Climate Change (IIGCC) is a forum for collaboration on climate change for investors. IIGCC currently has over 80 members, from 9 countries, representing around €7.5 trillion in assets. Their network benefits from active participation from some of the largest pension funds and asset managers in Europe and is continually growing. IIGCC provides investors with a collaborative platform to encourage public policies, investment practices, and corporate behavior that address long-term risks and opportunities associated with climate change. IIGCC pursues its mission through two strategic objectives:
 - 1. Changing market signals by encouraging the adoption of strong and credible public policy solutions that ensure an orderly and efficient move to a low carbon economy, as well as measures for adaptation.
 - 2. Informing investment practices to preserve and enhance long-term investment values.

8. ENERJ – Joint Actions

MED cities and regions have adopted local energy strategies for achieving the energy efficiency targets set by EU. However, fresh approach is needed since the implementation capacities are not sufficient to meet the set goals. The ENERJ – Joint Actions For Energy Effiency project is addressing the contribution of local communities to the achievement of the objective for EU's decarbonisation. The EU targets for ensuring security of efficient energy supply are transferred to the national and local level. In municipalities, the local public authorities are responsible for setting up their frameworks for efficient energy management by taking into account local potentials for sustainable development. The project aims at enhancing and improving the coordination of Sustainable Energy Action Plans (SEAP's) and other relevant energy Efficiency Plans. The project will develop and test a technologically oriented methodology for increasing cooperation among public authorities through Joint Actions transferring the most promising methods in the partner regions.

The development of joint actions was based on the methodology proposed in D.3.1.1 - Guidelines for Joint Actions Definition and the proposed funding was based on guidelines from the D 3.2.2 – Funding Tools. So, according the Application Form of ENERJ, 9 Joint Actions were defined (one per country) and for each one, the partners have identified the Financing solution for the implementation of the national joint action.

The individual analysis of each one of the Joint Actions allowed the identification of the pilot implementation areas, the target audience and its connection with the SEAPs or other guiding documents of the Local Energy Policy.

The table below summarizes each one of the pilot cases identified and, after the extensive analysis, the financing propose to the joint action implementation:

Country	Joint Action	Financing Propose
Slovenia	Joint action to renovate indoor lighting in sports halls in the Primorska region	Combining individual projects to one large joint action could have positive result of achieving an economy of scale, that would attract private capital and enable realization of the investment;
Spain	REDEMA, an Energy Network of Andalusian Municipalities	FAMP is looking for funding tools through cooperation projects such as Interreg programme (POCTEP, SUDOE, Med), so the development of the Network could be progressive, increasing its resources and capacities to develop the activities and actions it undertakes.

Country	Joint Action	Financing Propose
Greece	Energy Upgrade of Municipal Buildings	The Municipalities will receive a loan from the Deposits and Loans Fund Mechanism; The investment will be subsidized by 50% by National Funds
Croatia	Creating a synergistic effect on the use of local resources in the renovation of public buildings	EEA Grants and Norway grants One of Programme areas is: Environment, Energy, Climate Change and Low Carbon Economy Cultural heritage: energy renovation and implementation of RES
Cyprus	Energy Upgrade of public Buildings	
Italy	Metropolitan energy efficiency actions on public buildings	Improvement of the energy efficiency of as many as possible municipal buildings in the area of MCR, under EPC contracts co-financed by the EIB through the ELENA initiative; Establishment of a Project Implementation Unit coordinated by MCR (Territorial Coordinator of CoMO) and funded by ELENA funds;
Malta	Joint preparation of ELENA project for the energy retrofit of public buildings in Gozo	The Action will be funded under the ELENA programme
Albania	Improvement of Energy Efficiency in Public Buildings	Programme "Interreg IPA CBC Greece – Albania 2014 – 2020" 85 % BE and 15 % Albania Government
Portugal	Improvement of Energy Efficiency in Public Buildings	Alentejo Regional operational programme for the period 2014- 2020, the "Alentejo 2020".

9. Methodology for Financing

ENERJ establishes a joint action approach that parts from the current situation in a given geographical area, regarding the energy planning in place, data availability, funding options, etc. and promotes the implementation of the existing plan (mostly SEAP) with the help of a Joint action coordinator (JAC) who can effectively plan, design, implement, manage and monitor joint actions for energy efficiency.

There is a strong link in the way the public bodies implement EE measures in public buildings across the partner countries of the ENERJ project. It is common for governments to create funds for financing EE measures and in most of the countries grant schemes have been establish in order to mobilise the energy efficiency upgrades, co-financing the projects. Loans with low interest rate seem to be a common way in financing such projects across the partner countries. Furthermore, local authorities seem to benefit in their planning for energy efficiency by creating a Sustainable Energy Action Plan that can aid them in decision making of the energy upgrades to be undertaken.

Before setting the required funding, it's necessary to consider the following steps:

- 1. Specialized technicians with specific training in the area of energy efficiency;
- 2. Diagnostic phase: energy audits;
- 3. Data analysis and
- 4. Definition of actions and identification of measures
- 5. Definition of the most appropriate financing modality

10. Conclusions

Funding energy efficiency projects comes with financial obstacles for public building owners, since funds for energy efficiency (EE) renovations are not readily accessible from the public bodies' annual budget, since they often come with a high cost. Even though the savings that can be achieved are substantial, in order to proceed with such investments, public bodies need to finance these kinds of projects with alternative means rather than their own funds.

One source of funding may come from European funding regarding energy efficiency (EE) measures in public buildings, as well as RES penetrating in public buildings. The general financing opportunities come from European Structural and Investment Funds (ERDF, Cohesion Fund), European Funding Programmes (LIFE, Horizon 2020 etc.), Project Development Assistance (ELENA, JASPERS etc.) and Financial Institutions Instruments (EFSI, EEEF etc.). These may provide co-financing in some cases reaching 100%, but also as low-rate loans.

At a National level, most of the partner countries have used the Cohesion fund along with ERDF for energy upgrading the public building stock. Furthermore, most of the countries have established National Funds providing Grant schemes for the energy efficiency projects in public buildings.

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