

INVESTMENT FUNDS TO THE EUROPEAN STRUCTURAL AND INVESTMENT FUNDS TO THE 10 COMMISSION PRIORITIES ENERGY UNION AND CLIMATE

HOW ARE THE EUROPEAN STRUCTURAL AND INVESTMENT FUNDS (ESI FUNDS) CONTRIBUTING TO THIS COMMISSION PRIORITY 2014-2020?

Achieving an Energy Union will ensure that Europe has secure, affordable and sustainable energy. More sensible energy use and production, and fighting climate change, can create jobs and spur economic growth.

HOW CAN THE EUROPEAN STRUCTURAL AND INVESTMENT FUNDS HELP?

Climate change mitigation and adaptation receives significant support from ESI Funds amounting to more than EUR 114 billion of which almost half – about EUR 56 billion – comes from the European Agricultural Fund for Rural Development (EAFRD). The European Regional Development Fund (ERDF) and the Cohesion Fund also have a significant contribution of about EUR 55 billion collectively. The ambitious political objective that climate change-related action will represent at least 20% of the EU's overall budget between 2014 and 2020 is strongly supported by the ESI Fund contribution. In fact, the allocated amounts cover 25% of the overall ESI Fund budget.

By more than doubling the funds available to support the shift to a low-carbon economy – to EUR 45 billion for the 2014-2020 programming period – ESI Funds represent the largest allocation of the EU budget to be channelled into low-carbon investments. This includes in particular energy efficiency, renewable energy and sustainable urban mobility.

Further funding of EUR 24 billion is allocated to an energy-efficient, decarbonised transport sector – e.g. rail and multimodal transport – and about EUR 2 billion is allocated for large, smart energy infrastructure.



All these allocations are complemented by significant public and private co-financing. In short, ESI Funds play a central role in delivering the Energy Union Strategy on the ground and supporting the EU's far-reaching climate change agenda.

ESI Funds will not only contribute to Energy Union objectives and help Member States achieve the EU's climate and energy targets; they will also benefit regional and rural development, competitiveness, jobs and growth, biodiversity, and soil and water concerns, while tackling energy poverty and enhancing energy security.

Furthermore, the sustainable development principle ensures that considerations related to climate change mitigation and adaptation are mainstreamed in all ESI Fund investments.

ESI FUND ACTIONS: 2014-2020

INVESTMENTS IN ENERGY EFFICIENCY, RENEWABLE ENERGY, SMART ENERGY INFRASTRUCTURE AND SUSTAINABLE TRANSPORT

ESI Funding programmes focus heavily on energy efficiency investments, particularly on the energy efficiency of buildings and Small and Medium-sized Enterprises (SMEs). Better energy efficiency in buildings and businesses will lead to lower energy bills, better living and working conditions, local jobs and more competitive businesses. The ESI Funds will also be used for renewable energy and smart distribution grids, as well as for smart energy transmission and storage infrastructure and energy-efficient, decarbonised transport.

The ESI Funds provide a strategic, integrated and comprehensive framework for these energy investments. and also provide a link to policy makers in regions, cities, rural and coastal areas. This framework bridges the gap between the ambitious framework set by EU leaders and the changes needed on the ground to effectively make the shift towards a low-carbon economy and the realisation of an Energy Union.

Now that the new Operational Programmes and Rural Development Programmes are in place, developing and implementing high quality projects to support the Energy Union objectives will be crucial. The active and close involvement of local, regional and national energy authorities, economic and social partners and civil society is vital.

INVESTMENTS IN CLIMATE CHANGE ADAPTATION AND RISK PREVENTION

In addition to the climate change mitigation investments, ESI Funds also support climate change adaptation and risk prevention, supporting a broad range of measures, including flood prevention and ecosystem-based measures such as green infrastructure.

BETTER LAND MANAGEMENT

Farming and forestry play a pivotal role in relation to climate. Agricultural activity is a source of greenhouse gases as well as a sink, notably through the storage of carbon in the soil, organic matter, and in biomass. EAFRD targets climate action, for example through agri-environment-climate measures that support farmers to use environmentally-friendly practices on their land. It also supports investments into reduction of emissions from livestock and improving carbon storage.

PRE-CONDITIONS BEFORE FUNDS ARE CHANNELLED

The pre-conditions for ESI Funding ensure the efficiency and effectiveness of the investments, and help provide the best possible framework for preparing high quality projects. They have already shown to be drivers for the faster transposition of EU legislative initiatives as regards energy, for example for the relevant parts of the Energy Performance of Buildings Directive in several Member States.

KEY EUROPEAN COMMISSION INITIATIVES

ESI Funds improve conditions for achieving the Energy Union by providing administrative capacity building and technical assistance. The Commission is undertaking a number of initiatives to help Member States implement energy investments:

- The Energy and Managing Authorities (EMA) network brings together national energy and Cohesion Policy
 Managing Authorities, and acts as an informal platform for exchanging information and sharing good practices, experiences and latest developments to ensure the best possible use of the funding.
- The Smart Specialisation Platform on Energy is supporting regional energy innovation and the broad adoption of Cohesion Policy energy projects, including policy advice and analysis as well as matchmaking and dissemination.
- The European Network for Rural Development and the European Innovation Partnership both play
 an important role in improving the performance of rural development programmes on climate-related topics
 by sharing good practices and help translating research results into practical improvements on the ground.

The European Investment Advisory Hub, a partnership between the Commission and the European Investment Bank, provides a single entry point to a number of advisory and technical assistance programmes and initiatives. Project promoters, public authorities and private companies can receive support on technical and financial questions.

European Territorial Cooperation and the EU macro-regional strategies can also play an important role in promoting and supporting low-carbon issues, through networking and joint initiatives.

USE OF FINANCIAL INSTRUMENTS

Alone, EU funding and national public co-financing cannot close the much higher investment gap for moving to a low-carbon economy. Public funding needs to complement and encourage private investments. To this end, Member States and regions are encouraged to put more ESI Fund investments into financial instruments. and work with loans or quarantees, and not only grants. In this way, support can be multiplied. A further advantage of financial instruments, particularly loans and equity, is that their revolving nature provides support well beyond the end of the programming period. Grants can still be used as a complement to, for example, support 'deep' building renovations that exceed minimum energy performance requirements, support the development of innovative technologies, or to address social issues.

According to current estimates, about EUR 3.8 billion of European Regional Development Fund (ERDF) and Cohesion Fund (CF) resources will be allocated to financial instruments in the 2014-2020 period. These will mainly address energy efficiency and renewable energy, but also investment in other low-carbon related sectors. This is about 10% of the total ERDF and CF allocations to low-carbon. Although this is a significant increase compared to the previous period, more efforts are needed.

According to the current estimates for the European Agricultural Fund for Rural Development (EAFRD) EUR 430 million will be channelled via financial instruments, supporting also low-carbon investments in agriculture, forestry and the rural economy. This is more than in 2007-2013 and volumes are expected to increase with Member States focusing their efforts on undertaking relevant *ex ante* assessments.

The preliminary information as regards the European Maritime and Fisheries Fund (EMFF) also shows some progress in the envisaged use of financial instruments compared to the previous period as more Member States have declared their intention to use them. However, EMFF resources allocated to financial instruments in the 2014-2020 period to date are below expectations.

This shows that there is a need for more financial instruments for all four funds and further commitment on their use is required.

To encourage a higher uptake of financial instruments, the Commission has provided Member States with the following assistance.

- Support via the *fi-compass* platform for advisory services, together with the European Investment Bank (EIB), on the implementation of financial instruments. Targeted country-specific advice and campaigns, including seminar series in the Member States are also provided.
- Off-the-shelf instruments, readily available templates that may be deployed in order to facilitate the use of financial instruments by the Managing Authorities. These include the so-called 'Renovation loan' for energy efficiency and renewable energies in the housing sector.

EXPECTED RESULTS

The ESI Funds will contribute to Energy Union objectives and the EU's climate policy, including the EU's climate and energy targets. Overall, ESI Funds will contribute to an estimated annual greenhouse gas emissions decrease of around 30 million tonnes of ${\rm CO_2eq}$, which equals around 50% of the emissions of either Sweden or Hungary. At the same time, they will also contribute to regional development, local jobs, and more competitive businesses.

ENERGY EFFICIENCY

- EUR 13.3 billion from the European Regional Development Fund (ERDF) and the Cohesion Fund will
 be invested in energy efficiency in public and residential buildings, leading to 875 000 families living
 in homes that have been renovated to reduce energy use and to public buildings using 5.2 TWh/year
 less energy than they do now.
- EUR 3.4 billion from the ERDF and the Cohesion Fund to support energy efficiency in over 57 000 companies, mainly SMEs.
- EUR 13.3 billion from the European Regional Development Fund (ERDF) and the Cohesion Fund will be invested
 in energy efficiency in public and residential buildings, leading to almost 1 million households with renovated dwellings and reduced energy bills for public buildings.
- EUR 870 million and EUR 113 million respectively from the EAFRD and the EMFF for energy efficiency
 measures in rural development and for fisheries, leading to 24000 farms with improved energy efficiency, and a significantly higher number of energy-efficient fishing boats. The EMFF will help reduce

emissions and increase energy efficiency in fishing vessels by reducing fuel consumption. On average, Member States estimate a reduction of 55 litres of fuel per ton of landed catches in 2020.

EUR 1.7 million of ERDF and Cohesion Fund to be invested in the support for high-efficiency cogeneration.

LOW-CARBON TRANSPORT

- EUR 16.0 billion from the ERDF and the Cohesion Fund for multimodal travel facilitation, intelligent transport systems, footpaths, cycle tracks, as well as clean urban transport infrastructure and promotion, including public transport, clean vehicles, and alternative fuels will among other things, result in over 748 km of new or improved tram and metro lines.
- EUR 23.7 billion from the ERDF and the Cohesion Fund for investments supporting the move to an energy-efficient and decarbonised transport sector. This includes rail, seaports, inland waterways and multimodal transport, contributing to 7515 km of new or upgraded railway lines and 977 km of new or improved inland waterways.

RENEWABLE ENERGY AND SMART GRIDS

- EUR 5.8 billion from the ERDF, the Cohesion Fund and the EAFRD for investments in renewable energy will contribute to around 7670 MW of additional capacity of renewable energy production.
- EUR 1.1 billion from the ERDF and the Cohesion Fund for investments in smart distribution grids will result in 3.3 million additional energy users connected to smart grids.





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Around **7670 MW** of additional capacity of renewable energy production.

3.3 million additional energy users connected to smart grids.



Investments will protect
13.3 million people from floods and 11.8 million from forest fires.



875 000 households

will live in buildings that have been renovated to reduce energy use.



Public buildings will use 5.2 TWh/year less energy than they do now.



Energy efficiency will be supported in over **57 000 companies**, mainly SMEs.

LARGE SMART ENERGY INFRASTRUCTURE

• EUR 2.3 billion for infrastructure for smart electricity and gas storage and transmission systems, mainly in less developed regions in six Member States.

RESEARCH AND INNOVATION

- EUR 2.6 billion from the ERDF is currently allocated to research and innovation and adoption of low-carbon technologies, with possible increases in the future. Over 100 regions or Member States have identified such priorities in their Smart Specialisation Strategies, which will form the strategic basis for their overall use of ERDF for research and innovation investments. This means that allocations for low-carbon research and innovation might increase further in line with the evolving content of these strategies.
- EUR 438 million from the EAFRD for innovative projects related to energy efficiency, renewable energy, climate and the environment.

TRAINING AND EDUCATION

- At least EUR 1.1 billion from the ESF for improving education and training systems necessary for the
 adaptation of skills and qualifications and for the creation of new jobs in sectors related to energy and
 the environment.
- Around EUR 810 million from EAFRD for improving knowledge transfer and advice related to energy efficiency, renewable energy, climate and the environment.

CLIMATE CHANGE

The ESI Fund support to climate change-related actions is broader than the above-listed measures and it will also include, for example:

- EUR 6.4 billion from the ERDF and the Cohesion Fund to be allocated to prevent climate change-related risks, in addition to EUR 1.1 billion for disaster resilience and the management of non-climate related risks. This will support a broad range of measures, including flood prevention and ecosystem-based measures such as green infrastructure. These investments aim at protecting 13.3 million people from floods and 11.8 million from forest fires while making a positive impact on jobs and growth. Risk assessments, which take climate change adaptation strategies into account, are a precondition for funding in this area.
- 17.4% of agricultural land and 3.5% of forests will be targeted for better protection of biodiversity, respectively 30.6 and 4.1 million hectares of agriculture and forestry land.
- Organic farming to be supported on 10 million hectares of EU farmland (5.7 % of total farmed area).
- 635 000 farmers participating in risk management schemes and 4 million hectares of agricultural and forestry land will get support for carbon sequestration and conservation actions. 7.6% of agricultural land will come under management contracts that support the reduction of greenhouse gas and ammonia emissions.

PROJECT EXAMPLES

- The Sustainable Construction Programme in Andalucía has invested in the energy renovation of buildings and the rehabilitation of urban areas, boosting the competitiveness of the construction sector and the creation of skilled employment. Not only has it made the region's construction sector greener and helped create jobs, one of its main goals is also to educate the public on the importance of energy efficient and sustainable construction. The project has achieved energy savings of 26 000 tons/year, has reduced emissions by 62 000 tons of CO₂ and is expected to create 80 000 new jobs in the next 5 years. http://bit.ly/21jn9wS
- The Green Business Growth in SMEs project in the Southern Denmark region is successfully creating new
 jobs by helping small businesses undertake energy efficiency renovations in residential and office buildings. Green Business Growth, which was launched in July 2009, is targeted at small businesses and in particular master craftsmen, who are being retrained in energy-saving renovation.
 http://europa.eu/!Hv94UH
- A new biogas power plant is helping improve the energy efficiency of sewage treatment in Gdańsk, as well
 as providing opportunities for young people to learn more about renewable energy.
 http://europa.eu/!ur63nV

- Automated irrigation system for horticulture. The EAFRD has supported the final stages of a major modernisation programme at a leading seedling nursery in Cyprus with co-financing for the installation of a modern new 'smart' irrigation system that is both saving costs and conserving water. http://europa.eu/!wT77nP
- Green skills: The ECO+ project in Belgium supported courses in eco-construction and eco-renovation targeting disadvantaged groups of job-seekers to give them the skills that will be in future demand. http://europa.eu/!Xx64tJ