



Supporting sustainable, competitive and secure energy in Europe

Promoting sustainable, competitive and secure energy for Europe is one of the European Union's strategic priorities and the EIB supports implementation of these policies. Thus in 2012 we lent more than EUR 4bn to this sector.

Europe's citizens and employers need a secure supply of energy at affordable prices. Also, sustainable energy production is required to reduce negative environmental effects. Hence we put particular emphasis on developing renewables, diversifying supply and reducing energy consumption by improving efficiency.



The European Investment Bank

The EIB is one of the world's largest multilateral financing institutions. As the bank of the European Union we use our expertise and resources to make a difference to the future of Europe and its partners. Thus we support sound investment to achieve EU policy objectives. Set up in 1958 under the Treaty of Rome establishing the European Community, we raise the majority of our resources on the capital markets on favourable terms, which we then pass on to our clients. Our shareholders are the Member States of the European Union, but we are autonomous from the EU budget.

EIB lending is channelled primarily to projects in the EU Member States. Outside the Union, we contribute to the implementation of EU development aid and cooperation policies regarding: EU Candidate and Potential Candidate Countries; the Mediterranean region, the Eastern Neighbours and Russia; Central Asia; African, Pacific and Caribbean (ACP) Countries, the Republic of South Africa; Asia; Latin America.



Supporting sustainable energy

Energy is one of our priority lending objectives. Thus we fund many energy projects and we have broadened the range of financial instruments available.

The EU has set itself the ambitious target for 2020 to cut greenhouse gas emissions by 20% compared to 1990 levels and boost renewable energies by up to 20% of final energy consumption. This is set to promote the use of more environmentfriendly and diversified energy sources. At the same time, the EU has vowed to cut its energy consumption by 20% by 2020 in a bid to reduce its dependency on imported energy and ease energy costs. Renewable energy and energy efficiency are therefore at the heart of this Europe 2020 strategy for sustainable growth and resource-efficient economies. To help achieve these goals, we focus our energy-related lending on five priority areas:

- Renewables
- Efficiency
- Research, development and innovation
- Diversification and security of supply, especially across borders
- Economic development

Partnership for sustainable energy

We work with European Union programmes targeting regions (JASPERS), SMEs (JEREMIE) and cities (JESSICA). We also work with the European Commission on joint energy efficiency initiatives.

We have established a series of funds with EU institutions and the private sector to provide equity for investment, particularly in renewable energy and energy efficiency. These include the 2020 European Fund for Energy, Climate Change and Infrastructure (known as the **Marguerite Fund**), the Global Energy Efficiency and Renewable Energy Fund (GEEREF) and the European Energy Efficiency Fund (EEEF). European Investment Bank • European Investment Bank • European Investment Bank • European Investment Bank



Managed by the EIB and funded by the Commission, ELENA (European Local Energy Assistance) helps local authorities accelerate their energy efficiency and renewable energy investment programmes. Eligible projects focus mainly on buildings, urban transport and related local infrastructure. This initiative supports, in particular, the Covenant of Mayors initiative of the Commission, whereby cities voluntarily commit to pursuing the EU's energy and climate objectives.

Local sustainable energy plans get lift from ELENA Facility

The first ELENA agreement was signed with the Province of Barcelona. The EUR 500m project provides for both the installation of solar panels on public buildings and improved energy efficiency. This is projected to save 280 GWh of energy each year, so cutting up to 200 000 tonnes of CO_2 emissions. In the Dutch city of Purmerend, ELENA supports a 30% improvement in efficiency of its district heating network. In total, the project is expected to save an estimated 100 000 tonnes of CO_2 emissions a year. Further ELENA funding is provided for energy efficiency refurbishment of public buildings in the Province of Milan and a programme to save energy in some 660 schools in the city of Paris.



Strong tailwind from the Belgian shore

We lent EUR 450m to an offshore wind farm on the Thornton Bank, located some 30 km off the Belgian coast. It will be the first time that 6MW offshore wind turbines are used. The 48 turbines will have a combined capacity of 295MW, taking the full wind farm capacity to 325 MW – enough to provide power to 600 000 people and to avoid 450 000 tonnes of carbon emissions per year.



Investing in new solar power technology in Spain

The world's first commercial-scale project in Fuentes de Andalucía built with concentrated solar power technology received a EUR 80m loan from the EIB. With a nameplate power of 17MW, the new plant is based on a central tower receiver and heliostat field and an innovative molten salt heat storage system. The plant will ensure electricity production for some 6 600 hours a year.

Stepping up investment in renewable energies and energy efficiency

Renewable energy and energy efficiency investments are crucial to making Europe's supplies more sustainable, competitive and secure. These goals support each other. More sustainable energy sources, such as renewables, help the EU's energy sector be more competitive, as well as diversifying and securing its energy supply.

We insist that at least 20% of energy projects in the EU should involve **renewable** sources. In addition, we aim to maximise the proportion of projects associated with low-carbon technologies. Normally we limit financing to no more than 50% of project cost, but we can finance up to 75% for renewable energy and energy efficiency projects.

Energy efficiency is the most cost-effective and achievable way of reducing emissions and improving energy supply security. This concerns all sectors of the economy. However, to support specific EU initiatives, particular emphasis is put on local authorities and SMEs. We target energy efficiency in buildings, especially in the public sector. Industry, urban transport and public infrastructure networks also have major potential for energy efficiency improvements.

More generally, across all lending activities we have **mainstreamed** energy efficiency considerations. Most projects result in increased energy efficiency as promoters are encouraged to implement the highest performing technologies available.



In Latvia, the EIB has supported th upgrading of Latvenergo's combined heat and power plants, as well as its transmission and distribution networks.

Investing in innovative energy technologies

We support both mature renewable energy technologies and those under development. Thus we are helping to consolidate and innovate for onshore wind farms, hydropower, geothermal, solid biomass, photovoltaics, offshore wind, concentrated solar power, solar thermal and second generation biofuels. Research, development and innovation (RDI) of renewable energy also strengthen Europe's international competitiveness, so putting the EU at the forefront of the rapidly growing low-carbon technology sector.

Under the European Strategic Energy Technology Plan (SET-Plan), the ElB, together with the European Commission, has developed a dedicated instrument designed to support the initial market take-up of innovative low-carbon technologies. The ElB is also working with the Commission to identify large European research infrastructure in the energy sector. Through the European Technology **Platforms** devoted to energy and research infrastructure, we support RDI with tailored financial instruments.

Moreover, we are working with the Commission on the **NER 300** programme to support carbon capture and storage (CCS) and innovative renewable energy technology demonstration projects. Our role is to appraise projects and sell emissions allowances.

Security and diversification of energy supply

Financing large-scale energy projects, such as large power stations, national and international energy grids, major energyimporting facilities or the development of large domestic energy resources, is a core part of EIB lending to the energy sector. By supporting state-of-the-art energy efficient technologies, these projects not only help to enhance the security of energy supply, including diversification of imports, and contribute to the creation of the internal energy market but also foster a shift towards more sustainable use of conventional energy sources.

Achieving long-term solutions for Europe's energy security needs will not be possible without a modernised, interconnected and reliable electricity grid and gas pipelines. The development of trans-European energy networks (TEN-E) remains a high priority for the EIB. Projects financed include liquefied natural gas (LNG) terminals, oil and gas storage projects and interconnectors. We have a selective approach to financing carbon-intensive electricity generation and will only finance power stations that use the best available technology and are carbon capture ready.

Pipeline project takes an important step

In 2010 the EIB, the European Bank for Reconstruction and Development and the International Finance Corporation – a member of the World Bank Group – started appraisal of the Nabucco gas pipeline project. The potential financing package for the investment is around EUR 4bn, of which EUR 2bn from the EIB. Nabucco is the flagship project for meeting future EU gas demand and will diversify Europe's energy supply by allowing the transmission of additional volumes of gas from both the Caspian Region and the Middle East. The early involvement of the three international financing institutions will support Nabucco in meeting the highest standards in environmental and social risk evaluation and procurement. European Investment Bank • European Investment Bank • European Investment Bank • European Investment Bank

Supporting energy projects beyond the EU's borders

Energy is also a key priority in the EIB's activities outside the EU. In the neighbouring countries to the south and east, the aim is to extend the benefits of the EU's internal market by creating a pan-European energy community and to facilitate energy imports into the EU originating in or transiting through these countries. Particular attention is given to projects outside the Union that enhance security of supply to the EU, such as the construction of pipelines and LNG terminals to transport energy to Europe. We also support the development of renewable energies such as the Mediterranean Solar Plan, which aims to develop all renewable energy sources in the region, with a special focus on wind and solar power.

The EIB also manages technical assistance programmes to support project preparation and operation in the Mediterranean region, the Western Balkans and the African, Caribbean and Pacific (ACP) countries. In these regions, technical assistance operations in the field of energy efficiency and renewable energies are gaining in importance. In developing countries in general, the EIB promotes access to modern sources of energy and the development of sustainable energy solutions. The aim is to contribute to the partner countries' development and reduce the environmental impact of energy activities.

A variety of financing instruments

We tailor our financing to the specific needs of the borrower and the project, in line with sound banking practice and procedures. Borrowers can be both public and private, from within or outside the EU.

Our traditional financing instruments are medium and longterm loans with fixed or variable interest rates in euro or other currencies. For projects of at least EUR 25m, we provide individual loans covering up to 50% of investment costs. The remaining share and the working capital have to be provided from other sources. For projects under EUR 25m, we provide indirect lending through intermediated loans to partner banks.

We have also widened our range of financing facilities to assume sub-investment grade risk where appropriate by using resources from the Structured Finance Facility (SFF). This can be applied to help finance renewable energies or other types of priority energy projects, such as trans-European energy networks (TENs). The Risk-Sharing Finance Facility (RSFF) is used to provide finance for research, development and innovation, an area that often involves greater risk and thus faces more difficulties in obtaining funding. This joint initiative of the EIB and the European Commission is aimed at private companies or public institutions with a higher than average risk profile.

Other financing instruments include equity funds through which we participate indirectly in companies and projects promoting energy efficiency, renewable energy or infrastructure projects. The funds can have different geographical coverage and are established with the private sector and a range of international financial institutions. EIB financing may be accompanied by EU grants to finance investment promoting the reduction of energy consumption as well as technical assistance to help build up capabilities and provide other technical support.



A dedicated EUR 4.5bn **Energy Sustainability and Security of Supply Facility** supports projects in EU Neighbourhood countries, ACP countries, South Africa, as well as Asia and Latin America.

The **Green for Growth Fund**, a joint initiative with Germany's Kreditanstalt für Wiederaufbau, provides financing through loans, equity and technical assistance for sustainable energy projects in the Western Balkans and Turkey.

The Global Energy Efficiency and Renewable Energy Fund (**GEEREF**) is an innovative financing vehicle in the form of a fund-of-funds designed to promote energy efficiency and renewable energy in emerging markets outside the EU. It is active in EU Neighbourhood and ACP countries, but also supports initiatives in Latin America and Asia.



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