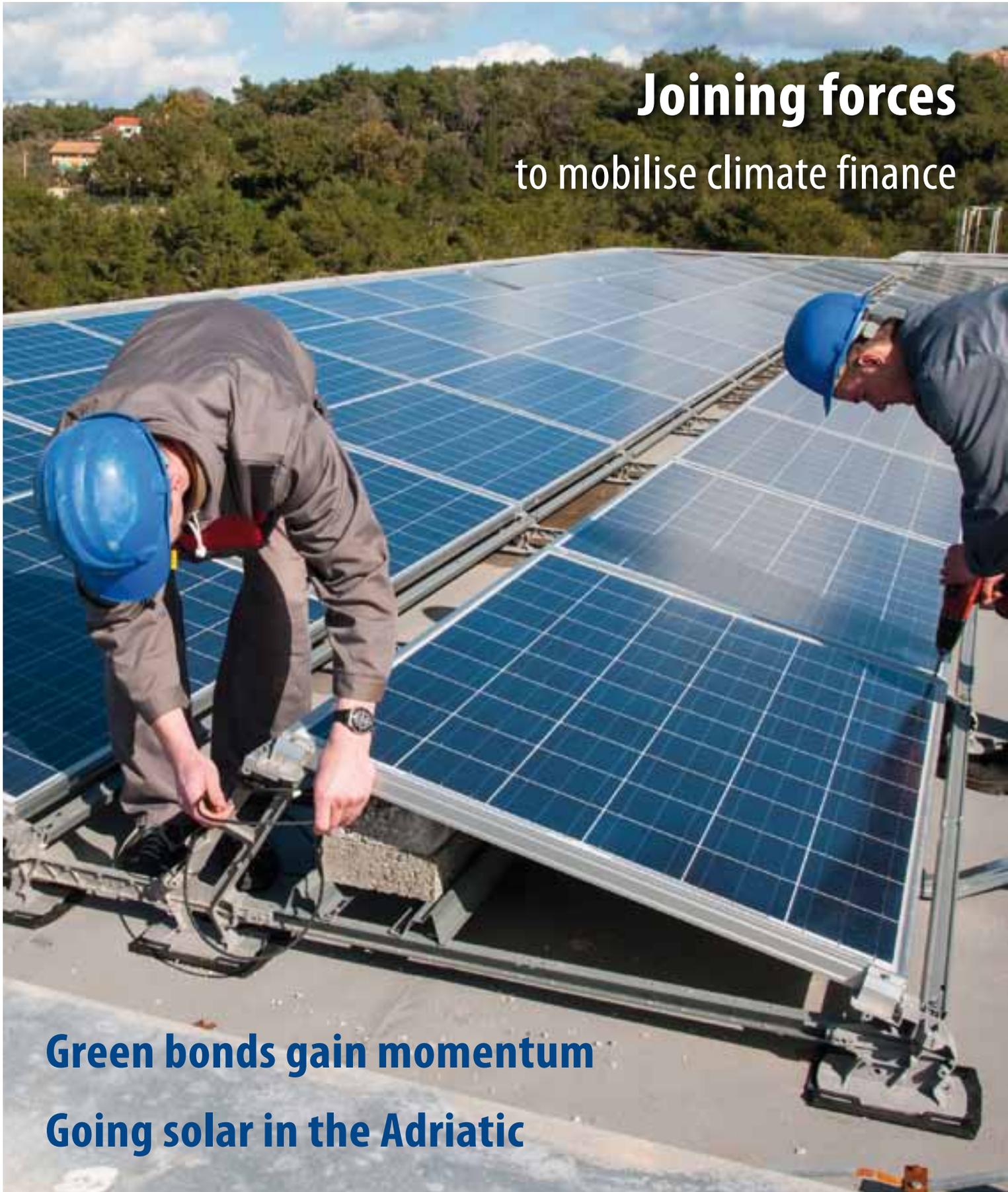


Joining forces to mobilise climate finance



Green bonds gain momentum
Going solar in the Adriatic

INFO

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The EIB – The EU bank

November 2014

Editorial

Global aspirations for sustainable growth and poverty reduction are increasingly threatened by the heightened risk of extreme weather events and sea level change. To avoid dangerous levels of climate change, the long-term goal agreed by the UN Framework Convention on Climate Change (UNFCCC) is to limit the global average temperature increase to below 2°C compared to pre-industrial levels. But meeting this goal requires an estimated additional USD 1tr of investment in clean energy until 2015.

Given the scale of the investment needed, it is clear that governments and public institutions cannot face this challenge alone. We must work together to tackle the global problem of climate change. That is why the EIB is partnering with others – in both the public and private sectors – to unlock further investment in climate action projects.

We are doing this not only by means of traditional loans to projects that help build climate-resilience and reduce carbon emissions, but also through innovative climate financing solutions, such as new products, specialised funds, expert platforms and issuance of green bonds, which all contribute to mobilising much-needed resources. In addition, we have an extensive track-record of “blending” public resources by using our instruments alongside traditional EU or national grant-based finance. In this way, we use the limited public funds available to mobilise private investment for the benefit of climate action projects in Europe and beyond.

Whether it’s wind energy in Africa, solar module innovation in Germany, energy-efficient housing in the UK or sustainable transport between Norway and Denmark, or our record-breaking green bonds and involvement in climate funds around the world: the EIB is doing its bit to help scale up different forms of financial support to facilitate the urgently needed transition to a low-emission and climate-resilient economy, as this edition of the EIB INFO seeks to show.



We are partnering with others to unlock further investment in climate action projects.

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Joining forces to mobilise climate finance

Global leaders will next meet for COP 20 in December in Lima, Peru, to prepare the ground for a climate deal in Paris in 2015. As in previous years, the EIB, as the EU bank, will be present as an observer, showcasing its activities and contributing to the climate finance debate.



Known as “COP (Conference of the Parties) 20”, the climate talks in Peru will seek to create momentum ahead of the deadline to reach a new international agreement in 2015. Hopes are high to strike a deal in Paris towards the end of next year, with a view to establishing a new international climate regime replacing the Kyoto Protocol as of 2020. The international community is seeking to limit the average global temperature rise to less than 2°C compared to pre-industrial levels by 2100 in order to avoid dangerous levels of climate change. In order to meet this target, global emissions need to be reduced by at least 50% globally in 2050 compared to 1990. Clearly, investment decisions made now will determine whether or not we can reach the target.

“The European Investment Bank supports both the political momentum and broader engagement that has been building up ahead of the Lima conference. Global leaders face an historic opportunity to ensure an

international climate agreement, and tackling the challenge of climate change requires an even stronger mobilisation of investment both in Europe and globally. To achieve this, the EIB is joining forces with both the public and private sectors to unlock much-needed funding and to make the most of available resources to help the transition to a low-emission and climate-resilient economy”, said Jonathan Taylor, EIB Vice-President responsible for climate action.

As the EU bank, the EIB considers climate action to be of strategic importance, and its activities, both within and outside Europe, support the climate and energy policies set by the EU. The consequences of climate change will have serious social and economic impacts in the EU and globally in the coming decades. Growth and development gains made in both developed and developing countries may be put at risk. To counter this, the EIB applies an ambitious and comprehensive approach to climate change.



We will be present at the COP global climate talks in Lima, but we also engage with companies, think-tanks, not-for-profit organisations, public authorities and other international financial institutions throughout the year. We are working closely with others to co-finance mitigation, adaptation and other climate-related projects and helping to harmonise concepts and approaches



in the rapidly evolving world of climate finance. For instance, we are a member of the European Financing Institutions Working Group on Climate Change Adaptation and recently became a partner in the UNEP-led Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants.

Another example is the cooperation with other Multilateral Development Banks (MDBs) to develop a transparent and accountable framework for measuring climate finance commitments (see next article). MDBs are teaming up and increasingly speaking with one voice, as well as one set of figures, and have reaffirmed their shared commitment to develop climate financing ahead of the UN climate talks.

Partnering for innovative climate finance solutions

Going beyond conventional approaches, our innovative financial products embrace smarter ways of investing. We are a cornerstone investor in funds, bringing together private and public investors in novel set-ups like the Green for Growth Fund Southeast Europe, but also funds that pilot new areas, such as

Althelia, which targets sustainable landscape projects – both highlighted in this issue.

We also play a role in developing new platforms that help attract private investors to climate projects. The EIB has developed the Renewable Energy Performance Platform to foster the bankability of innovative small and medium-scale renewable energy projects in sub-Saharan Africa by helping them to access risk protection and financing products.

On the borrowing side, our Green Bonds link the proceeds of a bond issue to environmentally friendly investments. For us, projects in renewable energy and energy efficiency have been the exclusive focus of our so-called Climate Awareness Bonds, which have raised over EUR 7bn to date. These provide investors with the opportunity to contribute to the Bank's climate action, while benefiting from the excellent credit quality of the EIB as an issuer.

To address the need for investment in large EU infrastructure projects, the Project Bond Initiative aims to provide partial credit enhancement to projects in order to attract capital market investors. The ultimate ob-

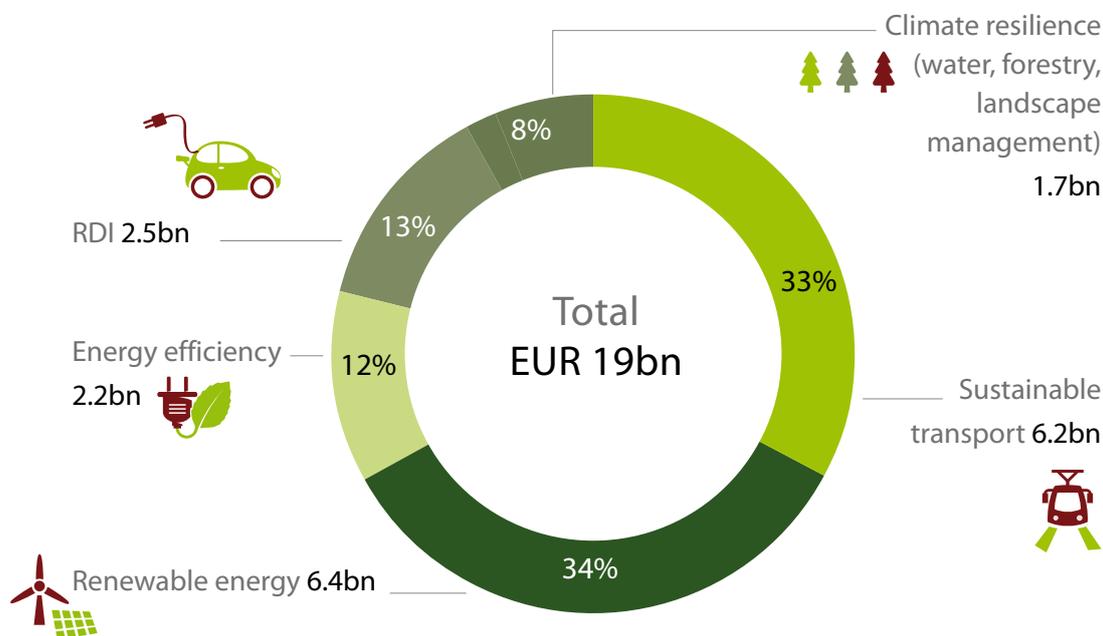
jective is to widen access to sources of finance and to minimise overall funding costs. A climate-relevant example is the support for the UK offshore transmission link to the Greater Gabbard wind farm, which is the first UK-based project to benefit from the Project Bond credit enhancement initiative.

Our advisory services include the sharing of substantial technical and financial expertise for projects in lesser developed regions or with a weaker institutional framework. One example of this is the ELENA (European Local Energy Assistance) facility: managed by the EIB and funded by the European Commission, ELENA provides technical assistance grants to local and regional authorities for the preparation of energy efficiency and renewable energy investment programmes.

Backing climate projects that make a difference

While we are engaged in many innovative financing initiatives, our more traditional lending also acts as a catalyst to mobilise private finance for climate action, encouraging

EIB climate action lending in 2013 by sector (in EUR)



others to match our long-term investment. In this way, we seek to maximise the use of limited available public funds.

We strive to promote the most efficient, economic and sustainable way of satisfying transport demand. By fostering a shift from private to public transport, we also help to tackle climate change by enhancing energy efficiency and limiting greenhouse gas emissions. The ferry link between Norway and Denmark, highlighted in this magazine, is an example of our backing for efficient and environmentally friendly modes of transport.

Support for sustainable energy stretches from mature renewable energy technologies to early-stage or evolving technologies. The Austrian hydropower plant Obervermuntwerk II demonstrates our support for environmentally-friendly energy generation, but is also an interesting way of responding to imbalances due to power generation from renewables. Promoting a secure, efficient and flexible power supply is among the core goals of our financing.

Energy efficiency is certainly the most cost effective and rational way of reducing emissions and improving the security of the en-

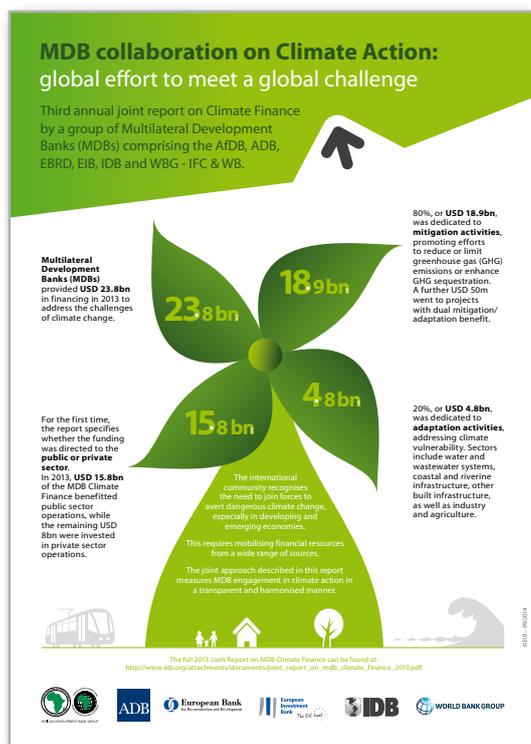
ergy supply. Projects typically include the retrofitting and expansion of existing social and urban infrastructure and services, such as the sustainable housing schemes that we are supporting in the UK.

Climate change is exacerbating energy and water insecurity. With our integrated approach we aim to ensure that both water and energy resources are developed sustainably. As the largest source of loan finance for the global water sector worldwide, the EIB supports projects in the whole water cycle, as we seek to demonstrate in this issue.

Forestry and agriculture are at the heart of our efforts to support sustainable landscapes, foster rural economic growth and employment, and strengthen the availability of a range of key renewable resources. Forests play an important role in maintaining soil health, reducing soil erosion and mitigating flood risks, and also serve as important carbon sinks as they grow. Joining forces with the European Commission, we are backing amongst others a Rural Development Programme in Slovakia that will not only have considerable environmental benefits, but also help to generate new jobs throughout the country.

Preparing for the future, we are conscious that both adaptation and innovation are key to achieving the investments in climate action needed globally. Adapting early to the consequences of climate change is more effective and less costly than rushed emergency action. Known as climate resilience, these considerations are factored into all EIB projects. In addition, we strongly support investments that accelerate the development and dissemination of low-carbon technologies and processes in all sectors. A recent loan to the German midcap Manz AG, a leader in specialised solar modules, is an example from the new InnovFin product range, which has the financial backing of the EU under Horizon 2020 Financial Instruments. Innovation that can be widely scaled-up and replicated is at the heart of the transformation needed in our societies to tackle climate change today and tomorrow. ■

Leading the MDBs' joint efforts on transparent and accountable climate finance



Each year as the global climate talks approach, there is a multitude of announcements and calls for commitments to finance global climate action. But what is behind these figures is not always as clear cut as it seems. In order to better track climate finance, Multilateral Development Banks (MDBs) are working on a harmonised accounting approach. This year, the EIB has taken the lead in coordinating their joint efforts

One of the most well-known figures in the context of the global climate talks is the commitment by the industrialised countries to mobilise USD 100bn a year by 2020 to support climate action – an undoubtedly impressive amount. Many more figures are cited, but the key question remains: how do these figures, in particular those of the MDBs, compare to each other? Or are we comparing apples to oranges? It seems that different actors apply different methods and approaches to get to their figures.

Increasing trust in commitments – methodology matters

A first in international climate finance, a harmonised methodology currently being developed is set to enable all interested parties to track finance streams in a reliable manner, monitor disbursements and thus increase accountability and finally

trust in commitments. In 2010, a group consisting of the EIB and other MDBs (including the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, and the World Bank and International Finance Corporation) first started to tackle this issue and work on a joint methodology to track their investments in a low-carbon and resilient economy. The MDBs developed a very conservative and granular approach, which means that only those specific components of a project that have a mitigating effect or make a project more resilient to climate change, but not the entire project, are counted towards an institution's climate action figure. The joint methodology should eliminate any "double counting", meaning that finance can only be counted as either mitigation or adaptation, or as dual benefits, and never counted twice. Finally, a large number of concepts and terms had to be defined and agreed upon.

Shared commitments for joint climate action

This year, the EIB took the driving seat by chairing the coordination of the MDBs' methodological work up to the COP and drafting the 2013 Joint Report on MDB Climate Finance that tracks the financial commitments by all MDBs. A meeting organised by the Bank's Environment, Climate and Social Office not only welcomed MDBs, but also included a wider circle of stakeholders, in the hope of extending the harmonised methodology to a larger group to spread the benefits of a joint approach and further improve the transparency and accountability of climate finance commitments. MDBs are increasingly speaking with one voice, and one set of figures for emerging and developing economies, and have reaffirmed their shared commitment to develop climate financing ahead of the UN climate talks. ■

News in brief

Commission President-elect encourages stronger EIB role

In his introductory speech to the European Parliament in July, President-elect Jean-Claude Juncker outlined his plans and priorities for the new European Commission. "What we need is an ambitious package for employment, growth, investment and competitiveness. [...] I would like us to mobilise EUR 300bn in public and above all in private investments over the next three years", he stated. Juncker said that this could be done through the targeted use of existing structural funds and the EIB instruments already in place or to be developed. He called for coordinated investment in infrastructure, broadband, energy networks and transport infrastructure in the centres of industry, as well as in the industrial sector, research, development and renewable energies, adding that "If Europe invests more, Europe will be more prosperous and will create more jobs".

As the EU bank, we of course welcome this ambitious agenda and are strongly committed to these shared goals. In particular, we fully support the suggestion to stimulate greater private investment by making better use of European and national funds. And we hope that we can further contribute to implementing these ideas and work very closely with the new European Commission.



Enhanced MDB cooperation a top priority for the EIB

Speaking at the World Bank Group Annual Meetings, the EIB President proposed developing new, more effective ways of boosting development finance in the years to come. "New platforms will be necessary if we want to increase the scale of financing, in particular if we want to mobilise more funds not only from banks but also from capital markets. To count on public responsibility and public money alone will simply not be sufficient if we want to fight poverty effectively and make development sustainable. It is a common responsibility of public institutions, but also the private sector."

On the sidelines of the Washington meetings, a new Global Infrastructure Facility (GIF) was launched. The EIB joined multilateral development institutions and donor nations, asset management and private equity firms, pension and insurance funds, and commercial banks, to work as partners in the GIF, which has the potential to unlock billions of dollars for infrastructure in the developing world.

President Hoyer underlined the need for a coherent, comprehensive and integrated financing approach. The Multilateral Development Banks (MDBs) and the International Monetary Fund (IMF) intend to make concrete proposals to the UN to foster sustainable development and promote the best ways to mobilise the required financing in time for the 2015 IMF/WB spring meetings.



First IATI data published to increase the transparency of EIB activities outside the EU

The EIB has now published the first set of data and information on its operations outside the EU based on the reporting standard of the International Aid Transparency Initiative (IATI). Having joined IATI in October 2013, now publishing to its standard reflects our strong commitment to transparency and accountability in the use of our resources and further improves public access to information on our activities. The first EIB IATI reporting includes contracts that were signed in 2014 in countries outside the EU. From now on, IATI files will be updated every month and new signed contracts will be added.

EIB climate action highlights

Sustainable Transport



239m^{EUR}

for a new metro line in Warsaw with estimated reduction of

41 000
tonnes **CO₂**

emissions per year

Innovative Climate Funds

550m^{EUR}

for 21 climate funds, supporting total investment of

14.5 bn^{EUR}



7 bn^{EUR}

raised via **Climate Awareness Bonds**

across 10 currencies

88
bn^{EUR}

for **Climate Action**

2009-2013



Climate and Development

1.5 bn in a dedicated facility supporting projects outside the EU as of this year



Renewable Energy

587m

for the world's largest offshore wind farm to be constructed north of the Netherlands

expected to deliver green electricity

for **1.5 million** people

Energy Efficiency

327m for energy efficiency refurbishment of apartment buildings in Bucharest

50% expected savings in heating energy consumption



Water and Sanitation

424m

for 9 water projects outside the EU in 2013

Water supply for **656 000** households

Sanitation services for **199 700** households

Capturing Kenya's wind to boost energy on a large scale

The area around Lake Turkana, in northern Kenya, is a strikingly other-worldly landscape – remote, desolate and stark. It also presents characteristics that are just about ideal for wind power generation, and a 365 turbine wind farm is being built in the area. EIB INFO spoke to Henk Hutting, former Managing Director of Lake Turkana Wind Power, which will be the country's largest wind farm.

“We knew we needed to build this to a big scale because of the distances to the grid and the logistics involved”, says Henk Hutting about the 310 MW Lake Turkana wind farm. “This was about the minimum size that would be economical when factoring in the overhead costs of other elements like a paved road and the transmission line.”

The scale of the operation is notable, as is the difference it will make to Kenya. This wind farm, together with the 204 km stretch of upgraded road, is the largest single private investment in the country's history, at a value of KSH 76bn (EUR 623m). The EIB has lent EUR 200m towards this, helped by another EUR 25m contribution from the EU Africa Infrastructure Trust Fund. The output of 310 MW is equivalent to approximately 20% of Kenya's installed capacity for generating electricity, and it is low-cost, reliable and clean. It will displace 16 million tonnes of CO₂ over its 20-year life cycle.

The wind farm will be connected to the national grid by means of a 428 km transmission line, a separate project which will also enable the connection of future geothermal power plants along its path, while the road upgrades will make the region more accessible. If it seems remote, that is precisely because it is remote.

Low level jet

So why this location? It actually began with a Dutch farmer named Willem Dolléman, who was camping on the shores of Lake Turkana in 2004. His tent blew away, and he went to the settlement at Loiyangalani, by the edge of the jade-coloured waters of the desert lake and took shelter in the lodge, remarking on the storm outside. “What storm?”, enquired the bemused local villagers. A light bulb sparked in his head. Dolléman brought acquaintances and experts from the wind power sector to the area.

They found their ideal site in the region around 30 km south of Loiyangalani. After some delays in securing funding, owing much to the business climate at the time, the formal financial agreements were signed in March 2014. A decade on from Dolléman's tent mishap, ground can now be broken for the construction of the new wind farm.

“Our location has very stable wind”, explains Hutting. The wind streams come from the East African jet and pass through a valley between the mountain ranges of Mt. Kulal (2 300 m above sea level) and Mt. Nyiru (2 750 m). The lake itself is at 450 m above sea level. The valley acts as a tunnel, causing the wind to accelerate. It is known as the Turkana corridor low level jet stream, and it explains the elevated wind speeds in the area and the constant wind at the chosen site. A 12-month ornithological survey also concluded that the desert location will have no impact on bird flight paths.



Henk Hutting
is shareholder
and former Managing
Director of Lake
Turkana Wind Power
Ltd.

into service we'll have about 90 MW ready to put into operation. It will then take about one more year to ramp up generation to full output", says Hutting.

It is not easy to put a figure on how many people will benefit from the extra power produced, but faith in the national grid itself will be improved by the more stable supply. With the availability of consistent power, demand itself is expected to grow. People may currently not use devices at home and companies may be put off by the risk of power cuts. Once that burden of cost is diminished, everyone will be able to do more. "Take the example of SMEs running on generators", continues Hutting. "When the price of power from diesel hits a certain point, they will essentially have to shut down." This is something that simply will not support economic growth, but the Lake Turkana wind farm will do just that. The electricity produced by the wind farm will be bought at a fixed rate by Kenya Power over an agreed 20 years. The price represents a 60% reduction on the costs of thermal power generation.

Benefits across the board

For Kenya, the Lake Turkana wind farm will bring tangible benefits, connecting people to the grid, creating around 2 800 jobs in the construction phase and securing a supply of affordable power. Hutting believes that smaller businesses and, for

example, shop owners stand to benefit most. But Lake Turkana could just be the beginning. Fewer than one in three Kenyans have access to electricity.

"This country should have around 40 000 MW of installed capacity. The shortage is shocking", Hutting explains. The potential of the area around Lake Turkana could accommodate multiple wind farms. As things stand now, the limiting factors are demand and transmission. But the more power that is produced, the more there will be a demand for it. Wind power in Kenya could become an export product and a source of local jobs and income. An example of how the local area can benefit can be seen in the fishing industry at Lake Turkana itself. "As this area will also be connected to the grid, local fishermen will have access to cold storage, and potentially they will be able to sell their fish in Nairobi thanks to the connecting roads", he points out. "That was not possible before."

In addition, a corporate social responsibility programme has been devised for local people in the region, focusing on improved access to drinking water, better housing, education and other community projects. "They will jump from the Stone Age to broadband internet in two years", says Hutting. The wind farm is expected to be fully operational at the beginning of 2017. For Kenya, this should be the first step on the path towards comprehensive development. ■

Green power in a barren landscape

"It will take two years to complete the transmission line. When the line comes

"Local fishermen will have access to cold storage, and potentially they will be able to sell their fish in Nairobi thanks to the connecting roads"



Green bonds gain momentum

investors buy into climate finance

As the climate finance challenge continues to figure high on the agenda at global level, Green Bonds are doing their bit, gaining momentum in the financial markets and raising awareness among investors. The pioneer among public issuers, and an active promoter of Green Bonds, the EIB is committed to further developing this market segment.

Green Bonds establish a link between the proceeds of a bond issue and environmentally friendly investments. For us, projects in renewable energy and energy efficiency have been the exclusive focus of our Climate Awareness Bonds (CABs). Over the past seven years (2007-2013), CAB proceeds have been allocated to 55 projects in 19 countries across the globe. Projects range from wind, solar, hydropower and geothermal energy generation and transmission, to the upgrading of housing for energy efficiency purposes. All projects comply with the EIB's environmental and social standards. The Bank's long-standing experience in evaluating and financing sound and sustainable projects is something investors have come to appreciate. The Green Bond Principles, a set of best practice guidelines published earlier this year by a consortium of international banks in consultation with the leading market participants such as the EIB, further encourage transparency, disclosure and integrity in this market segment.

"We recognise the strong investor interest in our Climate Awareness Bonds and look forward to further developing the instrument to allow targeted investment in climate-related projects," says Jonathan Taylor, EIB Vice-President responsible for Environment and Climate Action. One example of a project supported by the EIB's Green Bonds is the London Array, the largest operational offshore wind farm in the world, completed last year. Its 175 turbines

are capable of generating enough energy to power nearly half a million UK homes and reduce CO₂ emissions by over 900 000 tonnes a year. This helps make a difference to the environment while providing a reliable electricity supply to South East England. It also pleases investors to receive transparent reporting on the allocation of CAB proceeds to verifiably green projects – in this instance, the London Array, which was allocated EUR 244m worth of proceeds from CABs issued by the EIB.

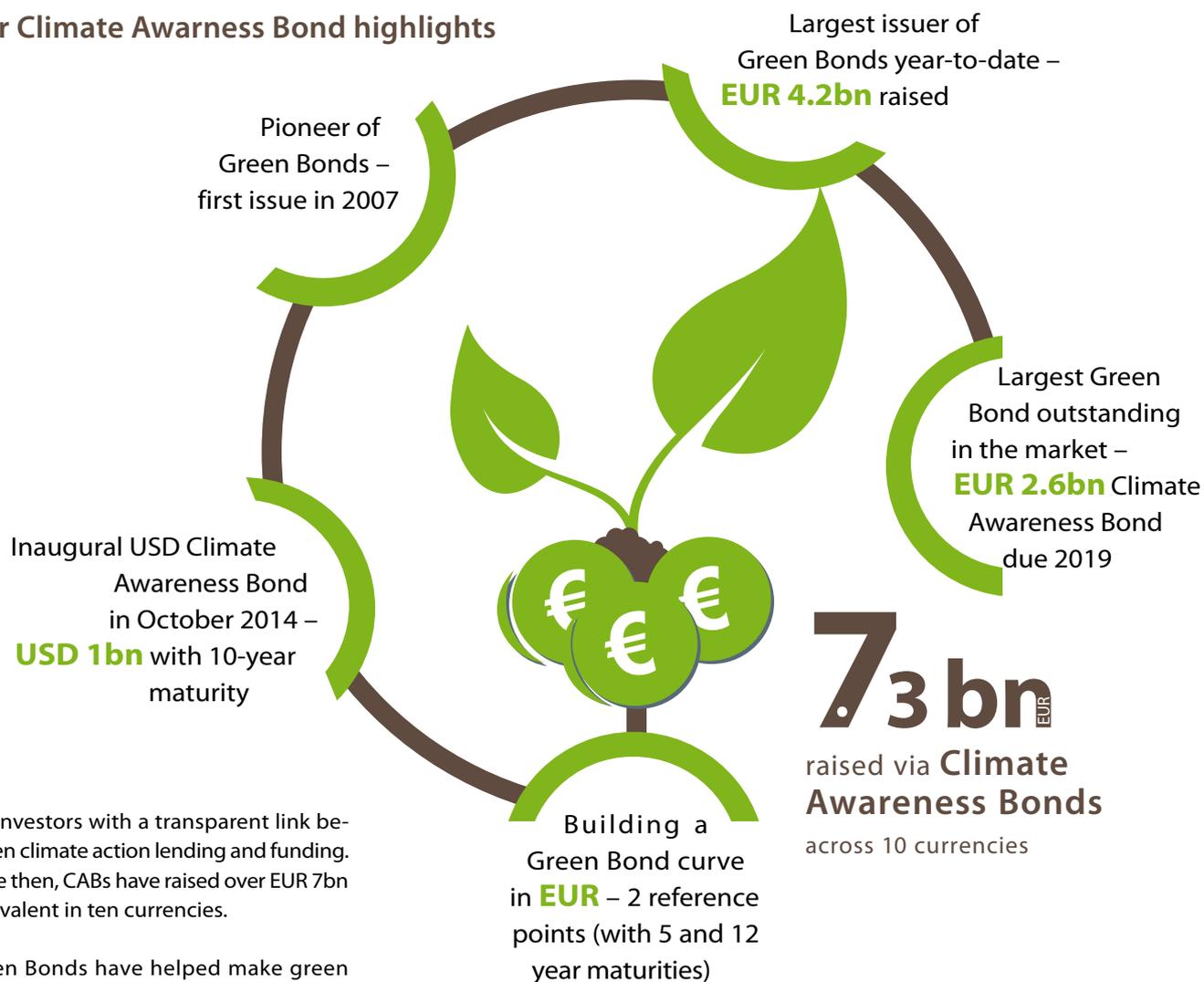
Increasing awareness and attracting investors

This year has witnessed unprecedented growth in the Green Bond market with USD 29bn raised year-to-date, roughly twice as much as in 2013 as a whole. As the market has gained new traction, supply has grown accordingly, with the EIB as the largest and also one of the most engaged issuers. The EUR 2.6bn CAB is currently the largest Green Bond outstanding in any currency.

Responding to climate policy imperatives and the need to scale-up financial market involvement, in July 2007 the EIB launched the first ever Green Bond in its asset class. Importantly, the transaction pioneered the earmarking of proceeds to match disbursements for climate action projects, provid-



Our Climate Awareness Bond highlights



ing investors with a transparent link between climate action lending and funding. Since then, CABs have raised over EUR 7bn equivalent in ten currencies.

Green Bonds have helped make green lending much more visible. This has, in turn, led to growth and diversification of investor demand. One of the advantages of Green Bonds issued by the EIB is that investors take no project risk, as their exposure is to the EIB and yields are the same as for the EIB's standard bonds. At the same time, investors have the possibility of monitoring closely how funds are actually disbursed. The involvement of a wider range of investors has helped issuers diversify funding sources and extended market scrutiny. Multiple positive feedback loops have thus led to increased awareness among all market players.

Mobilising green investment for sustainable returns

Huge capital investments and their effective deployment are required to achieve the 2°C limit in global temperature increase objective. This is especially true in the clean energy sector. It is thus clear

that the mobilisation of long-term capital at scale is going to depend on engaging conscious and proactive institutional investors, such as pension funds, fund-management companies and insurance companies, who between them own a pool of capital estimated at around USD 80tr. Ahead of the UN Secretary General's Climate Summit in New York in September, a group of 347 investors representing more than USD 24tr worth of assets – over a quarter of the global total, signed a joint Statement on Climate Change, whereby they committed to "identify and evaluate low carbon investment opportunities that meet our investment criteria and consider investment vehicles that invest in low carbon assets subject to our risk and return objectives".

Historically, institutional investors had, relative to their size, limited opportunities to exert influence over bond issuers regarding the actual deployment of funds. Green Bonds are an essential tool in furthering their useful involvement in this area and are thus bound to continue to be part of the global dialogue. The joint statement by Multilateral Development Banks (MDBs) on climate finance, published in September, highlights that the MDBs aim "to maintain the developmental role, in order to spur further sustainable growth of the Green Bond market." The EIB, a signatory to the Statement, remains committed to this market segment and will continue to grow its Green Bond issuance to support market development and remain responsive to investors. ■

Aligning economy with ecology

for sweet success



Our ecosystems, biodiversity and natural resources are fundamental to the well-being and sustainable development of our societies: they are the Earth's natural capital base. The EIB is a cornerstone investor in the Althelia Climate Fund, which targets sustainable landscape projects that are set to generate financial, environmental and social returns. Among the first investments of the fund is the conservation of 570 000 hectares of natural forest in Peru.

Once up and running, the investment will produce at least 3 200 tonnes per annum of certified zero-deforestation organic and Fairtrade cocoa, thereby helping to improve the livelihoods of 1 100 small farmers and their families. These agroforestry systems act as an environmentally sustainable and economically attractive alternative to business-as-usual and will result in a total of 4 million tonnes CO₂e of avoided emissions over seven years.

The total investment in support of the project exceeds EUR 9m, to be spread over seven years. On the ground, this investment is being implemented in partnership with a leading Peruvian NGO – the Asociación para la Investigación y el Desarrollo Integral – which has built up 27 years of expertise in community-based sustainable development projects – as well as the National Service for Natural Protected Areas and the Vice-Ministry for Strategic Development of Natural Resources.

A signalling effect for investors

Deforestation and forest degradation are responsible for almost 20% of the planet's greenhouse gas emissions, second only to the global energy sector when it comes to carbon emissions. Tropical forests hold 25% of terrestrial carbon, while also absorbing 15% of global carbon emissions. To

protect standing forests and in accordance with REDD+ (Reducing Emissions from Deforestation and Forest Degradation), a financial value is given to the carbon stored in these forests, in the form of carbon credits sold in part to companies to facilitate their corporate and environmental responsibility objectives.

For us, REDD+ is new territory. By branching out into this new area, we seek to send a positive signal and show the business opportunities for investing in REDD+. Our EUR 25m investment in the Althelia Climate Fund will help to mobilise some EUR 150m in total private equity investments in Africa, Asia and Latin America. At least 1.2m hectares of pristine forest will be protected, and several million tonnes of emission reductions will be achieved each year. Althelia has also negotiated with the US Agency for International Development (USAID) a 50% loss guarantee at both investment and portfolio level for investors in the Althelia fund.

Launched in 2013, Althelia demonstrates that competitive financial returns can be fully aligned with the preservation of natural capital and social development. It has already raised over EUR 60m from both private and public sector institutions, with the aim of profitably directing finance to some 20 projects that generate income from sustainable agriculture and environmental services. ■

The investment will produce at least 3 200 tonnes per annum of certified zero-deforestation organic and Fairtrade cocoa.

The Tambopata National Reserve and Bahuaja-Sonene National Park areas are among the country's most biologically diverse spots and serve as water reserves and carbon stores for Peru, the Amazon basin and the world. Slash-and-burn agriculture, inefficient pastoral systems and illegal mining are threatening these protected areas. Althelia is providing financing for a transition towards sustainable land use, in particular by restoring 4 000 hectares of degraded lands.

Seeing the wood from the trees in Slovakia

Forests and other wooded land account for over 40% of the EU's land area. In recent decades, afforestation and natural succession have increased this area by approximately 0.4% annually while the global demand for forest products continues to grow steadily at an annual rate of 3%. It is no surprise that investment in sustainable forestry is a growth area for the EIB.

When we think of forests, many of us conjure up idyllic images of lush expanses of green bursting with woodland life. Well-managed forests hold the key to protecting ecosystems and providing global ecological benefits. However, woodland areas are also an important source of employment for 3 million people living in Europe's rural areas.

The EIB has been active in the forestry sector for some 35 years, promoting its wide range of economic, environmental and social benefits by investing in the entire forest value chain, from planting, management and fire protection, to processing and timberland funds.

Our commitment to Europe's living and breathing green resource is reflected in our support for the forest-focused measures of national and regional rural development

More than 
300 000 ha
to be rehabilitated

programmes. Given that the European Agricultural Fund for Rural Development, under which these programmes are designed, accounts for some 90% of EU funding for Europe's forests, the possibility of blending our loans with European Commission funding represents a significant opportunity for the EU bank.

Planting the seeds of opportunity in Slovakia

March 2014 saw a first for both the EIB and Slovakia: we signed our first ever forestry loan in support of the Slovak Ministry of Agriculture and Rural Development's inaugural comprehensive rural development programme. EUR 120m of EIB finance will contribute to afforestation projects, improved forest protection and management and the upgrading of agricultural infrastructure.

Forests play a particularly important role in maintaining Slovakia's delicate environmental balance; they make up 69% of the country's Natura 2000 network of protected areas, against an EU average of 51%. This significance is not lost on the EIB, and our Vice-President László Baranyay underlined his pleasure at EIB funds nurturing green growth in the country: "The project will have considerable environmental benefits in terms of improved forest ecosystem health and increased greenhouse gas sequestration and renewable energy pro-

duction. It will also generate new employment throughout the country."

From small farms to growing agro-tourism

The project's final beneficiaries represent a wide range of public and private entities, including over 2 000 farmers whose land will benefit from the modernisation of on-farm facilities to improve the environmental performance of farms. On-farm use of renewable energy and energy efficient technologies will be promoted, and better nutrient management will reduce surface and groundwater pollution from livestock farming activities to improve the management of all-important water resources.

An important facet of the loan will be to contribute to the rehabilitation and improved management and protection of more than 300 000 ha of forest damaged by storms, pest outbreaks and fires in recent years. 40 km of forest access roads will be built or repaired to facilitate forest conservation and management operations. The Slovak authorities are particularly proud of the fact that, during implementation, the project will create new jobs in the rural economy, supporting growth and employment. Moreover, the nationwide forestry programme represents an important step in the development of a new age of agro-tourism in the central European country. ■



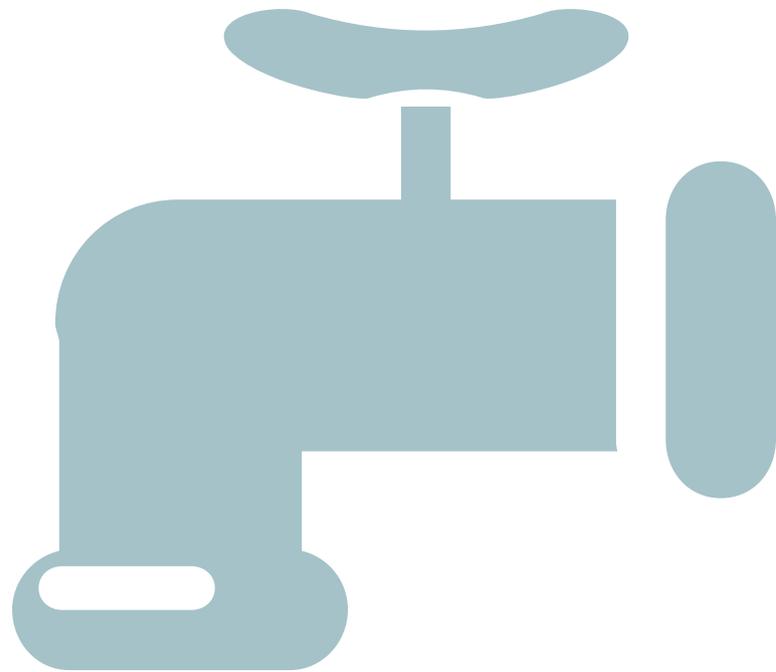
A watertight solution for a more secure future

By 2025, some 800 million people will be living in countries or regions with absolute water scarcity, and the stress of diminishing water resources will be felt by two-thirds of the world's population. This places water security high on the political agenda. The EIB is helping several countries inside and outside Europe to adapt their water management strategies to account for climate change and essential cuts in energy consumption.



Helping Lisbon meet the ever-growing demand for water

Since 1997 we have provided over EUR 2bn in loan support as well as technical assistance to Águas de Portugal for a number of projects that improve and expand water supply and wastewater collection and treatment throughout Portugal. The Beirolas wastewater treatment plant in Lisbon exemplifies improvements in local water resources, including coastal areas, rivers and groundwater, helping protect drinking water supply sources and contributing to sustainable development in the region. Most recently, we have supported the concerted effort by the publicly-owned utility Empresa Portuguesa das Águas Livres (EPAL) to improve the water distribution network through increased energy and water efficiency. A loan of EUR 72m has been approved to help EPAL meet the soaring demand for water in the growing Greater Lisbon area.



Making
a splash:
The largest
lender to
the water sector
worldwide

The EIB has helped shape thousands of water projects across the world. We have lent some **EUR 58bn** via **over 1 300 projects**.

Pouring our
technical
know-how
into the
water sector

And it is more than just finance that we can provide to the water sector. **35 EIB water specialists**, are providing their expertise. In Europe alone, the EIB-EU joint initiative, JASPERS, has provided technical assistance for **129 water projects** across **17 countries**.

Outside Europe we signed nine water operations in 2013 for a total of **EUR 424m**. These projects may be a drop in the ocean in light of the global water challenge, but they represent a life-changer for **855 700 households** in EU partner countries, which benefit from new or improved access to water supply and sanitation services.

Trickle-down effect: water projects improving lives



Award-winning water and sanitation investments in eThekweni

A EUR 50m EIB loan has financed a considerable share of the 2009-2014 eThekweni Water & Sanitation investment programme in the South African metropolitan area, which is home to over 4 million inhabitants. The project, part of a wider effort to strengthen water security in the urban area, supported the extension of access to basic services for a vast and diverse population, while improving the efficiency of the water supply system via innovative technologies. The promoter was awarded this year's Stockholm Industry Water Award (SIWA) in recognition of its achievements, which include the provision of first time access to piped drinking water for 1.3 million people and to sanitation services for 700 000 people.



Taking a holistic approach to the life-sustaining element

Water is essential to life in all its forms. For a more global impact, we are active across the entire water value chain, addressing four key areas: water supply, sanitation and wastewater management, flood protection, and hydropower. By taking a strategic approach to water projects, we support increased access to basic services while strengthening regional water security and resilience to climate change.

In 2014, we invested **EUR 80m** in Italian mini-bonds, an innovative securitisation financing structure to support the investment activity of small and medium-sized companies operating in the water sector in the Veneto Region, Italy. The Viveracqua Hydrobond project should help local water companies overcome their difficulties to access banking finance.

Innovative financing solutions to ensure security for life's eternal element

Water security in the Veneto region

In 2009, the EIB provided a EUR 88m loan to the public concession company Veneto Acque Spa to diversify water sources and enhance security of supply in Italy's Veneto region. In recent years, Northern Italy has experienced decreased snow cover, fewer rainy days with less intense showers and glacier retreat. These climate events are altering the flow of the main rivers, which is hampering water availability in the region. As a result of the project, poor quality surface water from the Adige and Po rivers has been complemented with pre-alpine groundwater, meaning that the 600 000 inhabitants of Central Veneto plus its 400 000 seasonal residents enjoy a consistently higher quality of water. When fully operational in 2016, the plant will distribute some 30 million cubic metres of water annually.

Backing solar module innovation in Germany



"The example of Manz demonstrates that a medium-sized company can be well on a par with its international competitors and be a technology leader".

A EUR 20m loan to high-tech engineering company Manz AG is supporting the company's research and development in the area of sustainable and cost-efficient power generation. The financial assistance is being provided under the new InnovFin – EU Finance for Innovators initiative set up jointly by the EIB and the European Commission. InnovFin MidCap Growth Finance is tailored to the specific requirements of midcap companies in the field of R&D financing.

Our financing will primarily benefit the company's R&D in the solar photovoltaic (PV) sector. Manz's solar cell technology is among the world leaders, with currently the highest sunlight-to-energy efficiency for CIGS and other thin-film PV modules, and competitive costs compared to cSi PV technology. The CIGS technology is based on copper, indium, gallium and selenium and produced in thin-film technology. CIGS modules are currently considered to be the most efficient on the market. They require a relatively low amount of material, which makes them more sustainable and environmentally friendly.

EIB Vice-President Wilhelm Molterer called the Bank's financial support crucial: "To be able to deliver strong research achievements – as here in the field of sustainable and renewable energies – reliable financial

support is vital. This is particularly the case when it comes to small and medium-sized companies. The example of Manz demonstrates that a medium-sized company can be well on a par with its international competitors and be a technology leader. Yet, this requires stable financing conditions in the long run." It would be a central task for both the EIB and the EU Commission to ensure these conditions, added VP Molterer, whose responsibilities include the Bank's financing activities in Germany.

Innovative loans for innovative midcaps

Our loan will support the company's R&D activities in Germany. Manz specialises in the development and production of automation machinery and equipment. The company develops integrated production

lines that are deployed in the flat screen and sensor display, thin-film solar and lithium-ion batteries segments. The company's research programme is scheduled for completion by 2016.

Manz's R&D project is supported by InnovFin – EU Finance for Innovators MidCap Growth Finance, with the financial backing of the European Union under Horizon 2020 financial instruments. InnovFin is a new range of EIB Group products designed to facilitate access to finance for innovative businesses. InnovFin MidCap Growth Finance enables the EIB to provide between EUR 7.5m and EUR 25m in long-term senior, subordinated or mezzanine loans to innovative businesses in order to support their growth and investments in research and innovation. ■

Going solar in the Adriatic

Croatia's sun-drenched islands benefit from some of the highest levels of insolation in Europe. The Green for Growth Fund, Southeast Europe – one of the EIB's climate action financing partners – supports solar solutions in the country that generate green electricity along with a sustainable return for investors.



In 2013, Privredna banka Zagreb (PBZ) funded rooftop solar systems on the island of Lošinj in the Adriatic Sea. These are producing clean, emission-free electricity for around 100 households. PBZ is part of the local partner institution network, through which the Green for Growth Fund, Southeast Europe (GGF) is supporting renewable energy development in Croatia.

From rooftops to renewables

The solar energy solution, developed by a client of PBZ in collaboration with a local hotel chain, involved installing solar panels on leased rooftops. It is a true win-win scenario. The optimal location combined with good solar radiation ensures dependable returns for PBZ's client. Making use of existing hotel rooftops allows for easy, environmentally-friendly installation, since this requires less infrastructure and materials. Ground-mounted systems, on the other hand, take up valuable land for the solar array. Furthermore, the Croatian islands have significantly higher irradiation levels due to the mirror effect of the sea.

For the hotel chain, the venture is a win because it contributes to overall profitability by generating additional revenue, without upfront investments or operating expenditures. When the lease expires, the hotel chain may also benefit from owning the plant directly and using sun-generated power to cover its own needs. This type of arrangement could prove especially attractive: in the summer months, for instance, the hotel's energy demand matches daytime peak power generation.

The Green for Growth Fund's long-term loan ensures appropriate matching of PBZ's assets and liabilities, providing the final necessary link for enabling the greening of a beautiful corner of the Adriatic. Working with partner institutions on the ground, the Fund is playing a pivotal role in tapping the full potential for power generation from renewable energy sources. ■

Partnering for green growth in Southeast Europe

The Green for Growth Fund is an example of how the EIB teams up with others in order to attract a multiple in investment for climate action. This innovative public-private partnership provides financing, including loans, equity and technical assistance, for sustainable energy projects in Southeast Europe, including Turkey, and the European Eastern Neighbourhood Region. Initiated by the EIB and German KfW Bankengruppe, it has attracted donors, including the European Investment Fund (EIF), as custodian for the European Commission, and the German Federal Ministry for Economic Cooperation and Development (BMZ). With the EIB and KfW, a number of international financial institutions that have invested in the Fund include the European Bank for Reconstruction and Development (EBRD), IFC (a member of the World Bank Group), FMO (the Netherlands Finance Company) and the Development Bank of Austria (OeEB) alongside private investors, such as German private bank Sal. Oppenheim and the asset management firm Finance in Motion. As at 30 June 2014 the Fund had invested more than EUR 185m in loans in its partner institutions, resulting in more than 11 000 sub-loans for financing energy efficiency and small-scale renewable energy projects.

Hydropower to boost energy storage capacity in Austria

The growing diversification of energy sources, especially renewable energy, also poses new challenges for power plants. Capacity must be increased, supply must be balanced. The Obervermuntwerk II project is designed to do just that by reducing network losses, adding balancing capacity to the network and providing additional regulating energy.



“We are pleased to have found a competent and reliable financing partner for our projects in the European Investment Bank”, said Dr Christof Germann, Board member of the Federal State-owned energy supply company Illwerke AG, which received a EUR 280m loan in support of a pumped storage power plant.

“Obervermuntwerk II will play a key role in generating environmentally friendly power – and not only for the Federal State of Vorarlberg. It will also make an important contribution to ensuring the stability and reliability of the whole European power grid”, added EIB Vice-President Wilhelm Molterer.

Mountaintop renewable energy battery

Works at the 360-MW capacity Obervermuntwerk II started this summer and are due to be finalised by 2018. A special cable

railway is being installed to make sure the building site – located at an altitude of around 1 700 metres – remains accessible even when the roads are snowed under.

This project harnesses the natural power of water and the Austrian mountains: the 300-metre difference in elevation between the upper Silvretta and lower Vermunt water reservoirs – roughly the height of the Eiffel tower – is used to balance-out uneven energy supply and demand. This enables Obervermuntwerk II to rapidly deliver peak and regulating energy to the public power grid whenever necessary. In case surplus energy in the network endangers the security of supply, water will be pumped back up to the Silvretta reservoir.

Secure, efficient and flexible power supply

This will make it possible to react quickly to demand peaks and imbalances, which arise not only in consumption but also in

power generation from renewables, such as wind and solar, as well as to provide additional network services for the European grid. It therefore acts like a rechargeable battery, powered by renewable energy, providing as much electricity as is needed at a given time.

“Europe is dependent on a secure, efficient and flexible power supply. And the EIB sees this as one of the core goals of its financing”, said Vice-President Molterer, who is responsible among other things for the Bank’s financing operations in Austria. ■

Supporting greener social housing in London



Energy efficiency investments benefit the economy by cutting energy bills, saving emissions and creating new construction jobs. A UK social housing scheme seeks to do just that by improving the social housing offering with environmentally sustainable buildings in London and the rest of the country.

A EUR 480m (GBP 400m) EIB loan to The Housing Finance Corporation Ltd (THFC) is supporting retrofitting measures and the construction of highly energy-efficient new housing across the UK. Around half of these investments will be located in the London area where the need for new social housing is highest. This not only helps to drive down energy bills, but also significantly reduces atmospheric pollution. In particular the new buildings will comply with the highest environmental standards.

THFC is an independent, specialist organisation that makes loans to regulated housing associations, which provide affordable housing throughout the UK. Working with the EIB since 1998, THFC

has passed on GBP 1.5bn for investment by smaller housing regeneration schemes across the UK. As a not-for-profit organisation THFC uniquely passes on the EIB money at cost and does not charge a margin, which is a substantial advantage to housing associations.

“The construction schemes we are helping to fund with the financial backing of the EIB achieve very high environmental ratings. This can make a big difference to residents of social housing apartments. They will ultimately benefit by cutting-down on their energy bills,” Fenella Edge, THFC Director said.

It is expected that new construction schemes to be funded will achieve level 4 or higher as defined by the national Code for Sustainable Homes, representing a 44% reduction in energy usage over 2006 minimum planning-compliant benchmark standards. In comparison, the highest rating, level 6 is a zero carbon home, whereas the majority of private sector housing schemes are rated level 2 or 3.

Building sustainable neighbourhoods in London

This housing scheme is helping to shape sustainable neighbourhoods and some of the London investments are already starting to materialise. The Dockland Settlement scheme, due to be completed in November this year, includes five rental social housing units, four shared ownership social housing units and 18 private housing units. The amount covered by the EIB is around 49% of the total investment cost.

A brand new community centre is also being built together with a caretaker's house. The scheme is providing support to the local community, bringing new opportunities for young people and allowing other residents to play sports.

The funding from the EIB for this social housing scheme will be complemented by investment from the London Green Fund, which is managed by the Bank, and will target retrofitting schemes in the London area. ■

Full steam ahead for sustainable sea transport between Norway and Denmark

Two new LNG cruise ferries are providing an efficient and environmentally friendly way of travelling between Bergen, Stavanger, Langesund (Norway) and Hirtshals (Denmark). The EIB is supporting the expansion of the Fjord Line fleet with a EUR 124m loan.



The loan has supported the acquisition of two new ferries – MS Stavangerfjord and MS Bergensfjord. Constructed to the highest environmental standards, the two award-winning twin vessels are the world's first cruise ferries to be operated by natural gas (LNG) alone, and also the largest cruise ferries in the world with single LNG engines.

Award-winning eco design

The application of clean technology will significantly reduce harmful emissions from the 170 metre-long and 3 900 tonne vessels. CO₂ emissions are 23% less than for standard marine engines powered by heavy fuel oil. Other emission benefits are equally impressive: 100% reduction of sulphur, 100% reduction of particles and 90% reduction of nitrogen oxides. Furthermore, thanks to improved hull form and rudder/propeller systems, overall fuel consumption has been reduced by 5% with waste-heat recovery systems adding another 1-2%.

"Fjord Lines has always aimed to be highly climate-aware and responsible. Although conventional engines had already been installed, we changed the design for both vessels in 2012 to incorporate state-of-the-art LNG technology, with the result that we now have two of the most environmentally friendly cruise ferries ever built", said Peter Frølich, Chairman of the Board of Fjord Line.

Strengthening maritime links

The new vessels are set to boost capacity and increase the number of routes from two to four with daily departures from all ports in Norway, Denmark and Sweden as of 2015. They will operate the route between Bergen – Stavanger – Hirtshals and Hirtshals – Langesund, offering transport for up to 1 500 passengers and 600 vehicles each day. This boosts Fjord Line's capacity with some 700 000 passengers and 60 000 cargo units expected in 2015, compared to 190 000 passengers and 15 000 units of cargo prior to the upgrade.

Beyond its environmental benefits and capacity improvements, the introduction of the new ferries has created approximately 400 new jobs in the EU.

"The EIB financing has, due to favourable terms and conditions, increased the project's sustainability and thus reduced the risk related to the ship investments. The loan assures us long-term financial resources at a lower cost, thus providing financial value added for Fjord Line", Frølich explains.

Apart from offering a sustainable transport solution, the new vessels also help to bring Norway and the EU closer together by providing an attractive and reliable maritime link.

"The EIB's involvement is recognition of Fjord Line's commitment to sustainable sea transportation between Norway and the EU. We are proud to be the first Norwegian maritime transport company to have signed a loan agreement with the EIB", he adds. ■

Román Escolano joins the EIB



The Bank's Board of Governors has appointed Román Escolano as Vice-President and member of the Management Committee. Prior to joining the EIB's Management Committee on 1 September, he was President of the Instituto de Crédito Oficial in Spain.

People@EIB



Matteo Maggiore

Matteo Maggiore has been appointed Director of the Communications Department, within the Secretariat General.

Agenda

• 06/11/2014

InnovFin Seminar – EU Finance for Innovators and Growth Companies, Warsaw

• 07/11/2014

UK Businesses: Opportunities through the International Development Work of the EIB, London

• 01-12/12/2014

UN Climate Change Conference (COP 20), Lima

More @ www.eib.org/events

Nicholas Bloom and John Van Reenen awarded EIB Prize for Economics

The EIB Prize this year jointly goes to the economists Nicholas Bloom (Department of Economics, Stanford University) and John Van Reenen (Centre for Economic Performance and Department of Economics, London School of Economics and Political Science) in acknowledgement of the academic excellence and impact on public policy of their research on the topic of this year's prize: "Innovation, Market Structure and Competitiveness". The authors have been pioneers in analysing the effects of managerial and technological innovation on economic performance and inequality, developing new tools to measure organisational innovations in over 32 countries. They have also examined the determinants of innovation, with a particular focus on what policies influence productivity, such as competition, trade and regulations. President Werner Hoyer awarded the EIB Prize in September in Berlin.



Publications

- Developing innovation and skills for smart growth in Europe – brochure
- Environmental and Social Standards – Overview
- Sustainability Report 2013
- FEMIP Annual Report 2013
- Third report on the joint IFI action plan for growth in central and south eastern Europe

More @ www.eib.org/publications



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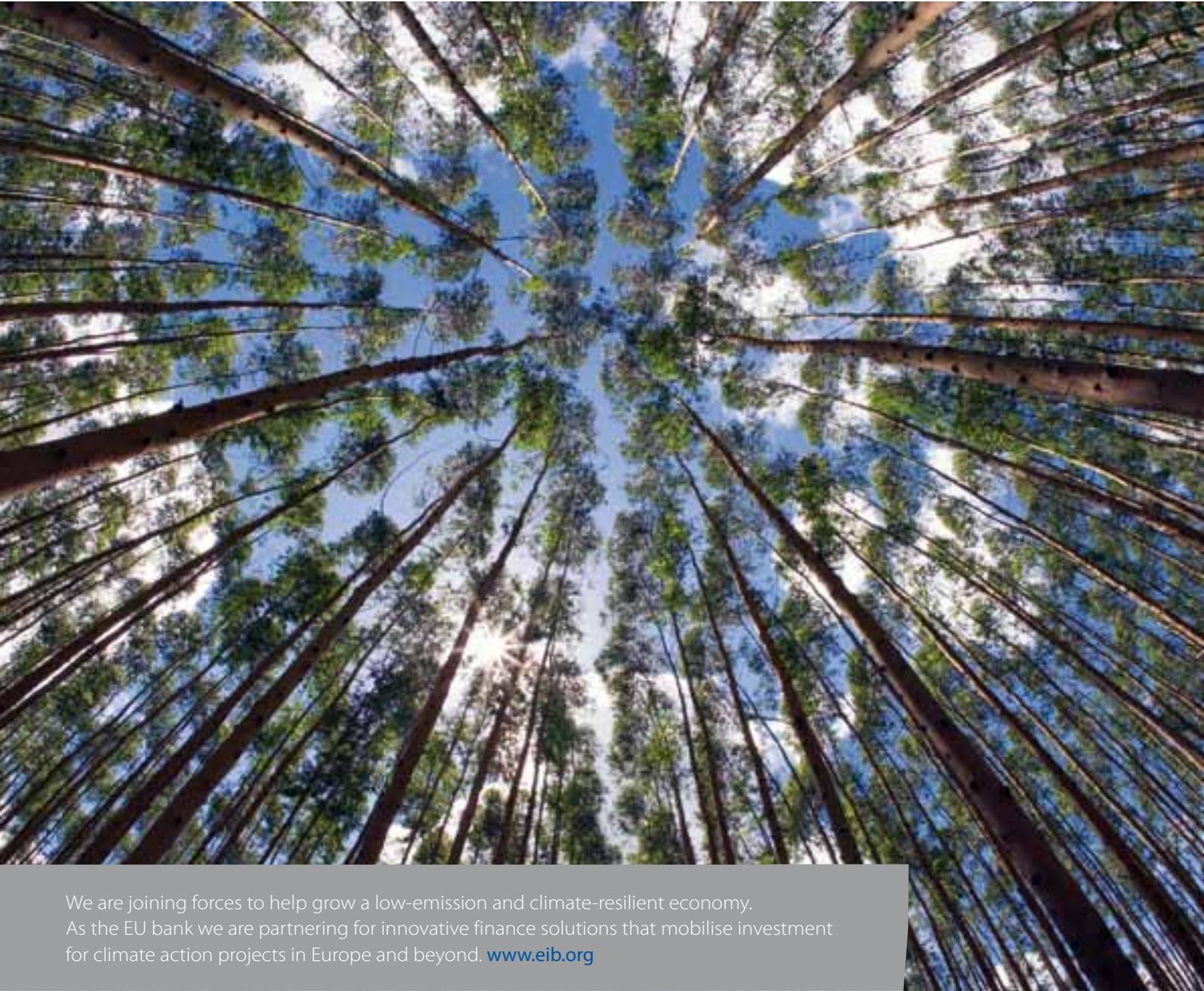
☎ (+352) 43 79 1

☎ (+352) 43 77 04

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