




# AHEAD of time ABOVE target



A peak year of lending and investment  
Plus the first big contributions  
of the Investment Plan for Europe



2015

Activity Report



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**USE** this report to...

**DISCOVER** what the world's biggest  
lender is **DOING...**

...and to **LEARN** what Europe's biggest  
financer of innovation is **THINKING**

## Foreword by the President



**T**he EIB met new challenges in 2015. To cope with them, the Bank evolved. Victor Hugo wrote, “Change your leaves. Keep your roots.” The words of the great French writer have a considerable resonance for us as we begin to implement the Investment Plan for Europe, taking our existing expertise and using it to develop new approaches. In 2015 we delivered on ambitious commitments that turned a EUR 10 billion capital increase into support for EUR 190 billion of investment. We strengthened our engagement in the most difficult areas of Europe and the globe. We ensured the Investment Plan for Europe was well on track even before the structures that underpin it were in place.

The EIB is the EU bank. Our responsibility is to the economic needs of every European citizen in every country of the EU. Since the financial crisis of 2008, the EIB’s response has been strong and invaluable. The Bank has embarked on a path of change and modernisation. And it has produced real results.

In 2012 our shareholders, the EU Member States, agreed to a capital increase for the EIB Group. In return they asked us to lend an additional EUR 60 billion and to support at least EUR 180 billion of overall investment. Not only did we succeed in that, but we exceeded the target and, in April, finished the job early.

That is one of the reasons why we started with confidence to deliver on the promise of the Investment Plan for Europe. While the regulation establishing the EU budget guarantee was being completed, the Commission acted as steward for the deals to be covered by it. This allowed us to launch the first investments under the Plan in April 2015.

By the end of 2015, the EIB Group – the EIB and the EIF – approved well over 100 Investment Plan loans and guarantees. You will read about them in the pages that follow. The European Fund for Strategic Investments deals signed so far by the EIB are





“ Europe’s  
future must be  
innovative.  
It must also  
be green.”

in precisely the kinds of activities and sectors the Investment Plan for Europe aims to bolster. Half of them are in the renewable energy, energy efficiency, or low-carbon and environmental sectors. The others include digital infrastructure, R&D, and industrial innovation.

That’s as it should be. Europe’s future must be innovative. It must also be green. The EIB is the world’s biggest provider of climate finance. We have financed more climate action than the next five biggest multilateral development banks put together. Over the next five years we will provide around EUR 100 billion for climate-related projects. We will help turn the ambitious agreement approved in December 2015 at the Paris climate conference into reality.

We committed to make at least a quarter of our loans to climate action projects. In 2015 we more than met that commitment. On top of this, we de-

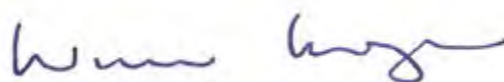
cided to increase lending for climate action projects to 35% of the loans we make in developing countries by 2020.

In 2015 the EIB responded swiftly to the refugee crisis, financing projects in countries of destination for emergency refugee housing and making long-term investments in the refugees’ home region. In Jordan, for example, the EIB signed a EUR 50 million deal in November to finance a water pipeline to supply the north of the country. The arrival of Syrian refugees creates intense pressure on Jordan’s scant water supply. It also has the potential to cause conflict between the refugees and existing residents. Projects like this pipeline will alleviate such pressures. By bolstering frontier countries, we reduce the impetus for refugees to move on and seek asylum in Europe; we give them the choice to remain closer to home and build new lives there.

Most of our activity naturally focuses on Europe. In Greece our outstanding loans amount to 10% of the country’s GDP. Still, we plan to step up our engagement. In neighbouring countries the EIB was very active in 2015 too. During the summer we conducted complex negotiations to speed up a guarantee to the World Bank for EUR 520 million of loans that allowed the World Bank to finance the purchase of heating gas in Ukraine. The cloud of war hung over the negotiations, as did the prospect of great suffering during a harsh winter if the gas didn’t get through. Thankfully the Bank’s energy staff succeeded.

The EIB’s reach, its impact, is global. In recent years the EIB Group’s role in helping Europe develop and deploy responses to local and global challenges has grown steadily. This report will show you how that trend accelerated still more in 2015.

Werner Hoyer



# Total FINANCING

**77.5bn** EIB  
EUR

**7bn** EIF  
EUR

**18.7bn** EUR  
for **Innovation  
and Skills**

**28.4bn** EUR  
for **Small and  
Medium-sized  
Enterprises**

**19.1bn** EUR  
for **Infrastructure**

# 2015 HIGHLIGHTS



## European Fund for Strategic Investments in 2015

EFSI

→ EIB Group **126** projects  
approved or signed



→ EUR **7.5** billion financing  
under EFSI



→ Mobilising EUR **50** billion total  
investment



→ In **22** of 28 EU countries

Climate and the environment are  
the focus of almost  
**50%** of EIB approved projects



**81,000** SMEs will benefit from EIF financing –  
support that will strengthen Europe's economy  
and create jobs



**19.6 bn** EUR  
for **Environment**

## Innovate now

The EIB's activity is targeted at responding to Europe's innovation gap with the US and Japan - before it's too late

**The EIB recognises the urgent need to remedy decades of underspending – and underthinking – about innovation. That realisation is behind many of the projects in this report.**

Innovation is not what it used to be. It's no longer just a matter of coming up with a new product. It's also about how you manufacture it. Cloud-based control systems will soon run factories around the world, harvesting economies of scale. Digitalised supply and delivery chains will operate automatically around the clock.

The transformation of manufacturing into a digitalised process is at the forefront of today's remaking of the business world. US firms have a big advantage in the service sector because of their digital advances over the last two decades, but Europe still holds a slight lead in manufacturing expertise. Within a few years, however, manufacturing will be fully digitalised too. Europe must innovate its manufacturing quickly with massive investment and a greater appetite for new approaches that carry a high risk – and high potential return – or there is


the real possibility that the continent will be left behind the US for generations.

US innovation pushed ahead of that in Europe in the 1990s, with the result that the companies dominating digital services are American – Google, Amazon, Facebook, Apple. The years since the financial crisis of 2008 exposed Europe's lack of competitiveness even more. One reason the economy did not rebound as strongly or as fast as in the US was Europe's long-term lack of investment in research, digitalisation, and education.

There are structural reasons for this investment gap. Whereas the US essentially operates as a unified entity using one language, Europe's single market is incomplete. Labour mobility is hampered by the many languages we speak. Different countries still have different regulations for the







A EUR 45 million loan to Polpharma, Poland's biggest pharmaceutical manufacturer, will finance research into affordable alternatives to current drug treatments

same product. We have gained tremendously from integration, but Europe is still far from being a genuinely integrated single market.

Even Europe's strong reliance on bank financing puts its companies at an innovation disadvantage. Innovation often needs someone to identify promising businesses and take risks, as well as liquidity. That's what venture capitalists do, and the US has a far more developed venture capital scene.

The investment needed is massive. A study by EIB economists shows Europe requires an additional EUR 130 billion a year to meet the EU's target of spending 3% of GDP on research and development, which would take us close to the R&D investment ratios of other leading economies. There's more. Europe needs: EUR 90 billion a year to keep up with advanced manufacturing tech-

nology, EUR 35 billion a year to match US venture capital financing, EUR 10 billion for state-of-the-art education facilities, and EUR 65 billion to reach EU targets for broadband, data centre capacity and cyber-security.

If anyone wonders why Europe needs to integrate further, the scale of this challenge is the answer. No European country could meet it alone. The EIB is at the forefront of financing for innovation. Our lending to innovative projects was a record EUR 18.7 billion last year, compared to less than EUR 10 billion in 2008. Every one of those investments is strategic.

We look for innovation in every project we appraise. That way, we hope, innovation will become a habit for European companies.

## We've got your back

The EIB supports innovative industries when it's hard for them to find private financing and stays on board until they become mainstream

**T**he Cestas Photovoltaic plant, which was inaugurated in December, produces clean energy that's equivalent to the domestic usage of at least a third of the residents of nearby Bordeaux. The activation of its 1 million solar panels also marks a big milestone in climate-friendly energy: Cestas is the first major photovoltaic project to be truly competitive with fossil fuel power stations.

It's the climax of a long road for the solar photovoltaic industry. Growth was slow each year of the 1990s and most of the first decade of this century. However, technological developments and increasing economies of scale brought a boom. Solar capacity is now nine times what it was in 2009. And the EIB was there all along.

"Cestas is the first big photovoltaic project we see that's competitive with a fossil fuel alternative," says David González García, senior engineer in the EIB's renewable energy division. "Costs have been going down for fifteen years, and now there's higher supply, standardised equipment, and great economies of scale."


### Next up, offshore wind and concentrated solar

The EIB has often taken a role in solar photovoltaic deals that didn't attract sufficient private investment. That helped bankroll the research that ultimately has made the industry a viable economic prospect. The EIB's approach is similar in other, less mature, renewable energy sectors where it has made big investments in British, German and Belgian offshore wind farms and the massive con-

centrated solar power development at Ouarzazate, Morocco, which is slated to open in 2016. Offshore wind and concentrated solar both produce relatively small proportions of the world's electricity at present, but the evolution of solar photovoltaic offers an encouraging path for them to follow.

Cestas, a town of 16,000 set on the flatlands between Bordeaux and the Atlantic coast, sees summer temperatures as high as 42 Celsius, and there's plenty of sunshine. The renewable energy company Neoen built its solar photovoltaic plant, the biggest in Europe, mostly in 2015.

"Solar photovoltaic power is now really competitive," says Céline Lauverjat, investment director at Mirova Renewable Energy Funds in Paris. "It's a key moment in the photovoltaic industry."



The Belwind Wind Farm,  
46 km off the Belgian coast



The offshore wind industry wouldn't have started moving without the presence of the EIB.

Mirova's Eurofideme III, a EUR 180 million investment fund, has a EUR 30 million investment in the EUR 285 million Cestas project. That means the EIB effectively has an equity stake, because it's an investor in Eurofideme III. The EIB also approved EUR 42 million in loans to a French bank financing Cestas.

## Deals that need engineers, as well as bankers

The EIB's role in supporting innovation is key to understanding the development of offshore wind power. The industry could easily have wiped out in 2008, when the global financial crisis made investors especially leery of risk. Though onshore wind farms were relatively well-developed, offshore technology was still in its early stages. The

EIB stepped in when private investment dried up. "Commercial banks were very reluctant to take the risk," says Alessandro Boschi, head of the EIB's renewable energy division. "The offshore wind industry wouldn't have started moving without the presence of the EIB."

Certainly 2008 would've appeared to be a risky time to invest in Belwind, a Belgian project to build Europe's biggest wind farm 46 km off the Zeebrugge coast in water as much as 37 metres deep. "There was no private money because of the financial crisis," says Melchior Karigl, an EIB project finance loan officer.

Karigl and his colleagues, however, were impressed by the technology that would enable Belwind to sink foundations deeper into the sea than any other project at the time – and also by the audac-



ity of the plan to construct 55 turbine towers over an area of 17 square kilometres. The EIB funded Belwind to the tune of EUR 300 million, half the cost of the project. Belwind now produces enough electricity to power 160,000 homes in Belgium.

Since then the EIB has worked on big offshore projects across Europe, in particular in the UK, the Netherlands, and Germany. It's even considering an investment in an innovative floating wind farm project in Portugal. **The EIB financed roughly two-thirds of all European offshore wind capacity.** The EIB's latest big deal in September committed it to lend GBP 425 million for the Galloper Wind Farm, 27 km off the Suffolk coast, which will include 140 turbines. Galloper is funded under the European Fund for Strategic Investments.

## When downscaling is good

The future of renewable energy isn't all about massive projects in developed countries. Solar photovoltaic, for example, has one advantage over some other renewable energy technologies – it can be scaled down. Whereas you're unlikely ever to erect a 90 metre-tall wind turbine in your garden, you might well attach some solar panels to your roof. That adaptability makes solar power very attractive in remote parts of the world where there's no alternative power supply.

"Solar is really taking off in places where there's no power grid," says Sophie Jablonski, an EIB engineer. "In African villages the only alternative light source, for example, might be kerosene lamps, which are expensive and the fumes are toxic."

The enormous economies of scale in big European solar projects brought down the price of photovoltaic panels so far that they can now be purchased by individual families in remote regions. "The more large photovoltaic projects you have like the one in Bordeaux, the bigger the effect on the cost of solar equipment turned out by factories in China," says Michael Gera, managing partner of Energy Access Ventures, one of the managers being backed by the EIB. "A big project in Bordeaux is going to lead to benefits for small projects in Africa."

These small-scale EIB-backed projects are:

- Pamiga (Participatory Microfinance Group for Africa): the EIB is lending EUR 4 million to a fund which in turn lends to microfinance companies in rural Africa. Those companies make loans for people to buy solar kits (as well as investing in irrigation and drinking water facilities). The fund operates in a number of African countries, including Benin, Burkina Faso, Cameroon, Kenya, Madagascar, Senegal, Tanzania and Togo
- Energy Access Fund: the EIB has invested EUR 10 million of equity in the fund, which lends to start-up companies providing access to energy in East Africa. The fund aims to bring reliable electricity to one million low-income people in rural and partially urbanised areas of Sub-Saharan Africa

"African microfinance has to be green and inclusive to be sustainable and responsible," says Renée Chao-Béroff, Pamiga's general manager. "Solar photovoltaic is very important in this green microfinance economy."

Global warming isn't limited by national borders. Thankfully for the energy consumers of Bordeaux and Benin, neither is the EIB.

**“ A big project in Bordeaux is going to lead to benefits for small projects in Africa.**



**EIB DOING**



A small photovoltaic panel for a single home in Tanzania



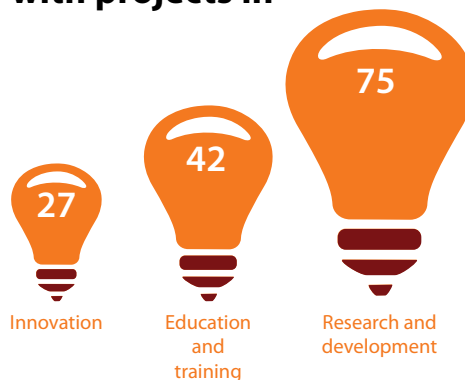
## INNOVATION for competitiveness

Europe's future depends on its ability to innovate. Competition with the US and other major economies is tough, as industry moves toward digitalised methods of production. Investment in this one of our public policy goals is vital. That's why innovation is a criterion for EFSI loans.

18.7bn<sup>EUR</sup>

to support **Innovation  
and Skills**

with projects in



EUR **4.9** billion  
Total loan volume  
for RDI in private sector



More than

**50**  
private sector  
companies  
supported  
in R&D







To reach EU targets for broadband, data centre capacity and cyber-security requires EUR 65 billion a year. The EIB made a lot of deals in 2015 to lay the groundwork

**15.3 million** new or upgraded digital connections

Telecom Italia **EUR 500 million**  
...7 million households

Nord-Pas de Calais **EUR 147 million**

Orange Poland **EUR 190 million**

Alsace **380,000 connections**

Lower Saxony **EUR 150 million**

Hessen **EUR 150 million**

Finland and Estonia  
**EUR 150 million**

Malta Telecom **EUR 30 million**



Innovations don't drop out of the sky. Someone has to think of them and develop them. Today's students will develop tomorrow's innovations. But Europe has fallen behind the US, which spends twice as much per student in higher education. Loans by the EIB are aimed at reversing that trend. In 2015 we made our biggest-ever university loan with EUR 278 million for the University of Oxford's scientific research facilities. Across Europe 1.45 million students benefit from EIB loans



Jorge Fernández Quesada, a 22-year-old medical device design and entrepreneurship student from Málaga, was one of the first students to receive a loan for his Master's studies under Erasmus+, an EC programme managed by the EIF that extends loans to Spanish Master's students studying abroad and to other Europeans carrying out Master's studies in Spain. Erasmus+ covers tuition and living costs, and repayments don't begin until a year after completion of the degree. Jorge got his loan from MicroBank, the social arm of La Caixa, for a one-year Master's at Imperial College, London. Erasmus+ is projected to lend about EUR 3 billion to 200,000 students by 2020.





## Get Smart

EFSI

Janet Thickpenny  
with her smart meter  
at home in Wales



### Smart meters help consumers control energy bills

When Janet Thickpenny used to want a cup of coffee, she'd simply click the button to boil her kettle. Often she'd find herself absorbed in something else, while the water heated up. By the time she remembered her coffee, the water had cooled and she'd have to boil the kettle all over again.

She has stopped that kind of waste since she had a smart meter installed in her home in Barry, a coastal town in Wales. The smart meter with its in-home display now shows her the effect on her bill. It also

lets her know how much she spends by keeping a closer eye on her usage. "You'd be surprised how much energy a kettle uses," she says.

Tens of millions of smart meters are being installed across Europe. The British government has ordered a smart meter in every home by the end of 2020. **The UK rollout will mean about 53 million new electricity and gas meters, with an estimated investment of GBP 10 billion.** Smart meters in Britain measure how much electricity or gas you use in real time, which in turn encourages you to use less.

That helps consumers who want to reduce their energy consumption and potentially cuts carbon emissions too.

### Smart money

Smart meters are also the subject of the biggest loan the European Investment Bank signed under the European Fund for Strategic Investments (EFSI) last year. With the backing of EFSI, the European Investment Bank will lend about EUR 500 million to a EUR 1.4 billion smart meters project managed by Calvin Capital, a British company that finances and manages the installation of new meters on be-

“It’s a big deal, but in the end our presence can make the market comfortable with the risks and ensures the economics of the project stack up.”

half of energy suppliers. Overall EFSI aims to generate EUR 315 billion in new investment in the EU by 2018 with initial money from the EIB and the European Commission.

When a British utility installs a smart meter, the consumer is essentially under no obligation to keep an account with that utility for the long term. Any time after a new smart meter is installed, the customer may decide to move to another energy supplier and the utility could find it difficult to recover the cost of its investment in the meter. Calvin Capital is accustomed to handling customer “churn,” as this phenomenon is known within the energy industry. After all, Calvin has financed the purchase and installation of over six million meters – including more than one million smart meters – since 2002. **This single EFSI deal covers a further seven million smart meters.**

The model the company chose in the EIB deal takes the impact of churn away from the energy supplier. Instead of the utility company owning the meter and consequently having to deal with customers switching, Calvin owns the meter. With the EIB’s support, the Manchester-based company provides a solution that works regardless of the supplier the consumer chooses.

### The economics stack up

The EIB made this loan under EFSI to demonstrate support for the model Calvin’s using. That support is intended to draw other investors into the sector and contribute to the modernisation of energy industry infrastructure. **Under EFSI, the EIB was also able to increase the size of its loan beyond the maximum amount it would have been allowed to lend as part of regular operations.**

“It’s a big deal, but in the end our presence can make the market comfortable with the risks and ensures the economics of the project stack up,” says Peter Jacobs, the EIB’s project finance head.

### Template set

Janet Thickpenny’s smart meter certainly encouraged her daughters to be more aware of their energy usage. “It beeps to warn us if we’re using more energy than normal,” she says. “That sends my youngest daughter scurrying around the house unplugging things.”

There’s a lot of work – and investment – still to be done to complete the British government’s smart meter rollout. But that’s part of EFSI’s role too – to help build momentum for new directions in strategic economic sectors.

And it’s on course. Now that the EIB has made this loan to Calvin and signed **other contracts to finance the installation of 13 million smart meters across the European Union last year**, the Bank’s Peter Jacobs says he has been contacted by a number of other UK companies to do similar deals.



## Innovation for life

The InnovFin Infectious Diseases Finance Facility funds the early, risky stages of vaccines, treatments and medical devices. Its first loan of EUR 10 million was to CaviDi, a Swedish biotech firm developing a device to monitor AIDS patients in case they become resistant to their medication. The device, which the company calls Ziva, will be on the market in late 2016 and is called a “viral load monitor.” Of the 35 million HIV sufferers around the world, 34 million are in poor countries without the complicated laboratory facilities needed to monitor AIDS drugs. “They just don’t have access to diagnostics,” says Andrew Oldfield, a CaviDi director. Soon a nurse in even a remote clinic will be able to take a blood sample, run it through Ziva and get a result. “As a small company with a novel technology, the EIB’s support has been crucial,” Oldfield says. “We now have a good chance of bringing this to market and really helping people.”



## Going big on SMALL and MEDIUM-SIZED ENTERPRISES

Most Europeans work in small or medium-sized companies, which makes support for this sector a vital goal. But small companies and start-ups also generate innovative ideas. Europe's competitiveness depends on strong investment here.

28.4 bn

for **small and medium-sized enterprises**







In 2015 **the EIB**

Provided loans helping to create and sustain  
**4.1 million** jobs in Europe's SMEs and midcaps

Devoted **29%** of its financing to small and medium-sized businesses

Supported **13%** more small and medium-sized businesses

In 2015 **the EIF**

Doubled SME deals to 85 equity and 119 guarantee & micro transactions worth EUR 6.96 billion to mobilise  
**EUR 26.89 billion**

Carried out 25 venture capital transactions with a total commitment of EUR 812 million that will mobilise **EUR 3.4 billion**

Concluded guarantee and microfinance deals  
**29% above target**





## Guarantees for growth in Spain and Malta

The EIB, EIF and European Commission signed deals with Spain and Malta to manage programmes to boost small and medium-sized companies there. The EIF will guarantee loans to financial intermediaries and cover 50% of losses on their loans to SMEs. In return the intermediaries will make the loans at reduced interest rates. In Spain the programme is expected to generate EUR 3 billion of financing in 16 regions of the country. The programme is projected to support EUR 60 million of financing for small and medium-sized Maltese companies.

## Energy efficiency for small business

A new collaboration between the EIB and the European Commission, Private Finance for Energy Efficiency (PF4EE), funds small energy-efficiency projects that are managed by local banks. The first deals were in the Czech Republic, Spain and France. The Bank targets about EUR 250 million of PF4EE lending each year, aiming for deals with 10 to 15 banks.



French Minister Ségolène Royal at the signing of the PF4EE deal with Crédit Coopératif



## When the Rhine feeds its tributaries

EFSI



Sebastian Wilbs  
at his factory near Düsseldorf

“ This was  
an excellent year...  
EFSI made it possible.

### How Europe's big investment plan reaches small companies

**T**he Düssel curves around the village of Gruiten. Then it splits into four different streams as it meanders to the Rhine. A map of these final, convoluted stretches of the little river looks somewhat like a diagram of the loan Simone Wilbs and her husband Sebastian received to finance their family business in Gruiten, an intricate structure of guarantees and counter-guarantees. The big European institutions and German banks that are ultimately behind the loan believe that, just as the little river feeds the big one, small enterprises like Simone and Sebastian's metal-moulding factory must survive for the larger economy around them to prosper.

That makes the lifeline the Wilbs family received important beyond the livelihoods of the small group of people who work at their company – though it certainly is vital in that case. “If we didn't have the loan, we would have no business,” says Simone, who works alongside her husband, two full-time employees (including her brother-in-law), and three part-timers, one of whom is the founder of the business, her father.

“It's not a big business. It's a family business. But we still have to have money at the end of the month to pay our workers, while we wait for customers to pay us.”

## Moving fast for EFSI

The EIF, which helped finance the Wilbs's EUR 30,000 credit, promotes financing across Europe for small and medium-sized businesses. Since 2015, COSME, a programme the EIF manages for the European Commission, has benefited from the backing of EFSI. That allows COSME to double the amount of loans it guarantees, and enables the EIF's counterparts to lend or guarantee the money twice as fast.

**The EIF's portion of EFSI should mobilise EUR 75 billion of financing for small and mid-sized businesses.** Let's call that the Rhine helping many little Düssels flow into it.

The aim is that banks which actually lend to small businesses have to worry much less about the risk of the loan, because COSME transfers much of that risk to the EIF with the backing of EFSI. Of course, **that makes the bank much more likely actually to make the loan – and that's good for small businesses.** "This kind of credit plays a vitally important role for start-ups and young businesses," says Lars Testorf, a vice president in product management for KfW in Frankfurt. "Without it, a lot of small businesses would be told, 'No,' by their bank."

In 2015, the EIF signed a deal with KfW to support EUR 1 billion of loans to start-ups in Germany by 2018. **More than 20,000 German start-ups could benefit.** Without EFSI, the EIF would not have had the resources in its COSME programme to make such a deal in 2015.

## Market gaps filled

Loans are hard to get for small businesses across Europe. Banks have plenty of money on hand, but perceive smaller companies as bigger risks than large ones. EFSI aims to make banks and private investors feel more secure about putting their money to work. That's important in the Czech Republic, where the EIF signed a deal in August 2015 to counter-guarantee the guarantees made by ČMZRB, a state-owned development bank. "There's enough liquidity, but banks require collateral, and that's missing," says Lubomir Rajdl, deputy chief executive of the Prague-based bank. "Our programme is really filling a market gap."

By the end of 2015 ČMZRB had already **guaranteed loans for 400 small businesses.** "This was an excellent year," Rajdl says. "The COSME guarantee backed by EFSI made it possible." In the next two years Rajdl expects the programme will support EUR 160 million of loans to **1,400 small businesses.**







One of ČMZRB's first guarantees was on a EUR 92,500 loan to OVEX Plus, a waste management company in Ostrava, the Czech Republic's third-largest city. With the loan and some of its own money, OVEX is buying a new technology that allows dust-free storage of ash produced by the energy, coal and metal industries across Moravia and Silesia. That's important in a region where air quality is seriously affected by industrial production. "The technology helps boost our position in the power and energy market in a sustainable and effective way," says Miroslav Olszovy, executive director at OVEX. "There are also positive environmental aspects of the new technology, which is important, especially for our region."

### ...and on the Danube too

These small loans extend the reach of EFSI to every corner of Europe. On the Danube's Bulgarian bank, Georgi Dikov runs a factory that makes scaffolding and construction equipment. He received a EUR 34,000 loan from Cibank in Sofia, for the purchase of a second-hand harvester from Germany. "In Bulgaria it's good to have more than one source of revenue," says Dikov, who employs 45 people in his factory and five others on a 100-hectare plot of agricultural land. "If things are not so good with one business, the other one supports it until things get better."

Dikov's firm is located in Oryahovo, a town of 5,000 people where the unemployment rate is higher than the Bulgarian average and wages are half the national average. It's an area with relatively few highly trained workers. "I train people with no education," says Dikov, "and I turn them into specialists."

Cibank's first 104 loans under the EFSI guarantee amount to EUR 17.7 million. By the end of the EUR 100 million programme, Cibank officials expect to **support 700 small and mid-sized businesses in Bulgaria**.

Whether it's on the banks of the Rhine or the Danube, EFSI backing for the COSME programme is already keeping Europe's economy flowing.

**“ If we didn't have the loan, we would have no business.**



## Finding financial refuge

| For refugees, microfinance loans are often the only way to get financing

**A**s an engineering student in Iraq, Said al-Obaidi developed a method for sending encrypted messages between opponents of Saddam Hussein's regime. When the underground group was busted in 1992, some of al-Obaidi's co-conspirators were executed, some jailed for life. Saddam threw al-Obaidi into the notorious Abu Ghraib Prison for four years. After the dictator was deposed, al-Obaidi fled the sectarian violence of his native land.

He made it to Belgium as a refugee where he decided to start a business repairing laptops. Banks turned him down for the EUR 3,000 he needed to rent a store. So he went to microStart, a Brussels company that makes business loans as small as EUR 500. Thanks to several microStart loans and al-Obaidi's hard work, his shop on leafy Boulevard Anspach in central Brussels is a success. "microStart are very kind people. I felt they were my friends, even before they gave me the loan."

Refugees like al-Obaidi have few financing options when they settle in a new country. Even migrants from within the EU are increasingly rejected by banks' automated loan procedures because they lack background data. So the EIF extended its microfinance programme in 2015, signing with six microfinance lenders from around Europe to provide guarantees that will unlock loans worth EUR 237 million to 20,000 small businesses. With many refugees arriving from the Middle East and large movements of workers seeking stable incomes within the EU, these loans are more and more important to the continent's economic future. Already microfinance lenders report that as many as 70% of their clients are foreign-born.

### Safe from the loan sharks

"Many of the people who obtain refugee status now will end up on the books of microfinance companies," says Faisal Rahman, founder of Fair





“ I felt they were my friends,  
even before they gave me the loan.”

Finance, a London social finance company that's backed by an EIF guarantee. "Many of the rest will work for small companies that get microfinance loans." Fair Finance and other social lenders aim to rescue small businesses from the clutches of high-cost lenders. The gap between the money small businesses need and the amount banks will lend them is put at GBP 2 billion a year.

Microloans provide the only real hope for many refugees. Take Vardan Babayan, who successfully brought Armenian cuisine to a place where food is taken rather seriously – the Tuscan city of Florence. He fled Armenia during a period of internal strife, and bounced from Russia, to Ukraine, and

to Austria, before he reached Italy. Rejected by local banks and unemployed for a year in Florence, he finally found PerMicro, a microcredit company that operates across Italy. Babayan got a loan of EUR 25,000, which he used to create a restaurant serving traditional Armenian food. "It was my chance to open a little corner of Armenia in Italy and to feel at home," he says. "I had no other option. I had no Plan B."

## Finding acceptance

Those who flee political unrest aren't always looking for small loans. Almi, a government-owned Swedish company that finances small businesses, lent EUR 1.5 million to a pair of Pakistani brothers who developed a technology for making planks from rice husks. Nasir Gill had already moved to Europe to work on the export end of the brothers' company, Green Plank, when political violence swept Pakistan in 2009. His brother Jamshaid, who had stayed in Lahore to run the company's manufacturing, was increasingly frustrated by corruption, particularly by local electrical company officials squeezing him for bribes under threat of cutting off the supply to the factory. The last straw came when, with law and order breaking down, Jamshaid was held up at gunpoint by thieves. "It was a nightmare there," says Nasir, who now lives in Malmö. "Here we're accepted as people and as entrepreneurs. Back there, we weren't accepted at all."

"Accepted" is the correct word. In 2015 the Gill brothers, who have Swedish residence permits, received the award for New Builder of the Year from the very symbol of the Swedish establishment, King Carl XVI Gustaf.



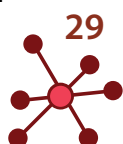




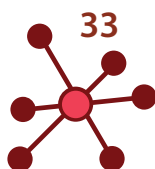
# INFRASTRUCTURE for a connected Europe

Commerce is global. Europe's businesses must be linked – to each other and to the rest of the world – if they are to compete. The EIB finances the technology that makes our cities work better and connects them with modern transport links. But economic success depends also on good health. We back the healthcare infrastructure that improves the quality of life for all Europeans.

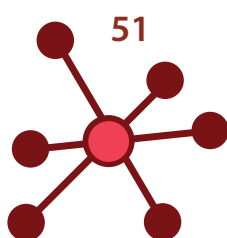
with projects  
in



Competitive and secure  
energy



Strategic transport



Urban renewal and  
regeneration





Electricity generation capacity  
**2 828 MW**  
94% renewable energy

**20.8 million** benefited  
from safe drinking water

**30,904 km** of power lines  
constructed or upgraded

**19.9 million** benefited from  
improved sanitation services



Reduced risk of flooding  
for **2.5 million**

Projects financed by EIB  
supplied electricity to  
**2.34 million** households



**3.17 million** benefited  
from new or upgraded urban  
infrastructure

**380 million** additional  
passengers transported

**185,312** social or  
affordable housing units  
built or refurbished

Improved health services for  
**9.8 million**



## Rolling through Italy

The EIB's EUR 300 million financing of new trains to operate within Lazio, Tuscany, Veneto, Piedmont and Liguria is a good example of how EFSI allows the Bank to put a stamp of approval on a company for private investors. The money will be used by the EIB to buy bonds issued by Ferrovie dello Stato, the Italian state railway company. Ferrovie dello Stato will pass the proceeds of the sale on to its subsidiary Trenitalia, which will actually buy the trains. Investors needed a clear signal of support for Ferrovie dello Stato's debt, because it's possible the company may soon be partially privatised. The EFSI loan showed that the company will have EIB backing during this time of potential transition – a move which was well-received by the market and allowed Trenitalia to go ahead with the update to its rolling stock.



## Going underground

With winter temperatures dipping to minus 25 Celsius, the Finnish town of Espoo advertises itself as a great place for snowshoe hiking in the nearby national park, visits to the local ice garden, and sled rides through the forest towed by a team of huskies. The winter wonderland has its drawbacks for the treatment of wastewater, however – mainly because the sludge and the equipment used to treat it freezes and has to be warmed up at considerable cost.

That problem is being overcome by a EUR 371 million project financed with EUR 200 million from the EIB to build a wastewater treatment plant inside the bedrock beneath Blominmäki, just west of Espoo. “Inside the rock the temperature is very pleasant,” says Jukka Piekkari, director of the Helsinki Region Environmental Services Authority, which is building the treatment plant. “It’s really magical in there.”

The Blominmäki facility will replace an outdoor plant built in 1963, doubling its capacity to treat the wastewater of 550,000 people. Though some of the facility will be above ground – mainly for administration and storage of biogas – all the water treatment will take place inside the rock. That also allows for the preservation of the forest on the site, a habitat for the vulnerable Siberian flying squirrel.

From the waste sludge, the new treatment plant will also recover

- 300 tonnes a year of phosphorus for fertilizer
- another 300 tonnes annually of nitrogen for fertilizer
- methane to generate enough electricity for 20,000 homes





## Not Jacques Brel's Port of Amsterdam

When Jacques Brel wrote his ballad of the sailors of Amsterdam, ships entered the port through the Noordersluis lock, built in 1929. They still do, but soon they'll be gliding through a much larger, new lock. The EIB's EUR 165 million financing for the sea lock at IJmuiden will bring access to the Port of Amsterdam, Europe's fourth busiest, and the North Sea Canal through the biggest lock in the world – 500 metres long, 70 metres wide and 18 metres deep.



## Energy security for the Baltics

Amber Grid's 110 km gas pipeline, funded with EUR 28 million from the EIB, is connecting the Lithuanian port of Klaipėda to the country's main gas network. It will allow liquid natural gas to be supplied by ship through the pipeline to the rest of Lithuania, as well as to Latvia and Estonia. For countries now dependent on Russian gas supplies, this is an important step toward energy security.



## Where the need is acute

**EFSI**

How the EU programme designed to boost Europe's economy is financing Britain's biggest accident and emergency hospital

If you were in Birmingham when you happened to experience numbness in one side of your body, trouble speaking, and blurred vision, you might head for the City Hospital. The emergency medicine team there would recognise that you were having a stroke and stabilise you. But for specialised treatment, you'd have to make a ten minute journey by ambulance to the stroke unit at Sandwell Hospital in West Bromwich, some five miles away. That's crucial time lost to a patient with an acute condition.

The Trust which operates the two hospitals aims to solve the problem of its split emergency services by building the GBP 350 million Midland Metropol-

"Quicker access to the right emergency care means patients recover more quickly and more fully," says Dr Roger Stedman, the medical director of the Sandwell and West Birmingham NHS Trust. "We may even save lives by reducing the complications that are sometimes associated with lengthy treatment."

### EFSI for A&E

The 669-bed Midland Metropolitan will have Britain's biggest Accident and Emergency facility and will be only the second UK hospital to specialise in the treatment of acute illnesses. The European Investment Bank is financing GBP 120 million of the



itan Hospital half way between the existing facilities. The new hospital will focus on acute cases, so everyone in the area will know where to go when they're struck by a sudden serious illness, and when they arrive they'll have immediate access to the full range of medical specialists. That will have real impact on the health – and sometimes the survival – of the 550,000 residents of the area it serves.







total cost under the European Fund for Strategic Investments (EFSI), a programme backed by a EUR 16 billion guarantee from the European Commission and EUR 5 billion of the EIB's own funds.

A major aim of EFSI is to back projects that might otherwise have struggled to get competitive financing from private investors. That's usually due to some risk which discourages private investment or makes projects less affordable.

### **Risk accepted**

In the case of Midland Metropolitan, the risk was linked to the Trust's contract with the privately op-

erated and mostly privately owned company dedicated to overseeing construction and maintenance of the new hospital for 30 years.

The UK government had changed its general contract to impose somewhat more stringent performance requirements on this type of company, although the structure of the operation is one commonly used in so-called public-private partnerships. Since Midland Metropolitan was the first major hospital to be financed under those new requirements, the contract could have been viewed as more risky than previous comparable projects. Private investors may have feared that, were the project company to underperform, it might have



## Public and private

With a EUR 70 million EFSI loan, the EIB is supporting Ireland's innovative solution to build 14 primary care centres around the country as a public-private partnership. The idea: to modernise medical services and provide a broad range of them on one site.

its contract more easily terminated by the NHS Trust. That, in turn, might make it harder for the investors to recover their money.

This is exactly the kind of "market gap" that EFSI was designed to fill when it was instituted in 2015. So the EIB made Midland Metropolitan one of its first EFSI projects.

"The market hadn't decided yet what it made of the risks in the new contract," says Peter Jacobs, head of the EIB's project finance division. "For us it's an acceptable risk, particularly as the project also means the regeneration of an old industrial site."

## From nuts and bolts to electronic records

Midland Metropolitan will be built in Smethwick, west of central Birmingham, on a site first used to manufacture nuts and bolts in the 1840s and, more recently, as a car factory. When it's completed in October 2018, it will house nine operating theatres, a large intensive care unit, and a maternity unit with two specialised operating theatres.

The new hospital will incorporate several innovative features once it's up and running:

- it will be paperless, giving all staff full, immediate access to electronic patient records for each of the 400,000 people it expects to treat each year
- "hot clinics" will process new patients, sending them to a senior doctor quickly and, thus, allowing the quick discharge of many who would otherwise have been admitted for a longer stay

"We will aim to assess, investigate and treat our patients quickly so that they don't have to stay in hospital longer than necessary," says Dr Matthew Lewis, the Trust's director for medicine and emergency care. "We will certainly provide better care in this new environment."

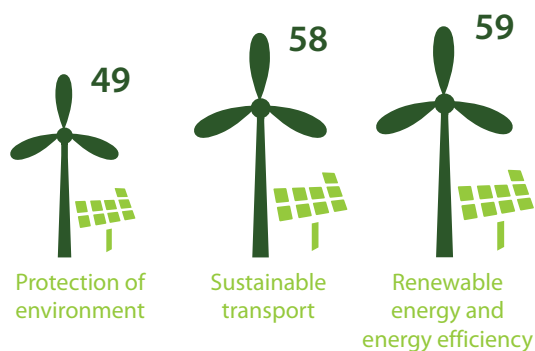


## CLIMATE and ENVIRONMENT for everyone's future

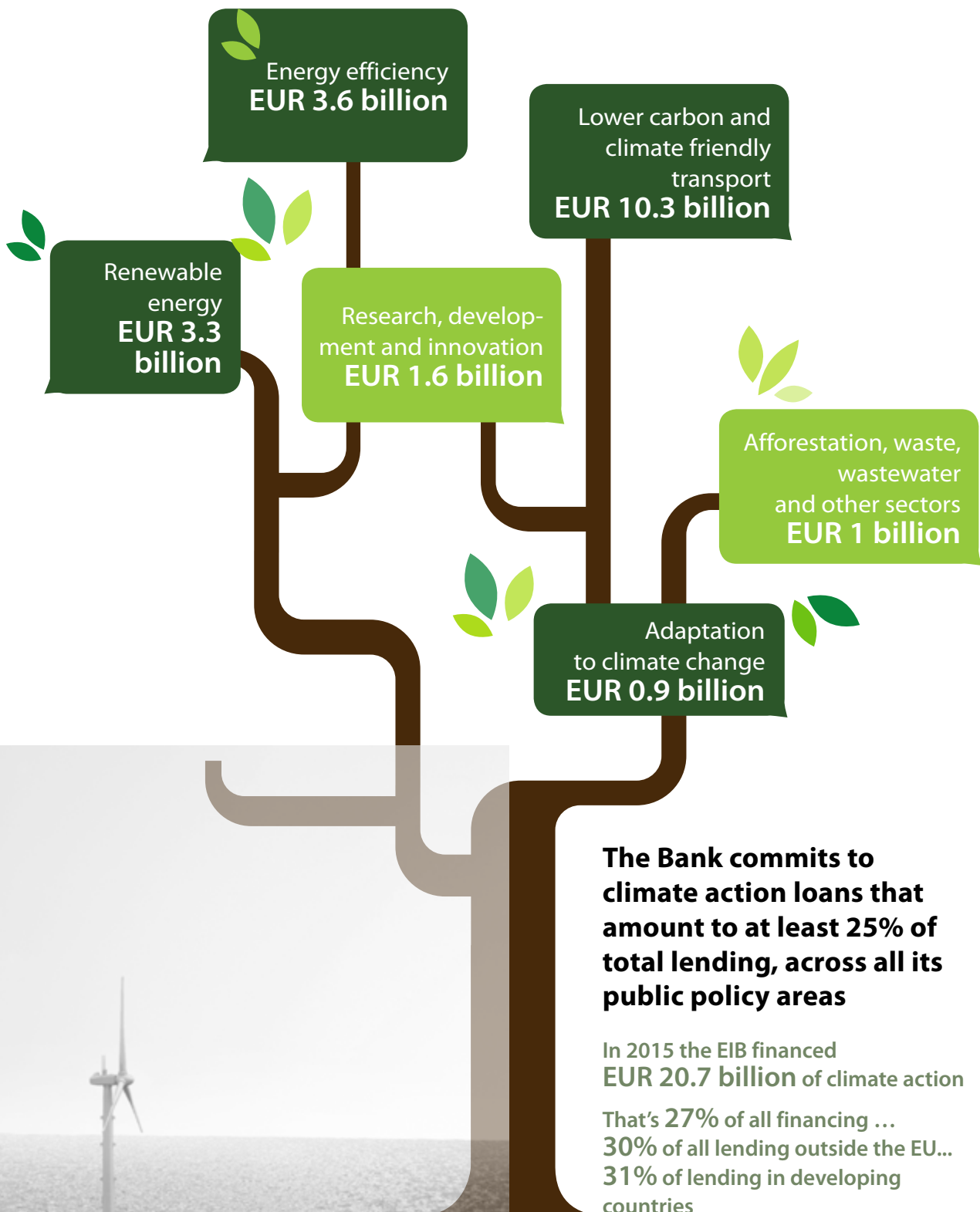
We back projects that promote clean air, biodiversity and sustainable transport, guarding the environment in which our children will live, even as we innovate to make their future more prosperous.

**19.6 bn**  
for **Environment**

With projects in







## Low leverage draws high investment

How Copenhagen Infrastructure II gets pension funds into renewable energy investments

Putting 67 wind turbines, each 90 metres tall, in the raging North Sea is tricky. Turning waste wood into electricity isn't exactly child's play either. But try raising billions of euros to do these things from investors who typically don't take big risks. Now that requires some innovative thinking.

That's the challenge that faced Copenhagen Infrastructure Partners, a Danish renewable energy infrastructure fund manager, when it put together its third major investment fund. By planning investments with considerably lower levels of leverage than similar funds, the company raised about EUR 2 billion, mostly from pension funds and other typically conservative investors. Without the smart structure the managers found for the fund, most of the institutional investors would probably not have put their money into new energy technologies that are usually seen as relatively risky investments. "We wanted to make these types of investments attractive and accessible to institutional investors," says Stephanie Bendorff Røpcke, a Copenhagen Infrastructure Partners vice president.

The result was Copenhagen Infrastructure II, which started in September 2014 with money from eight Danish institutional investors. By the time it completed fundraising in July 2015, it had 19 investors, including the EIB, whose stake was **the first equity participation made through EFSI**.

### Investors' needs and EFSI's role

A major aim of EFSI is to draw private investors into areas where they typically may fear to tread. That fulfils an important need for the investors, as well as a policy goal for EFSI. "Institutional investors are sitting on lots of money and they need to invest it, because there are such low interest rates at the moment and they need a higher return," says Barbara Boos, co-head of equity funds in the EIB's

climate change and environment division. Institutional investors are often wary of relatively untried technologies. They look for dependable investments, because they have to protect people's pension money. The structure of Copenhagen Infrastructure II "channels their liquidity into investments they wouldn't usually fund," says Boos.

PensionDanmark, Copenhagen Infrastructure II's cornerstone investor, is a leading advocate of institutional investor support for low-carbon financing. It influenced the design of the fund to make it attractive to institutions. "These outcomes were the reasons we wanted to support it with an EFSI investment," Boos says. EFSI enables the EIB to make investments it would previously not have done. Copenhagen Infrastructure II fits that bill. Previous EIB equity investments were smaller, usually no more than EUR 50 million. With EFSI the EIB was able to increase its stake in Copenhagen Infrastructure II to EUR 75 million.





“ The structure of Copenhagen Infrastructure II channels [institutional investors'] liquidity into investments they wouldn't usually fund.



## How low leverage brings in big money

One of the key attractions for institutional investors in Copenhagen Infrastructure II is the fact that it intends to make investments with low leverage. Copenhagen Infrastructure II typically funds its share of a project with preferred equity, or a combination of equity and debt. That makes the level of leverage far below similar infrastructure funds and “de-risks” Copenhagen Infrastructure II so that relatively conservative institutional investors can participate. “For the kind of investors we have, the fund is more of an alternative to a bond, rather than a highly leveraged private equity investment,” says Copenhagen’s Bendorff Røpcke.

Copenhagen Infrastructure II has already committed or reserved about EUR 1 billion of its total funds for specific investments. These first investments are in newer technologies that traditional institutional investors usually don’t get into, including a UK bio-mass power plant, a German offshore wind project, and a wind farm off the Scottish coast.

The entirety of the EUR 2 billion fund is expected to be committed to investments by mid-2017. With Copenhagen Infrastructure II’s managers planning to hold their investments for as much as 20 years, that will support these innovative projects for the long term.



# Uniquely green

How a ground-breaking fund attracts private investment for climate and development projects

A few years ago, Alastair Vere Nicoll trekked across Antarctica, recreating the adventure of pioneering polar explorer Roald Amundsen. Now he's standing on a spot considerably hotter than those icy southern wastes, and he's part of a project that's as ground-breaking as the great Norwegian's journey to the South Pole. Beneath his feet, 250 km south of Addis Ababa, is the Corbetti volcanic caldera, part of the Ethiopian Rift. A happy coincidence of geological features sends water through subterranean fissures in the earth where, heated by the volcanic activity around it, the water turns naturally into steam. Vere Nicoll and his colleagues aim to harness the power of that steam to create electricity. "It's a coal-fired power station without the coal," he says.

In the dustbowl over the caldera, the renewable energy investment company that Vere Nicoll co-founded, Berkeley Energy, is building Ethiopia's first independent power project. The pilot stage will be completed in the next two years. Within eight years, Vere Nicoll expects the Corbetti plant to have a capacity of 500 megawatts. That's approximately a quarter of the country's total electricity usage and enough to supply ten million Ethiopians. "We've done ground-breaking deals in various emerging markets, but this is the most significant project any of us involved will ever work on," he says. "Really, in our entire careers."

Vere Nicoll's cutting-edge project is typical of the work of one of his main investors, the Global Energy Efficiency and Renewable Energy Fund (Geeref). The fund started with a big chunk of public money – EUR 112 million from Norway, Germany and the EU – which it used to entice EUR 110 million from private investors. Geeref completed its fundraising in Spring 2015 and already calculates that for every EUR 1 it puts into a project, another EUR 50 is ultimately invested.

Using the public funds to give private investors a cushion against risk, Geeref has built a unique portfolio of renewable energy investments in developing countries. In a single, bustling room in an airy corner of the EIB's Luxembourg headquarters, Geeref chief Cyrille Arnould presides over a team that has invested in around 50 separate projects run by first-time managers in developing countries. "We are proving that you can do social projects with a profit mentality," he says.

## Supporting renewable energy without betting the house

The key to Geeref's structure is what's called a "first-loss piece." That means the public money in the fund is used as a buffer to protect the private investors. If the fund has a loss, it comes out of the public money first. That makes private investors more secure and encourages them to invest in a fund that might otherwise have seemed too risky. Garrie Lette, who runs a EUR 4.5 billion pension fund portfolio in Melbourne, Australia, invested EUR 42 million with Geeref. "We haven't bet the house on it," says Lette, chief investment officer of Catholic Super. "But it's still a significant investment for us."

Lette acknowledges that renewable energy in a developing country with first-time fund managers "doesn't tick all the boxes for us." It was Geeref's structure that attracted him. "We're driven by risk and return. The presence of the first-loss capital was crucial in our decision to get involved." The fund projects returns of somewhat over 20%.

## Building projects from scratch

Though Geeref has a broad geographical reach, Arnould sees the best opportunities for growth in the renewable energy sector in Africa. That puts

“ We are proving  
that you can do social projects  
with a profit mentality.

him in agreement with Anders Hauch, investment director of Frontier Investment Management. The 44-year-old Dane and his Frontier colleagues are behind a USD 45 million hydroelectric project on the Siti River in the remote Mount Elgon area of Uganda. Siti aims to produce 5 megawatts of capacity by the end of 2016, with turbines situated at the point where the river first cascades steeply – creating the most force to drive the turbines. By the end of 2018, when Frontier constructs turbines at the second cascade, Siti will produce 2.5% of Uganda's total capacity.

Frontier is a typical Geeref investment (it put up EUR 12 million of the EUR 60 million fund). It had no track record, allowing EIB advisers to play an important role in managing it – Arnould heads Frontier's investment advisory board. Importantly Frontier works on “greenfield” projects, which means that it doesn't invest in existing projects. It builds all its projects from scratch. That “added value” is at the heart of what Geeref does. “They came with a big investment that helped us bring in other money. Then they gave us a lot of leads for investments that we could make,” Hauch says. “Geeref was quite essential.”

Now that Geeref has built a track record for its strategy, Arnould is poised for another round of financing. The plan is for Geeref II to be considerably bigger, and for private capital to make up a larger proportion of the fund. “We're still mitigating the risk for the private investor,” he says. “But now we don't need to offer them as much protection, because they can see our track record. We've built a lot of trust.”



Ugandan boys overlooking  
the Siti project site



## The GLOBAL player

The EIB plays a major role on the world stage in issues like countering climate change. The Bank also works to promote prosperity for Europe's neighbours and trading partners around the world.

**7.25bn** EUR  
in loans outside  
the EU to 63 projects



Small-scale African solar that lights up evening studies, and microfinance for Syrian refugee women in Lebanon



EUR **95** million  
for 14 new microfinance  
operations



Support for  
**6,000**  
small and medium-  
sized businesses that  
employ

**280,000**  
people





## Hope close to home

Investments in programmes designed to keep Syrian refugees close to their homeland – and help them rebuild the country when the war ends

When the school year started in September 2015, only 200,000 of the Syrian refugee children in Lebanon were able to attend local schools. Lebanon simply didn't have capacity for the other 600,000. Ahmed Saeed, an Egyptian who's a director at ITWorx Education, arrived in one refugee camp in the Bekaa Valley village of Saadnayel and set about building a school in a tent. Within three weeks he had 50 students of all ages, many of whom hadn't been able to attend school for four years, studying a Cloud-based version of the Lebanese curriculum on 60-dollar tablets with the aid of only a couple of teachers. "They feel they are important," says Saeed. "Someone is finally taking care of them."

The ITWorx school, which the company wants to expand to cover all the Syrian refugees in the region, is aimed at rebuilding the future of those who fled the civil war in their homeland. It's also founded on the idea that helping refugees stay in the region will make it more likely they'll return to participate in the reconstruction of Syria when the war is over. "You can fight the refugee problem politically," says Romen Mathieu, ITWorx Education's chairman. "But **the best way to fight is with culture and investments** – by creating hope in the region."

The European Investment Bank's involvement in the Middle East aims to build the kind of stability that in turn creates an incentive for refugees to remain in their region. The Bank's regional presence is expanding and includes major projects in Lebanon, Turkey and Jordan.

Al-Majmoua, a Lebanese microfinance non-profit supported by the EIB, has trained 8,000 Syrian women and youths and given loans to 200 Syrian women in the last two years. That will prove vital when it comes time to rebuild the shattered country. "When our clients go back to Syria, they can use the credit history they have from us as a guarantee of good performance," says Youssef Fawaz, al-Majmoua's executive director. "That will help them – and Syria – get back to normal."

The EIB has funded Jordanian renewable energy projects in recent years, including the Tafila wind farm which started producing electricity for 83,000 homes in the desert kingdom in 2015. **Jordan aims for renewable energy to contribute 10% of its needs by 2020.** That's vital to a country whose energy costs eat up 20% of its gross domestic product.

→ In 2015 Jordan agreed a EUR 66 million deal to upgrade the national electrical grid that will improve the transmission of energy around the country.

→ In turn, that electricity will contribute to the power needed by another EIB deal signed in 2015. The EUR 49.7 million Wadi al-Arab project will **pipe water to an area of northern Jordan that's already dry – and getting drier** because of the influx of Syrian refugees. The 26 km pipeline will bring 30 million cubic metres of fresh water each year and contribute to stability in the region by reducing the tensions over water resources.

## A sweet story about sugar

On the tiny island of Mauritius, an innovative company squeezes every last cent from its sugar cane – and protects the environment

This is the story of a sugar cane company on an island two thousand kilometres off the southern African coast. The company managers faced big changes. But they responded with one innovation after another. They found a partner in the EIB, and over six years they built a set of businesses that could survive the kind of shock that threatened them. And they did it all while protecting the environment of their tiny homeland in the Indian Ocean.

A decade ago, international trade negotiations took away sugar price protections. Prices fell 36% between 2006 and 2009 in the African, Caribbean and Pacific markets where they had been in place. Things had to change.

Omnicanne, a company with a 150-year history, embarked on a journey into innovation that would lead it to build a series of facilities within its complex at La Baraque in the south of Mauritius, each designed to use a by-product of the previous one to create a new product. In the process the company moved into other sectors like refined sugar, electricity production and ethanol distilling, which would have seemed impossible in the days of guaranteed prices.

Mauritius's sugar growers traditionally cut their cane, put it through a rudimentary process to produce raw sugar, and shipped it to Europe, where it was fully refined and made ready for consumers. Omnicanne's first step was to build a refinery for its raw sugar with a EUR 15 million EIB loan, so that it could reap higher revenues from the finished product, white sugar. At La Baraque, Omnicanne now produces up to 200,000 tonnes of refined sugar each year. The refinery was a big success. But it also presented a new problem.

Before you eat sugar, it's filtered through a series of industrial processes. But what to do with the by-



“They’re not missing a single opportunity to find financial advantage in what they do.” Vincent Girard, EIB loan officer.

products – mostly molasses – that are left? At first Omnicanne had to sell it cheaply and ship it around the world, where it was converted into ethanol or used as a component for animal feed.

The next step for Omnicanne was, once more, to do all that locally. The company secured another EUR 8 million EIB loan to build a distillery that took the molasses and made bioethanol from it. Omnicanne now produces up to 24 million litres of bioethanol a year for use as a fuel additive to

reduce the amount of gasoline needed to power a car's engine, though it's also processed into alcohol for the food industry and for medical use.

That isn't the last step, of course. The bioethanol process brings by-products of its own, and Omnicane has turned them into businesses too.



During fermentation, the molasses gives off carbon dioxide. Omnicane captures some 25 tonnes of carbon dioxide daily and sells it to a neighbouring factory where it is used to produce the gas that makes your cola fizz. Then, once the molasses is distilled, there are leftovers called vinasse, which is rich in minerals like potassium. Omnicane's distillery turns that into fertilizer, methane gas for electrical power, and thermal energy.

The experience of the sugar price collapse taught Omnicane's managers that it might be wise to diversify. They took a EUR 8 million EIB loan to build a four-star, 139-room hotel. With another EUR 700,000 from the EIB, Omnicane conceived a masterplan to develop residential and commercial properties around the hotel that will employ 4,000 people.

But Omnicane still had a circle to close.

Industrial designers are increasingly examining the way products are made to find techniques to avoid waste. Known as Circular Economy, this thinking begins long before the stage at which a product is



discarded, reused, or recycled. **Circular Economy** is intended to be part of the planning and design phase of a product to ensure a long life, and high potential for reuse, repair and recycling. "You transform an output that's currently considered waste into a valuable input for another process," says Marco Francini, an EIB engineer. "The environmental benefits are tremendous."

The EIB has funded EUR 15 billion in Circular Economy projects in the last ten years, including the final stage of Omnicane's industrial process.

In 2015, the company signed a EUR 8 million deal with the EIB to build an innovative "carbon burn-out" facility. This will thermally reprocess the coal ash left over from three power plants in the company's complex and elsewhere on the island, creating an additive for cement that saves tonnes of carbon dioxide otherwise emitted during the manufacture and import of that product, and steam to power Omnicane's other facilities. "It's an industrial ecosystem," says Rajiv Ramlugon, Omnicane's chief sustainability officer. "It's a cradle-to-cradle concept."





## Where the funds come from

The EIB is the world's largest multilateral borrower and lender. In 2015 the Bank raised EUR 62.4 billion on the international capital markets. The EIB's high credit standing helps it raise money in large amounts and at competitive rates. We then pass the financial advantage on to our customers.

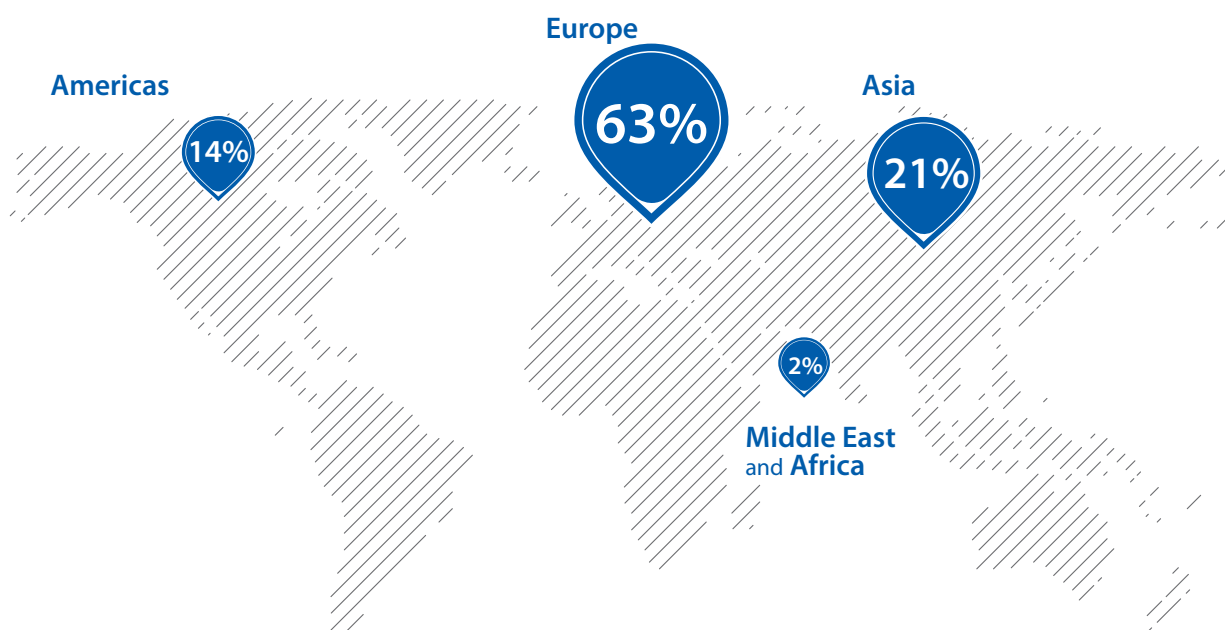
**T**he EIB is a global financial player. In 2015, the Bank disbursed in 12 currencies and issued in 16 currencies. With issuance in such a range of currencies, we reach investors who might not typically target the kind of investments the EIB makes in Europe, but who contribute indirectly to European projects by investing in EIB bonds.

### Where the money came from

Distribution of EIB bonds by geography

### Highlights of 2015:

- 89% of EIB bonds issued in EUR, GBP, or USD
- a leading benchmark issuer in EUR and USD
- the largest issuer in pounds Sterling, except for the UK government
- a market leader in Turkish lira, Canadian dollars, Norwegian krone, South African rand



## The bottom line in green ink

The EIB rallies market participants to set up clear guidelines for assessing the impact of investments made with the proceeds of their Green Bonds

**T**he UN climate conference in Paris in December 2015 reached a big agreement on global warming. But one of the more esoteric developments announced at the gathering may turn out to have a significant impact as well.

In fact, it's about impact. The EIB coordinated a group of 11 international financial institutions that released guidelines for reporting the impact of Green Bonds.

The USD 40 billion raised in 2015 through Green Bonds has to be invested in climate action projects. Trouble is, different organisations measure and report climate impact differently. Investors can't be certain that the tonne of carbon dioxide they believed their money would keep from being emitted wasn't really a half tonne or even two tonnes.

Thanks to the EIB-led working group, a first set of guidelines for reporting the impact of their Green

Bonds was put in place. The guidelines provide transparency and accountability, enabling Green Bonds to reach a broader range of investors.

The EIB already releases project-by-project information on the amount of financing provided from Green Bond issuances and the climate impact of its projects. Take the massive Moroccan solar energy project at Ouarzazate, which is set to start electricity production early in 2016. The EIB's total loans to fund Ouarzazate's various solar panel and concentrated-solar projects run to more than EUR 200 million. EUR 40 million of the EIB's Green Bond issuance was allocated to the Ouarzazate project. The Bank's reports clearly lay out the impact:

- power for 250,000 Moroccans
- 193 tonnes of carbon dioxide emissions avoided per year
- new jobs created in the local solar industry

Ouarzazate solar energy project  
in Morocco





## Interacting and Collaborating

With the European Fund for Strategic Investments, the Bank acquired a big new role that requires special management capabilities to oversee it.

EFSI

In December 2014 the European heads of state and government agreed on the Investment Plan for Europe. The aim: to kick-start long-term investment, which has lagged at least since the financial crisis of 2008. A big pillar of the plan is the **European Fund for Strategic Investments (EFSI)**. Under EFSI the EIB will dispose of a EUR 16 billion guarantee from the EU budget and EUR 5 billion of its own funds. With that backing, the Bank will invest in projects that should support EUR 315 billion of financing over three years.

The European Parliament passed the regulations to set up EFSI in the middle of 2015. The formal administrative structure of EFSI was completed in December, when Wilhelm Molterer was appointed managing director of EFSI.

Before the appointment of the EFSI Investment Committee was made final, the EIB had already put together a portfolio of EFSI deals, each of which was sent to the European Commission for approval. You've read about some of those deals on the projects pages of this report.

Projects that benefit from the EFSI guarantee are subject to a standard EIB due diligence process and final approval by the EIB's Board of Directors. EFSI financing operations will be booked on the EIB's balance sheet, but these higher-risk lending operations will be credit neutral for the EIB because they benefit from the EU guarantee and the Bank's own resources. EIB staff are now working with EFSI's governing structures to get financing for their projects under the EU budget guarantee:

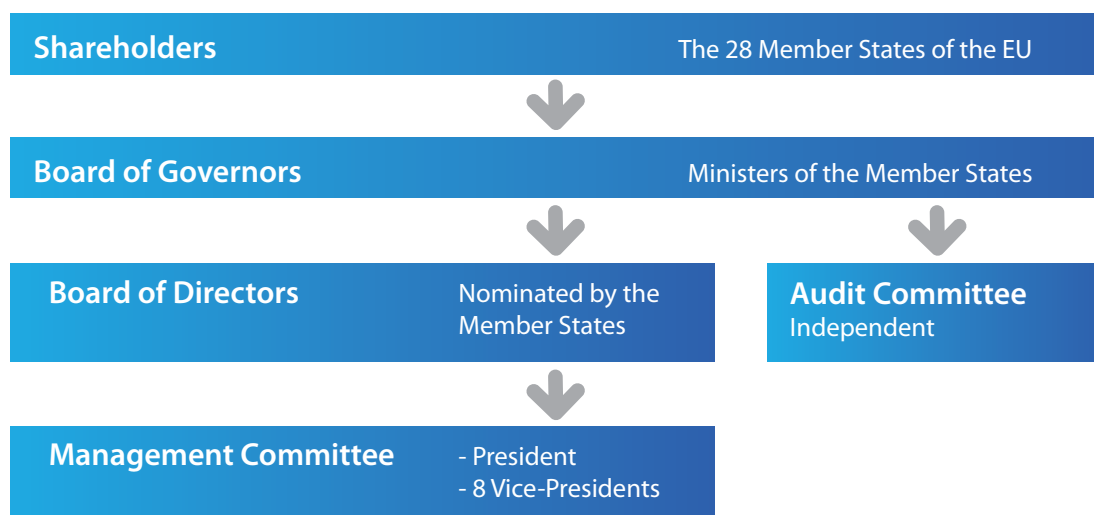
- the EFSI Steering Board provides guidance on the risk profile of the portfolio and strategy
- the EFSI Investment Committee assesses and approves the use of the EU budget guarantee for specific operations



The EFSI Investment Committee



## The EIB governance structure:



## There are plenty of EU institutions collaborating and interacting with the Bank to enhance its accountability:

- **European Parliament** reviews EIB activities every year
- **European Commission** nominates a member of the EIB Board of Directors and gives an opinion on every project presented to the Directors
- **European Ombudsman** Unlike other international financial institutions, citizens' complaints of maladministration don't stop with the EIB complaints mechanism. They can be carried on to the Ombudsman
- **Court of Justice** of the EU rules on any disputes between the EIB and EU Member States, and may assess the legality of decisions taken by the Bank's decision-making bodies
- **European Court of Auditors** can audit loan operations under mandate
- **European Data Protection Supervisor** monitors EIB compliance with personal data protection rules and regulations
- **European Anti-Fraud Office** works with the EIB to prevent fraud
- **European Central Bank** provides liquidity facilities to the Eurosystem operations, which the EIB can also access

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The EIB Group consists of the European Investment Bank and the European Investment Fund.

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# Activity Report 2015

