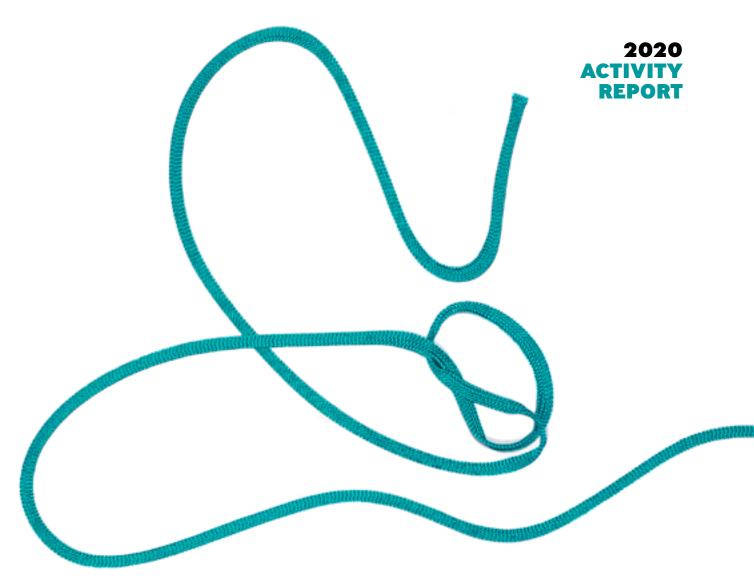
CRISIS SOLUTIONS





EUROPEAN INVESTMENT BANK

CRISIS SOLUTIONS





European Investment Bank Activity Report 2020

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HOW TO READ THE REPORT

Recovery from the economic impact of COVID-19 is urgent, but it must be a green recovery and it must be fair to people in developing countries. THIS REPORT HIGHLIGHTS THE EUROPEAN INVESTMENT BANK'S EMERGENCY RESPONSE TO COVID-19 IN 2020, ALONGSIDE THE INVESTMENTS IN CLIMATE, ENVIRONMENT AND DEVELOPMENT WITH WHICH THE BANK WILL DRIVE A SUSTAINABLE RETURN TO GROWTH.

THREE THEMATIC SECTIONS MAKE UP THE CENTRAL PORTION OF THE REPORT, focusing on some of the Bank's solutions for the COVID-19 crisis, climate and environmental degradation, and the need for sustainable development. These "Solutions" sections begin with voices from around the Bank, key staff explaining how the EIB responded to a year of crises and laid the foundations for future innovation and growth. The stories that follow take you through the Bank's work in innovation, infrastructure, SMEs and climate and environment inside the European Union (EU) and beyond the EU's borders.

THE REST OF THE REPORT PROVIDES THE CONTEXT FOR THESE SOLUTIONS. From the strategic thinking of the President's Foreword to data on the Bank's lending and borrowing and a look at the year ahead in the highlights of the Group Operational Plan.

THE REPORT TELLS THE STORY OF A FINANCIAL INSTITUTION THAT IS ENGAGED ON EVERY LEVEL – FROM SUPPORT FOR MICRO LOANS TO MULTILATERAL DEVELOPMENT PROGRAMMES – IN FINDING SOLUTIONS TO THE CRISES AROUND US.

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WHAT'S NEXT? WHAT KEY EIB STAFF EXPECT TO SEE IN THEIR SECTORS OR MARKETS IN 2021

FOREWORD

PROOF THAT EUROPE DELIVERS

aced with the immediate challenge of the COVID-19 pandemic, the European Investment Bank acted decisively to protect jobs, to back crisis-afflicted industries and to help absorb the most violent of economic shocks. In doing so, we did not lessen our commitment to the long-term battle against the climate threat. We used our experience and expertise to incorporate our climate goals into our pandemic safety net. It is in nobody's interest simply to rebuild. With the EIB, Europe and the world can build back better.

In 2020, we fought COVID-19 itself, with investments in companies researching tests, therapeutics and vaccines, including Germany's BioNTech, which produced the first approved vaccine. Our financing supported health systems in countries across the European Union and backed the development of key technologies that will shorten the pandemic. We confronted the disease's impact on the economy with a raft of immediate measures to inject liquidity into the economy for small business in particular, even as we prepared the more comprehensive Pan-European Guarantee Fund.

Unlike previous shocks, this crisis originated in the real economy, not the financial or sovereign sectors. Millions of perfectly healthy firms suddenly suffered liquidity problems due to lockdowns. By supporting investment in the real economy, the Pan-European Guarantee Fund is already helping ensure that healthy firms (and the jobs they provide) are safeguarded – and that their troubles do not migrate to the banking sector and, thence, to public sector balance sheets.

As the world's biggest long-term multilateral borrower and lender, we did all this whilst paying careful attention to the implications of our investment for the challenges that shall remain after COVID-19. And we did it with a global perspective. Our investment is sustainable and green, battling the pandemic even as we lay the foundations for a crucial decade of struggle against climate change. We partnered with other multilaterals and investors to ensure that a solution for COVID-19 would be shared with developing countries too, approving a €400 million deal with COVAX, a global initiative to promote equal access to a vaccine in developing countries. This was a moral responsibility, and it is also a key contribution to the achievement of the UN Sustainable Development Goals.

In development, too, we must harmonise the desire to create jobs and growth with a serious approach to climate investment. After all, our EU climate action will not stop global warming by itself, because 90% of emissions are generated outside the European Union. If the growing demand for energy in Africa, for example, is addressed through coal- and gas-fired power plants, our climate ambitions will literally go up in smoke.

An equitable spread of investment is not just a matter of global north and south. Regional convergence within the European Union has slowed in recent years, in particular between urban and rural areas. We need to make sure that COVID-19 does not accentuate this divide. As with COVID-19 and climate change, our cohesion investments are aimed at immediate economic gain and long-term sustainability. The "just transition", which bolsters regions moving away from polluting industries, also makes absolute market sense. Look at the record of the European Fund for Strategic Investments (EFSI), the financial pillar of the Investment Plan for Europe, which in 2020 successfully concluded its five-year march to over €500 billion in supported investment. EFSI is fully market-driven, yet the top five recipients of EIB loans backed by the EFSI guarantee, measured against GDP, are Estonia, Greece, Bulgaria, Portugal and Latvia. Four out of ten EFSI operations from the EIB are located in Cohesion areas. When our backing offered an opportunity, Cohesion regions

FOREWORD BY THE PRESIDENT



The EIB is now the first multilateral development bank that will spend no money—zero—on anything that has a negative climate impact.

responded with bankable projects. EFSI mobilised investments all over Europe that would otherwise have been too risky. EFSI shows how to support private sector investment with relatively low public spending. This is important for the just transition and is valuable experience to be carried through to the Recovery and Resilience Facility, the European Union's COVID-19 stimulus programme.

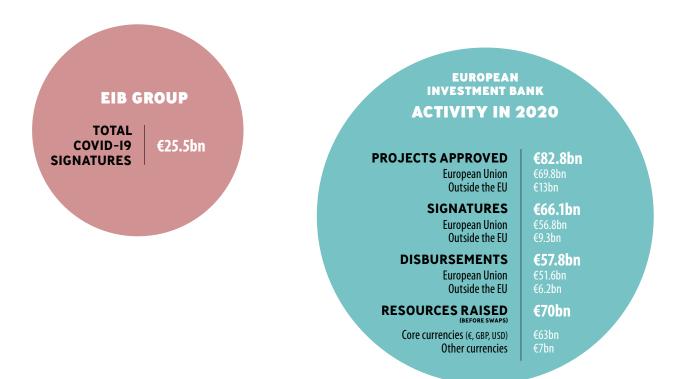
In 2020, our focus on the crucial climate decade ahead did not waver. Our Climate Bank Roadmap, approved by our Board in November, lays out all the intricate parameters of our climate work for 2021-2025. This groundbreaking document highlights our commitment to align all our work with the Paris Agreement. The EIB is now the first multilateral development bank that will spend no money – zero – on anything that has a negative climate impact. The EIB is the EU climate bank, and the largest section of this Activity Report illustrates our work to counter global warming.

Innovation is key to our climate action ambitions. We cannot rely on current business models to achieve the massive cuts in emissions necessary to meet the goals of the Paris Agreement. We need enormous increases in the use of existing renewable energy and energy efficiency technologies, as well as the development of new climate technologies. Yet any economic downturn hurts new technology investment, because it is perceived as risky and non-essential. There could be no worse time for a slump in innovation. Europe and the world needs more than ever what tech brings to the table: disruption of business as usual and accelerated and exponential growth.

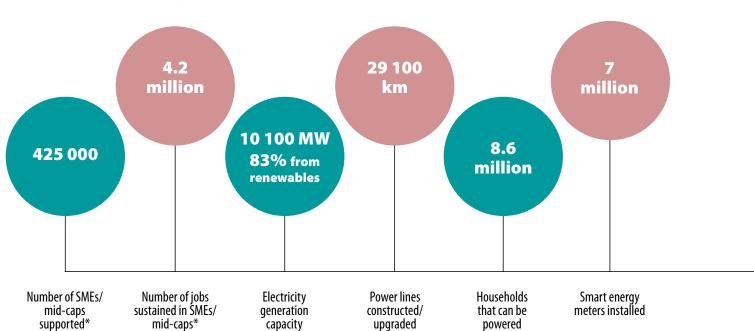
At the EIB, we are doing our part to maintain innovation investment. By providing long-term financing and reducing investment risk, we promote a more predictable market environment for new, sustainable technologies. We do not measure our success by the amount of money we lend. We look for impact, for contributions to the structural changes required in Europe's economy and for advances in the prosperity and safety of ordinary people around the world. The European Investment Bank is proof that Europe delivers.

Werner Hoyer

2020 HIGHLIGHTS



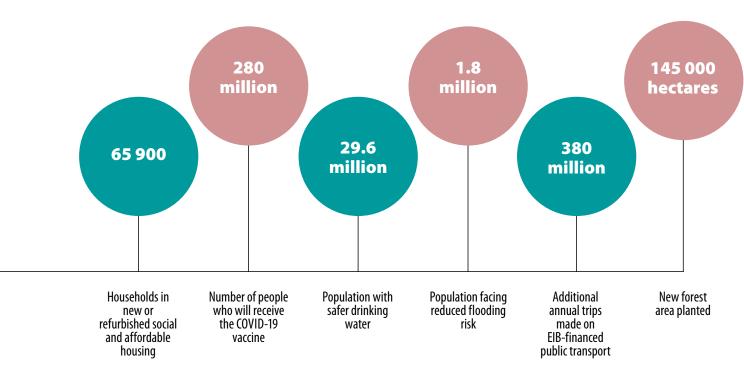
The EIB's impact



^{*}Number of jobs sustained in SMEs refers to number of employees in SMEs/mid-caps that were allocated EIB finance in 2020 and number of employees in SMEs that were allocated EIF finance from Oct 2019-Sept 2020.

The European Investment Fund (EIF), part of the EIB Group, specialises in risk finance to support micro, small and medium-sized enterprises and stimulates growth and innovation across Europe. It provides financing and expertise for sound, sustainable investment and guarantee operations. EIF shareholders include the EIB, the European Commission, public and private banks and financial institutions.





Figures are expected outcomes of financed new operations signed in 2020 for the first time based on available data at this stage.

All figures are unaudited and provisional.

THE EIB GROUP IN YOUR COUNTRY

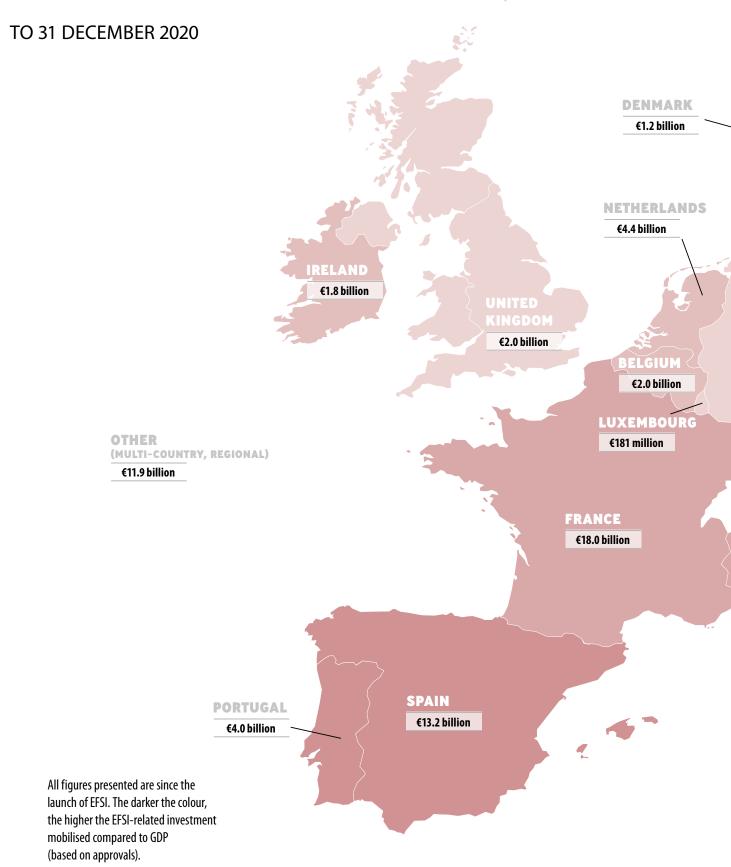


Darker colours signify higher investment as a percentage of GDP $\,$

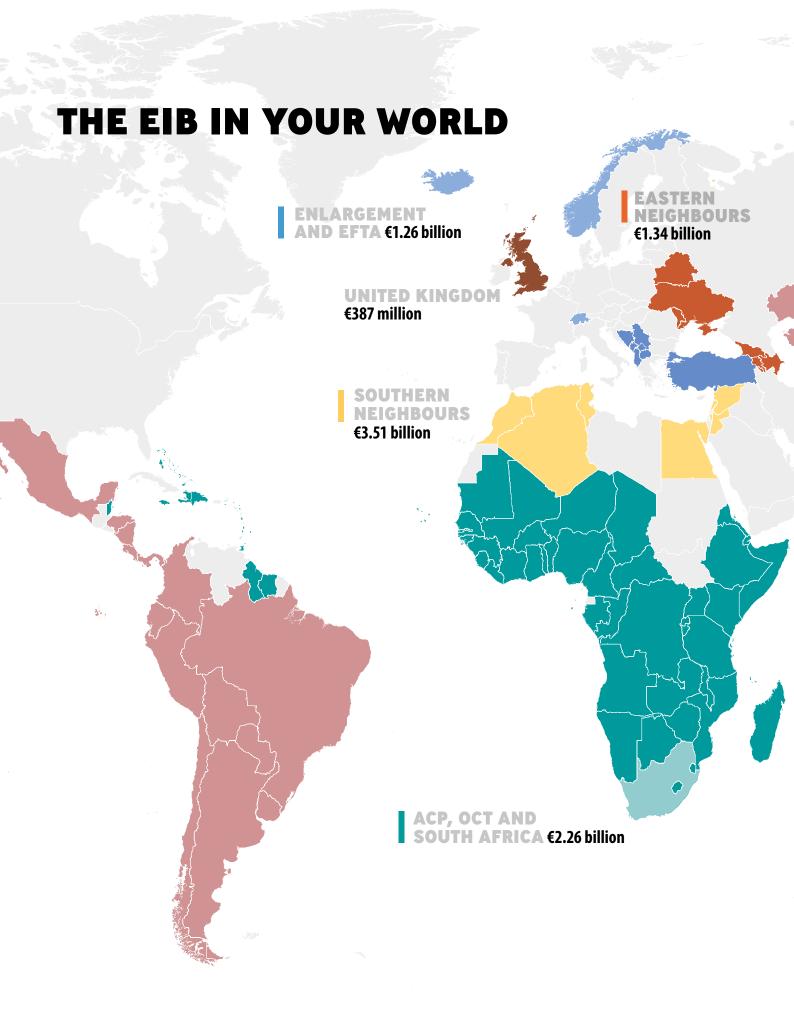




EFSI IN YOUR COUNTRY









OCT: Overseas Countries and Territories

The European Investment Bank does not endorse, accept or judge the legal status of any territory, boundaries, colours, denominations or information depicted on this map. Following EU sanctions against Syria in November 2011, the EIB suspended all loan and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the country. However, the EIB is part of the Syria core donor group monitoring the situation and advisory activity in the Country and Advisory activity activity and Advisory activity activitunder EU and UN co-leadership.

THE EIB STEPS UP TO FACE THE PANDEMIC

This pandemic needs to be approached from all different angles. It is vital that we provide countries with the means and equipment to treat infected patients, whilst also enabling accurate and rapid identification of infected individuals. The vaccine provides the best protection in the long run, but there remains a high, unmet need for treatment options and improvements to the situation in the hospitals of the most impacted countries.

Felicitas Riedl, Head of Life Sciences, Projects Directorate

With a direct equity-type portfolio in life sciences of €1.5 billion supporting more than 60 highly innovative European biotech and medtech companies, the EIB is the largest player in Europe. When the pandemic reached Europe and the lockdown started, we rapidly established contacts within our existing network, where many COVID-19 projects have emerged, with leading institutions such as the World Health Organization, the Gates Foundation and the Wellcome Trust, and with new initiatives in vaccines, treatments or diagnostic tools. We can be proud to have supported projects such as BioNTech, the world's frontrunner in COVID-19 vaccine development, and CureVac, another promising vaccine developer, as well as companies working on COVID-19 in France, Germany and Poland.

Yu Zhang, Head of Life Sciences and Biotech, Operations Directorate

COVID-19 tests the resilience of countries, regions, cities and communities. We need to remain attentive to cohesion challenges and to prevent any deepening of inequalities. We quickly deployed a support plan to help meet the most urgent financing needs of regions and municipalities. Recognising the key role of cities and regions in mitigating the pandemic's effects, we instituted exceptional measures to approve and disburse new loans faster and to allow existing loans to be used more flexibly or increased. Our advisory teams mobilised to support countries and regions in programming and optimising COVID-19-related expenditure.

Leonard Reinard, Head of Regional Development, Projects Directorate

COVID-19 posed the ultimate survival test for many of the fast-growing European companies in our pipeline, either directly impacting their business models or affecting their access to third-party funding. We had to shift gears quickly. Our strategy was simple and effective: first, provide immediate and sizeable support to biotech and life sciences companies tackling COVID-19 head on, and then support innovations that increase the resilience of the economies of the Member States. Already in the first half of the year, we managed to triple our direct venture-debt financing to biotech and life sciences companies. We supported companies deploying digital innovations for contact tracing, mobile payments and digitalisation of their business models. We are happy that we managed to secure sufficient support from the Member States to even increase our investments in innovative companies in the fields of artificial intelligence, industry 4.0, biotech, life sciences and energy efficiency.

Hristo Stoykov, Head of Growth Finance and Venture Debt, Operations Directorate

We are proud to have supported BioNTech, the first COVID-19 vaccine available on the market. This was thanks to the dedication of our health experts, who worked day and night during this crisis to screen the best possible vaccine research among a multitude of candidates. We are also supporting a range of other vaccines and treatments with very promising results.

Christopher Hurst, Director General, Projects Directorate

The COVID-19 crisis is having a strong effect on the EU economy and in the countries where the EIB operates outside the European Union. The EIB has been swift in responding, addressing the liquidity needs of our counterparties. As the crisis evolves, liquidity is not the only issue we need to address. The crisis is inducing a structural change and will require substantial rethinking, where smart, green and sustainable become essential words. To adapt to the new normal, investment is needed, so support for investment financing, restructuring and transformation will become even more important than dealing with liquidity.

Debora Revoltella, Director, Economics Department, Secretariat-General

Experts are still seeking to grasp the extent of the ravages caused by the pandemic, but one thing is sure: the recovery will be green. All our efforts on cleaner energy and transport, heavy industry decarbonisation and energy efficiency contribute to this objective. We aim to develop financing solutions to foster climate investment and to tackle its main obstacles. Thanks to our thematic impact finance products, we are catalysing the green change that the European Union needs, because innovative flagship projects can raise the level for an entire industry.

Gilles Badot, Head of Infrastructure and Climate Finance, Operations Directorate

A SWIFT RESPONSE

The Pan-European Guarantee Fund bolsters small businesses hit by the COVID-19 crisis. Just as another guarantee finishes mobilising over €500 billion in investments

hen the COVID-19 pandemic is overcome, our bodies will carry traces of the virus that we have survived. The same is true of our economy. And just as we all act together with solidarity to protect each other through social distancing, a great coordinated campaign with the participation of many EU nations is the best route to return us to prosperity.

The biggest part of the European Investment Bank Group's pandemic response is the Pan-European Guarantee Fund (EGF), which aims to use up to €25 billion in guarantees provided by contributing EU Member States to spur financing in the participating countries by the end of 2021. Most of that sum will support small and medium-sized enterprises, with some of it intended for slightly bigger companies and healthcare entities, and it will be provided through debt financing, as well as venture or growth capital.

The Guarantee Fund is a massive undertaking. But the EIB Group is confident it can meet the challenge. We can point to the success of our previous crisis response, the European Fund for Strategic Investments (EFSI), a five-year guarantee programme that ran until the end of 2020 and far surpassed its target of €500 billion in investment supported. "The level of ambition for pushing the European economy higher is there," says Wilhelm Molterer, EFSI's Managing Director. "If you want to make a big impact, you have to create a big programme and go for it."

The EGF certainly does that. And in double-quick time, too. "It would normally take two years at least to prepare a mandate of this size, but we put it together in six months," says loanna-Victoria Kyritsi, who leads EGF implementation at the European Investment Bank. "This is incredibly ambitious and new for the Bank. It's a crisis instrument. We're really trying to make a huge difference for affected parties in the Member States."

So how does the Pan-European Guarantee Fund work? It is a little like the European Fund for Strategic Investments, in which a guarantee from the EU budget enabled the EIB to invest in companies that might otherwise have been too risky. In the case of the Guarantee Fund, the EIB takes even more risk. With EFSI loans, the EIB Group provided unprecedented support to small businesses, sharing the risk of new financing with local partners throughout Europe. With the EGF, the EIB Group continues to work through local partners to reach target beneficiaries. It is able to bear the lion's share of the risk of new lending to target beneficiaries, based on the guarantees provided by the participating Member States. The EGF maintains a level playing field between European countries that are able to put in place a strong national safety net and others with more limited capacity.

The EGF is like EFSI in that it uses a public guarantee to mobilise a much larger amount of financing than can be done with public grants alone. However, it is unlike EFSI, in that the concept has been adapted to address an urgent crisis. "The EGF is about providing liquidity in a crisis," says Marcus Schluechter, advisor to EFSI's Managing Director. "It's about fundamentally viable entities affected

It's all about wide outreach to support small and medium-sized enterprises across all sectors.

by the economic fallout from the health crisis being able to pay their bills and surviving the current turmoil, so they can bounce back when the situation stabilises."

Emergency response

As the pandemic spread in the spring, small businesses across Europe were shuttered by lockdowns. The Guarantee Fund aims primarily at helping them, with at least 65% of its investment earmarked to support small and medium-sized businesses (SMEs). The EIB Group also launched a range of emergency programmes:

- €10 billion of additional working capital through liquidity lines to banks
- €10 billion of loans to SMEs through asset-backed securities purchase programmes
- €8 billion of financing through guarantee schemes for immediate deployment
- €6.7 billion of financing for projects related to COVID-19 outside the European Union
- €6 billion of financing for investments in healthcare infrastructure and the development of vaccines and drugs

All EU Member States were invited to contribute to the Guarantee Fund based on their share of EIB capital. The guarantee amounts to almost €25 billion. "It's all about wide outreach to support SMEs across all sectors," says Piotr Stolowski, who leads EGF implementation at the EIF.

The EFSI legacy

The EGF is one of a number of programmes developed in response to COVID-19 when the European Commission joined forces with EU Member States and European institutions to prepare a swift and massive relief package for businesses devastated by the pandemic. Meanwhile, EFSI was already at work, immediately guaranteeing hundreds of millions of euros in financing for projects to fight the pandemic, including €100 million for Germany's BioNTech for its COVID-19 vaccine programme.

Originally intended to counter the low-investment environment that followed the financial crisis a decade ago, EFSI developed into a flexible tool for fighting a sudden shock like COVID-19 or a broader crisis like climate change. Its success is built around the concept that, rather than using public money for grants, a market approach can draw private investment into a project alongside the EIB and thus multiply the impact of the original public guarantee many times over.

EFSI exceeded its stated target of supporting €500 billion in investment six months ahead of schedule, even as it adapted to the impact of COVID-19 on Europe's economy. "We were able to quickly provide urgently needed liquidity to support companies impacted by the pandemic as well as funding for companies working on the development of cures and vaccines," says lliyana Tsanova, EFSI's Deputy Managing Director. "Flexibility is the key to success."

TREAT, TEST, VACCINATE

Key investments support a full range of biotechnology and medical responses to the pandemic with COVID-19 vaccines, therapies and diagnostics

OVID-19 is a sly disease. It flits among the population and hides in people who have no symptoms. It disguises itself as a common cold or allergy. If we can flush it out with good tests, stop the spread with new vaccines and heal the sick with innovative therapies, the pandemic will end.

The European Investment Bank is backing dozens of companies that are working day and night to end the crisis. BioNTech, based in Mainz, Germany, has moved to the front of the pack in the race to solve one of humanity's great challenges, partnering with US pharmaceuticals firm Pfizer. The EU bank signed a €100 million agreement with the company in June 2020. This investment and others profiled in this report are backed by programmes such as InnovFin and the European Fund for Strategic Investments, which support innovative, higher-risk projects.

"The best contribution we can make to the fight against COVID is to help companies which are developing new vaccines, treatments or diagnostic solutions," says Gergely Krajcsi, an investment officer at the European Investment Bank who worked on the BioNTech deal and other similar transactions. "We did everything we could to support BioNTech, because, let's be realistic, COVID is not going to go away by itself."

Track, stop, care

At the start of the crisis, European Investment Bank staff decided to work on the health emergency and the economic downturn at the same time. The Bank divided its support for biotechnology and medical companies into three main sectors: vaccines, therapies and diagnostics. The aim: to track infections, stop the spread of the disease and care for those who get sick.

In April, the Bank approved €5 billion in new financing to support urgent action in fields such as healthcare and medical innovation for COVID-19. Since then, more than 40 biotechnology or medical companies and projects have been approved for EIB financing worth about €1.2 billion. The European Investment Bank is also backing global programmes to distribute COVID-19 vaccines, especially in the developing world. The Bank approved a €400 million deal with COVAX, a global initiative supported by hundreds of countries, the private sector and philanthropic organisations to promote equal access to a vaccine.

A review of companies to fight COVID-19

At the start of the crisis, the Bank reviewed its loan portfolio of existing deals and also sought new companies that could do with extra help. Two companies identified were BioNTech and CureVac. The EIB was the first financial institution to support BioNTech's coronavirus research. Meanwhile, CureVac, which specialises in treating rare diseases, signed a €75 million loan with the Bank in July to expand production capabilities at its site in Tübingen, south-western Germany.

The EIB's goal is to accelerate several promising candidates into large-scale production and global supply.

CureVac and BioNTech's vaccines are based on technology never before used in commercial vaccines. They could prove revolutionary for future vaccines. The technique takes non-infectious genetic material called messenger RNA and injects it into muscle cells. The vaccine enters these cells and instructs them to produce a protein resembling the spikes on the new coronavirus. This new protein prompts the immune system to make antibodies and activate T-cells to fight the virus, if the person is exposed to it.

"Messenger RNA vaccines are versatile in that they can be quickly adapted to mutations in the virus," says Anna Lynch, a life sciences expert at the European Investment Bank. "CureVac and BioNTech vaccines can be modified within a matter of weeks to target a mutated virus if needed."

Vital venture debt

Private investors are often wary of vaccines, because success is hard to predict. The Bank's backing of BioNTech and CureVac shows how venture debt from a public bank is important to help companies innovate in the infectious disease sector, says Cristina Niculescu, another life sciences expert at the European Investment Bank. Ebola, SARS and now COVID-19 have been a wake-up call for pandemic preparedness and investment. **As the private and public sectors step up support, more than 200 candidate vaccines have reached some stage of development around the world. Several are expected to be approved by the end of the year.** "The EIB's goal here is to accelerate several promising candidates into large-scale production and global supply," Niculescu says. "In the meantime we have a lot of very sick people, so we also need therapeutic solutions that target hospitalised patients and make sure they don't progress to becoming severe COVID cases."

Özlem Türeci, the chief medical officer at BioNTech, says her vaccine's early success makes it possible today to have hope. "I don't think we can say the pandemic is over", she adds, "but this might be a contribution to the very beginning of the end."

We will always need therapies

EIB loans are backing key therapeutics companies: Atriva, Immunic, AB Science and Pluristem. The companies' COVID-19 products are designed to treat people after they are infected, especially if they become sick enough to go to hospital.

Atriva's lead drug candidate, ATR-002, aims to reduce the viral load of RNA viruses such as COVID-19 and influenza, and hinder the spread of severe respiratory infections. The drug, taken as a tablet, has shown promising results in pre-clinical trials. It could offer much-needed help for people with coronavirus symptoms that require hospitalisation. Atriva's therapy treats two aspects of the

coronavirus: it stops the virus replicating and prevents an overreaction of the body's immune system. "We believe this dual approach could be extremely effective," says Olaf Althaus, chief financial officer at the company, which signed a €24 million EIB loan in October. "We are very optimistic about ATR-002's potential to fight the pandemic." **Atriva's goal is to develop a broadspectrum antiviral drug that will also be effective against new mutations of COVID-19 or new RNA viruses that could lead to future outbreaks.**

Another October loan went to Immunic, which is using its €24.5 million from the EIB to work on a similar therapy, IMU-838. This medicine, also in tablet form, has a broad spectrum of antiviral benefits. IMU-838 is undergoing a phase 2 trial in COVID-19 patients hospitalised with moderate illnesses. The medicine is also being tested on chronic inflammatory and autoimmune diseases, such as multiple sclerosis. "We had an idea in February, right when the pandemic reached a global scale, that our drug could work against COVID-19," says Hella Kohlhof, the chief scientific officer at Immunic.

Immunic's IMU-838 aims to reduce the severity of infections like COVID-19 in several ways. It prevents the replication of the virus. It then induces innate immunity and, finally, it may help the body's immune system avoid overreacting to severe infections. It works as a teacher, instructing the body's cells. "When cells in our body get infected with a virus and the virus wants to replicate, we have these very friendly cells in our body that say, 'No problem, I will switch on a new mechanism to support the virus's need,'" Kohlhof says. "The virus is hijacking the cells' kindness. IMU-838 is able to block this mechanism by inhibiting the enzyme that supports the production of the friendly building blocks."

France's AB Science signed a €15 million EIB loan in November to advance the clinical development of its drug masitinib. The medicine could help people suffering from life-threatening illnesses related to the coronavirus, including the so-called cytokine storm, in which the immune system overreacts to the infection. "AB Science's research could have benefits for inflammatory diseases, neurodegenerative diseases, infectious diseases and cancers," says Yu Zhang, a manager in life sciences and biotechnology at the European Investment Bank. "Our support for the company might be expanded in the future."

The therapeutics companies hope their research will tackle a wide range of diseases. They say their therapies will be needed for a long time, even if the vaccines are a success. "First, not everyone will want to get vaccinated," Atriva's Althaus says. "Secondly, there will always be cases where the vaccines don't work or can't be used. After the airbag was introduced, ambulances were still needed."

Time is of the essence. It feels like we are at war.

Therapeutic placenta cells

The Israeli-German company Pluristem, which signed a €50 million financing deal with the EIB in April, is taking a different route to a therapy. **The company is using placenta cells, which are the most potent cells in the human body, to treat severe infections.** Pluristem grows the cells from placentas in a 3D bioreactor that mimics the conditions of the human body. Injected into patients, the new cells help the body to regenerate. The therapy may help patients suffering from complications of the coronavirus – pulmonary hypertension, lung fibrosis, or acute kidney and gastrointestinal injuries.

The placentas are collected after the delivery of healthy, full-term babies from women under 35 years old who undergo an elective caesarean section. "Those cells can then be used for the good of humankind," says Auvo Kaikkonen, a senior life sciences specialist at the Bank.

One of the many lessons of the COVID-19 lockdowns has been the value of tracking and tracing the spread of the disease. The Bank's most recent testing investment is Scope Fluidics of Poland. The company has developed a fast system for detecting viral pathogens and bacteria. The EIB approved a €10 million loan for Scope Fluidics in September. Called PCR/One, the company's fully automated system can identify – in 15 minutes – up to 20 pathogens and drug-resistant bacteria. The accuracy of the system means doctors won't have to wait for days for tests to identify COVID cases. It also means that people could be tested more often. "The main advantage of our test is the speed," says Piotr Garstecki, chief executive of Scope Fluidics. "Time is of the essence. It feels like we are at war."

Today's quick coronavirus tests have a reputation for inaccuracy, because they test for COVID-19 antibodies. The problem is that some people who are infected may not yet have antibodies. This can lead to a false result. **The accuracy of Scope Fluidics's PCR tests is almost 100%.** "There is huge demand for this type of device," says Anna Stodolkiewicz, the EIB loan officer working on the project. "The PCR test is compact, very comprehensive. It can be used in airports, train stations, anywhere."

Testing will remain crucial even though coronavirus vaccines have arrived. Large swathes of the population will not get the first round of vaccinations, which means that the coronavirus is likely to continue circulating widely. Scope Fluidics expects its system to get temporary approval from European regulators by the end of the year. "Even massive testing", Garstecki says, "is a better option economically than lockdowns."

'A GODSEND, A BEAUTIFUL THING'

The European Investment Bank partnered with the national promotional bank to bring hope of overcoming the COVID-19 crisis for small Italian businesses

s a child, Giuliano Annigliato used to turn the knob of the television set again and again, just for the pleasure of tuning in to one of the two channels available back then. Perhaps it was inevitable that he would find his way into local radio and television in Bagnoli, his working-class neighbourhood on the outskirts of Naples.

But he always remembered, too, how he had felt when his father died of a heart attack. Aged 19, it was a punch to the stomach, a unique heartache. The factory where his father had worked offered him a job, but he said: "No, thanks. I'll manage by myself." And after a decade in the media, he did just that, founding the advertising agencies A&C Network and Uno Outdoor.

For three decades, Annigliato's business has grown in size and ambition, backing the restoration of monuments in Naples and elsewhere with an innovative idea that saves money for the municipality. But when the COVID-19 virus ravaged Italy in March, it hit Annigliato's business too – most of his clients were in the clothing sector, one of the worst-hit by the pandemic.

Hope came as a result of €1.5 billion in financing for Italian small businesses from the European Investment Bank, its first immediate COVID-19 response and its largest support for any single country during the pandemic. In partnership with Cassa Depositi e Prestiti (CDP), Italy's national promotional bank, the EIB backed a €2.3 million loan to Annigliato from Monte dei Paschi di Siena, the oldest bank in the world.

"We are standing shoulder to shoulder with Italian small businesses and microbusinesses," says Claudia Barone, a European Investment Bank loan officer who has been part of this rapid response since the start of the crisis. Approved by the European Investment Bank's board in April, more than €600 million had already been disbursed to small businesses by July.

Naples' history preserved

If you are in Naples and you stumble across a huge billboard wrapping the facade of a monument, chances are that Giuliano Annigliato is behind the creative idea: "These ads pay for the restoration of historic buildings." Obelisks, fountains and monuments attract the attention of companies and businesses, including Original Marines, Burger Italy, Liu Jo, and Enrico Coveri. These companies have a temporary "advertising window" in Naples, while the monuments will be restored at no cost to the city.

With the rich history of Naples, there is a lot of restoration work to do. Nevertheless, at the height of Italy's pandemic in March and April, Annigliato had hardly any business. **Even the money he had**

With CDP, we've mobilised our respective energies, working as a unique team to benefit small Italian businesses.

set aside for emergencies would not have been enough to pay his 36 employees for long. Annigliato had to make use of a temporary furlough scheme for some of them.

Then, at the end of April, when the weight of the world seemed to be crashing over him, **Annigliato** got some much-needed liquidity from the European Investment Bank through CDP and Monte dei Paschi di Siena. With this buffer, he was able to happily accept a big online order from Rossignol, the iconic French brand. "It was a godsend, a beautiful thing," says Annigliato, his voice warm and enthusiastic, but also displaying the relief of a man who had been on edge.

Annigliato is opening up now to the online market, finding other channels through which to offer his new products. If the crisis has taught us something, he says, it is that we shouldn't waste an opportunity. "Today it's a virus, tomorrow it will be something else. That's life. And when life happens, you just have to deal with it."

Too small and too risky? No problem

Annigliato compares the pandemic crisis to a war that we must fight with passion, flexibility, rationality and grit. Without these ingredients, the joint operation between the European Investment Bank and Cassa Depositi e Prestiti would not have happened either. As long-term partners, the two institutions enjoy a deep and rich understanding, resulting in security and comfort. "With CDP, we've mobilised our respective energies, working as a unique team to benefit small Italian businesses," says the EIB's Barone. "This required a lot of work, including simplifying long and cumbersome procedures," she adds.

The result is impressive. The EIB backs the CDP "Business Platform" instrument on favourable terms. CDP onlends the funds to financial intermediaries like Monte dei Paschi di Siena, which in turn back entrepreneurs like Annigliato. By partnering with CDP, EIB financing can reach banks that would not usually have access to its favourable terms, because they are too small or too risky. As CDP does not take any profit, Annigliato and other small entrepreneurs enjoy the full benefit of the EIB's favourable interest rates.

Now Annigliato is looking forward to restoring the Maschio Angioino, the medieval castle in the heart of Naples and a symbol of the city. Its turrets have seen many pestilences ravage Naples and still they stand. Thanks to the cooperation between CDP and the EIB, so will Annigliato's businesses.

A LIFELINE FOR NORTHERN SPAIN

Catalan bank aims to help nearly 50 000 people keep jobs, pay bills and survive during coronavirus economy downturn

OVID-19 has dealt a heavy blow to many parts of the economy, but companies that rely on tourism or travel in particular are suffering. For many, financing backed by the European Investment Bank has been a lifeline. "We believe that by 2021 things will improve, but we will have to work hard over the next few years and watch expenses closely," says Rafael Ruiz, chief financial officer of the Barcelona Technical Center, an engineering firm in Martorell, northwest of Barcelona, that has 148 employees and designs products for the automobile, aeronautics and railway sectors.

We are helping them start new models of business that can relaunch their activities and boost the economy.

Ruiz's company took out a €950 000 loan from the Institut Català de Finances, also called the ICF, the public Catalan bank for small businesses and entrepreneurs. "By receiving this loan, we have been able to keep paying salaries and cover other commitments, despite the drop in projects," Ruiz says.

The Barcelona Technical Centre's financial lifeline was made possible by a €250 million loan that the European Investment Bank signed with the ICF. The loan will help up to 48 000 people in retail, tourism, catering, culture and many other sectors pay bills and come up with new business plans. The EU bank and the ICF have been working closely to support thousands of small businesses in the region since 2008.

"We are on continuous alert for signs of recovery," says Rafel Niubò, the general secretary of Eurofitness, a Barcelona company that manages and builds fitness and sports centres across Spain. Eurofitness has had a hard time during the pandemic and many gyms have closed. Niubò is seeing some encouraging signs, but his goal now is just to keep the company going. Eurofitness, which has 327 employees, took out a €1 million ICF loan. With this assistance, it avoided salary cuts, redundancies or reduced customer service.

As many as 2 000 companies could qualify for loans from this European Investment Bank financing. Using the EIB's loan and investments from other public and private sources, the ICF plans to make up to €1 billion available to steer small businesses through the crisis.

The EIB is supporting small businesses in Spain more than ever. We are working closely with our intermediaries to reach out to as many companies as we can.

New business models to respond to the crisis

Josep-Ramon Sanromà, chief executive of the Catalan public bank, says his staff has been working intensively to offer new financing solutions to entrepreneurs. "The crisis has had a strong impact on businesses in Catalonia during the lockdown," he says. "Companies were paralysed, sales fell and businesses were reoriented to respond to the new safety measures. Many, especially the self-employed and small firms, need greater financial support. We are helping them start new business models that can relaunch their activities and boost the economy."

Spain's gross domestic product and employment rates fell substantially in 2020. Its economy relies more heavily than most other European countries on tourism and real estate transactions, two sectors that have especially struggled because of COVID-19. Spain is starting to recover and its GDP is expected to rise in 2021, according to the International Monetary Fund. "The economic impact has been severe in the country, but little by little we are starting to see the light at the end of the tunnel," says Alex Saz-Carranza, a European Investment Bank loan officer who is working on transactions to jump-start many parts of Spain. "The EIB is supporting small businesses in Spain more than ever. We are working closely with our intermediaries to reach out to as many companies as we can to alleviate the economic effect caused by the pandemic and to enable businesses to stay alive and maintain jobs."

Rapid response to the coronavirus crisis

This European Investment Bank loan agreement with the ICF was one of the first of dozens of large deals approved under a €5 billion EIB Group programme to help European businesses fight the crisis. The European Investment Bank approved this Spanish deal in a few months under an accelerated procedure to help small firms quickly.

The extra financing came just in time for companies such as Atrápalo, an online travel agency based in Barcelona that employs 220 people. Atrápalo took out a €500 000 loan from the Catalan public bank to help pay its staff and prepare for the unexpected. "There is a lot of uncertainty for the future," says Luis Alonso, chief financial officer of Atrápalo. "We do not know when or how fast travel, tourism and leisure activities will recover, but with this loan we are now able to manage these uncertainties and make up for the drop in activity during the pandemic."

BACK TO BASICS

In a field that is usually high-tech and innovative, 2020 saw health authorities across Europe scramble to finance basic medical supplies, while others looked for simple solutions for COVID-19 infection spikes

he city of Kiskunhalas in southern Hungary saw that its COVID-19 infection rate could become too hard for the area's health services to control in March, so the government decided to erect a mobile hospital. "It was built in just a few weeks to respond to a surge in the number of hospitalised cases in the area," says Gabor Kiss, a European Investment Bank loan officer who worked on the financing for Kiskunhalas and other emergency COVID-19 medical supplies in Hungary.

Completed in April, the Kiskunhalas Epidemic Mobile Hospital has a capacity of 150 patients and is specifically designed to treat those suffering from COVID-19 who need intensive care. "It also helps contain the virus," emphasises Tunde Szabo, the Bank's health economist. "The local health services are able to separate coronavirus patients from other patients, thus substantially reducing the risk of hospital-acquired COVID-19 infections."

The European Investment Bank typically supports medical innovation – from financing hospital infrastructure to medical device and biotechnological innovation and the development of COVID-19 vaccines. But, in a year unlike any other, it was not innovative technology and tools that hospitals and healthcare workers all over the world lacked most, especially in the first months of the pandemic. Rather, governments struggled to provide essential equipment to prevent the spread of the disease, as well as infrastructure and staff to treat severe SARS-Cov-2 cases. So they came to the European Investment Bank with requests to finance much more basic medical needs than usual.

500 ways to help

Countries had to react swiftly to supply their hospitals and health centres with essential protective equipment, including medical masks, gloves, sanitising products, and equipment needed specifically for SARS-Cov-2-related critical care, such as intensive care beds and respiratory equipment.

In March 2020, even though Hungary was not among the worst-hit EU countries, the government still needed to protect the health of its population by stemming the infection rate. It also had to prepare for a possible second wave of infections. This proved crucial as Hungary was hit especially hard later in the year. To help the country finance its emergency response, the European Investment Bank stepped in with a €162.5 million loan to the Hungarian government. It financed almost 500 different types of items required by the healthcare sector to avoid the spread of the disease and to treat patients efficiently.

"This was a special healthcare project for the Bank," says the Bank's Szabo. "Our projects usually involve hospital modernisation and health innovation, but these are extraordinary times. Recognising the urgent need, we had to respond quickly to support the EU Member States and help them deal with the coronavirus crisis in whatever way we could."

Respirators, disinfectants, masks, ventilators, patient monitors – these are just some of the items the Hungarian government secured through this loan. "Nearly the entire loan went to medical equipment and supplies required for the day-to-day operation of health centres during a pandemic," Szabo says. The newly purchased medical equipment was distributed throughout Hungary.

Simple solutions for COVID-19 in Czech hospital project

The Hungarian crisis response is one of many COVID-19-related projects the EIB supported in the past year. The number of healthcare projects at the Bank tripled compared to the previous year. The Bank's 2020 health sector projects, however, were not solely focused on emergency response. Despite the unprecedented circumstances, we didn't forget about our long-term healthcare infrastructure goals.

The coronavirus crisis has stretched local health services to their limits. The pandemic has also exposed their vulnerabilities and lack of preparedness. Inadequacies at older hospitals have been put under the spotlight, pushing local governments to address them. This is why the EIB is supporting the Central Bohemian Region in the Czech Republic with a €48 million loan to improve its emergency preparedness and modernise its healthcare, transport, social care and education

It's not about increasing the number of hospital beds. Rather, it is about increasing the resilience of our hospitals.

More than half the money will go to the refurbishment and modernisation of five hospitals in the region, as well as the Central Bohemia ambulance service. The investment will result in almost 1.4 million people in the region having better access to improved health services. "The programme will enable these medical facilities to become more efficient, increase the quality of their services and contribute to energy efficiency and emergency preparedness," says Szabo.

The best time to prevent the next pandemic

infrastructure.

"The way to deal with a pandemic is to improve our existing health facilities," Szabo explains. "It's not about increasing the number of hospital beds. Rather, it is about increasing the resilience of our hospitals." This can be done with simple solutions such as improving ventilation systems to reduce hospital-acquired infections, and that is one of the changes made in Czech hospitals.

"It is also about rethinking our healthcare system," Szabo points out. "We need to increase the number of chronic care centres. Chronic care should not be provided in acute hospitals, because it is the most resource-consuming form of care. Purpose-built chronic care facilities are much more efficient and are easier to adapt for infection control." The coronavirus pandemic has forced us to speed up these developments – to rethink our hospitals and evaluate how prepared we actually are. As we have all come to understand this year, the best time to prevent the next pandemic is now.

CLIMATE SOLUTIONS

OUR EXPERTS ASSESS THE CHALLENGE OF CLIMATE CHANGE

As a response to the global climate emergency and in support of the European Green Deal, the EIB has set itself ambitious climate goals and is transforming into the climate bank of the European Union. At the same time, there are those who now argue that to counter the effects of the COVID-19 crisis, the stimulus should solely focus on growth and job creation. For the EIB, the recovery is green and it must move us firmly toward net-zero emissions. The Climate Bank Roadmap that will guide our journey toward the climate goals was drawn up in 2020. So 2021 will be the first year of implementation of this green action plan.

Elina Kamenitzer, Head of Climate Action and Environment Coordination, Operations Directorate

The pandemic, in a harsh but direct way, has brought about a realisation that we will need to consider future infrastructure investment decisions in the context of more radical expectations of future needs, behaviour and resource usage. This paradigm shift requires project promoters - and financers – to apply a new set of sustainability measurement indicators. Building the capacity of promoters and financial intermediaries to better understand and apply these new techniques and standards will require significant advisory and technical support.

Frank Lee, Head of European Investment Advisory Hub, Operations Directorate In times of difficulty the wind has kept blowing and the sun shining. Renewables have shown their resilience to COVID-19. The path ahead of us could not be clearer. Now we need to accelerate the transition towards our green future.

Alessandro Boschi, Head of Renewable Energy, Projects Directorate

Cities are in the front line of the COVID-19 crisis, operating key services in health, civil protection, urban transport and management of public space, while facing severe revenue constraints as the urban economy has slowed. In 2020, we put in place COVID-19 urban recovery programmes in key cities such as Grenoble, Milan and Barcelona and developed national urban recovery programmes in France, the Netherlands and Poland. 2020 also marked the launch of a major new advisory facility – the City Climate Gap Fund – which we and GIZ, the German agency for international cooperation, are implementing together with the World Bank to deliver early-stage project preparation support to cities in developing and emerging countries. Funded by Luxembourg and Germany, this should help kick-start climate-smart projects in water, sustainable urban mobility, energy efficiency and climate adaptation.

Gerry Muscat, Head of Urban Development, Projects Directorate

The EIB showed quick reactions to COVID-19. The capability of the Bank to develop new approaches and address unprecedented challenges will be even more crucial when it comes to fighting climate change and environmental destruction. Becoming the EU climate bank will be both an important contribution to the European Green Deal and a highly rewarding experience for all involved in tackling the biggest threat the world is currently facing.

Heinz Olbers, Director, Western Europe, Operations Directorate

Ever since the invention of the wheel, transport has been a hub of human endeavour and, from tall ships to sleek jets, it has driven and enabled technological progress. Now it is our turn to face up to the existential challenges of our times. A green and digital revolution is sweeping through the transport sector at a time when the climate of the earth is in turmoil and a health pandemic threatens humanity. Transport is both part of the solution and part of the problem. It is the only CO2-emitting sector that continues to grow and one of the economic sectors most severely affected by the pandemic. But transport is also expected to lead the recovery in a green transition that the EIB will support to create a truly sustainable transport system.

Gavin Dunnett, Director, Mobility, Projects Directorate

A PLAN FOR THE PLANET

The Climate Bank Roadmap will guide our finance to support the European Green Deal and make Europe carbon-neutral

he coming decade is critical for the climate and environment emergency. Our Climate Bank Roadmap sets out how we will deliver on our increased climate and environment commitment in line with the European Green Deal from 2021 to 2025. We will accelerate the transition to a low-carbon, climate-resilient and environmentally sustainable economy and align all financing with the Paris Agreement, while leaving no one behind and supporting long-term development objectives.

"This increased ambition has far-reaching implications for the EIB Group, transforming its priorities and the way we work," says Stephen O'Driscoll, Head of the Environment, Climate and Social Office. "It's a DNA change, in which we pull out all the stops to deliver on the objectives of the European Green Deal."

The Bank has had an ambitious climate strategy in place since 2015. The idea of a new Climate Bank Roadmap started in late 2019, after the European Council and EU countries asked the EIB Group to step up its support for the European Green Deal and help accelerate the move to a carbon-neutral continent by 2050.

More clean energy and innovation

The Roadmap's highlights:

- Increase EIB finance for climate action and environmental sustainability from about 30% today to over 50% by 2025
- Align all new finance with the principles and goals of the Paris Agreement
- Support €1 trillion of investment in climate action and environmental sustainability from 2021 to 2030
- Build on the decision to stop supporting traditional fossil fuel energy projects
- Maintain leadership in the capital markets, where the EIB was the first institution to issue a green bond and is still the largest supranational green bond issuer
- Focus on clean energy, innovative technologies and digitalisation, which will play a major part in modernising and decarbonising industries
- Increase finance that helps societies adapt to climate change and makes economies more resilient

The Roadmap outlines how we will direct more support to communities whose economies depend heavily on energy-intensive industries, such as coal mining or steel production. That means more resources for a "just transition" and social equality, including more training, jobs and advisory services for people whose livelihoods are threatened by the transition to low-carbon economies and the impacts of climate change. We also will support the transition to a low-carbon, environmentally sustainable economy around the world, with a particular focus on the resilience of communities vulnerable to climate

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change. "When we think about livelihoods at risk from climate change impacts, we know that people living in developing countries, and especially the least-developed countries and small island states, are often most vulnerable and yet have the fewest financial resources to adapt," says chief climate change expert Nancy Saich.

Every country will have to make big changes over the next decade. The Roadmap will help the Bank find new partners and extend its reach around the globe to meet its climate goals.

Read the full Climate Bank Roadmap at www.eib.org/cbr

THE NEXT GREEN THING

The European Investment Advisory Hub, a partnership between the EIB and the European Commission, helps Member States and companies prepare projects for future financing. Its work helps Europe achieve its climate ambitions.

Hydrogen as an alternative fuel

The German Ministry of Transport and Digital Infrastructure requested strategic advisory support in the development of a funding and financing model for the use of hydrogen as an alternative fuel in the German transport network. The Hub is providing cross-sectoral support for technical and financial advisory services to assess the hydrogen market outlook and propose financing and delivery models.

Climate adaptation for Genoa

Municipalities such as Genoa, Italy, need assistance with the option analysis of climate adaptation measures. The Hub's assignment is to analyse different adaptation options for projects in three or four different cities and to compare cost and benefits. Based on the results of this analysis it will be possible to draw conclusions on the most suitable adaptation option in each case.

Check your energy efficiency

Czech promotional bank ČMZRB approached the European Investment Advisory Hub for help in scaling up the investment volume of energy efficiency investments using EU funds. The Hub undertook a market assessment that led to a proposal for a guarantee instrument addressing the market gaps, including its investment strategy, governance, monitoring and reporting processes. The assessment also identified the need for a one-stop-shop mechanism for technical assistance for potential projects, which led to an application for project development assistance under the ELENA (European Local Energy Assistance) facility. The assignment shows that EU funds and EIB co-financing can be mobilised through innovative financial instruments to support the development of energy performance contracting, combined with investment grants for comprehensive building renovation. Such schemes are also planned as part of the Renovation Wave, a European Commission initiative to double energy renovations in the next decade. The financial instrument is expected to become operational in 2021.

WHEN THE WINDS DON'T BLOW

Two innovative Swedish battery companies aim to supply clean energy in the home and for your car

hen it is windy or sunny, wind and solar farms produce renewable energy. But the wind doesn't always blow, and the sun doesn't always shine exactly when we want to use electricity. That is why batteries are so important to a green future. Nilar and Northvolt, two Swedish companies, are producing batteries that store green energy for use when it is needed.

Nilar, which has been developing nickel-based batteries in a new large format for over 15 years, launched commercially in 2019. The company's nickel metal hydride batteries are designed to store renewable energy in homes or commercial, municipal and industrial settings. They are not intended to replace lithium in fully electric vehicles because nickel is a heavier metal. But Nilar's hydride batteries are safe for use in buildings, because nickel metal hydride batteries are non-flammable. They also have a 20-year life span and can be economically recycled.

Battery costs are declining. Since 2010, the cost of lithium-ion batteries for electric vehicles has dropped by nearly 90%, and the cost of nickel stationary storage batteries has dropped by around two-thirds. But nearly all advanced batteries are currently imported from outside the European Union. As price makes batteries more affordable, it is important to develop battery production in Europe, where the market for clean energy is growing by leaps and bounds. However, battery development is a long, uncertain and costly process, and high-volume production is needed if a company is to be competitive, so it is hard for firms in their early stage to find commercial investors and financing from banks.

Driving rapid innovation

Without an extensive commercial track record, Nilar is the kind of project for which the European Investment Bank's financing is vital. The EU bank backs research and scaling-up of innovative products, so that they become more attractive to private investors. "The European Investment Bank is hugely important in driving rapid innovation in small companies with brand new tech," says Michael Obermayer, Nilar's chairman. Tech companies with innovative projects that can't overcome the capital-intensive scale-up hurdle cannot grow and their ideas may remain on the shelf. "The European Investment Bank's willingness to provide loans to help take Nilar's technology to the market at the beginning of its commercialisation phase is critical," Obermayer adds.

Next generation batteries have a pivotal role in the European Commission's target of reducing carbon emissions by 55% by 2030. They will also help enhance energy independence – and therefore energy security – for Europe.

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Our investment enabled this to happen in one go... Otherwise, the tech risks staying on the shelf or being bought out, possibly going outside the European Union.

Wheels and windmills, turning green

Northvolt's batteries are also green. But, unlike Nilar's batteries, Northvolt's lithium-ion batteries are mostly intended for use in powering electric vehicles. Electric vehicles don't use a single battery like a phone. Rather they use a pack comprised of thousands of individual lithium-ion cells working together. When the car is charging, electricity is chemically stored inside the batteries. When the car is on the road, the battery releases energy to the electric motor without discharging carbon. Replacing carbon-polluting cars with clean electric vehicles is vital for the green transition.

Nilar and Northvolt are backed by EIB loans which are, in part, under the European Commission's InnovFin programme which finances innovative demonstration projects in the fields of energy system transformation, including energy storage.

Nilar's €46 million loan from the European Investment Bank will help it scale up to eight production lines from one. These batteries will help homeowners, commercial buildings and industries with solar panels, as well as smaller renewable energy power plants, by enabling them to sell surplus green energy.

Scaling up Swedish battery companies

Scaling up production was also the driver for the EU bank's backing for Northvolt's electric car battery. With an InnovFin-backed loan from the European Investment Bank, the company built a demonstration line of its concept in Västerås, not far from Stockholm. That factory started producing the new type of battery at the end of 2019.

Northvolt has already taken the next step: a lithium-ion battery factory in Skellefteå, north-east Sweden. The Skellefteå factory is backed by another European Investment Bank loan, this time for \$350 million, using the guarantee of the European Fund for Strategic Investments, part of the Investment Plan for Europe. "Renewable energy storage is the key to a carbon-neutral society", says Peter Carlsson, Northvolt's chief executive, "and batteries are the key to getting there."

WHAT MONTY PYTHON FORGOT ABOUT LUPINS

A bioeconomy fund aims to fill the finance gap for companies with proven technologies, so they can expand across Europe

Pritish comedy team Monty Python once broadcast a sketch in which an inept highwayman robs his victims with the ridiculous demand, "Your lupins or your life!" The joke was that lupins weren't worth anything, because they were just purple flowers. Germany's Prolupin knows better. The company has developed milk-free vegan ice cream, as well as a range of other food products, all from lupin seeds. Prolupin, based near Rostock, sells its products in Germany. But expanding to other European countries requires additional investment, which is difficult for relatively new companies in the bioeconomy to find, because they don't have the track record to attract bank loans and venture capitalists tend to focus on other sectors.

That is where the European Circular Bioeconomy Fund steps in. On its way to raising €250 million for the bioeconomy and circular bioeconomy, the Fund invests in early-stage companies with proven technologies that need financing to scale up their operations and to expand into bigger markets. The bioeconomy and circular bioeconomy are key elements in making the economy more sustainable and protecting the environment. The bioeconomy reduces our dependence on natural resources by promoting sustainable products that use renewable biological resources (such as lupins) to produce food, materials and energy.

The origin of the European Circular Bioeconomy Fund is a 2017 study by the EIB's InnovFin Advisory, prepared with the backing of the European Commission. The study identified a significant gap in financing for bioeconomy companies that needed to expand their production and distribution. The report recommended setting up an equity fund to support growth-stage companies. So the European Investment Bank and the European Commission selected an investment advisor, which set up the European Circular Bioeconomy Fund. "The bioeconomy and circular bioeconomy are still perceived as a nascent sector," says Yicui Sun, the investment officer in charge of the EIB's investment in the fund. "The guarantee from the European Commission is instrumental in mobilising private investors to fill this gap."

Since the Fund reached a first close in October with €82 million, it has been attracting a lot of interest from both private and public investors and is well on its way to subsequent closings. "This will kick-start more activity in Europe in this sector," says Felipe Ortega Schlingmann, Head of Agribusiness and Rural Development at the EIB. "There's huge potential for growth."

CLIMATE SOLUTIONS

SUSTAINABILITY IN SPACE

A company based on the shores of Lake Como builds satellite carriers to gather climate change data from space and to clean up decades of debris

atellites help people and first responders when terrestrial networks are damaged by natural disasters, like hurricanes or earthquakes. They digitally connect isolated patients or those living in rural areas to healthcare professionals in the case of a pandemic. And they provide data for tracking the dangers of global warming – and our progress in fighting it.

But satellites also generate space junk. When they have completed their missions, small satellites are brought back to the earth to burn in the atmosphere. Bigger ones are redirected to spacecraft cemeteries in the oceans or are kept floating in controlled graveyard orbits. It is time to figure out how to deal with increasing space debris.

D-Orbit, a New Space company headquartered near Lake Como in Italy, is pioneering sustainable space economy and space logistics. "Several of our customers are Earth observation operators, delivering data and information about weather, pollution, forestry and agriculture, oceans, coastal erosion and critical infrastructure," says Luca Rossettini, chief executive and founder of D-Orbit. "Space is an opportunity for our society, industries and research institutions."

In October 2020, D-Orbit launched – with the European Vega rocket from the Guiana Space Centre – its first ION satellite carrier, which successfully deployed 12 Planet SuperDove Earth-imaging small satellites. The ION (In Orbit Now) satellite carrier developed by D-Orbit is backed by the European Investment Bank with a €15 million loan. The financing is part of a Memorandum of Understanding signed between the European Investment Bank and the European Space Agency in 2018.

Micro and nano satellites

D-Orbit's cargo satellite missions are operated from its headquarters at Lake Como. They are designed to be launched by many different rockets available in the market. It is a sort of space taxi capable of hosting several nano or micro satellites. These miniaturised CubeSats weigh a few kilograms each. There is also the possibility of carrying other types of payload, such as technologies developed by start-ups, research institutions and space companies that need to test and validate a technology in space before being able to commercialise it.

"The ION satellite carrier is an innovative solution to support small sat operators in testing their technologies in space and to accelerate the commercialisation of new satellite services," says Christian Kohr, the EIB digital infrastructure lead engineer, who worked on the D-Orbit loan. Adds Anders Bohlin, the EIB lead economist on the project: "With the ION concept, D-Orbit is an innovation leader in this field."

GREEN STEEL, CIRCULAR STEEL

Energy-intensive industries cause 15% of worldwide CO₂ emissions. Big steelmaker ArcelorMittal is developing an innovative steel decarbonisation technology that saves CO₂ emissions – and turns them into useful biofuel

blast furnace uses coal to chemically reduce iron ore to iron, which is then further processed into steel. It releases large amounts of greenhouse gases CO and CO₂ in the process. In Europe, steelmakers capture these by-product gases, transforming them into electricity and useful heat. But then the CO₂ is released into the atmosphere.

This financing would not be possible without the support provided by the Commission under InnovFin.

That makes integrated steel plants a key area for decarbonisation. Big steelmaker ArcelorMittal Belgium is implementing a first-of-its-kind, innovative technology at a scale and complexity that doesn't exist anywhere else in the world. The project is in line with ArcelorMittal Europe's carbon emissions reduction roadmap, which targets a 30% reduction by 2030 and carbon neutrality by 2050.

The installation captures the CO- and CO2-rich off-gases emitted from the blast furnace and transforms them into ethanol through a gas fermentation process that uses microbes. This "Carbalyst" technology was developed by the US firm LanzaTech, with which ArcelorMittal has

partnered for a decade. "As a material producer, we believe that we must focus on the circular economy and develop 'cradle to cradle' processes which use fewer primary resources and enable us to reduce carbon emissions," says Carl De Maré, ArcelorMittal Group's head of technology strategy. "Steel and other waste needs to be recycled, and the blast furnace is an excellent tool to do that."

There's a second step to the project, too. Since carbon is currently used as an input to the blast furnace in the form of fossil coal, the company intends to partly replace this fossil carbon with waste wood that has been treated to become bio-coal. This substitution of fossil coal by a circular carbon is already a step towards the green transition.

"It's a typical carbon capture and usage process," De Maré explains. "The blast furnace is in the middle. This project comes at the end, at the by-product level, to make ethanol, but also at the beginning, with the torrefaction of carbon from natural sources. By combining both innovations, the output is so-called bioethanol: ethanol produced with carbon of biological origin. This closes the carbon circle."

Financing innovation: from theory to practice

This sort of technological innovation is not easy or certain. A substantial investment also needs to be made for the new plants, equipment and machinery. So financing such a venture is a challenge.

CLIMATE SOLUTIONS

We are taking a technological risk, but we want to support the industry.

Under the European Commission's InnovFin Energy Demonstration Projects facility, the European Investment Bank signed a €75 million loan in May 2020 with ArcelorMittal Belgium to partially finance the construction of the new facilities. "This is an interesting, innovative scheme that's complex to implement," says Senso Figaredo Pire, the senior loan officer at the European Investment Bank who closed this complex transaction. "It contributes to the circular economy and generates green ethanol, which can be used as fuel or feedstock in multiple chemical processes."

"This financing would not be possible without the support provided by the Commission under InnovFin," Figaredo Pire adds. "We worked closely with the Commission. And now this project could constitute a significant step forward for the steel industry to make a green transition."

Implementation will start first at ArcelorMittal's site in Ghent. The technology aims to use 15% of the by-product gases to produce ethanol, instead of electricity. But ArcelorMittal's vision is to replace, progressively and completely, its internal power plants with the transformation of off-gases into ethanol – or, in the future, into other base chemical products.

The lower amount of power produced by the carbon by-product gases allows ArcelorMittal to move to power-purchase agreements with renewable energy producers, thus indirectly supporting the development of renewable power. The company plans to have five of these plants operating by 2025 across Europe and the rest of the world.

What's better than recycled carbon? Recycled green carbon

The project is economically viable because there is a large demand for ethanol, which is also easier to store and transport than electricity. Ethanol has many different applications. It can be used as fuel, when blended with gasoline. It can also be converted into ethylene, a basic component of the plastics manufacturing process, thus contributing to the circular economy.

"This investment protects existing jobs by keeping the steel industry in Europe, where we need highly-skilled people to design and operate these plants," says Marc Tonteling, an engineer at the European Investment Bank.

With the combination of two innovative processes, the company targets the production of 80 million litres of bioethanol, equivalent to the fuel used by 600 flights between New York and London. ArcelorMittal estimates the CO₂ savings to be equal to the yearly emissions of 350 000 cars.

"I liked the enthusiasm and commitment of the people in Ghent, who want to make this project work," Tonteling says. "We are taking a technological risk, but we want to support the industry, and if this is successful, it can lead to more generalised production of circular carbon products such as biocoal, recycled carbon fuels, bioethanol and many others."

SECRETS TO REVEAL

New Greek climate change infrastructure will supply data vital to the study of global warming and the prediction of natural disasters

he south-eastern Mediterranean is a natural laboratory that can help scientists observe and predict climate change globally. And yet it has been insufficiently studied so far.

To close this gap, two of the Greek government's leading research centres are constructing infrastructure and equipment to measure the air and explore the waters – from the highest layer of the atmosphere to more than 5 000 metres below the surface of the deepest part of the Mediterranean, which happens to be located in Greece.

The National Observatory of Athens is setting up the Panhellenic Geophysical Observatory of Antikythera (PANGEA) on Antikythera, a small, almost uninhabited island between Crete and the Peloponnese. "The PANGEA project is a big leap forward in measuring atmospheric parameters and building climate models for the south-eastern Mediterranean," says Professor Manolis Plionis, president of the Observatory. "The Mediterranean region is a climate change hotspot and **the data will help us understand how climate change will evolve in the coming years** and its consequences on society and the economy."

Meanwhile, the Hellenic Centre for Marine Research will construct a new oceanographic research vessel to replace a previous one that must be decommissioned after having served for 35 years. The new vessel will be able to explore continental shallow waters and the deep sea. At 70 metres in length and 16 metres wide, it will carry multi-purpose laboratories and offer spacious open decks to accommodate containers with mobile, interchangeable laboratories. This will make the vessel a versatile platform for a wider range of scientific and other missions.

"The Mediterranean is of critical importance for climate change, as it operates as a **miniature ocean** responding rapidly to climate variability. Its dark, unexplored waters still have many secrets to reveal," says Dr Aris Karageorgis, president of the Centre. "A new, solid vessel with state-of-the-art technology can help us **further explore the Mediterranean** waters and seabed and predict what can happen in the open oceans under the prism of climate change."

Greek climate change infrastructure for a global challenge

The PANGEA station will provide continuous monitoring of essential climate variables and geophysical activity and will stream real-time certified monitoring data to the scientific community. It aims to address challenges such as climate change and its impact on severe weather and natural disasters in Greece and the eastern Mediterranean, as well as monitoring seismic activity. In the south-east Mediterranean, that is important because it has been poorly monitored to date, despite intense tectonic activity.

CLIMATE SOLUTIONS

For its part, the vessel is a new piece of infrastructure in an ageing worldwide oceanographic fleet and can "heal oceanography," says Karageorgis.

On a scientific level, the projects will enable the constant collection of essential climate variables in the atmosphere and in the sea to feed into climate models. Reliable climate models can lead to better observations and more accurate forecasts on climate change. The data will help scientists understand how the climate evolves and to distinguish between natural and human-induced climate change. In the area of marine research, it will strengthen the preservation of biodiversity by observing how living organisms change, for example by studying alien species that come from tropical waters due to the rise in the temperature of the seawater.

Impact on Greek society, fighting the brain drain

For Greek society as well, there will be a positive impact. The data from the PANGEA station will assist the Greek civil protection authorities in forecasting and possibly avoiding the severe effects of natural disasters. In addition, this infrastructure will offer Greece the opportunity to raise its research profile. "In research circles Greece is often not competitive enough," says Martin Humburg, an economist at the European Investment Bank. "These projects show that Greece has excellent, forward-looking researchers. All they need is support and infrastructure to enable them to use their knowledge and skills and to compete with others."

Professor Plionis adds: "The PANGEA project will have important societal benefits, related to reversing the population decline of Antikythera and improving coastal shipping in this border area."

The European Investment Bank, the EU climate bank, signed a loan of up to €57.5 million to the Greek state in July 2020 to finance the construction and equipment of the Geophysical Observatory in Antikythera and the new oceanographic vessel. These projects have an implementation horizon of five to six years.

Financing for scientific projects is scarce, especially in the period of austerity in Greece since the financial crisis, explains Costas Kargakos, the loan officer at the European Investment Bank who worked on the deal. "The operation supports the efforts of the Greek government to promote investments in strategic research infrastructure and aims at contributing to climate change mitigation and adaptation, a top priority of the Bank and of the European Union."

The data will help us understand how climate change will evolve in the coming years and its consequences on society and the economy.

A PLAN FOR LIFE

Urban planning must adapt to the needs of citizens during a pandemic, as well as making cities greener and climate-resilient. Barcelona shows the way

arcelona is working to cut pollution, but also to create a living space that encourages young people to stay while making it easier for older people to take care of themselves. "Barcelona has a very clear strategy," says Alex Saz-Carranza, a European Investment Bank loan officer. "The city's new plan is addressing mobility, energy efficiency and social cohesion. All of these issues will help the city prepare for the future, but also come out of the COVID-19 pandemic."

The impact of climate change has been a major factor in recent years for urban planning, but the pandemic brought new challenges, especially for the health sector and dense city life. Public spaces need to allow people to socialise at a safe distance. The European Investment Bank approved a €95 million loan in 2020 to help Barcelona complete around 40 projects, with a focus on climate action and better city living.

A quarter of the loan is dedicated to regenerating nearly 200 000 square metres of land and creating "superblocks" that let residents get around, use public spaces for leisure activities and do business more easily. Pedestrians will be given priority in many parts of the city. Low-speed zones will limit vehicles to 10 km/hour. All new buildings will be designed to have nearly-zero emissions. New bus lines and bicycle lanes will persuade people to keep their cars off city roads and reduce emissions. A tree-planting programme is being accelerated. The result: a city that is more resilient to climate change, while helping people follow social distancing guidelines.

No traffic zones

Over the past eight years, the Bank has invested more than €150 billion to build better cities. The Barcelona project is similar to a €201 million financing deal, also struck in 2020, to help Milan boost the energy-efficiency of its buildings, make it easier for city residents to walk around and use public transport, create more green open spaces and help the economy recover from the pandemic.

Barcelona's climate plan calls for a big reduction in greenhouse gas emissions, water consumption and poverty. The city plans to become carbon-neutral by 2050. "Barcelona residents are quite proactive and have a long track record of participation," says Leonor Berriochoa, a senior engineer in urban development at the European Investment Bank. "There is a lot of public engagement on climate and social issues. People like to contribute and give their opinions and make cities livelier."

CLIMATE SOLUTIONS

GREEN DEAL IN MOTION

In Poland, renewable energy gets a boost as a change in legislation attracts international investors – and paves the way for the green transition

long a 50 km stretch of the Baltic coast in Poland, 29 wind turbines are under construction. Their tall, white towers overlook picturesque hillsides populated by moose, deer and rabbits. When they are completed, they will supply enough clean electricity to power 138 000 Polish homes. "I'm very proud of the way our wind farm shows that nature and electricity generation can exist side by side," says Diana Kazakevic, head of the Poland region for Ignitis Group, the Lithuanian energy company listed in Vilnius and London that is building the wind farm. "In Poland, electricity has so often not been good for nature."

The Ignitis wind farms in Pomerania are part of a new move towards clean power in Poland, a country that still obtains almost all its energy from polluting coal. **The European Investment Bank signed three Polish wind farm loans in 2020 and a solar power deal, too.** "Poland is under some pressure, because of climate change," says Roland Schulze, managerial advisor for low-carbon energy technologies at the Bank. "The European Investment Bank is at the forefront in helping Poland transform its energy sector."

Renewable energy became a more attractive investment in Poland two years ago, when the government changed the legislation for energy contracts. Under the new law, companies make their bid based on the price at which they propose to sell electricity. If the market price drops, they are still guaranteed their bid price. If it goes higher, they pay the difference to the government.

New Poland renewable energy deals

The Ignitis project was one of the first deals to be concluded under the new law. Financing from the European Investment Bank, which loaned almost €60 million to the project, showed "that we have partners with a green sustainability agenda," Ignitis's Kazakevic says. Like others of the EIB's four Polish renewables deals in 2020, the loan is backed by the guarantee of the European Fund for Strategic Investments.

The emerging trend in Poland could be crucial for the European Green Deal. The European Commission's plan to combat climate change, announced in 2020, commits to making Europe a net-zero emitter of greenhouse gases by 2050. But the Green Deal also aims to ensure that regions currently dependent on fossil fuels should not be left behind by the transition to clean technology. That is important for Poland, with its big coal industry.

"We are witnessing the Green Deal in motion," says Vincent Metzler, EIB project finance expert. "This sector requires a lot of infrastructure – and that's good for jobs. For a just transition, it makes total sense."

THE GLOBAL VIEW

Putting people, human rights and social inclusion at the centre of development efforts maximises opportunities and benefits for all. Well-targeted investment can assist the green transition and contribute to social development, so the EIB invests in projects that support an inclusive approach to the low-carbon transition and increase resilience for the communities most affected by climate change in the European Union and beyond. By considering, respecting and promoting a wide range of human rights, including those of indigenous peoples, local communities, migrants, women and children, through its environmental and social standards and relevant policies, the EIB will continue to ensure the effectiveness, impact and sustainability of its operations.

Yasmine Pagni, Head of Social Policy, Projects Directorate

The global microfinance sector has been severely affected by the economic impact of the COVID-19 pandemic. To protect microenterprises, many national regulators instructed microfinance institutions (MFIs) to postpone all outstanding repayments from clients, which resulted in deteriorating loan portfolios and liquidity constraints due to missing cash flows. The EIB's continuous support of MFIs through long-term funding is particularly important in this situation. After the COVID-19 crisis, the level of funding needed to support the recovery of economies typically based on micro and small enterprises might be even greater than before.

Milena Messori, Head of non-EU equity and microfinance, Operations directorate

In Tunisia, as in other partner countries, the EIB has responded quickly to the COVID-19 crisis by financing the purchase of medical equipment and introducing flexibility on the conditions of our existing loans. We reallocated part of our ongoing loan for school rehabilitation to buy protective equipment for teachers and pupils across the country. We have also continued our efforts to improve the daily life of Tunisian people by financing much-needed water infrastructure and an urban mobility project in the Greater Tunis area, where a quarter of Tunisians live.

Jean-Luc Revéreault, Head of EIB Tunis office, Secretariat-General

There is a saying in Africa: "If you want to go fast, go alone. If you want to go far, go together." The EIB has worked hard to build partnerships – with the EU Member States, their development institutions and international financial institutions, governments and private companies across the globe. All these partnerships come together in the face of COVID-19 with our natural partner, the European Commission, in Team Europe. Even now, however, we must remember existing challenges that are exacerbated by the crisis: climate change, gender and other inequalities, unemployment, especially among young people. These must remain central to our thinking, and we need to explore ways to do more, to be more innovative in our approach.

Catherine Collin, Head of Regional Office for East Africa, Nairobi, Secretariat-General

The EIB has supported private sector solar photovoltaic plants in Senegal, Zambia and Mexico and wind farms in Mongolia, Kenya and Jordan. As the EU climate bank, we will continue to further the deployment of clean and affordable energy across emerging markets. Private sector renewable energy projects are commonly financed on a limited recourse, project finance basis, and since 2015 they have represented over 90% of total EIB project finance lending beyond the European Union.

Paloma Perez de Vega, Head of Project Finance for Global Partners and Neighbouring Countries, Operations Directorate

The COVID-19 pandemic knows no borders and its unprecedented economic and social impact is felt throughout the world. Our enlargement and neighbourhood partners are severely affected. As the EU bank, the EIB has a special role in helping our neighbours respond to the widespread effects of the pandemic. From the onset of the current crisis, in close cooperation with the European Commission and as part of the Team Europe initiative, we have contributed to the reinforcement of health systems and supported business communities and the upgrading of essential infrastructure.

Flavia Palanza, Director, Neighbouring Countries, Operations Directorate

Every crisis is also an opportunity. The COVID-19 pandemic and its constraints on travel have shown us the immense value of our growing external action teams in close to 30 offices on five continents around the globe. We deliver efficiently and effectively on the ground, despite the current challenges.

Ulrich H. Brunnhuber, Head of External Action Representation, Secretariat-General

FAST RELIEF

For the Moroccan health system, COVID-19 is a severe challenge. Swift financial action from the EIB helps fight the crisis – and train medical staff to improve quality of life across the country

eds are filling up with COVID-19 patients at the Centre Hospitalier Universitaire (CHU) Ibn Rochd in Casablanca. Professor Kamal Marhoum El Filali, head of the hospital's infectious disease service, says the hospital "is managing" the influx. But if admissions keep rising, he says, the hospital could quickly run out of intensive care and resuscitation beds. "We're in greater and greater difficulty," Dr Marhoum says.

Morocco acted decisively to contain the pandemic in the spring, putting the entire country in lockdown and cutting off tourism and other travel. But like many nations, Morocco faced a second, tidal wave of infections. The country was recording around 5 000 cases a day in mid-November, with around 80 deaths. By that time over 320 000 people in the country of 37 million had contracted the virus and around 5 000 had died. The health system was creaking under the weight.

The urgency and pressure were enormous, as I knew that we were literally saving lives. Time was of the essence.

CHU only takes patients with severe cases of COVID-19 – those requiring intensive care or resuscitation – and its own employees who have been infected with the virus. One of the hospital's biggest problems, Dr Marhoum says, is managing the increasing number of hospital workers who have fallen ill or been exposed to the virus and who need to self-isolate for up to 14 days. "We're already short-staffed," he says. "It's an enormous organisational problem."

Staring down a pandemic

When Morocco locked down in the spring, the country had only recorded 77 coronavirus cases. The government, however, had watched the virus decimate parts of Spain, and officials knew that the country's health system

lacked the resources to fend off a similar onslaught. "If we had reached the same level as Europe, we would have been overwhelmed," Dr Marhoum says.

The drastic measures enabled Morocco to keep the number of deaths low. The fatality rate – the number of deaths to total infections – in the first wave was one of the lowest in the world. As in other parts of Africa, the low death rate is attributed to Morocco's young population.

Lockdowns also bought the government precious time to set up testing facilities, websites and hotlines to communicate with the public. The government worked with global bodies like the World Health Organization to hone its pandemic response and raised urgently needed funds from international lenders, including the European Investment Bank, which is providing a €200 million loan for medical supplies, training and other measures to reinforce the health system. These efforts spared the country's fragile health system and its 9 200 public-sector doctors from severe stress.

Constant contact

The Morocco lockdown came just one week after Hervé Guenassia, a senior EIB loan officer and country lead for Morocco, returned to Luxembourg from Casablanca. He kept in constant contact with Moroccan authorities as the pandemic unfolded and the Bank responded quickly to a request for help in March. The €200 million EIB loan pays for medical devices, supplies and equipment. The flexible loan terms allow Morocco to use the money for any COVID-19-related health purchases made since 1 February 2020, and enable officials to provide proof of purchases retroactively. The loan can also pay for up to 90% of the project cost, far above the normal limit of 50%.

The money reached Morocco in record time, with €100 million disbursed in just one month. "The urgency and pressure were enormous, as I knew that we were literally saving lives," Guenassia says. "Time was of the essence."

Guenassia used the Morocco loan as a springboard to set up an overarching facility – the Neighbouring Countries COVID-19 Public Health Care Programme Loan – to help EU neighbours in Eastern Europe, the Middle East and North Africa to weather the crisis. The EIB board approved the new programme loan swiftly within a month. The loan is made possible by Team Europe, a €36 billion initiative to help EU partner countries deal with the pandemic by combining resources from the European Commission, Member States, the European Investment Bank and the European Bank for Reconstruction and Development.

Tapping international support

Morocco is one of the African countries most affected by the coronavirus. Anna Barone, head of the EIB Representation in Morocco, says the pandemic exposed huge gaps in the country's healthcare system: inadequate hospital infrastructure, a lack of trained medical personnel and large disparities in healthcare coverage. At the beginning of the crisis, Morocco had one of the lowest numbers of hospital beds per population in the region with just 1.1 beds for 1 000 people. Total public spending on healthcare is also low for the region, at about \$160 per person each year, she says.

While the lack of infrastructure remains a daunting challenge, in the short term Morocco has managed to respond effectively to the crisis, successfully tapping the international community for money and expertise. The country has doubled the number of hospital beds to about 3 000. Testing centres were set up and new ones are opening every day. Loans from the EIB and other lenders have helped pay for much-needed medical supplies, equipment and treatments.

Putting together the legions of qualified medical staff needed to fight the pandemic has been a bigger challenge, however. Qualified medical professions are particularly scarce in rural areas, which may have limited infrastructure and daunting geographical barriers, like mountains or the desert. "They can have all the money in the world, but if they don't have the staff to distribute the masks and do the lab tests, it will be complicated," says Dana Burduja, a senior EIB health economist, who is working on the Morocco project.

Morocco has about one-third the number of doctors per 1 000 inhabitants that neighbouring Tunisia has (0.54 per 1 000). Part of the EIB loan will be used for "soft" investments, such as educating clinicians and doctors and providing training for medical and administrative staff at hospitals.

Bumpy road to universal care

Morocco embarked on a plan to introduce universal healthcare in 2002. While the road has been long and arduous, it has yielded results. Life expectancy in Morocco is high, and key indicators have steadily improved. Infant mortality, for example, was cut in half from 42 deaths per 1 000 live births in 2000 to 20 in 2017.

The most recent drive to expand health coverage takes the form of a five-year strategy, from 2017 to 2021, that calls for improving hospital resources, extending medical coverage to the self-employed or those in regulated professions, increasing the number of health-sector employees and standardising the education received by medical students in Morocco.

The government has put hard cash behind its plans. Government spending on health rose 10% in nominal terms in 2019, while overall investment in healthcare, in the public and private sector, increased by 40%, according to Oxford Business Group.

The reality, however, is that healthcare, particularly primary care, remains elusive for many Moroccans. While United Nations Sustainability Development Goal 3 calls for universal access to at least basic healthcare, many Moroccans don't have access, either because they live in rural areas or because they aren't covered by RAMED, the public insurance system.

"Basically, even if on paper the poor and vulnerable have the right to have access free of charge," Barone says, "those services face a lot of shortages in terms of structure, staff and quality."

The crisis as an opportunity for reform

Barone says that the groundswell of international support Morocco received during the pandemic could provide the momentum needed to tackle the remaining aspects to improve access to healthcare. "We need to take advantage of the urgency of the crisis to implement reforms that typically take much longer," she says.

The European Investment Bank has a role to play there, too. Barone says that the Bank can help increase cooperation between the different agencies involved in Moroccan healthcare, providing expertise and technical support. The EU bank can also help renovate and build more hospitals, particularly in rural areas.

The European Union and Morocco are working on a new cooperation agenda for 2021-2027, which could also provide new momentum for reforms. "It could be a huge opportunity to set priorities to relaunch the economy and support society," Barone says, "making improved healthcare a central pillar of the country's recovery."

We need to take advantage of the urgency of the crisis to implement reforms that typically take much longer.

SAVING YOUNGSTERS' DREAMS

Education can suffer during lockdowns. But Morocco and Tunisia moved fast to get students what they need to keep learning

hen the pandemic forced Moroccan schools to close in March, the Euromed University of Fez worked hard to offer students online classes. But remote learning was not easy for many students like Wafa Harir, who lives about 100 kilometres south of Fez. "The connection was slow and unstable, sites were crashing," says Harir, a student in digital engineering and artificial intelligence. Worse, the mobile data required to join the online classes is expensive.

Harir and more than 400 other students at the university did not have their own laptop or reliable internet access. The university made a special request for assistance, because the EIB had already financed its construction with the European Union. The European Investment Bank and the EU Delegation in Morocco donated €500 000 from the European Commission to help students work from home. "The COVID-19 pandemic plunged students' dreams into uncertainty," says Didier Bosman, a senior EIB engineer. "Our goal was not to bring things back to normal, but to offer deserving students a new normal in which to learn and thrive."

A few weeks after the EU donation, 420 laptops offering unlimited internet access were delivered to students who did not have computers and who lived in remote and poorly connected areas.

This operation targeted girls who needed a computer and internet access. Nouhayla Chahm, 21, is in her fourth year of civil engineering. "I'm grateful to my university and to the European Union for giving me the courage and the energy to keep going," she says. Because Chahm has top grades, she can keep her laptop for three years. The grant also helped buy 3D printers to make reusable masks and disposable filters for students and staff.

Out of trouble in Tunisia

The International School in Tunis is undergoing improvements under a plan to modernise a third of all secondary schools. The €220 million project is being financed by the Tunisian government, the EIB, Germany's KfW and an EU grant. But when students were preparing for final exams, Tunisia's Ministry of Education called urgently for help because it lacked sanitary supplies, such as masks and hand sanitiser, to keep them safe.

The EIB's Bosman stepped in once more. He knew that the Bank's loan agreement for the school improvement project had ended up with an unexpected €8 million surplus, because the Tunisian dinar had depreciated. He proposed that the Bank use part of this surplus to provide urgent sanitary equipment in Tunisia's schools. In only a week, 750 000 facemasks and 102 500 litres of hand sanitiser were ordered for 240 000 students, 160 000 teachers and staff.

VACCINE SOLIDARITY

A ground-breaking global initiative to ease the health and economic impact of the pandemic means that poor countries will get access to a COVID-19 vaccine in Africa

o one is safe until everyone is safe, because infectious diseases do not respect borders. To protect everyone, all countries, rich and poor, must have access to a COVID-19 vaccine.

That is the mission of the ground-breaking COVAX global initiative - jointly led by Gavi, the Vaccine Alliance, the World Health Organization and the Coalition for Epidemic Preparedness Innovations. Supported by the European Investment Bank and the European Commission, COVAX aims to ensure equitable access to a COVID-19 vaccine across all economies.

While we saw barriers going up around Europe to prevent the spread of infection, there was also a willingness to contribute to ensuring equitable access to vaccines.

"A fair and equitable distribution of the successful COVID-19 vaccines is key to tackling the pandemic and alleviating a dire situation in developing countries," says Raffaele Cordiner, the European Investment Bank investment officer working on the project. "The joint effort of the European Investment Bank and the European Commission as Team Europe highlights the importance of the multilateral approach to solving global health issues. Europe has put together an innovative financial instrument that shows the kind of solidarity with our fellow humans that's needed at this dangerous moment."

The EIB is investing €400 million in COVAX Advanced Market Commitment, the innovative financing instrument that will support the participation of 92 low- and middle-income countries in the COVAX Facility. This instrument provides these countries with access to donor-funded doses of safe and effective COVID-19 vaccines. Combined with additional support for country readiness and delivery led by Gavi and its Alliance partners, the World Health Organization and the UN Children's

Fund, UNICEF, COVAX will make sure the most vulnerable in all countries can be protected in the short term, regardless of income.

As well as its guarantee of fair access for every country, COVAX aims to accelerate the development and manufacture of COVID-19 vaccines. It provides support for the deployment of vaccination campaigns, including the temperature-controlled supply chain required for an effective distribution of the vaccines.

Solidarity mission

Nearly 100 self-financing participating economies make a financial contribution to COVAX and pool resources for vaccine development and purchase. Meanwhile, 92 low- and middle-income economies have their participation in the model financially supported by donor contributions.

This crisis is unprecedented in terms of the global and synchronised nature of the impact.

These include countries in sub-Saharan Africa and the EU's Southern Neighbourhood, where vaccines would otherwise be unaffordable. "This particularly stood out as a solidarity mission," says Anna Lynch, a life sciences specialist at the European Investment Bank, who worked on the COVAX deal. "While we saw barriers going up around Europe to prevent the spread of infection, there was also a willingness to contribute to ensuring equitable access to vaccines."

Half of low-income countries and a quarter of middle-income countries face a high risk of serious economic impact due to COVID-19. The World Health Organization estimates 132 million could be added to the world's total of hungry people because of the impact of the pandemic.

"This crisis is unprecedented in terms of the global and synchronised nature of the impact," says Debora Revoltella, Director of the EIB's Economics Department. "Nearly all countries and regions of the world are affected. For all or most of these countries, it is one of the most severe blows to growth on record."

Equal access to vaccines for rich and poor

A vaccine is one of the best tools to overcome the impact of the pandemic on health and the economy.

COVAX is funding the development of a range of potential vaccines. It is supporting the manufacture of vaccines at scale and negotiating vaccine prices with manufacturers. COVAX's investments enable manufacturers to expand manufacturing capacity immediately, producing the vaccine even while it is being evaluated in clinical trials and before it has a licence. If the vaccine is successful, those doses will be available right away.

COVAX's aim is to ensure that all countries can access doses of a safe and effective vaccine on roughly the same accelerated timeline. That is essential to bring the pandemic under control and reduce its impact on economies, communities, individuals, trade, and travel.

In the acute phase of the pandemic, COVAX's focus will be on securing sufficient supply and resources to provide all economies with vaccines to protect the most at-risk—health and social care workers, the elderly and those with underlying health conditions. Vaccines will be allocated equally between self-financing and Advanced Market Commitment-eligible economies, based on the WHO's Fair Allocation Framework.

Strength in unity

The European Investment Bank's services worked "as fast as humanly possible" to structure and sign the COVAX deal, says the Bank's Raffaele Cordiner. "There was remarkable cooperation and speed, so that we can end the acute phase of the pandemic and rebuild economies."

The European Investment Bank's loan is backed by a guarantee from the European Commission under the European Fund for Sustainable Development, which promotes a pro-active development aid policy and primarily supports investments in the EU neighbourhood and Africa. This is in addition to €100 million in European Union support for COVAX.

This global approach to vaccination will enable social and economic recovery and reduce the chance of a resurgence of the disease. COVAX shows that there is truly strength in unity.

Europe has put together an innovative financial instrument that shows the kind of solidarity with our fellow humans that's needed at this dangerous moment in time.

THE OTHER INFECTIOUS THREAT

A biomedical firm working on a new tuberculosis vaccine says it is critical for the developing world

uberculosis has been a global emergency for the past 30 years. An estimated one-fourth of the world's population has the disease. It is a big problem in developing countries, where poverty and government instability hamper programmes that can control it. But most of the biotechnology sector is ignoring it.

Not Leander Grode. "I'm working on the number one single killer—and, therefore, the most dangerous infectious disease—in the world," he says.

There is a big need for safer and more effective tuberculosis vaccines. The main vaccine used today, BCG, is about 100 years old. The European Investment Bank signed a €30 million loan in August with Grode's Vakzine Projeckt Management, also known as VPM, to finance late-stage research on VPM1002, the company's new vaccine designed to prevent tuberculosis in babies.

There is a real financing gap for clinical research in infectious diseases.

Critical for Africa and HIV

Many people who take the BCG vaccine still end up catching tuberculosis. VPM hopes its new drug offers more protection. The EIB's loan is part of a larger deal that may include €15 million to support a medicine for HIV, the virus that causes AIDS. In Africa, tuberculosis is the most common illness among people who have contracted HIV. "We can't stop fighting diseases like tuberculosis," says Raffaele Cordiner, a loan officer at the European Investment Bank who worked on the VPM financing. "We hope to be in the COVID-19 transition phase soon, but tuberculosis has been around for at least the last 200 000 years."

Tuberculosis and COVID-19 spread in similar ways from one person to another through tiny droplets released into the air by coughs and sneezes. Like the coronavirus, tuberculosis causes major problems in the lungs if untreated, but it also attacks the brain, kidneys and spine.

If people think the coronavirus is insidiously smart, they should see how tuberculosis operates, says Sina Brückner, a project manager working on VPM's new vaccine. "Tuberculosis is a very smart disease, very much adapted to humans," she says. "It is very difficult to fight and can cause many health problems. People starve, they get very thin, they can't eat. Compared to the coronavirus, fighting tuberculosis is much more complicated. It's a completely different level."

More tuberculosis vaccine funding for developing world

Funding is one of the biggest hurdles to new tuberculosis vaccines. This type of vaccine mainly helps developing countries, so it is not a big money-maker for pharmaceutical companies, unlike cancer treatments, which have higher financial returns.

Cordiner, the EIB loan officer, says there is a significant need for financing agreements from the European Commission or from European Union countries to help companies like VPM. Special mandate arrangements can give the EU bank more tools and more funding to back riskier research or unproven technologies. The EIB loan for the tuberculosis vaccine is backed by the Impact Financing Envelope, which is supported by EU member states and is used for development projects in poorer parts of Africa. The loan is a venture capital agreement that will be repaid based on the trials and market performance of the medicine. If the medicine doesn't work out, the loan can be written off.

Affordable medicine and mass vaccination

"It's really important that we finance projects like this," says Anna Lynch, a life sciences specialist at the Bank. "There is a real financing gap for clinical research in infectious diseases, and investments for high-threat pathogens are too often reactive. We hope that future funding can be actively guided by the global disease burden."

Vakzine Projekt Management is a subsidiary of the Serum Institute of India, the largest vaccine maker in the world. The company was founded by Cyrus Poonawalla, who has said his goals are to make medicine affordable for the developing world and to vaccinate as many people as possible.

"The Serum Institute is quite an incredible organisation," says Cristina Niculescu, another life sciences specialist at the European Investment Bank. "They really are driven by a philanthropic philosophy of affordable vaccines."

VPM's new medicine will be targeted primarily at sub-Saharan African countries that have high numbers of tuberculosis cases. The clinical trials will take place in Uganda, Gabon, Kenya, Tanzania and Lesotho.

Grode, VPM's managing director, says the future finally looks brighter for vaccine research into tuberculosis and other infectious diseases, and this is partly because of the coronavirus.

"COVID changed the story," he says. "People are realizing that we can't afford anymore to wait for the diseases and then try to treat people with new medication. The future of the world lies in better vaccinations."

The future of the world lies in better vaccinations.

GEORGIAN CHEESE WITH A TASTE OF SWITZERLAND

Georgian farmers train with a Swiss agricultural school thanks to an EU-backed loan

griculture is a big part of the Georgian national identity. Half of the country's territory is agricultural land and about the same percentage of the labour force works in the sector, almost all self-employed on small farms. But productivity is low and farmers often face poverty. To strengthen agriculture and increase know-how, a vocational school is opening in Sarkineti, a village high in the mountains near Dmanisi, 120 km from the capital, Tbilisi. It is a collaboration with a historic Swiss agricultural school. "Natural conditions in Dmanisi are similar to those in Switzerland," says Tinatin Makharadze, director of the school. "The region is vulnerable, so this project will revive life and create additional opportunities for income."

The Swiss Agricultural School Caucasus will offer short and long-term courses in cattle breeding and dairy production, in collaboration with Switzerland's Plantahof. A non-profit, private initiative, it will operate its own cheese factory and dairy farm, and will be financed through a loan from Bank of Georgia, alongside grants from Swiss and Georgian partners, the Swiss Agency for Development and Cooperation and the United Nations Development Programme.

Strengthening cooperation with a valued EU neighbour

The EIB signed a loan of €50 million with Bank of Georgia for small and medium-sized enterprises and mid-caps, which was partially disbursed in 2020. In December, the Bank signed an additional €25 million loan as part of its Team Europe COVID-19 emergency measures. In turn, Bank of Georgia lends the money to local entities, including the Swiss Agricultural School Caucasus. This was the first loan from the EU bank to Bank of Georgia that was partially made available in local currency, eliminating exchange rate exposure for the final beneficiary. "The loan from the European Investment Bank has an immediate short- and long-term effect on the market," says Levan Kobiashvili, Head of the Funding Unit at Bank of Georgia. "It allowed us to transfer the benefit to our SME clients, who are an important part of our portfolio."

The ElB's attractive financing in local currency was possible due to grants from the European Commission under the Deep and Comprehensive Free Trade Area Initiative East. "In Georgia, SMEs are a key part of the economy," says Andreas Berkhoff, the ElB loan officer who worked on the deal. "We demonstrate that SMEs benefit from the cooperation between Georgia and the EU. To back them, we work hand in hand with the EU Delegation and the Commission under the Eastern Partnership framework." EU support for SMEs in Eastern Partnership countries comes under the EU4Business initiative. The European Investment Bank Group is a core partner of the initiative.

DIGITAL KIDS

Digital education transforms Serbian schools to make the country more economically resilient – and to tackle future pandemics like COVID-19

he pandemic's impact on education has been enormous, with school and university closures affecting more than 90% of the global student population in 194 countries. Governments had to react quickly and set up remote learning. Many adopted online learning programmes. Where that wasn't possible, they turned to television, or even radio.

But the crisis exposed the digital divide between and within countries. It has made clear the global need for the digital transformation of the education sector. The European Investment Bank is part of that transformation.

In Serbia, with the help of the Bank, all schools will go digital by 2021. Digitalisation and education reform are the top two priorities of the Serbian government. The European Investment Bank backed a €65 million loan to upgrade digital infrastructure and digital teaching materials, as well as teacher training (with UNICEF support). Because it is such an important project, the Bank is financing almost 60% of the total €111 million cost. An additional €4 million will support technical assistance and advisory work in 2021.

"The COVID-19 pandemic and the social restrictions it imposed caused severe disruption in educational systems and processes," says Isabelle Stoffel, the senior EIB loan officer who worked on the deal. "These unprecedented circumstances showed that better digital infrastructure improves schools' efficiency in the event of emergencies. Besides increasing resilience to future crises, this investment will create conditions for youth employability, higher competitiveness and growth of innovation in the country."

When Serbia went into lockdown in March, teaching moved from classrooms to television sets. The Ministry of Education, Science and Technological Development began broadcasting educational content for elementary and high school students on Serbia's national public television channels. Like many other countries, Serbia had to think on its feet and adapt to the "new normal" by producing specialised content for multiple grades.

However, Serbia had already been preparing its digital education content for the last few years. "Even before this project, the government had prepared online learning content for four elementary school grades, which proved to be extremely useful during the lockdown," says Milan Dobrijević, who heads the digital agenda department within the Ministry of Trade, Tourism and Telecommunications, and who has been working on the project since its inception.

Since the project includes the improvement of digital infrastructure *and* teaching materials in schools, both the local telecommunications and education ministries are implementing it. "By the end of next year, more than 1 800 larger schools will be fully covered by high-speed wireless internet access, while the remaining remote schools will be connected using mobile broadband units," says Dobrijević.

This is a crucial step in Serbia's plan to become a digital economy.

From hardware to software

"Besides improving digital infrastructure, the project entails nationwide teacher training," says Nihan Koseleci Blanchy, the European Investment Bank's education economist. "In addition, the Serbian Ministry of Education is at the same time developing interactive online teaching materials and textbooks."

In total, around 50 000 teachers all over the country will get a chance to improve their digital skills through this training. "This is a crucial step in Serbia's plan to become a digital economy," Koseleci Blanchy says.

Serbia has recognised the role education plays in digitalisation. According to Eurostat, the level of individual digital skills in Serbia has increased to 46% in 2019 from 32% in 2015. In 2018, there were 2 000 digitally-equipped classrooms across Serbia. A year later, the number was at over 10 000. And starting from this school year, computer science will become compulsory for first graders, while programming will be introduced in the third grade. "All of these programmes will help make the Serbian education system more resilient, which in turn will ensure the development of skills that nurture new ideas and technologies," Koseleci Blanchy explains.

They did their homework

In Croatia, schoolchildren also reaped the benefits of good digital planning. The country started a school digitalisation programme several years ago with the aim of providing high-quality education that takes advantage of the latest digital tools in teaching and learning. The plan included new offerings of online content, software, training for teachers and school staff, and the installation of new equipment.

This countrywide digitalisation programme started with a pilot project from 2015 to 2018, covering over 150 schools, or 10% of the schools in the country. The second phase, which ended in 2019, covered the remaining schools. The whole programme helped students in more than 1 300 schools become more comfortable with working and learning online.

The initiative's preparation was aided by JASPERS (Joint Assistance to Support Projects in European Regions) and is backed by the European Commission and the EIB. JASPERS helps regions and cities improve the way they use EU funds. JASPERS helped Croatia prepare the whole programme, including giving advice on how the integration of information technology into the education system helps children, encourages lifelong learning and benefits the country's economy and social development.

When the lockdowns started in 2020, the digitalisation programme and other education measures already in place helped smooth the transition to home schooling in Croatia. Primary and secondary students were able to continue their education online without interruption when schools closed in mid-March.

WHERE THE MONEY COMES FROM



The European Investment Bank, the world's largest multilateral borrower and lender, raised €70 billion on the international capital markets in 2020. The Bank's issuance reaches investors who might not typically invest in Europe and who contribute indirectly to European projects by investing in EIB bonds.

he Bank issued bonds in 19 currencies, with the majority raised in the core currencies of European euros, US dollars and British pounds. Diversified sources and tenors give flexibility to the Bank's funding strategy. The multi-currency approach also enables the EIB to access some local currencies for disbursements.

THE EIB IN THE MARKETS

The pandemic has put a heavy strain on public health and the economy – as well as the way financial markets and institutions operate. In March, when the EIB issued the first supranational benchmark bond since the outbreak of the pandemic, the Bank's activity gave direction to the market. We aimed to show flexibility in adapting to challenging and changing circumstances, while at the same time focusing attention on the EIB's rapid response to areas where support was immediately needed, **says Eila Kreivi, EIB Director of Capital Markets.**

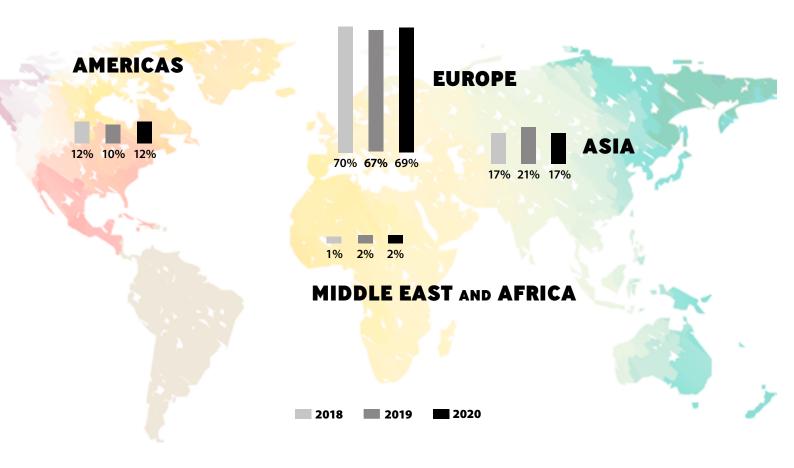
Through more than a half year of transactions carried out by staff working from home, the Bank, the lead managers and the investors involved in our deals illustrated a commitment to working together remotely, under uncertain market conditions.

The size of the EIB's funding programme has not been materially impacted by the pandemic response packages as our main response was in instruments with guarantees attached.

ISSUANCE BY CURRENCY

EUR

47.14%



One positive aspect of this year was the boost to financing for social objectives. With a jump in social bond volumes in particular, we can truly say that the social side of finance has taken huge strides. It is no longer far behind green finance.

The EIB played its part there too. As early as April, the EIB extended eligibility for its Sustainability Awareness Bonds (SABs), drawing attention to the Bank's emergency measures in healthcare. First launched in 2018 with an initial focus on water projects, the SAB framework was extended to the health sector in late 2019. These bonds build on the expertise acquired with Climate Awareness Bonds (CABs), a green bond framework pioneered by the EIB in 2007. SAB eligibility reflects the wide range of EIB financing to fight the pandemic and its consequences, across a broad national and international health or economic emergency response, as well as future preparedness plans.

We integrated technical screening criteria aligned with the EU Sustainability Taxonomy. To date, this has been most relevant for our CAB eligibility, which has been expanded in line with the EU Taxonomy beyond energy efficiency and renewable energy into two additional areas of climate change mitigation: research, development and deployment of innovative low-carbon technologies; and electric rail infrastructure and rolling stock, and electric buses.

USD	GBP	OTHERS
32.27%	10.56%	10.03%

GROUP OPERATIONAL PLAN HIGHLIGHTS

uge uncertainty surrounds the global pandemic. The crisis sent shockwaves through the economy and dramatically altered the EIB Group's operations. Nevertheless, **the European Investment Bank Group is committed to increasing support for the recovery.**

We will increase financing for the climate and environment. The new Climate Bank Roadmap outlines how we will meet our goals from 2021 to 2025. Combating climate change is one of the most important challenges of our time.

We will keep promoting cohesion among European Union countries. There are still many structural differences between Member States and this has become especially clear during the COVID-19 crisis, which is hitting some regions more severely than others. We are committed to the European Commission's Just Transition Mechanism. In helping regions that depend heavily on fossil fuels, we will ensure that people are not left behind when industries change and jobs are lost.

The EIB Group will back the technological transformation of companies, spurring innovation, making companies more efficient and improving services. We will help companies accelerate their digitalisation to increase resilience and productivity. There is a significant lack of investment in innovation and digitalisation in Europe, and this is hurting economic growth and the European Union's global competitiveness.

We will work hard to implement EU mandates in the new Multiannual Financial Framework and work with Member States and the European Commission to support the Next Generation EU plan for economic recovery. This will support the post-crisis recovery and provide a solid foundation for sustainable long-term growth based on the European Union's priorities of climate action, digital technology and cohesion.

The amount of financing outside the European Union will remain similar to recent years. We will focus on the COVID-19 crisis, small businesses and other investments that spur economic recovery and combat climate change. We will support more projects that help developing countries meet rising healthcare needs and make economies stronger to withstand new crises.

The European Investment Fund's activities will increase significantly in 2021, primarily because of its key role in the European Guarantee Fund and other responses to fight the COVID-19 crisis. The EIF will take responsibility for the EIB's Climate and Infrastructure Funds in 2021.

The new European Guarantee Fund's activities are over and above the financing presented in our Operational Plan. This new fund will help provide extra assistance to businesses of all sizes, address healthcare needs and aid medical research.

Group governance will be strengthened with a new risk and compliance programme overseen by Roman Escolano, who was named Group Chief Risk Officer in 2020. The EIB Group Audit Committee has also been strengthened. Group governance covers the rules and processes used to manage the Bank.

The EIB Group will use the lessons learned from the crisis to examine how we can find new ways to work and fulfil our tasks. Many employees are teleworking during the pandemic.

Read the full Operational Plan for 2021 at www.eib.org/en/publications

GOVERNANCE

The EIB is an EU body, accountable to the Member States, and a bank following applicable best banking practice in decision-making, management and controls.

At the start of 2020, **the Board of Governors** was made up of government ministers, usually Ministers of Finance, from each of the then 28 Member States. (With the departure of the United Kingdom from the European Union on 1 February 2020, that number fell to 27.) The Governors set out the Bank's credit policy guidelines and once a year approve the annual accounts. They decide on capital increases and the Bank's participation in financing operations outside the European Union. They also appoint the Board of Directors, the Management Committee and the Audit Committee. The EIB's Governors unanimously agreed in 2019 that the departure of the United Kingdom from the European Union would not have any impact on the EIB's strong subscribed capital base. The EIB capital subscribed by Poland and Romania increased on 1 March 2020, providing the EIB with a higher capital base than before Brexit.

The Board of Directors takes decisions on loans, borrowing programmes and other financing matters. It meets ten times a year to ensure that the Bank runs in accordance with EU Treaties, the Bank's own Statute, and general directives laid down by the Board of Governors. As of 1 February 2020, there are now 28 directors, one nominated by each Member State and one by the European Commission. There are also 31 alternate directors. To broaden the Board of Directors' professional expertise, six experts may be co-opted to participate in Board meetings as non-voting advisers. Decisions are taken by a majority representing at least 50% of the capital subscribed by the Member States and one-third of the Board members entitled to vote, unless otherwise provided for in the Statute. The Board is chaired by the President, in a non-voting capacity.

The Management Committee is the Bank's resident decision-making body. It oversees the day-to-day running of the Bank, prepares decisions for the Board of Directors and ensures that these are implemented. It meets once a week. The Management Committee works under the authority of the President and the supervision of the Board of Directors. The other eight members are the ElB's Vice-Presidents. Members are appointed for a renewable period of up to six years and are responsible solely to the Bank.

The Bank has an independent **Audit Committee** answerable directly to the Board of Governors. It is responsible for the audit of the Bank's accounts and for verifying that the activities of the Bank conform to best banking practice. The statement of the Audit Committee is submitted to the Board of Governors with the annual report of the Board of Directors. The Audit Committee is composed of six members appointed for a non-renewable term of six consecutive financial years.

WHAT'S NEXT?

WHAT KEY EIB STAFF EXPECT TO SEE IN THEIR SECTORS OR MARKETS IN 2021.

Sustainable investment is the only productive investment in our economy. The EIB has responded to the pandemic not only with financial resources, but also with a firm commitment to their sustainable use. Accountability is a pillar and the Bank intends to track its green finance in line with the EU Taxonomy Regulation, the framework established by the European Union in 2020 to facilitate sustainable investment. We reflect this ongoing process in the capital markets through the issuance of Climate and Sustainability Awareness Bonds, whose allocations are exclusively to investments of green or social significance. In 2020, the issuance volume of these bonds has grown to more than €10 billion, or 15% of the Bank's total funding programme, versus 7% in 2019. Eligibility should be extended to include biodiversity and social and affordable housing in 2021.

Aldo Romani, Head of Sustainability Funding, Finance Directorate

A cornerstone of a healthy society, water and wastewater services have weathered the pandemic. The Bank was able to help clients facing short-term difficulties due to lockdowns and trade disruptions, and activity in this sector even grew somewhat in 2020. This perseverance highlights the sector's forward-thinking nature. We expect to keep playing an important role as partner for the sector in the coming years.

Thomas van Gilst, Head of Water Security and Resilience, Projects Directorate We have started an overhaul of the EIB's Environmental and Social Standards, to be completed in 2021. We are moving from a compliance and do-no-harm approach to positively contributing to environmental sustainability. For biodiversity, we now aim at a net positive impact in our projects. By reversing the loss of biodiversity in projects financed by the Bank, we hope to contribute to the prevention of the spread of pathogens like COVID-19 in the future. And to ensure we can be held accountable for this ambition, we have developed a system to track all environmental investments across the Bank's financing activities, which will inform and guide the development of an environment financing tracking system under the EU Platform on Sustainable Finance in 2021 and thus contribute to defining green investments across the European Union.

Adina Relicovschi, Head of Environmental Policy, Projects Directorate

Outside Europe, in the energy transition we see momentum for new blending operations with important partners, such as the European Commission, the development finance community and private finance, to bring clean power and heat to people. The road to impact will be hard and will require strong commitment and cooperation across the Bank.

Dirk Roos, Head of Energy Transition Programmes, Projects Directorate

I see a lot more emphasis on digital technology and digitalisation – this whole notion of giving small businesses the technical and innovative help they need, especially through digital innovation hubs. We need to give entrepreneurs and small businesses more help to grow their ideas, expand and bring new products to market. I see a lot of change in industries, in bio-based packaging, in biodegradable products, in recycled clothing, in the circular economy. A lot of this change will be consumerdriven, making products more sustainable and producing less waste. I also see more focus on hydrogen as an important part of our new energy system and to decarbonise our heavy industries. The pandemic has helped us appreciate how innovation and digital solutions though block-chain, big data, space and even quantum technologies will be critical to tackling the health and climate crises for businesses and society at large. This gives the EIB a historic opportunity to help mobilise investment in these critical areas.

Shiva Dustdar, Head of Innovation Finance Advisory, Operations Directorate

As the COVID-19 crisis engulfed us, EIB Advisory quickly mobilised support to help clients navigate and adapt to the exceptional circumstances. This support has ranged from advice on how to make best use of and combine EU resources that were available to address the impact of the crisis, to helping manage the re-prioritisation of investment, or even contributing to the pipeline of vaccine candidates. Looking forward, advisory support will be instrumental in accelerating future-oriented investments targeted towards the green and digital transitions both within the European Union and beyond. While ensuring the quality of investment projects is essential, we also see an increased role for EIB Advisory in understanding strategic trends and the crossover points between them, identifying emerging gaps and opportunities, and developing concrete solutions for the coming challenges.

Simon Barnes, Director, Advisory Services, Operations Directorate

The EIB provided immediate assistance to its clients in Central and South Eastern Europe by accelerating disbursements and by making available a €1 billion dedicated COVID-19 facility throughout the region. While the region was able to manage the first wave of COVID-19 relatively well, it was hard-hit by the second wave in autumn 2020 and we expect to continue our related lending activity well into 2021.

Anita Fuerstenberg, Director, Central and South Eastern Europe, Operations Directorate

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CRISIS SOLUTIONS





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