2022/2023

EIB GLOBAL REPORT THE STORY



EUROPEAN INVESTMENT BANK

2022/2023

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2022/2023 EIB Global Report — The story

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The power of nature is awesome. Throughout history, people have feared its storms, its floods, droughts and eruptions. At this critical time, we realise that we must instead be in tune with nature and harness its power, if we are to beat the climate change that our own actions have caused. More than half the European Investment Bank's investments are now in climate action and environmental sustainability. Our priority is to finance the green transition to renewables powered by nature, from geothermal energy to hydroelectricity and wind power. That is why we are putting these natural forces right on the covers of our major reports this year.

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FOREWORD BY THE PRESIDENT

oncerns and disillusionment related to the war in Ukraine, global economic struggles, the pandemic and the climate crisis have grown considerably over the last year. Despite the greatest efforts of international organisations, the world order and the crises we are fighting are getting more complicated.

In the European Investment Bank, the European Union and its Member States have in their hands a powerful instrument to help solve the world's biggest problems. The EU bank is the largest multilateral climate investor in the world. We are a global leader in financing key sectors for development, especially water and green energy. Our investment decisions, based on solid financial and technical assessments, influence markets and help set the standards in sustainable finance.

We are the EU bank worldwide. The significance of this role is especially illustrated by our work in Ukraine. We were one of the first institutions to provide financial support for Ukraine after the Russian invasion, building on our close partnership with the country, which we had strengthened after the annexation of Crimea by Russia in 2014.

A clear signal for the future

The financial and technical firepower of the European Investment Bank matters when it comes to the achievement of Sustainable Development Goals and the transition to net zero. In 2019, I announced that the EU bank would eschew fossil-fuel projects and pledged to mobilise €1 trillion in climate investments this decade. This is what gave rise to our label, the "EU climate bank."

The decision to steer clear of fossil fuels was crucial for the European Investment Bank. We forged this new path, enabling the European Union to assume a leadership role in future climate action and the energy transition worldwide. Looking back, it is clear that our decision was correct, in particular now that we witness how energy security has taken centre stage, everywhere in the world. In 2022, our global clean energy financing reached €19.4 billion, a record high. This is an investment in the long-term future of our planet – and in our security.

When Europe has the courage to move ahead, this makes it possible for us to cement partnerships around the globe that combine technology and high development impact. The European Investment Bank has been a first mover in offshore wind power, new battery technologies, tiny satellites, green hydrogen technology, and infectious disease research. We plant the seeds for future success stories and play an active role in the adoption of these breakthrough technologies worldwide.

Now another seed has been planted: EIB Global, the European Investment Bank's development arm, which began operating in 2022. In a divided world in which Europe is asked to play a greater role for development and stability – and in which public resources are shrinking – EIB Global has made a powerful impact, building on decades of European Investment Bank activity outside the European Union.

In a divided world in which Europe is asked to play a greater role for development and stability, EIB Global has made a powerful impact.



The financial backbone of Europe

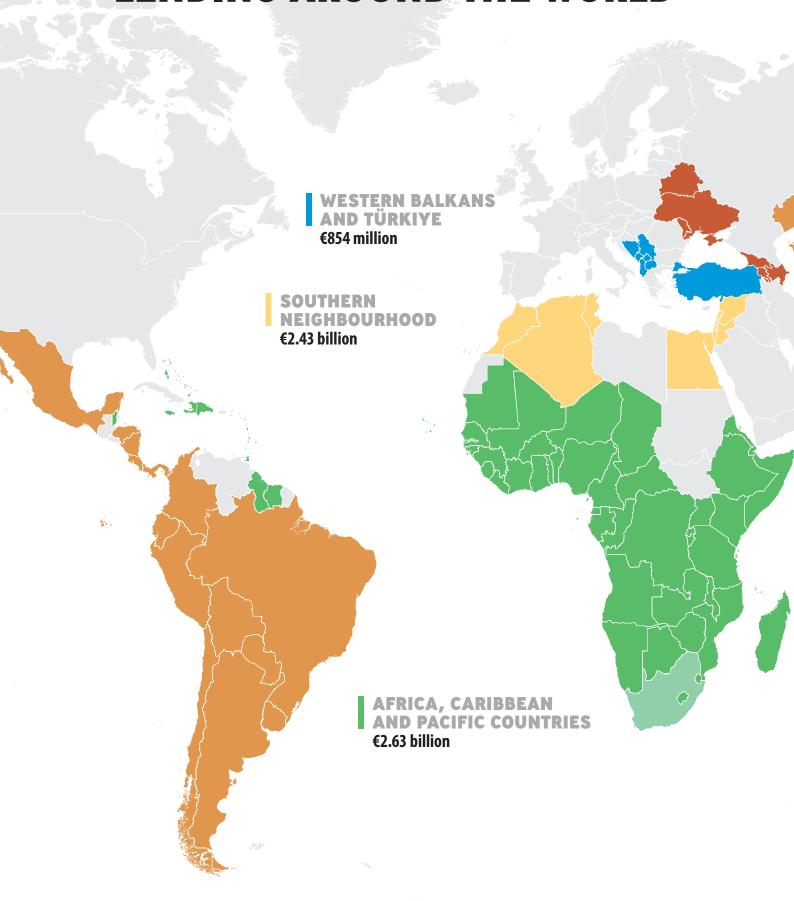
EIB Global invested €10.8 billion in 2022. Over the past ten years, we have financed more than €70 billion in projects outside the European Union. But the creation of EIB Global allows us to build closer partnerships around the world, offer more targeted advice from new regional hubs, and form the financing backbone of Team Europe.

Through our partnership with the European Commission and under Team Europe, EIB Global has the potential to deliver even more. In 2022, we proved again and again that the European Investment Bank and the European Union constitute some of the biggest forces behind the push to achieve the Sustainable Development Goals. In a companion volume to this one, EIB Global Report: The Impact, our economists analyse the real difference our projects make in daily lives – 11.7 million people benefiting from safe drinking water, 836 million people vaccinated against COVID-19 and other diseases, and 141 million more trips on public transport. Our impact report highlights our rigorous analysis of the results of our investments and assesses the financial benefits, catalytic effect and technical support we bring to each project.

The challenges we face – from energy supply to the pandemic, from climate change to conflict and the impact of artificial intelligence – know no borders. The projects supported by EIB Global represent a tangible example of the European Union's commitment to sustainable and inclusive societies everywhere. This report tells the story of that engagement.

Werner Hoyer

LENDING AROUND THE WORLD





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 under EU and UN co-leadership.

EUROPE'S GLOBAL INITIATIVE

EIB Global allows us to build closer partnerships around the world and offer more targeted advice.

Werner Hoyer, President of the European Investment Bank

We take the pulse of the world with our influential climate surveys. We are at the forefront of EU programmes, such as the Global Gateway, which builds partnerships around the world. We are a leader in every important sector for growth in developing countries, including water.

GREEN ENERGY PRIORITY

Large majority of Africans say climate change is hurting daily living

frica and the Middle East are highly vulnerable to climate change, with extreme weather, poor access to water, and rising temperatures threatening millions of people. Urgent action is needed to reduce greenhouse gas emissions, build resilience to the impact of climate change and support the people that will be most affected by it.

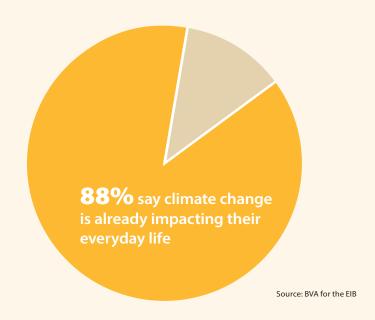
The Intergovernmental Panel on Climate Change predicts that temperatures in Africa could rise 3°C to 4°C above pre-industrial levels by the end of the century, leading to significant problems for food supplies, water and public health. Water scarcity is already a big issue, and climate change is making this worse. Crop yields are expected to decline, leading to malnutrition for more people.

The European Investment Bank's 2022 Climate Survey shows that for many people in these regions, the changes are being felt concretely today. The survey found that, for millions of people, climate change is making everyday aspects of life, such as accessing water or collecting firewood, more difficult. A significant majority of the people interviewed say climate change is hurting their income and making it harder to find jobs.

Africans reported that they are worried about inflation and access to healthcare, but they also are concerned about environmental degradation. More than three out of four want renewable energy to take priority over other sources of power — fossil fuels in particular — during the climate transition.

More than 28 000 people from 30 countries responded to our questions in August 2022. This feedback is an important way to hear from people around the world and understand how the climate is changing their lives. The survey tells us that many people in Africa and the Middle East are taking action themselves to adapt to climate change.

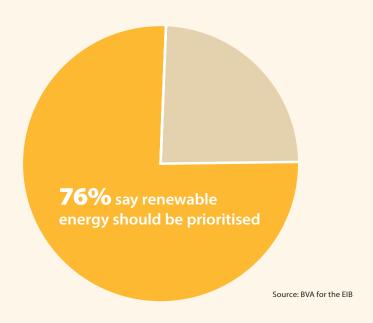
More than three out of four people in Africa want renewable energy to be a priority.



Large majority of people say climate change has an impact on everyday life



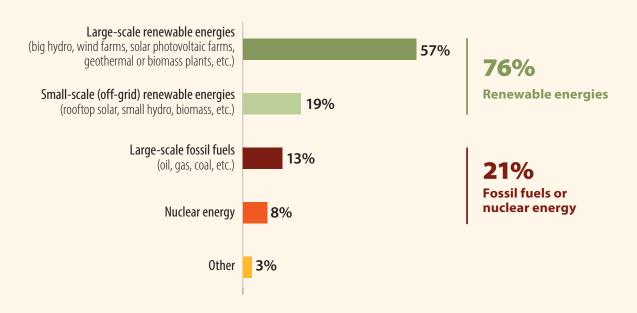
Just over half (51%) of Africans responding to the survey cite environmental issues as the biggest challenge their countries face, ahead of inflation (41%) and access to healthcare (39%). When asked about the source of energy their countries should invest in to combat climate change, **76% of Africans said renewable energy should be the main one**, far ahead of fossil fuels (13%) and nuclear power.



Three-quarters of respondents in Africa and the Middle East agree that their countries should focus on the development of renewable energy

In which source of energy should your country invest as a priority moving forward?

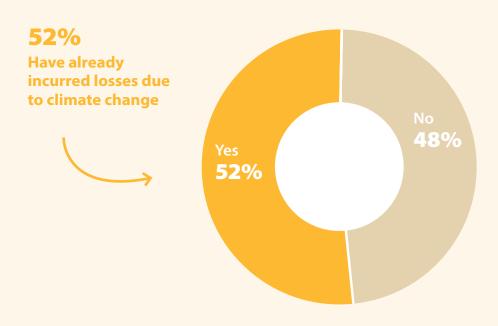
Average for ten African and Middle Eastern countries



Climate change has caused losses to over one in two respondents in Africa and the Middle East

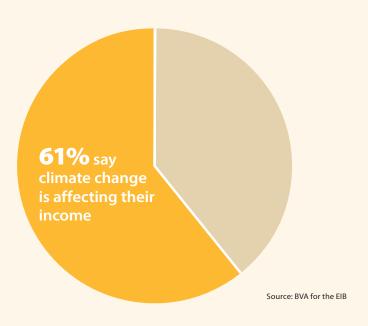
Have you or your family already incurred losses due to climate change (for example, because of droughts, sea rise/coastal erosion, extreme weather events — floods, hurricanes, etc.)?

Average for ten African and Middle Eastern countries



What can we do better in Africa?

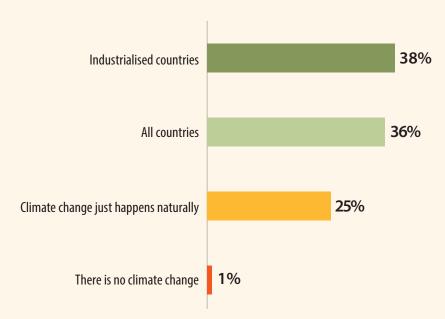
The European Investment Bank is working more closely with African partners to accelerate climate action investment. EIB Global is intensifying its work by adding more experts in Africa, developing more partnerships in public and private sectors, and **increasing work on the ground in countries that need the most help**. Our climate surveys help us understand more clearly how these investments impact daily lives, and they are guiding our future initiatives.



Those interviewed in Africa and the Middle East are divided over who is most responsible for climate change

Who do you think is responsible for climate change?





The climate surveys help us understand how our investments help daily lives.

The European Investment Bank has been working with African countries for nearly six decades. Our financing has provided access to clean energy for hundreds of millions of people in Africa. We improved water in many parts of the continent. We built flood protection in Burkina Faso, solar energy in Zambia, wind power and geothermal projects in Kenya, hydropower in Liberia, Ghana and Madagascar, and solar power in Benin for households and microentrepreneurs.

The Bank has invested around €60 billion in 52 African countries, supporting infrastructure projects, innovative firms and renewable energy, in the public sector and private companies, from microenterprises to the largest multinationals. We do this work because we are one of the biggest climate banks in the world, and because we want to help our neighbours and meet the greatest challenge on this planet.

GATEWAY TO PARTNERSHIP

Global Gateway investments improve supply chains around the world

gateway can be barred and reflect the hostility and fear of those who build it. Or it can be welcoming, open wide, a sign of friendship and confidence. Sven Röben knows which description applies to the European Union's Global Gateway initiative.

"The Global Gateway really is at the core of what we at the European Investment Bank are doing outside the European Union," says Röben, head of the Neighbourhood, Development and International Cooperation Instrument Unit at EIB Global. "We are supporting the European Union's strategy of connecting Europe to the rest of the world."

The European Commission set up the Global Gateway in 2022 to narrow the international gap in infrastructure investment. The initiative will improve trade with international partners and invest in digital innovation, green energy, transport, healthcare and education. The goal is to improve the way countries work together and do business in these important sectors.

Many of the new global investments will involve big infrastructure improvements in roads, water, sanitation, mobile connections, vaccine manufacturing and higher education. The COVID-19 pandemic and the war in Ukraine revealed how quickly global trade can be disrupted. The Global Gateway is creating stronger and more sustainable connections for goods, people and services to make international trade more resilient to future shocks and more sustainable.

The European Investment Bank has a long record of investing in green energy, digital innovation and infrastructure projects outside the European Union. Just a few of the recent ongoing EIB projects under the Global Gateway are:

- A desalination plant in Jordan to pipe drinking water to the capital, Amman, which faces water shortages that are exacerbated by climate change
- A high-speed fibre-optic cable under the Mediterranean to offer better internet access to universities and research institutions in Morocco, Algeria, Tunisia and Egypt
- Fast internet connections in remote areas of Congo and Uganda
- Renewable energy investments to help Brazil, Peru and Chile advance in the green transition
- Sustainable forestry in Mongolia and Uzbekistan
- A large hydroelectric power plant to make Tajikistan more independent in electricity production.

The plan is to mobilise €300 billion in global investments from 2021 to 2027.

Billions in global investment

The Global Gateway is turning the European Green Deal into a Global Green Deal. The plan is to mobilise €300 billion in global investments from 2021 to 2027. The Global Gateway will particularly help emerging countries in areas such as new electricity connections, new ports and railways, more modern telecommunications, infrastructure and digitalisation.

EIB Global is working with programmes such as the Global Gateway to "further enhance the impact and visibility of EU investments worldwide," says Werner Hoyer, the EU bank's president. "We are placing more bankers, engineers and economists on the ground, working within EU delegations, and are working hand in hand with the European Commission in the delivery of key European Union global and regional policies."

The European Investment Bank's deals under the Global Gateway are based on European values and standards, equal partnerships, and an alignment with the EIB Climate Bank Roadmap, which outlines the Bank's climate finance goals up to 2025. The Global Gateway combines financing for infrastructure with work to lay the foundations of this kind of investment, such as regulatory frameworks, standards, technology training, and business development.

How is the Global Gateway funded?

The Global Gateway is funded by the European Union, Member States and the European Investment Bank. It seeks to mobilise investment from the private sector, too. The main financial tool to mobilise investment under the Global Gateway is the European Fund for Sustainable Development Plus. It will raise up to €135 billion worth of investment in a variety of Global Gateway sectors. This development fund is an innovative instrument that helps generate investment through guarantees covering the risks of large and small projects, and grants that are combined with long-term loans.

A new Global Gateway Fund of €400 million is planned for high-impact private sector investment. The European Investment Bank will invest €300 million of its own resources in the fund. Together with contributions from the European Fund for Sustainable Development Plus, this is expected to mobilise more than €4 billion of investment.

Investments that help partners

The Global Gateway will promote relationships that enable partners to maintain their economic competitiveness. It will strengthen access to commodities, and in return, offer partnerships to countries beyond the European Union through investment in infrastructure. All countries are hurt when supply chains break down. For countries that already suffer disproportionately from climate change, food scarcity and hunger, supply chain problems threaten lives and economies.

"Everyone is talking about strategic autonomy in Europe, but our partners also want it," Jutta Urpilainen, the European Commission's executive vice president for international partnerships, said at the EIB Group Forum in February. "They want resilience and independence."

We are placing more bankers, engineers and economists on the ground, and are working hand in hand with the European Commission in the delivery of key global and regional policies.

Independence, not indebtedness

International Monetary Fund figures show that more than half of low-income countries are in or at risk of debt distress, including many in Africa. This leads to the allocation of resources from public spending to debt payments, creating a vicious debt cycle. The Global Gateway initiative offers investments on attractive terms. It uses grants, loans and technical assistance to enable clients to operate as partners, rather than dependants.

The Global Gateway is especially helpful to parts of Africa that have the hardest time making a green and digital transition. The European Commission announced €150 billion in EU-financed investments for the Africa-Europe Investment Package in 2022. This is around 50% of the amount that the Global Gateway aims to mobilise.

Global Gateway is above all a geopolitical project, which seeks to position Europe in a competitive international marketplace. It is a critical tool, because infrastructure investments are at the heart of today's geopolitics.

"Global Gateway is above all a geopolitical project, which seeks to position Europe in a competitive international marketplace," European Commission President Ursula von der Leyen said in December 2022, during the first meeting of the Global Gateway Board. "It is a critical tool, because infrastructure investments are at the heart of today's geopolitics." Partners around the world want to work with Europe. The first year of implementation shows the demand for sustainable investments that put the strategic autonomy of our partners at the heart of our offer."

Global Gateway is an important part of the European Union's work in every part of the world, she adds.

"The Global Gateway strategy is a template for how Europe can build more resilient connections with the world," Von der Leyen says. "We will support smart investments in quality infrastructure, respecting the highest social and environmental standards, in line with the European Union's values and standards."

HUMAN RIGHTS IN A WATER PIPE

North Macedonia and São Tomé projects bring clean drinking water to hundreds of thousands of people

ozin Spasov has lived in the village of Leski in the eastern part of North Macedonia for nearly seven decades. As a primary school teacher, one lesson he always taught was to be careful drinking the local water and to understand that it would not always be available.

"We live in such a hot climate that we do not have stable supply of water," Spasov says. "Especially during the summer, we were without water almost every day."

Old and poorly installed water supply pipes caused water shortages and impaired the quality of drinking water in the village throughout the year. The water was often contaminated with organic substances, making it dangerous to drink.

To provide good water to Leski, the local government decided to connect to the water supply system of Vinica, a bigger town nearby, with a 3.5-kilometre pipeline. At the same time, a modern filter station to purify drinking water and a pumping station were installed in Vinica. In February 2023, the European Investment Bank approved a €50 million loan to North Macedonia to support the project and address many other water problems in the country.

"Now we have water in summer and in winter," says Spasov. "There is no one in Leski who is not satisfied."

A water crisis

Water is an increasing problem around the world, from scarcity of drinking supplies and droughts that hurt farming to flooding and violent storms that destroy homes and roads. The European Investment Bank is one of the largest water lenders in the world, with close to €79 billion invested in over 1 600 projects during the last 60 years.

The United Nations General Assembly declared in 2010 that safe and clean drinking water and sanitation are essential human rights. But about 2 billion people worldwide have bad drinking water today. Nearly half of the world's population lacked regular supplies of water in 2022.

Access to safe and affordable drinking water and modern sanitation has huge benefits for societies and economies. Countries in areas such as sub-Saharan Africa have a hard time improving water supplies, because they also face other pressing issues, such as poverty, conflict and migration.

Access to safe and affordable drinking water has huge benefits.

"Investments in water management are key for development," says Juan Bofill, a senior European Investment Bank water engineer. "We are trying to cover the financing gap and market failures by supporting adaptation and mitigation projects across the world. Partnering with local actors and other institutions is crucial to maximise the impact."

Especially during the summer, we were without water almost every day.

Better supply of drinking water for North Macedonia

In North Macedonia, the loan will help other cities and towns that have similar water problems to Leski. Called a "framework loan," it can finance a range of projects.

"Each municipality has different problems and water infrastructure. There is no one-size-fits-all solution," says Alessandro de Concini, a loan officer at EIB Global. "Framework loans offer flexibility, making it possible for us to finance relatively small projects all across the country."

This framework loan will support the construction and renovation of water supply, wastewater and flood protection infrastructure in 80 cities or towns across North Macedonia. The European Investment Bank also gave a \leq 1.2 million grant for technical assistance.

"Improved coverage, quality and efficiency of the water sector is estimated to bring benefits to 700 000 people and to increase resilience to climate change for 40% of country's population", says Lijana Jancauskiene, a senior water engineer in the Water Security and Resilience Division of the European Investment Bank.

Helping families have a better life in São Tomé and Príncipe

Located close to the equator, São Tomé and Príncipe has plenty of rainfall and water. But only a small part of the population has easy access to safe drinking water. The poor water supply and lack of adequate water treatment affects the quality of life and the economy for a part of the world that also suffers from extreme poverty.

To improve the water, a local utility company, Empresa de Água e Eletricidade, developed a 20-year plan to improve and expand supplies in São Tomé. This will mean better distribution of water, larger reservoirs and water treatment plants, and improved access to safewater.

The European Investment Bank supported the plan with an \in 8.44 million loan signed in December 2022. The deal also includes a \in 5.56 million grant for technical advice.

"São Tomé is not poor when it comes to water," says Emmanuel Chaponniere, the senior European Investment Banks water sector engineer who worked on this project. "There is sufficient rainwater throughout the year to feed the springs and rivers. But, with climate change, rains are now more intense, and in between you have longer drought periods. So, if you do not have proper water storage and transport infrastructure, you can find yourself in a worrying situation."

More than 25 000 people will get better water when the São Tomé project is finished. Households will be connected to water pipes and women and girls will no longer have to make long treks to collect good water. Cleaner water and better water treatment will reduce the spread of malaria, cholera and typhoid. Improved water distribution will also help the island fight climate change.

PARTNERSHIPS AND UKRAINE

People in Ukraine need help now.

Jean-Erik de Zagon, head of the Kyiv office for the European Investment Bank

The European Investment Bank is involved in some of the most critical projects in Ukraine. We moved fast to support the country after Russia invaded. Our investments keep electricity and gas supplies functioning, renovate medical clinics, keep children in school, and improve almost any essential part of daily life.

A FOUNDATION FOR UKRAINE'S FUTURE

First lady makes a plea for aid and urges allies not to forget the war

e held on. We are holding on. This is what Olena Zelenska tells everyone who asks about the war with Russia.

"Many people told us that Ukrainians would not survive this winter, but as you can see, we continue to fight and recover, and hope is growing," Zelenska, the first lady of Ukraine, says during an interview with the European Investment Bank from Kyiv. "Ukrainians are holding on, but they are getting exhausted."

Zelenska, who has two children and is an architect and screenwriter, focuses her work during the war on raising funds to meet Ukrainians' basic daily needs. For her, this involves healthcare, shelter, humanitarian aid, childcare and education. She created the Olena Zelenska Foundation last year to funnel more global aid to these issues. In March, the EIB Institute, the philanthropic arm of the European Investment Bank, donated €800 000 to her foundation.

This donation is helping more than 2 000 children in 280 orphanages around Ukraine. "From the very beginning of the invasion, in the first few months, we started receiving requests for help from family-style orphanages," Zelenska says, explaining that these types of homes are run by regular families that each adopt five to ten children who lost parents. The EIB Institute funds are helping these households buy appliances, clothes, groceries, toys and "everything a family needs to live through these months peacefully," she says.

The war greatly increased the need to care for children who don't have parents. The foundation's ultimate goal is to find permanent homes for orphans. It is raising money for a pilot project to build ten family-style orphanages for children from families that lost their homes under shelling or because they had to leave during the occupation.

"We are caring for the future generations of Ukrainians," Zelenska says.

Problems grew every day

When the humanitarian problems started growing every day after Russia's invasion, the many offers of assistance from abroad gave Zelenska the idea of creating an aid foundation.

"There were many requests to help Ukraine," she says. "My main task, the foundation's main task, is really to accumulate aid. And I hope I succeed."

By forgetting about Ukraine now, people also forget about their own future.

The foundation is also using funds to:

- · renovate medical clinics and provide medicine and medical supplies
- keep people working by giving them new office space
- make sure children attend school by repairing public buildings and providing bomb shelters
- · offer grants for training and scientific research
- support a mental health programme for Ukrainians suffering from the horrors of war, including people who have become disabled.

How not to fall apart

Keeping electricity and gas supplies operating has been one of the most critical issues this winter in Ukraine, Zelenska says.

"It's incredibly inspiring to see Kyiv illuminated with lanterns in the evening," she says. "This means we are standing our ground."

"Everyone is working," she adds, some in the trenches in the military and others in offices and others on the streets, and children are going to school. "Working keeps us from falling apart into little pieces and it inspires you to get up in the morning."

There is still a big need for foreign support, Zelenska says. This help, in the form of financial or military aid, or the daily public statements from leaders around the world, encourages Ukrainians to keep fighting.

"Our economy is not designed for such significant losses as we see today," she says. "We still need to hold on for a long time, and we have to prepare for the fact that help will still be needed."

There is an impression among some Ukrainians, Zelenska says, that parts of the world are beginning to forget that the war is still raging.

"By forgetting about Ukraine now, people also forget about their own future," she says. "We all of course are waiting for victory. We are all sure of it. To get it, we still need to work a lot."

FOR THE LONG HAUL

The EU bank backs hundreds of projects essential to Ukrainian people's lives during war

he United Nations estimates that that nearly 20 million people in Ukraine, or about 40% of the population, need humanitarian aid. About 8 seven million people have fled to nearby countries. More than 5 million Ukrainians have moved to other parts of the country to escape fighting.

The European Investment Bank approved three major funding packages for Ukraine during the war. A first package of €668 million shortly after the war began helped the government pay for urgent needs. A second package of €1.59 billion, approved in July 2022, was used to repair damaged infrastructure and resume critical projects. A little more than €1 billion from this second package has been disbursed to help the country repair damaged roads, bridges, railways, public buildings and other services. The third package, approved at the end of March 2023, will set up an EU for Ukraine Fund to enable Member States, the European Commission and other countries and donors to support the Ukraine recovery. This fund will be accompanied by a €100 million technical assistance package.

Other EIB assistance:

- The EIB Institute offered €2.5 million in humanitarian aid to Ukrainians affected by the war.
- €59 million in European Union grants were repurposed to repair trains and railways in Ukraine, install temporary replacement bridges, and improve healthcare and housing for people forced to flee their homes.
- €550 million was used to rehabilitate dozens of bridges, more than 2 100 kilometres of roads, and rail border crossings.
- €13 million in grants from the Eastern Partnership Technical Assistance Trust Fund for projects in areas where Ukrainian communities are caring for about 700 000 people who have fled their homes. This fund is backed by Austria, the Czech Republic, France, Germany, Latvia, Lithuania, Poland, Sweden and the United Kingdom.

Supporting projects away from conflict areas

The European Investment Bank has been working in Ukraine for 15 years, financing more than €7 billion in projects. In 2014, after Russia occupied eastern Ukraine and annexed Crimea, we approved a €200 million early recovery framework loan to assist people who had fled the conflict and the towns that accepted large numbers of refugees. This type of loan can be used to help fund almost any public project essential for daily life — heating systems, schools, hospitals, sports centres. Many of these projects have been damaged by the war, including one of the highlights of the recovery programme, a state-of-the art library and technology centre in Mariupol. In this city, an estimated 90% of homes have been damaged, and 40% of these houses or apartments can't be rebuilt.

Ukrainians don't want presents from us. They want to be a partner.

We are also helping Ukraine rebuild or repair logistics centres, deliver blankets, thermal mugs and rucksacks to people hiding in bomb shelters, build housing for people who have had to move because of the war, improve firefighting and ambulance services, and fix broken electricity and gas lines.

Keeping Ukraine's electricity and gas supplies running involves more than just repairing damage. The country's utility companies are in trouble amid the war as their expenses rise and their revenue plummets, because millions of people can't pay their energy bills.

Broken bridges shut down whole towns

Bridges have been destroyed all over Ukraine by Russian forces, as well as by Ukrainians trying to halt the Russian advance. The EU bank is helping to finance temporary floating pontoon bridges across Ukraine.

To the question of whether Ukraine needs to take on more debt during a war, Violaine Silvestro von Kameke, a senior EIB loan officer, responds that the country requires grants and loans during this time, and that the European Investment Bank offers generous financing terms.

"Ukraine today has difficulty getting financing from the markets," she says. "With EU support, we are offering loans with very long grace periods. They do not have to repay them for a long time, sometimes up to five years. Ukrainians don't want presents from us. They have their pride. They want to be a partner."

'WE MUST NOT LOSE A GENERATION'

Ukraine mayors ask for investment to rebuild schools, educate children and repair services



n 23 February 2022, Ukrainian children came home from school, did their homework, ate dinner, prepared for the next day and then went to sleep. But for many, the next day didn't come.

This is how Andriy Vitrenko describes the situation for many families in Ukraine. The next day just doesn't arrive. Vitrenko, the first deputy minister of education and science in Ukraine, says that one year after Russia invaded, rebuilding damaged schools is a priority — to keep children safe and preserve their future.

"This situation of never knowing if a school is open happens every day in Ukraine," Vitrenko says. "Education in our country takes place in harsh conditions. We need new textbooks, new chairs and desks for children, new shelters."

Vitrenko made his remarks while visiting Luxembourg in early February 2023 for the Business Forum: Rapid Recovery of Ukraine conference, sponsored by the European Investment Bank. According to the Ukrainian government, the damage caused by Russia's invasion has already reached more than \$750 billion. About 50 participants came to the forum from Ukraine, including high-level government officials and the mayors of cities struggling to provide essential services.

Keeping schools open was one of the biggest issues Serhiy Solomakha, the mayor of Myrhorod in central Ukraine, dealt with after Russia invaded. Myrhorod is famous for its thermal spas. The town is hosting more than 10 000 people who had to flee their homes. That's more than 20% of its population.

Education troubles started immediately

"Immediately after the war started, the problem with educational institutions occurred," Solomakha says, "but every day brought new problems — medical institutions, transport in the middle of the city, providing heating, water, housing."

In the first week of the invasion, children in dangerous areas of the country switched completely to online learning, the mayors said. A few months later, when many towns realised they could run some classes in school buildings, schools slowly started reopening, but only if they had bomb shelters.

Myrhorod is using money from a recovery loan signed between EIB Global and Ukraine to fix problems related to the Russian conflict. Two key projects built with a €500 000 portion of the loan were a damaged centre for "aesthetic education" and a school of arts. Both buildings are used by many hundreds of students daily, including those from about 2 000 families that had to flee their homes.

Artem Semenikhin, the mayor of Konotop, a small city in northeastern Ukraine, says that when looking to the future and deciding how to repair the country, it is important to remember that the war didn't really start a year ago.

Every day brought new problems — medical institutions, transport in the middle of the city, providing heating, water, housing.

"The war in our country has been going on for more than eight years," he says, referring to Russia's invasion of Ukraine's Crimea peninsula. "This comes at an extremely high price for our society, but it made us really begin to appreciate freedom."

Semenikhin and Serhii Morhunov, mayor of Vinnytsia in west-central Ukraine, say the war has made more Ukrainians focus on the Russian problem — something that many tried to ignore in the past, while focusing on more local concerns in their daily lives.

"War has a negative impact on any resident of any country and city," Morhunov says. "But if we talk about Ukrainians, first of all, the war brought the whole society together. And, more than ever, everyone was ready to fight the enemy who attacked our country."

Children could fall behind for years

Children are in danger of falling way behind, and consequently the country will suffer for a long time, says Solomakha, the mayor of Myrhorod.

"We must not lose a generation now," he says. "If we do not educate this generation of children during the current war, then in five to ten years we will have many other problems. Children must have certain knowledge and skills, in order to build Ukraine in the future."

'THERE CAN BE NO OTHER FLAG HERE'

Ukraine mayor describes how EU loans helped residents reject occupiers

hen the full-scale invasion began, Russian leaders claimed they would be welcomed in parts of Ukraine, especially near the border, where the Russian language is commonly spoken, many ethnic Russians live, and cultural ties are strong.

Thanks to people like Ivan Fedorov, the welcome has not been warm.

"My primary task today is to help people and quicken the Ukrainian victory," says Fedorov, 34, the youngest mayor ever elected in Melitopol, a city just north of Crimea where 90% of residents speak Russian. Fedorov quickly labelled the Russians as "occupiers," kept the Ukrainian flag flying as long as possible and openly encouraged resistance.

Melitopol has been under occupation since the war began and is part of the four regions Russia annexed in September 2022. Fedorov makes regular live broadcasts on social media to reassure residents that the city is doing everything possible to keep services functioning. In videos, he encourages citizens to stay calm and vows to return the Ukrainian flag to the city centre. "There can be no other flag here," he said in one address.

Love the city and develop it further

Life has been hard in Melitopol during the war. The city had about 150 000 people at the start of the war, but now has about a third of this number. The area came under a fierce assault on the first day of the invasion, 24 February 2022, when Russian rockets destroyed the city airfield and big Russian military vehicles rolled through the streets. It was one of the first cities to fall in Ukraine.

On 11 March, Russian soldiers came to Fedorov's office in central Melitopol, put a bag over his head, and arrested him. He was held for a week, until a prisoner swap was arranged. He wasn't physically tortured, but he did sit next to people who had been hurt by interrogators, including some whose hands had been broken.

Fedorov is well known to European Investment Bank loan officers and engineers. The Bank has been helping the town and its region of Zaporizhzhia since the 2014 Russian invasion. Bank investments rebuilt nursery schools, primary schools, sports centres, a hospital for infectious diseases, care centres and other sites in Melitopol. The many years of partnerships and construction projects helped residents lean towards Europe when Russia arrived.

"This is about improving the quality of life," Fedorov says, when asked why he works with the European Investment Bank. "We get help with business, tourism, logistics. We are able to further develop a plan for reconstruction, there is zero tolerance for corruption and people get to love their city and develop it further."

My primary task today is to help people and quicken the Ukrainian victory.

Today, in Melitopol, many residents are arrested regularly to squash resistance. Children attending schools are subject to Russian-controlled learning. Evacuation is dangerous, but those who make it out get free accommodation in Zaporizhzhia, the administrative centre of the region, about 170 kilometres north of Melitopol. Fedorov works online out of Zaporizhzhia.

More resilient and braver since the invasion

"Every day you have to solve a lot of new issues," Fedorov says of the occupation. "I feel pity for my city and my people. We all, the whole team, have become more resilient and braver during this time."

There is no doubt in his mind that Ukraine will win the war.

"I am definitely an optimist," he says. "Ukrainians choose life and demonstrate it daily, both at and behind the frontlines."

FIVE WAYS TO REBUILD DURING A WAR

Report calls for more targeted assistance in Ukraine and greater cooperation among aid groups

ow do you rebuild a country ravaged by war? It's not usually something the European Investment Bank has to do. But the EU bank's big commitment to support Ukraine after the Russian invasion meant that the question had to be answered.

"We are usually focused on financial transactions, and we don't develop strategies for helping countries during a war," says Jean-Erik de Zagon, head of the Kyiv office for the European Investment Bank. "But we needed a plan for the huge amount of money we're investing to reconstruct Ukraine."

Working with the Boston Consulting Group, the European Investment Bank reviewed public documents on the war in Ukraine, especially findings from the international conference in Lugano, Switzerland, held in July 2022 to raise money for Ukraine's recovery. More than 30 loan officers, engineers and other experts at the European Investment Bank contributed to the resulting report.

The final publication, released in February 2023 and called *A Study on Potential Recovery Strategies for Ukraine*, offers a blunt assessment of the country's needs. Yearly gross domestic product in Ukraine is expected to shrink more than 30% because of the war with Russia, the report says. All economic sectors are struggling, but especially heavy industry, energy supply and foreign trade.

The survival of Ukraine as a sovereign state is a prerequisite for future recovery and long-term modernisation, the report says. "If Ukraine can't survive now, nothing will work," de Zagon adds.

Some of the headline problems facing Ukraine:

- The war has caused many millions of people to leave their homes.
- There is a bottleneck in the process to review, approve and implement recovery and reconstruction loans and grants in Ukraine.
- There has been a significant decrease in the monthly value of goods exported compared to before the war (down 62%).
- Small and medium-size companies have an average fall in revenue of nearly 80%.

Solutions for rebuilding Ukraine

The Ukraine recovery report outlines the ways that the European Investment Bank and other organisations can help the country survive and recover.

If Ukraine can't survive now, nothing will work.

1) Offer more help right now

"If we don't do more work now during the crisis, we will be so far behind when we finally start that everything will be more difficult," de Zagon says. "People in Ukraine need help now — food, medication, shelters, schools, hospitals."

The so-called solidarity lanes that improve roads between Ukraine and border countries are playing a big role in keeping the economy alive.

2) Assist key areas of the country

Ukraine's needs far outstrip available funds, so international financial institutions must focus on the most important investments that can keep the economy functioning and lay the foundations for a long-term recovery.

"You have to make very difficult choices when deciding where to put the money," de Zagon says. "Which projects do you need to finance first, which roads need to be repaired first, what infrastructure is needed today, what shelters should be built, what food do we need?"

3) Improve cooperation with the European Union

The future of Ukraine is tied to integration with other democracies, especially those closest to the country. Improving cooperation and integration with the European Union is good for Ukraine, Europe and the entire democratic world.

4) Let Ukraine lead the recovery

Ukraine must own the reconstruction effort. While international organisations need to advise and monitor the recovery process, Ukraine will have to become independent from international aid at some point after the war ends.

"We can come with our ideas and experience, but we should give the power to the government and the people," de Zagon says.

5) Work together

International financial institutions should find out how they can offer the most value by working together and then tightening these partnerships.

"There are so many needs and not enough resources, so we have to be sure we work together and coordinate," says de Zagon, who meets weekly with Ukrainians, EU institutions and aid organisations around the world to make sure every possibility is being exploited to help Ukraine.

THE NEEDS OF REFUGEES

Solidarity package helps neighbouring countries meet the needs of Ukrainians seeking new homes

s Russian troops invaded, over 7.5 million Ukrainian refugees fled across the borders to Poland. Thousands of Polish volunteers mobilised to help the displaced and welcome them into their homes, schools and businesses.

With no end in sight to the conflict, Poland faces a new challenge — settling these arrivals for the longer-term.

"The needs of the refugees have changed," says Grzegorz Gajda, a senior urban sector specialist at the European Investment Bank who hosted five Ukrainian refugees at his home in Poland. "They need employment, a stable income, free education, and free access to health and public services to create a new life in Poland."

To help integrate the Ukrainian refugees, the European Investment Bank approved a €2 billion loan, signed in June 2022.

Adapting to a new reality

Poland has welcomed more than 1.5 million Ukrainian refugees since the beginning of the war. The scale of the influx is such that the population of Rzeszów, the largest city in south-eastern Poland, has increased by 50%. In Warsaw, the population has grown by 15%, while Kraków's has risen by 23% and Gdańsk's by 34%.

Ukrainian refugees can legally live and work across the European Union. They are also eligible for the same benefits as Polish citizens, such as health insurance, free public education and child allowance.

But this new reality has put pressure on local authorities. With the vast percentage of refugees wanting to stay and work in Poland as long as the war continues, the authorities are struggling to accommodate the needs of these new arrivals.

"When the initial local enthusiasm runs out and the resources are depleted, there is a need for a systemic solution," says Tomasz Balawajder, a legal counsel at the European Investment Bank. "You need to make sure that the public sector will function efficiently and provide financial support and social benefits to the host communities and refugees."

It really revolves around ensuring a safe place for all the Ukrainians.

Careful planning

Integrating millions of refugees requires time, careful planning, new infrastructure and funds.

That is why less than one month after the invasion, the Polish government established the Aid Fund, which provides financing for all activities and projects necessary to help and integrate Ukrainian refugees. It's operated by Bank Gospodarstwa Krajowego (BGK).

The European Investment Bank has already disbursed €600 million in financing to the Aid Fund, the first tranche of the €2 billion to be allocated to support the fund. BGK distributes the funds to local governments and other public entities that welcome and host Ukrainian refugees.

"We had to create a new form of cooperation to generate resources for a wide spectrum of activities supporting the Ukrainian refugees and helping them feel like Polish citizens," says Robert Faliński, director of the Fund Managing Office at BGK.

Building a new home

Children and women are deeply affected by the war. Still, the children go to school, while women work and help their loved ones and compatriots in Ukraine as much as they can.

"Women and children make up 90% of the refugees in Poland," says Vasco Amaral Cunha, a banker at the European Investment Bank in charge of the public sector in Poland. "The operation will have a special focus on meeting women and children's most basic needs."

The additional funding will enable the displaced people to continue to have access to healthcare and other important public services during their stay in Poland. It will help local authorities build new schools and hospitals, upgrade and adapt existing infrastructure and, most importantly, support the host communities.

The improvement of public infrastructure — in particular, digital administrative services — will also create economic opportunities for women refugees and create wider social benefits for the local Polish communities.

"It really revolves around ensuring a safe place for all the Ukrainians arriving in Poland," says Cunha. "At the same time, it supports local entities in providing them and their host communities with the necessary public infrastructure and services."

SUSTAINABILITY AND SOCIETY

Investing in secondary towns is important to help meet the growing demand of water and reduce disparities. I'm so happy we were able to multiply the impact of the project.

Emmanuel Chaponniere, senior engineer at the European Investment Bank

One of the best ways to help a society and its economy is to offer small loans that enable young companies or entrepreneurs to launch new ideas and grow. Microfinance institutions show businesses how to expand correctly. Training and knowledge sharing are also important, especially for female entrepreneurs who have the hardest time getting loans. We also never forget life's essentials, such as clean water, safe roads and a good education.

HARMONISING LENDING

Palestinian microfinance institution Faten unlocks millions for small businesses

hua'a Yassin wants nothing more than to offer better, quicker and wider-ranging specialised testing to the patients who come to his laboratory in the West Bank city of Ramallah. A medical laboratory technician specialising in haematology, Yassin left his job at the Palestinian Ministry of Health in 2014 to found Lab Tech.

"We started as a routine lab, conducting simple routine tests — not a specialised lab," he says. "Then we grew and started specialising in haematology and molecular testing."

To expand the lab's services, Yassin needed more sophisticated equipment. He was able to purchase it with the help of loans from Palestine for Credit and Development — Faten, a Ramallah-based microfinance institution, which in 2022 received the second part of a \$10 million loan from the European Investment Bank.

Financing microenterprises

Faten was established in 1999 as a non-profit helping women microentrepreneurs. "Then we expanded over the years to give microfinance services to the public in general," says Lubna Aboudi, director of Faten's investment and treasury department.

Now the largest microfinance institution in the West Bank and Gaza, Faten's outstanding portfolio is nearly \$157 million with 26 400 active beneficiaries, according to Hamza Ghannam, manager of the institution's credit department. More than 30% of the customers are still women.

"We have 35 branches in Palestine, including eight in Gaza," Ghannam says. "We also have a virtual branch. Since the coronavirus pandemic, we've focused on digitalising our processes and our work."

In 2019, the European Investment Bank signed a \$10 million loan agreement with Faten. To make the deal a success, the Bank also offered technical assistance through a programme focused on providing advisory services to microfinance institutions and their clients. This assistance strengthens their financial and managerial skills.

Simplifying myriad agreements

Faten was happy to accept the assistance. The microfinance institution had to respect 49 different sets of loan conditions, or covenants, from 17 different lenders. It was complicated, because sometimes the covenants were very similar to each other, with only slight differences. For example, for one lender, the microfinance institution would have to calculate its capital adequacy ratio — a measure of its financial health — using only certain types of assets. For another lender, it could use a wider range of assets.

Since the coronavirus pandemic, we've focused on digitalising our processes and our work.

Faten reviewed all the covenants and winnowed them down to six. It then entered a long and complex negotiation with each of the lenders to see if they could accept the new covenants.

The project was supposed to last just a couple of months, but it ended up taking close to a year. Each lender had to check the proposals with their risk committee, then went back to Faten, which took the lender's demands into account before checking with each of the other 16 lenders, who repeated the process.

Crisis-proof conditions

The political situation in the West Bank and Gaza is complicated, and crises are frequent. "We don't control our borders, like the border between Jordan and Palestine, or the sea borders, or borders with other countries around us, like Lebanon and Syria," Ghannam says. "This makes it difficult for export and import between us and other countries."

Faten provides loans to microenterprises and small businesses, which may not have the resources to absorb currency fluctuations while they wait for their exports to be processed. "It takes a lot of time for them to export their products," Ghannam says.

So when the covenants were being renegotiated, it was also important that lenders understand the instability inherent in Faten's business.

All of the lenders eventually made compromises, and all 17 ended up adopting the same six covenants. Once the initiative was completed, the European Investment Bank was able to release the \$8 million. Since the disbursement in July, Faten has added three new lenders, which also agreed to the same six covenants.

The Bank's technical assistance team hopes it might be possible to replicate the initiative at other microfinance institutions in crisis-hit economies.

COMFORT IS A RUNNING TAP

New water infrastructure offers relief for more than a million people in Senegal

arie Sall woke up before dawn hoping to fill a barrel while the water was running, so that her household of seven could drink and wash all day. But the taps have been empty for weeks in the Pikine district of Saint-Louis, a town in northern Senegal.

"This is not life," she says, as she shares among her five children a bottle of water generously offered by her neighbour. Sall has no choice but to spend the rest of the day fetching water, just so that her family can survive.

Fresh hope takes the shape of a €64.5 million European Investment Bank loan coupled with a €5.55 million European Union grant to Senegal. The financing will bring drinking water to Sall's family, all the residents of Saint-Louis, and two towns in Senegal's centre and south, Kaolack and Kolda.

"We stood side by side with our African partners and responded to the COVID-19 challenging times," says François-Xavier Parant, the senior European Investment Bank loan officer who worked on this operation.

The Bank began working in Senegal in 1966 and today it's one of its strongest partners. This loan will help Senegal guarantee water for all, as a population boom and severe droughts intensify pressure on scarce water resources.

Water to small cities in Senegal

With its 230 000 inhabitants, Saint-Louis is nestled between the Senegal River and the Atlantic. This strategic location allowed the town to flourish in the past, but it has also made it vulnerable to climate change.

"All this suffering will be over with the new treatment plant," says Abdou Diouf, director of the works on the ground on behalf of the Société Nationale des Eaux du Sénégal, the national water company.

At the end of the project, Saint-Louis will enjoy:

- · a new drinking water treatment plant
- · reservoir units for storage
- an expanded distribution network.

We stood side by side with our African partners and responded to the COVID-19 challenging times.

Kolda and Kaolack will also benefit from similar works. They will strengthen the water network and improve the quality of drinking water for the 634 000 people living in the three towns. Aligned with the African Sustainable Cities Initiative, this project is vital. If there's no water in smaller cities, people will be displaced as they look for a better way of life.

"Investing in secondary towns is important to help meet the growing demand of water and reduce disparities," says Emmanuel Chaponniere, the European Investment Bank's senior engineer on the project. Previous loans to the water company in Senegal focused on the capital Dakar.

More support for greater impact

People like Ouleymatou Diakhaté rely on bottle vendors to survive. But those who cannot afford bottled water drink dirty water from the tanks. This adds to existing health problems from airborne and waterborne diseases.

The €5.55 million European Union grant, mobilised by the European Investment Bank as part of Team Europe, will help Senegal's water company accelerate its 35 000 subsidised drinking water connections for 350 000 beneficiaries across the country. "I'm so happy we were able to multiply the impact of the project," says Chaponniere.

The EU bank's loan and the European Union grant are benefiting women in particular, as collecting water is a task that falls largely to women and girls, robbing them of time to learn and to earn an income.

A solid partner

The European Investment Bank's team approved the three-town project remotely and quickly during the COVID-19 pandemic. By October 2022, €13.5 million had already been disbursed.

"We were able to fast-track appraisal as we leveraged on this long-term and close relationship. We knew how the water company worked, and they knew us well too," says Parant. "This project is our fifth with Société Nationale des Eaux du Sénégal since 1995."

Under the pandemic emergency measures, the European Investment Bank exceptionally financed almost 90% of the project costs, compared with its standard maximum of 50%. The Bank's additional funding helped the Senegalese government free up €34 million to use for the economic recovery from the COVID-19 crisis.

THREADING OUT OF THE CRISIS

Moroccan women use online training and coaching from a microfinance institution to expand their businesses during tough times

alima Ennabali opened her own boutique to showcase her interest in sewing and fashion design. "When I used to pass by sewing shops," she says, "I was fascinated with the traditional Moroccan dresses."

She hangs one of her hand-embroidered dresses in her shop on a busy street in Meknes, northern Morocco. She places it alongside other dresses in the perfect spot on the wall to advertise the variety of colours she offers. Then she takes a picture of her display for social media. It's smart sales and good marketing — something she learnt from a microfinance institution that helps women succeed during hard times.

Ennabali got a loan to open her shop from Attadamoune Micro-Finance, a lending firm that gives advice and small loans to hundreds of businesses across Morocco, focusing on people having a tough time getting help from traditional banks. What makes this financial institution stand out is its non-financial offering for women, including training courses and individual coaching.

"Attadamoune Micro-Finance started out as an association whose aim was to support women in precarious situations, in recognition of the central place women hold in Moroccan families," says Kenza Serrhini, head of marketing at the institution.

Attadamoune means "solidarity" in Arabic. The firm was founded by a woman, Khaddouj Gharbi, in 1994 and is the only microfinance institution in Morocco led by a woman.

Coaching to help Moroccan women get ahead

A €63 000 technical assistance grant from the European Investment Bank's Financial Inclusion Fund enabled Attadamoune Micro-Finance to develop a "post-crisis entrepreneurship motivator" programme. From 2020 to 2022, this programme helped 450 female entrepreneurs, including Ennabali, receive training in e-commerce.

The Financial Inclusion Fund is a trust fund managed by EIB Global. These funds provide grants, technical support and other financial assistance in dozens of countries. The Financial Inclusion Fund supports vulnerable groups in developing countries. Luxembourg is the first contributor to this fund, putting up nearly €7 million so far. The fund also supports gender equality, entrepreneurship and digitalisation. EIB Global manages 12 trust funds around the world.

"It is very satisfying to see the effects of these grants on beneficiaries," says Cristiana Finotti, a technical assistance expert at EIB Global.

My dream after working in different cities in my country is to eventually work abroad.

Moroccan women go online for growth

Through the entrepreneurship motivator programme in Morocco, 100 female clients from Attadamoune Micro-Finance received coaching to develop an online business plan. The women learnt how to use the internet to reach a new audience and even export crafts and services. This coaching was especially beneficial during the pandemic. Attadamoune Micro-Finance will now expand the e-commerce training and coaching programme to reach 2 500 women.

The programme helps women to be taken more seriously in the business community and gives them a better chance of receiving loans from traditional banks. This in turn opens new horizons. Take Fatiha Boularf, also an entrepreneur in Meknes who completed Attadamoune's training programme and works as a *negafa*, a "guardian" organising traditional Moroccan wedding ceremonies. She provides jewellery and other accessories for women to wear at weddings. Using the e-commerce training, she increased her income and expanded her business internationally. "My dream after working in different cities in my country is to eventually work abroad," she says.

With the extra sales, Boularf qualified for a loan from a local bank and bought a van, so she no longer has to carry her tools and products to weddings by hand. She used her new revenue to send her children to good schools and now plans to buy them a house so they can be more independent.

Influencer fashion from women's coaching

In Meknes, Ennabali's business is thriving and she has built an active online presence on three social networks.

"My dream is to run a large store in a posh neighbourhood, where I can employ the largest possible number of employees," she says, "especially widows, divorcees and those responsible for caring for their parents."

FRUITFUL ACCESS TO FINANCE

EU loan helps Armenian businesses stay alive

nder 20 hectares of greenhouses in central Armenia's semi-arid Kotayk province, local agricultural company Green Farmer grows hydroponic cherry tomatoes. Tomatoes are one of Armenia's top agricultural exports and the company's site, in the town of Hrazdan, is less than an hour away from the first century Temple of Garni, where another famous Armenian export, Kim Kardashian, stopped to admire the Greco-Roman colonnades in 2019.

It may be that proximity to an ancient monument originally dedicated to the Armenian sun god, Mihr, is beneficial to a crop that thrives on sunlight. But the location's main attraction for Green Farmer was the area's climate and a nearby gas-fired power station, from which the greenhouses draw heat to help keep the tomatoes warm.

Founded in 2018, Green Farmer today employs around 230 people and its greenhouses, which use the latest Italian and Dutch technologies, produce 8 000 to 9 000 tonnes of tomatoes a year for export, mainly to Russia and the United Arab Emirates. But the start of the project was not easy, because the company initially struggled to find a bank willing to lend it the nearly \$12 million it needed.

A game-changing loan

That changed when the company came across Ardshinbank, a local lender that had been working with the Central Bank of Armenia to make use of EU funds to develop the country's private sector. With support from the European Commission, the European Investment Bank extended the central bank three €50 million, ten-year financing facilities in 2014, 2016 and 2018 to give small, local businesses cheaper access to financing through the local banking system. In the case of Green Farmer, the money from the European Investment Bank helped cover \$4.2 million of the project's cost and made it easier for the company to borrow more money to equip the firm's apricot, cherry and apple orchards in Ararat province with an anti-frost system and a high-tech anti-hail net, which protects the fruit trees from hail, ultraviolet rays and wind, as well as birds and pests.

"The full amount of money just wasn't available to the founders at the time," says Robert Kotsinyan, director at Green Farmer. "But the idea of taking out a loan for the business was definitely the right decision and things have worked out pretty well."

In 2023, a new line of credit is expected to support the economic recovery and resilience of the country by enhancing access to financing for micro, small and medium-sized enterprises and mid-caps. The facility, which was approved in December 2022, will focus on support for green projects, female entrepreneurs and small companies outside the capital city, Yerevan.

The idea of taking out a loan for the business was definitely the right decision and things have worked out pretty well.

Close cooperation with the central bank has been vital for the programme's success. "Working with the Central Bank of Armenia is a great way for us to provide wide-ranging support with a strong added value for SMEs and mid-sized companies in the country," says Kirill Stoychev, an EIB loan officer. "By working with the central bank, the European Union's support can reach smaller businesses via the distribution channels of virtually the entire banking sector."

The relationship between the Central Bank of Armenia and the EU bank goes back to 2014. It has included a significant element of advisory work by the European Investment Bank.

"Armenia is a country where we are constantly engaged," says Michael Steidl, who works in the advisory department of EIB Global. "We've worked with them in the past to identify opportunities for climate action investment in the agribusiness and tourism sectors and how financial institutions should attend to this demand. With the new loan, we are exploring the digital sector and female entrepreneurs."

The European Investment Bank's advisory work with the central bank is financed by the Eastern Partnership Technical Assistance Trust Fund, a trust fund financed by EU governments.

THE KIDS WILL BE ALL RIGHT

€600,000 technical assistance grant improves the image of Kosovo universities at home and abroad

s a country with a youthful population, keeping hold of its best and brightest should be a priority for Kosovo, but the education sector cannot keep up with the ambitions of its youngsters.

Kosovo has eight public universities, spread out over several major towns, and there are inconsistencies in terms of resources and facilities. The student population across these universities hasn't grown over the past few years, but the importance of free or affordable higher education in the country is widely acknowledged.

The Ministry of Education, Science, Technology, and Innovation wants to change how Kosovo's public universities are viewed, by local and international students. The European Investment Bank is providing a €600,000 grant to help. Through the Economic Resilience Initiative Fund and its donors — Bulgaria, Croatia, Italy, Lithuania, Luxembourg, Poland, Slovakia, Slovenia, and the United Kingdom — the grant will provide expert technical assistance and help Kosovo's universities provide students with the educational opportunities they want.

Laying the groundwork

The institutions are looking at several projects, from better facilities for students and researchers to intangibles such as increasing the number of teaching languages and integrating academic programmes with economic and business needs in the country.

"To begin with, we need to see an improvement in transparency and accountability, but also in quality control and monitoring," says Shpresa Mehmeti of the Kosovo Ministry of Education. It is not just about providing funds to the universities but doing it in a structured way that meets their needs, the needs of their students, and the needs of the country as a whole, Mehmeti adds.

To thrive, these educational establishments will also have to integrate with each other. The system lacks cohesion: certain faculties duplicate work at other institutions, while other needs are neglected. As an example, several public universities may offer courses in specialised areas of law or agribusiness, while none offers programmes in particular applied sciences. Targeted investment, promotion and accreditation will help this, and steps are already being taken.

We need to increase our higher education institutions' participation in European programmes for higher education and scientific research.

The International Business College of Mitrovica is an example here. The college is new, having been set up in 2010 by SPARK, the Dutch organisation that supports young people in business and academia in fragile states. Further funding was provided by public authorities from other countries, the European Union, as well as Kosovo's Ministry of Education. The International Business College follows European Union standards in its educational programmes, and was designated as a not-for-profit public higher education institution in 2018. It provides a useful indication as to where Kosovo wants all its public universities to go: It has partnered with institutions in Denmark and Lithuania, and offers courses in English as well as Albanian. The college is also accredited by Evalag, the German quality assurance agency for higher education.

Matching peers across Europe

The International Business College's accomplishment is something Kosovo would like to see across the board, and is why the fund grant is so important. Standards have to reach a certain level for any university to take part in international programmes and initiatives such as Horizon Europe. The grant will enable Kosovo's universities to employ best practices that are tried and tested by peers across Europe. This applies to the teaching and the platforms available to students and academic staff. A cornerstone of this is access to digital services. The correct IT infrastructure will further embed Kosovo's institutions into national platforms, bring them closer to business and to the country's genuine needs, and also plug them into global academic networks.

"We need to increase our higher education institutions' participation in European programmes for higher education and scientific research, and by identifying where we can improve, this ambition will be more attainable," Mehmeti says.

HOW TO MOVE IT, MOVE IT

Madagascar overhauls roads to boost trade and combat climate change

adagascar's road network is damaged each year by extreme weather linked to climate change. Building new roads and modernising existing ones helps connect isolated rural populations and enables the development of international ports in the north and south of the country.

The island nation off the southern African coast is increasingly vulnerable to climate change. It faces frequent severe weather that causes drought and flooding. Crop failure is widespread.

Cyclones batter Madagascar each year, destroying large sections of roads and making an already inadequate system impassable. Better roads are vital for a country in which only 11% of the rural population has access to electricity.

"The main issue in Madagascar is the road infrastructure," says Christophe Rakotomavo, the director general of the Madagascar Road Agency. "Madagascar is a very big island. There is a lot of area to be covered. It's hard to maintain the network because obviously the country is fairly poor. There aren't enough taxes to pay for maintenance of the network."

In December 2022, the European Investment Bank approved a €50.4 million loan and a grant of €23.2 million from the European Union for work on the RN6 national road linking Diego Suarez (Antsiranana in the Malagasy language) and Ambanja in the north of the island, and the RN13 motorway between Ambovombe and Fort-Dauphin (Taolagnaro in Malagasy) in southernmost Madagascar.

Madagascar wants to develop the port of Antsiranana in the north and Taolagnaro port in the south, linking them to better road networks. This is necessary because Madagascar imports many essential goods and relies on revenue from exports, including perishable luxury food items, notably vanilla and crustaceans.

"We collect, prepare and export frozen langoustines," says Ivan Staub, the chief operating officer of Martin Pêcheur, a fish and seafood supplier that has a processing plant in Fort-Dauphin. "To collect the langoustines, we have about ten pick-up trucks. To have the roads rebuilt is important for us, because it will make our journeys shorter. The shorter the journey, the fewer langoustines die en route, which is bad for business."

Opening Madagascar's ports

Toamasina, on Madagascar's eastern coast, is the country's major port facility, handling about 80% of international maritime traffic. It is relatively well-connected by road networks to Antananarivo, including a ring road around the country's capital that is designed to reduce chronic traffic congestion and is nearing completion, with a €28 million loan from the European Investment Bank.

There aren't enough taxes to pay for maintenance of the network.

"Roads are the key to opening the ports in these regions," says Pierre Sarrat, a road engineer at the European Investment Bank. "It's critical that goods can flow in and out."

Better roads have many benefits.

"The roads are needed to help fight famine in the south by being able to transport goods to the people that need it," says Christelle Savall, a portfolio management officer at the European Investment Bank. "Construction work has to make sure people can still use the road, whatever happens. In some places in the south, the road is so damaged that big chunks of it are not usable at all." European Investment Bank financing to improve Madagascar's roads is part of the European Union's strategy to support global transport. The European Union set up the Global Gateway in 2021 to develop smart, clean and secure transport links, as well as strengthening other fields.

Planning for safer roads

The European Investment Bank's assistance in Madagascar included audits of road safety that looked at road users and pedestrians.

"Safety is very important when planning road improvements," says the EU bank's Savall. "Decisions to change traffic flows must protect against increasing casualties."

New and repaired roads are built to international standards, often replacing dirt tracks that are swept away during cyclones. Some stretches of road have bridges. These structures have been strengthened to improve their resilience to adverse climate events.

"The design of all bridges and hydraulic structures has been updated to take account of climate change, and the pavement structure of the RN6 has been reinforced to comply with modern standards," Sarrat explains.

SILICON VALLEY IN THE MIDDLE EAST

Venture capital funds empower technological entrepreneurs and create jobs

alid Hanna always wanted to create something to help people in the Middle East become entrepreneurs. When the global financial crisis hit his region in 2009, he decided to act. But first he had to do the impossible — "to bring Silicon Valley to the Middle East."

Together with Walid Mansour, Hanna created the Middle East Venture Partners investment fund in 2010. The fund makes venture capital investments in young companies in the Middle East and North Africa, especially targeting technology, innovation, women entrepreneurs and young people.

"When we started, there was nothing else similar to us in the Arab world," says Hanna, who has been in venture capital for more than 20 years. "We had to innovate and explain what venture capital is to our investors. We had to become pioneers."

The firm has invested in more than 60 companies in the Middle East, North Africa, Turkey and Pakistan. "It is difficult for a startup to access finance in our region," Hanna says. "We now have a lot of success stories."

The European Investment Bank supported the firm's fourth venture capital fund, the Middle East Venture Fund IV, with an investment of \$27 million, signed in December 2022. The new fund will help early-stage digital technology companies.

A driver of social change

Young companies in North Africa and the Middle East play a crucial role in solving many of the region's challenges. But these companies often can't find the right talent, can't sell products in other markets, don't have the correct managers, can't find loans, or don't have the right infrastructure to run the business. Getting finance to expand is usually the biggest challenge.

"When we started twelve years ago, it was impossible for a young business to raise any funding," Hanna says. "Even today, despite the market evolution, it is still impossible to receive a loan to start a company from a local bank."

Middle East Venture Partners is filling this gap and creating an entrepreneurial ecosystem, especially in the technology and digital sectors. Among the regional success stories for the firm is Anghami, a Lebanese music streaming application, and HyperPay, a Jordanian one-stop shop payment method for online merchants.

Our investments created more openings in technology for women.

The firm's work helps society, too. Its investments mean more opportunities for people to find employment or start companies in lower- and middle-income countries. The funds are particularly beneficial for women and youth.

"Our investments have created over 73 000 jobs," Hanna says. "They have also created more openings in technology for women, who hold 27% of the current permanent positions at our portfolio companies."

A new growing venture capital market

In Africa, another venture capital company, Partech Partners, is also focusing on entrepreneurs. Founded in 1982 in Silicon Valley, it is one of the most active technology investors in the world, with more than 240 companies in 40 countries in its portfolio.

In 2018, the firm launched Partech Africa, the first Fund of its new strategy focusing on Africa. Its ambition is to invest in the next generation of African digital champions across all sectors ranging from financial inclusion and banking to healthcare, logistics or education. Partech Africa Fund I ultimately received €125 million in investor commitments and has supported 17 companies, including TradeDepot, Wave, Yoco, Reliance and Nomba, which operate in sectors responsible for most of Africa's employment and economic activity.

"The venture capital market is relatively underdeveloped in large parts of Africa and fundraising remains difficult," says Nur Özdemir, an equity investment officer at the European Investment Bank. "But the continent is also one of the world's fastest-growing venture capital markets because of the increasing access to digital infrastructure and rising consumer and business demand. Partech and its funds are helping African venture capital grow and its by-products, digitalisation and innovation."

In February 2023, the firm announced the launch of Partech Africa Fund II to continue its successful strategy on the continent. For its first close, the fund reached a size of \in 245 million, already above its target size, making it the largest Africa-focused fund yet. The European Investment Bank has supported both funds, with \in 10 million in 2017, and \in 45 million in 2022.

CLIMATE AND ENERGY

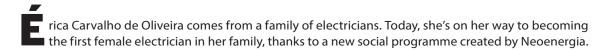
No matter the country or its social and economic status, when there's a will, there's a way. And this is definitely the way, the way to a more gender equal and prosperous future.

Joana Sarmento Coelho, a European Investment Bank loan officer who worked on a project that included an electrician training programme for women.

The European Union and the European Investment Bank work hard to improve lives and spread EU values beyond our borders. Ensuring access to clean and affordable energy is a key part of this mission. Hundreds of millions of people around the world have no electricity. We also finance projects to help people deal with the changing climate through better farming, modern transport and big infrastructure that help cities serve growing populations.

ELECTRIFYING OPPORTUNITIES FOR WOMEN

Power company opens Brazilian electrician school for women



"It's about getting out of your comfort zone and showing that both men and women can work any job," Oliveira says.

Neoenergia, one of the largest electricity suppliers in Brazil, wants to show that its work is about more than electricity and renewable energy. It's also about social inclusion.

The company created the School of Electricians in Bahia in 2013 to improve lives for people in disadvantaged Brazilian communities. In 2019, the school created classes specifically for women to end the idea that being an electrician is a man's job.

"This project was created and developed as a way to help the people in the poorest communities to enter the job market and to maintain a minimum standard of living, which includes paying their rent and buying food," says Régia Barbosa, who runs organisational development at Neoenergia. "It's about creating opportunities for better living, but also to show that job sectors usually associated with men also offer opportunities for women."

By 2021, the company had hired over 1 600 people who had completed the training at the School of Electricians. Today, nearly 300 women have become certified electricians thanks to the programme.

Finding a gender balance

In March 2022, the European Investment Bank signed a €200 million loan with Neoenergia to support renewable energy projects in Brazil. The investment will also help the company improve gender equality and be more active socially.

Joana Sarmento Coelho, a loan officer at the European Investment Bank who worked on the project, says Neoenergia's electrician training programme sets a good example for other companies.

"This project from Neoenergia is something they can be very proud of," Sarmento says. "It shows that no matter the country or its social and economic status, where there's a will, there's a way. And this is definitely the way, the way to a more gender equal and prosperous future."

Neoenergia's electrician training programme attracts thousands of applicants each year. It accepts 200 people. Graduates receive a certification that allows them to work for Neoenergia or one of its partners as electricians.

It's about showing that both men and women can work any job.

A commitment to sustainable development

The company opened the programme to women as part of Neoenergia's commitment to the United Nations' Sustainable Development Goals.

"We thought about doing something different, something that simply hadn't been done before," says Barbosa, who is in charge of the School of Electricians. "In the end, we created classes exclusively for women. In that first year, we opened 120 vacancies for women and had over 15 000 applications. It was a bit of a shock, the response we had."

Today, classes are mixed with men and women, and 30% of the openings are reserved for women.

"With the school, we show women that they have what it takes to work in this sector," Barbosa says. "They have all the abilities, the intelligence and the dedication to succeed just like any man, if they only take the chance and have faith in themselves."

Women who completed the programme are brought back to share their experiences with current students and to explain how the school helped them in their careers.

"This electrician training is only the beginning," says Aline Santos, a female student at the School of Electricians in Coelba. "It makes me really happy to learn that I too can do this and that I'm able to. By being here, it's become clear to me that women have the power to do what they want, when they want."

SOLAR POWER FOR RURAL AFRICA

Off-grid technology transforms access to electricity in rural Africa

round 600 million people lack access to electricity in sub-Saharan Africa, despite some progress over recent years, and the strong growth of the continent's off-grid solar sector during the last decade.

In Benin, only 40% of the population has access to electricity, with a significant disparity between urban (70%) and rural areas (18%), resulting in about 5 million people without access to electricity. Only 10% of households are currently using off-grid solar products.

"More than 1 million households don't have access to modern and sustainable energy in Benin alone," says Hendrik Engelmann-Pilger, a senior economist in the European Investment Bank's Energy Transition Programmes Division. "These households rely mostly on kerosene lanterns, candles, flashlights and generators for lighting and mobile phone charging. These solutions are expensive, polluting and often inefficient."

Cutting the high costs

Clean and sustainable energy sources like solar devices and solar home systems for off-grid households have high upfront costs that present a challenge to low- and medium-income households. ENGIE Energy Access, the leading pay-as-you-go and mini-grids provider in Africa, is offering a solution.

With pay-as-you-go, customers can make small payments to unlock the system for a day or week of usage at a time, until they have paid the full price and the systems are permanently unlocked. This payment solution makes the affordability of basic and modern electricity more accessible. Customers don't have to bear upfront the full cost of the solar system, including solar panels, battery storage, lighting and other optional appliances. People in Benin will be able to repay the cost of the equipment over several years at less than 20 cents a day.

Ultimately, the increased provision of reliable and affordable energy will reduce exposure to indoor pollution from current kerosene use, provide much better lighting at a lower cost, and provide electricity to charge mobile phones and power small appliances.

"Thanks to the use of digital tools and the strong penetration of mobile money in sub-Saharan Africa, ENGIE Energy Access sells access-to-energy products to our customers on credit to make them affordable," says Gilian-Alexandre Huart, chief executive of ENGIE Energy Access.

The European Investment Bank signed a loan of €10 million for ENGIE Energy Access Benin, a subsidiary of ENGIE, to support the deployment of 107 000 high-quality solar home systems in Benin. This will open up access to clean energy for an estimated 643 000 people in the West African country. The Africa-EU Partnership aims to extend access to modern energy services and expand the use of renewable energies in Africa.

More than 1 million households don't have access to sustainable energy.

The new Benin cooperation follows the EIB's previous support for ENGIE to deploy off-grid solar power in Uganda.

"Our partnership with the European Investment Bank in Benin will provide ultra-affordable pay-as-you-go systems to people in villages across the country, giving access to clean solar energy and financial empowerment," says Huart.

ENGIE is currently providing decentralised electricity to more than 8 million people in nine countries through solar home systems and mini-grids.

Clean and reliable power

Off-grid solar energy solutions, such as solar home systems, offer immediate access to affordable, clean and reliable electricity in places where grid or mini-grid connections aren't economically or technically feasible yet.

It tackles the "last-mile" distribution problem of bringing critical goods and services (such as lighting, mobile phone charging, radio, TV and refrigeration) to remote, rural communities using solar-powered technologies.

Off-grid solar power devices can also lead to a significant reduction in household air pollution by removing kerosene lamps from the picture, reducing health issues and accidents.

"Ultimately, this new initiative will provide economic, social, educational and health benefits for households and microentrepreneurs who cannot be connected to the national electricity network," says Romain Constant, an investment officer at the European Investment Bank. "The proposed operation will also promote private sector-led activity, economic diversification and job creation in Benin."

STOCKING UP FOR RESILIENCE

Grain silo project will help protect Tunisia from food crises

n the spring of 2022, international wheat prices rose to their highest level in 20 years. In Tunisia, the official price of a baguette remained the same as it had been for over a decade — 0.19 Tunisian dinars, or about 6 Euro cents.

A subsidy programme kept bread prices low for all Tunisians, but the cost of those subsidies was spiralling. Supply disruptions caused by the COVID-19 pandemic and Russia's invasion of Ukraine had pushed wheat prices to more than \$430 per tonne by May 2022, more than double the level a year earlier. Tunisia, which imports about 95% of the soft wheat used in its bread, suddenly spent \$250 million more on purchases in 2022.

That's a lot of money for a country struggling economically. "It's true that the Ukraine war is at the origin of more expensive and less regular imports of cereals as well as other basic food," says Nabil Zarrouk, the deputy general director of Tunisia's Office des Céréales, which manages the country's grain supply. Tunisia typically imports about one-tenth of its wheat from Russia, and about 65% from Ukraine.

To better resist food price crises, Tunisia plans to expand and improve its network of grain silos throughout the country, with the midterm goal of doubling its reserves from two to four months of supply. "It's a huge objective," says Giovanni Munoz Castaneda, a senior engineer working on the project in the European Investment Bank's Bio-economy Division.

The European Investment Bank signed a €150 million loan for the project in December 2022. Of that, €82 million is dedicated to grain purchases.

The new grain silos will also help Tunisia avoid food waste by preserving locally grown grain after harvest. While Tunisia only produces about 5% of the soft wheat it needs, it covers about 50% to 60% of demand for hard wheat, or durum wheat. Hard wheat is used in couscous and pasta, staples of the Tunisian diet.

Bread as a staple

15% of Tunisians live under the national poverty line. Bread subsidies help poorer people get the calories they need. Poverty and malnutrition are on the rise again in many countries after declining steadily for 15 to 20 years, the European Investment Bank's Munoz Castaneda says. "The overall economic situation has deteriorated in the last five years," he says, "and that has led to an increase in food insecurity."

High bread prices led to the "bread riots" in Tunisia during the 1980s, and they were a factor behind the Arab Spring protests in the early 2010s. "Countries like Tunisia and Egypt have seen the consequences of instability and social unrest in the past, so they are trying to do everything to avoid that situation again," Munoz Castaneda says.

Poverty and malnutrition are on the rise in many countries.

But he adds that providing subsidised bread to all Tunisians — compared to a similar programme in Egypt, which covers about 70% of the population — leads to waste.

Zarrouk says Tunisia managed to keep local markets supplied with grains last year, thanks to earlier purchases at advantageous prices. "That enabled us to dodge a little bit the effect of the war," he says.

Reaching out for help

The Tunisian government has difficulty borrowing on international financial markets. The wheat purchases and grain silo project are being financed by the European Investment Bank along with the European Bank for Reconstruction and Development, the African Development Bank, and the International Bank for Reconstruction and Development.

In addition to its €150 million loan, the European Investment Bank is requesting that the European Union provide a €20 million grant for infrastructure and technical assistance. The European Investment Bank loan benefits from a guarantee provided under the Neighbourhood, Development and International Cooperation Instrument, which aims to eradicate poverty and support sustainable development outside the European Union.

The project would not have been possible without money from international development banks. Tunisia is currently negotiating with the International Monetary Fund for a \$1.9 billion loan, and its beleaguered finances make borrowing on international markets almost impossible. "Most of the taps are closed," says Sébastien Valleur, a loan officer at EIB Global.

THESE SEEDS WORK

Sustainable rice that requires less water and cuts carbon emissions

hanging monsoon patterns in India are wreaking havoc on one of the country's most important agricultural commodities: rice. While central and southern India saw excess rain in 2022 with flooding in the southern states of Kerala, Karnataka and Madhya Pradesh, states in the east and northeast of the country, such as Uttar Pradesh, Bihar and Odisha, saw high temperatures and too little rain. As a result, India's Ministry of Agriculture expects this season's rice harvest to fall by around 6.77 million tonnes to 104.99 million.

New seeds and improved growing techniques developed by Hyderabad-based SeedWorks, however, are making a difference. "Many crops in India have been decimated by heatwaves recently," says Sundar Raja Vadlamani, supply chain president at SeedWorks. "Our company engineers characteristics that make plants more resilient to extreme heat, producing much greater yields."

Damaged by drought, floods, salinity and extreme temperatures, rice production is a victim of climate change. But it's also a major contributor, accounting for about 2.5% of all human-induced greenhouse gas emissions, on a par with the global aviation industry. The staple crop's hefty impact on the climate comes mainly from the way it is grown. Its flooded fields, called paddies, create ideal conditions for bacteria that emit methane, a potent greenhouse gas.

Rice varieties developed by SeedWorks require less water, an increasingly scarce resource in India where as many as 600 million people face high to extreme water stress. Combined with new techniques, which it trains farmers to use, the result is a more sustainable crop with a lower climate impact.

The company estimates it has helped save about 14 billion litres of water so far, by combining its less thirsty rice varieties with a number of water conservation initiatives, including the use of water meters and rainwater harvesting, as well as by training farmers on how to optimise their water consumption.

SeedWorks is also testing a new planting method for rice, involving a machine it has developed to seed rice directly in the fields, rather than growing them in nurseries first — an innovation it says should save a lot of water.

Empowering farmers

In addition to rice, the company also develops hybrid sesame, millet, mustard and tomato seeds. The hybrids are developed using selective breeding, not genetic modification, and offer yields that are 30-40% higher than typical varieties.

Private equity can play a unique and important role in emerging markets.

The company estimates its customers can quadruple their annual incomes. Its efforts also encourage the participation of women.

SeedWorks has research and development facilities in Singapore and is expanding in the Philippines. The company's development plans are backed by a climate and environmental sustainability-focused private equity firm called GEF Capital Partners, with offices in India, Latin America and the United States. EIB Global committed \$40 million to GEF's latest fund in 2022, after having invested over \$25 million in an earlier fund in 2018.

"GEF was one of the early pioneers of climate impact investing," says Raj Pai, managing partner for South Asia at GEF. "We've been looking at different themes, from renewable energy, to water and food security in India, South East Asia and Latin America since the early 1990s."

Impact of the EU bank

For funds like GEF, the European Investment Bank draws in other investors who might otherwise not have gone into the sector.

"The European Investment Bank's participation in funds like GEF attracts other investors and catalyses private sector investment in areas where it's desperately needed, like climate action and environmental sustainability," says Sissi Frank Perez, an investment officer in the private equity team at EIB Global.

"Private equity can also play a unique and important role in emerging markets, not just as a source of capital," she says, "but as a source of expertise to help companies develop, institutionalise, and adopt best practices in terms of environmental, social and governance matters."

LET THE LIGHT SHINE

In Madagascar, clean and reliable energy for rural homes

he sharing of food has brought people together since the dawn of time. It is how we make friends and do business. Romain de Villeneuve and Antonin Calzarossa met for the first time on Lagos Lagoon in Nigeria in front of a flavour-packed grilled barracuda with lemon zest.

A few years later, Villeneuve became chief executive officer of the mini-grid company WeLight. Based in Madagascar, the small startup had an ambitious target: to bring clean, cheap energy to the country's isolated villages. This required time, energy and resources. So Villeneuve remembered the "very capable" European Investment Bank loan officer, Calzarossa.

Solar mini-grids could be the most cost-effective option for rural electrification in Madagascar. "WeLight showed a proactive and hands-on approach from the start," says Calzarossa, who works for EIB Global. "They managed to get projects off the ground in remote areas where many others had failed."

In 2022, the European Investment Bank loaned \in 10 million to WeLight's \in 28 million project to build and develop solar mini-grids in 120 rural Madagascar villages. The EU-funded impact investment facility ElectriFI, and Triodos, a financial expert in the energy industry for Africa, partnered with the EU bank to raise a further \in 19 million.

Access to affordable and clean energy for all is a vital UN Sustainable Development Goal and contributes to the green and just transition supported by the European Union's Global Gateway strategy.

Alternatives to electricity lines

Madagascar is a large island rich in natural resources, but it's one of the poorest countries in the world. Only 15% of its rural population have access to electricity. Most rural households use kerosene, wood and charcoal for cooking and heating, often with little or no ventilation. Household air pollution caused by dirty fuels is particularly dangerous for women, who spend most of their time in and around the home.

Some people can afford to buy diesel generators to run electrically powered machines, tools and appliances, and irrigation pumps. Many solar home systems are mainly designed just to provide basic power for lighting and phone charging — and they only work when the sun shines.

WeLight's system is more powerful. Powered by renewable energy, the mini-grids set up by WeLight provide residents in off-grid rural villages with access to clean, affordable and reliable energy, at work and at home. That's true even after dark, because the WeLight system includes a battery that's charged during the day.

Solar mini-grids could be the most cost-effective option for rural electrification.

Clean and affordable

WeLight was founded in 2019 by Axian, a pan-African group mainly operating in telecoms, and Sagemcom, a French high-tech company specializing in broadband communications. Norfund, Norway's sovereign development bank, also entered the business at an early stage.

During the day, a solar power plant installed by WeLight captures light, transforms it into electricity, and charges its batteries, which take over at night. Using a smart meter installed in private homes, residents can buy their electricity by prepaying directly with their phone.

WeLight offers free connection for community buildings and public lighting. These connections light up isolated villages, improve safety, and enable activities after dark. "People can move around the village and stay up at night without worries," says a 58-year-old resident in Tsarabaria, a village in northern Madagascar.

Widespread impact

Women benefit most from this rural electrification, because they do most of the cooking and gathering of fuel. For them, childbirth at night is now less challenging, too.

"Thanks to the European Investment Bank financing, our impact is doubled," says Villeneuve, WeLight's chief executive. "It's women who show us their gratitude most."

Since 2022, WeLight has operated in Mali too, with plans to expand its presence in the country.

How electricity changes lives

The people connected in the villages are also entrepreneurs who will be able to set up new endeavours and secure new income streams.

"My life has changed," says Lan Yu Germaine, an artisan and grocer in Tsarabaria. With a freezer in her grocery store powered by electricity from a WeLight system, more clients come to buy fresh drinks, especially in the hot season. So Lan Yu's income has increased, allowing her to better provide for her family of four.

FAIRNESS IN THE FAVELAS

Electricity and social help for people living in Brazil's slums

t's a rainy night in São Paulo.

She's washing dishes to distract herself from the storm outside. The sound of the television presenter keeps going on and off each time the electricity briefly shuts off. She needs to remember to unplug the TV before going to bed if she wants to keep the refrigerator powered through the night.

If she had a job, she could afford a legal connection, but when you're a woman living in the favelas, Brazil's slums, opportunities are few.

Enel São Paulo decided to change this problem by providing stable electricity at a subsidised rate for people in the most impoverished areas on the periphery of São Paulo. The company is one of the biggest power distribution firms of the Enel Group in Latin America.

"If you go to the favelas and look up, you see all these cables connected to the power grid," says Martina Cimarosa, a loan officer at the European Investment Bank who worked with Enel São Paulo to modernise its network. "Most of them could be improved."

There also are social and gender benefits to this work.

"The different scopes of this project came as a surprise," says Moa Westman, a gender specialist at the European Investment Bank. "The main objective was to improve the stability and reliability of energy distribution in the favelas, but we ended up discovering that a majority of the households were led by women, which added a gender and a social integration perspective to the project."

The European Investment Bank approved \$200 million for Enel São Paulo to reduce energy losses in its network and improve the quality and safety of the energy supply in the São Paulo region.

Improving citizen rights

Brazil is the largest single energy consumer in South America, accounting for about 36% of total consumption in the region. But the rate of energy theft is around 15%, rising to over 50% in the north of the country.

Enel São Paulo begins its work in peripheral areas with a study of the social and economic context. It also educates residents about the risks of clandestine connections.

With proof of residence, they can register their plot, get social security and even open a bank account.

"By regularising the connections in the favelas, we cut the energy losses that damage the supply chain," says Marcia Massotti, head of sustainability at Enel Brazil. "We also reduce the number of accidents with the electricity grid due to the illegal connections."

If residents use less than a certain threshold of energy, they get a discount on their energy bills that allows them to have free electricity. Getting an energy bill also helps people exercise their rights as citizens. Because people have official proof of their address, they can register for a range of new services.

"With proof of residence, they can register their plot, get social security and even open a bank account — things that seem small but make a difference in social integration," says Massimo Merighi, a senior technical advisor at the European Investment Bank.

A social investment

Enel São Paulo has also developed the Enel Shares programme that promotes the social and economic development of vulnerable populations.

"In the Brazilian peripheries, social initiatives have become the main support base for residents, especially after the pandemic, which aggravated the economic situation of the poorest population," Massotti says.

In the Hortas em Rede project, Enel São Paulo provides urban garden and agricultural training for residents, especially for women and men over 50.

The projects developed by Enel São Paulo, especially those focused on social entrepreneurship and professional training, are geared towards women. These women have fewer opportunities, receive lower wages in the formal labour market, and are often victims of domestic violence.

"By encouraging social entrepreneurship, we give many women a chance to develop," Massotti says. "We're working towards a more inclusive and gender-balanced energy sector."

GREEN X FACTOR IN SERBIA

Modernising the Belgrade-Niš railway boosts integration with the European Union

he long-held dream of trains running smoothly across the Western Balkans could soon materialise. A \in 2.2 billion EU financial package for the Belgrade-Niš section of the Corridor X rail line in Serbia proves that the region is on the right track.

Thanks to these funds, travelling by train between these two Serbian cities will take less than two hours at a speed of up to 200 kilometres per hour. Currently, it takes at least six hours by train, or around three hours by car.

"When the railway was built in 1884, it took eight hours to travel and now it takes six and a half," said Serbian President Aleksandar Vučić at the announcement of the EU financing in Belgrade on 28 February. "Nothing has changed in 130 years. Now we are changing Serbia, with the help of the European Union."

The largest EU donation for a project in Serbia

On the same occasion, the first €82.8 million investment grant was sealed between the European Investment Bank and the Serbian Ministry of Construction, Transport and Infrastructure on a train from Belgrade to Niš, in the presence of officials from the Serbian government, the European Union and the European Bank for Reconstruction and Development. The European Union will provide up to €598 million in grants, making it the largest EU donation for a single project in Serbia to date. The package also includes a €1.1 billion EIB loan, as well as a loan of €550 million from the European Bank for Reconstruction and Development.

"We have picked this project because it is capable of changing the realities on the ground for the people of Serbia, for the people of southern Serbia, and with that, also for the entire region," said Olivér Várhelyi, the European Commissioner for enlargement negotiations, "because this train should bring growth and jobs, this train should bring investment to areas where it is most needed — in the south of Serbia. But it should also bring a new Serbia and a new region."

This project is capable of changing the realities on the ground for the people of Serbia.

Sustainable support for local partners and green projects

Upon completion, the new railway is expected to benefit more than 2.3 million passengers annually and to carry 9.4 million tonnes of cargo, creating new business and job opportunities.

EIB Global has approved €1.1 billion for this large-scale investment, which revitalises the pivotal link between the European Union and the Western Balkans, and connects central Europe with Thessaloniki, Greece, and Sofia, Bulgaria. It is part of the European Union's €30 billion Economic and Investment Plan for the Western Balkans, which aims to mobilise investments in transport, energy, and the green and digital transition to create sustainable growth and jobs equivalent to one-third of the region's gross domestic product.

To date, the European Investment Bank has invested over €1.2 billion in the rail sector as one of the largest financiers of the transport sector in the region, supporting economic cooperation and connectivity.

The rehabilitation of the Belgrade-Niš railway will improve Serbia's connections to other European rail networks. It will facilitate faster freight transport and significantly reduce commuting time. As rail is a clean mode of transport, the modernisation of the railway system also contributes to a cleaner environment.







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