

2021/2022

EIB GLOBAL REPORT

THE IMPACT



European
Investment
Bank



EUROPEAN INVESTMENT BANK

2021/2022

EIB GLOBAL REPORT THE IMPACT



2021/2022 EIB Global Report — The impact

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CONTENTS

V FOREWORD

1 WORKING IN PARTNERSHIP TO SUPPORT ECONOMIC RECOVERY AND CLIMATE TRANSITION

- 10 SUB-SAHARAN AFRICA
- 12 EASTERN NEIGHBOURHOOD AND CENTRAL ASIA
- 14 SOUTHERN NEIGHBOURHOOD
- 16 PRE-ACCESSION COUNTRIES: WESTERN BALKANS AND TURKEY
- 18 ASIA AND THE PACIFIC
- 20 LATIN AMERICA AND THE CARIBBEAN

23 A GLOBAL GREEN DEAL

- 24 REPLACING FOSSIL FUELS, INCREASING ENERGY ACCESS, BUILDING CLIMATE RESILIENCE
- 26 CLIMATE RISKS AND DEVELOPMENT
- 28 WHY SOME COMPANIES DON'T MAKE GREEN INVESTMENTS
- 29 GREENING AFRICA'S FINANCIAL SECTOR
- 30 EIB LENDING FOR CLIMATE ACTION: STEPPING UP TO THE CHALLENGE
- 32 2021 IN FIGURES: CLIMATE AND THE ENVIRONMENT

35 JOBS AND INCLUSIVE GROWTH

- 37 THE EFFECT OF COVID-19, THE UKRAINE WAR AND GLOBAL INFLATION ON SME ACCESS TO FINANCE
- 38 CREDIT CONSTRAINTS AND GAPS FOR BUSINESSES IN THE EU NEIGHBOURHOOD
- 42 IMPROVING ACCESS TO FINANCE FOR SMALLER COMPANIES: A LOOK BACK AT A DECADE OF CREDIT LINES
- 47 2021 IN FIGURES: PRIVATE SECTOR GROWTH AND EMPLOYMENT

49 CONNECTING THE GLOBE

- 51 COVID-19: THE NEED FOR A GLOBAL RESPONSE
- 52 CONNECTIVITY AND ECONOMIC GROWTH IN THE WESTERN BALKANS
- 54 TRADE CONNECTIONS, INNOVATION AND PRODUCTIVITY GROWTH IN THE EU NEIGHBOURHOOD
- 56 2021 IN FIGURES: CONNECTING THE GLOBE

59 IMPACT IN DETAIL

- 60 HOW WE MEASURE RESULTS AND IMPACT
- 62 EXPECTED RESULTS OF NEW PROJECTS
- 68 THE EIB'S CONTRIBUTION TO NEW PROJECTS
- 71 CARBON FOOTPRINT EXERCISE
- 72 MACROECONOMIC IMPACT MODELLING
- 74 RESULTS OF COMPLETED PROJECTS
- 79 LENDING VOLUMES

PRESIDENT'S FOREWORD

“The EIB is a leading multilateral provider of development finance. As such, we believe it is essential to base our work on a real understanding of local contexts, working closely with national governments, other EU institutions and development partners.”



Our greatest challenges are global. The pandemic, for example, has taught us that the public health situation in one country can quickly come to affect us all, putting lives at risk and creating immense global disruption. It is also an example of the responsibility we have in developed nations to help others facing the same threats with fewer resources. That is why, last year, at the EIB we continued our exceptional response to the pandemic. We worked with the COVAX initiative and partner countries to help vaccinate nearly 500 million people against COVID-19, and with GAVI, the vaccine alliance, to vaccinate 280 million children in sub-Saharan Africa against various preventable diseases.

Now, the war in Ukraine casts a new shadow over development prospects. Aside from the terrible toll in that country, the war is causing great disruption to Ukraine's neighbours and sending shockwaves around the world. Higher energy and food prices are undermining food security, energy security and macrofinancial stability in many developing and emerging economies. This emphasises how important it is to build trusted links — political partnerships, economic cooperation and physical infrastructure — to help countries around the world reap the full benefits of closer association with the European Union. In March this year, the European Investment Bank provided €668 million in emergency lending for Ukraine, to cover urgent financial needs. We are working to provide additional financial assistance so Ukraine can emerge stronger from this tremendous challenge.

This year has also seen an unprecedented heat wave hit South Asia, with further implications for food security. Whatever else may grab the headlines, climate change has not gone away. As Europeans, we must take all necessary measures to decarbonise our economy. However, we also know that, alone, this will not be enough. We must embrace our responsibility to support investment in climate change

mitigation and adaptation, wherever our help is needed. The climate transition is, in fact, a tremendous development opportunity. Projects we financed in 2021 will generate enough electricity from renewables to power 2.5 million homes and enable people to make 850 million journeys every year on low-carbon public transport.

This report is about the €7.2 billion in financing we provided to low and middle-income countries outside the European Union in 2021. More importantly, it is about the results of this lending and the impact it will have on people's lives. Nearly 100 new projects financed in 2021 will also help sustain 527 000 jobs and support improved water supply or sanitation for 3.4 million people.

This report also draws on the research we conduct at the European Investment Bank to deepen our understanding of development challenges and needs. The EIB is a leading multilateral provider of development finance. As such, we believe it is essential to base our work on a real understanding of local contexts, working closely with national governments, other EU institutions and development partners. While this report focuses on research and impact, its companion volume — EIB Global Report: The Story — takes a closer look at selected projects and the lives they change.

The European Investment Bank has decades of experience financing sound projects in sub-Saharan Africa, the European Union's neighbours to the south and east, and in Asia and Latin America. Since the start of 2022, this work is taken forward through a new arm, EIB Global. The new structure will capitalise even more on our experience and strengths to mobilise more development and climate finance, and to enhance our impact. With a stronger local presence in partner countries, EIB Global will foster focused partnerships within Team Europe and in support of the Global Gateway initiative.

By working together, in a true spirit of partnership, we can create a greener, more connected and more prosperous future for all regions of the world.

Werner Hoyer

WORKING IN PARTNERSHIP TO SUPPORT ECONOMIC RECOVERY AND CLIMATE TRANSITION

From the fight against climate change to the coronavirus pandemic, the interconnections in our world have become ever clearer. The European Investment Bank's support for its global partners, as part of Europe's response, has focused on helping countries withstand the severe economic implications of COVID-19 and the urgent provision of vaccines, while continuing to offer support for jobs and sustainable growth. Climate action and environmental sustainability also remain a critical and expanding area of EIB support.

The European Investment Bank (EIB) has a long track record as a provider of development and climate finance, working with EU institutions, Member States and partner countries in the EU neighbourhood, sub-Saharan Africa and around the world to foster sustainable development and bring real benefits to people's lives. The challenges faced by our partners around the world are many: economies struggle to provide adequate jobs and basic infrastructure, while dealing with the growing needs for climate action and protection of the environment. These challenges have been aggravated by the coronavirus pandemic and the ramifications of the conflict in Ukraine.



A €250 million EIB loan is helping the Government of Bangladesh to access COVID-19 vaccines and strengthen treatment.

Strong global progress on poverty reduction is at risk of stalling

Economic growth has lifted hundreds of millions of people out of poverty in recent decades. A large part of that growth took place in China, South and Southeast Asia, where companies were able to seize the opportunities provided by globalisation to tap new markets, adopt new technologies and raise productivity and ultimately the incomes of a large part of the world's population. The same process has been underway in many countries with close ties to the European Union or other developed economies.

But this progress has proved to be very uneven. The economic dynamism shown by many sub-Saharan African countries has not yet been sufficient to outpace the enormous and growing needs of people in that region. In the Southern Mediterranean and Europe's Eastern Neighbourhood, progress has been too slow in terms of convergence of living standards towards those in the European Union. While countries in the Western Balkans region have overall benefited from improved security and closer connections to the European Union, other countries around the Mediterranean and to Europe's east have been held back by a weak business environment and concerns about stability and security. Unemployment remains a key issue, particularly for young people, with youth unemployment in the Middle East and North Africa standing at 28% and rising to 49% among young women.¹

// Economic growth has lifted hundreds of millions of people out of poverty in recent decades, but progress has been very uneven. //

COVID-19 has intensified development challenges around the world...

In addition to causing a tragic loss of lives, the pandemic was a massive shock to the world economy. While most developed economies were able to deploy large-scale programmes of support for businesses to help cushion the impact and ensure business continuity, most middle- and lower-income countries had less fiscal flexibility to do so. It has been estimated that the pandemic pushed an additional 93 million people into poverty in 2020.²

Mitigating the negative effects of the pandemic was a major focus of EIB lending outside the European Union in 2020 and 2021. Indeed, the consequences of the pandemic will be felt in the medium and long term, well beyond the direct impact of the initial lockdowns. One consequence is the impaired financial health of businesses, which may negatively affect the strength of recovery, investment and employment creation for some time. Smaller businesses are especially affected as they typically have little recourse to longer-term lending to cushion the shock, with many effectively disconnected from the banking sector. For example, before the pandemic, as much as 62% of formal sector businesses in the emerging economies of the Middle East and North Africa reported needing a loan, but factors such as high collateral requirements and interest rates discouraged them from applying for one, expecting rejection. Much employment, meanwhile, is not even in formal businesses but in the informal sector (often more than 90% in sub-Saharan Africa) where recourse to credit or public support is extremely restricted.³

// The pandemic pushed an additional 93 million people into poverty. //

1. International Labour Organization, ILOSTAT database. Figures for Middle East and North Africa exclude high-income countries.

2. Mahler, D.G. et al., 2022, Pandemic, prices, and poverty. <https://blogs.worldbank.org/opendata/pandemic-prices-and-poverty>.

3. Elgin, C. et al., 2021, Understanding Informality, CEPR Discussion Paper, 16497. <https://www.worldbank.org/en/research/brief/informal-economy-database>.

// Rising borrowing costs due to monetary normalisation in developed economies has put further pressure on the public finances of developing economies. //

A further effect of the pandemic has been on public finances, from the implementation of fiscal support measures to the loss of public revenues. The recovery that began in most of the world economy in 2021 brought some relief. But the rise in global commodity prices that has accompanied the recovery since early 2021 has had mixed effects, benefiting some commodity exporters but also exacerbating trade imbalances and undermining food security in countries dependent on imports.

Rising borrowing costs due to monetary normalisation in developed economies has put further pressure on the public finances of developing economies, with eight countries already in debt distress as of April 2022.

...as has the invasion of Ukraine

The focus of this report is EIB development finance in 2021, as well as the impacts of past lending, but of course we observe the additional stress created by Russia's invasion of Ukraine in early 2022. This will have stark consequences for development prospects, most particularly across the Eastern Neighbourhood and Central Asia, where losses of export demand, remittance flows and tourism revenues are likely to have a major negative impact, alongside the effect of increased instability and uncertainty on investment. Other low and middle-income countries around the world are likely to be affected particularly by further upward pressure on food and energy prices. Risks are highest for food and energy importers with public finances that are already under strain. The potential exacerbation of food insecurity and financial stability is alarming.

// Risks are highest for food and energy importers with public finances that are already under strain. //

The climate transition is both a challenge and an opportunity for development

A global green transition is now both imperative and extremely urgent. Countries that have achieved a high level of development by relying on fossil fuels have a special responsibility not only to decarbonise their own economies, but to assist in the transition and sustainable development of others. The three key priorities are: to replace fossil fuels in the current energy mix; achieve economic growth and development goals with minimal new emissions; and build resilience to climate change in all countries.

According to the International Energy Agency, investments in clean energy in developing and emerging economies (excluding China) need to expand by more than seven times, to above \$1 trillion, to be on track for net-zero global carbon emissions by 2050.⁴ This investment is needed both to replace fossil fuels within the existing energy mix and to ensure universal access to energy and enable rising standards of living. An estimated 770 million people still live without access to electricity, mostly in Africa and developing countries in Asia.

To achieve the sustainable development goal of universal access to affordable, reliable and modern energy services by 2030, we need to connect almost 100 million people every year with those services, via an annual investment of around \$35 billion.⁵

// Investments in clean energy in developing and emerging economies need to expand by more than seven times. //

4. International Energy Agency, 2021, *Financing clean energy transitions in emerging and developing economies*. <https://www.iea.org/reports/financing-clean-energy-transitions-in-emerging-and-developing-economies>.

5. Sustainable Energy for All and Climate Policy Initiative, 2020, *Energizing Finance: Understanding the Landscape*. https://www.seforall.org/system/files/2020-11/EF-2020-UL-SEforALL_0.pdf.

Investing in climate adaptation and resilience is a further challenge, with many developing countries among the most exposed to the risks posed by climate change. Countries in sub-Saharan Africa are particularly vulnerable to extreme temperature events and changing rainfall patterns because of their economic dependence on rain-fed agriculture and other outdoor activities, and also due to weak financial and institutional capacity, which impairs their ability to take mitigating actions. Low-lying regions, South and Southeast Asia and small island states in the Caribbean and Pacific are also particularly vulnerable.⁶

Green development presents an enormous challenge, but also a great opportunity. Energy investments can provide a substantial spur to employment, while improving energy efficiency in buildings and industry can lower the price of goods and services. Developing economies also possess tremendous unexploited potential for wind, solar, geothermal or hydro-based electricity generation that could provide a reliable domestic source of power to enable rising living standards and universal access to clean energy, even for remote communities. Making the most of these natural assets will bring significant benefits in terms of sustainable growth.

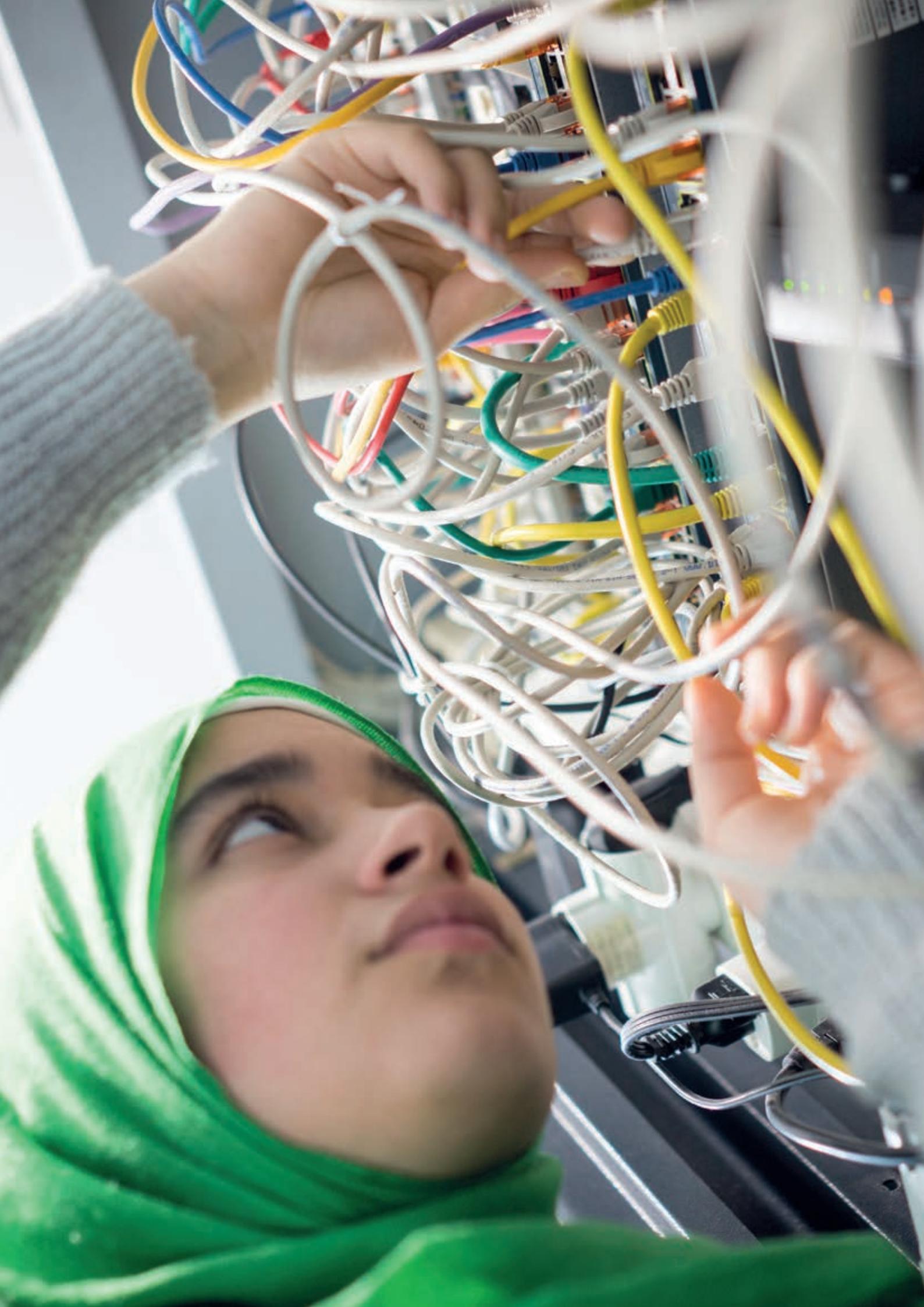
The financial capital needed for the global climate transition exists, but channelling it to green investment, particularly in low and middle-income countries, is subject to many hurdles. High financing costs in those countries threaten to make clean energy technologies, which have high upfront investment costs and low running costs, less affordable. International efforts to catalyse and accelerate the inflow of capital for green investments are therefore essential.

Enabling a thriving private sector is vital

Unleashing the potential of the private sector to grow and generating high-quality jobs is critical to reviving equitable growth across a number of regions. To do this, it is important to remove obstacles to private sector growth. Ensuring a stable macroeconomic policy environment has become ever more pressing given rising commodity prices, interest rate hikes and already high sovereign debt levels in many countries. The impact of the Russian invasion of Ukraine on the price of food and energy imports, as well as on the conditions of funding available to emerging markets, only adds to this urgency. Continued structural reforms to improve institutions and provide a supportive business environment are needed to allow firm activity to grow. Meanwhile, large infrastructure gaps remain an obstacle to growth, particularly with regard to increasing connectivity with major markets to facilitate trade. Supporting innovation, which partly involves offering assistance to diffuse cutting-edge global technology, such as the recent case of vaccine development, remains an important area for cooperation between the European Union and the rest of the world.

“Continued reforms to improve institutions and provide a supportive business environment are needed to allow firm activity to grow.”

6. Ferrazzi, M., F. Kalantzis and S. Zwart, 2021. “Assessing climate risks at the country level: The EIB Climate Risk Country Scores”, *EIB Working Paper*, 2021/03. <https://www.eib.org/en/publications/economics-working-paper-2021-03>.



Alongside issues such as corruption, administrative bottlenecks and poor infrastructure, access to finance is one of the main constraints on businesses. While access to finance is a challenge for smaller businesses even in developed economies, firms in low and middle-income countries face constraints that go beyond those found in developed economies. Such constraints include limited information on credit risk; less developed banking sectors; less favourable legal frameworks; higher uncertainty over the value of collateral; a lack of long-term funding for both banks and their business clients; and exposure to the volatility of international financial flows. Smaller firms face the brunt of these constraints.

// Access to finance is one of the main constraints on businesses. //

Closer connections bring benefits for all, but equal partnerships are needed

The development progress that has been achieved in recent decades — notably in many Asian countries — points to the need for all low and middle-income countries to reap the benefits of connections with advanced economies, in a way that stimulates local adoption of new technologies, innovation and productivity growth, leading to rising living standards. The creation of a conducive business environment is also crucial, and this is a further lesson of the EU enlargement process that has spurred growth in EU Candidate Countries as well as new Member States.

One prerequisite for a conducive business environment is transparent and accountable governance that limits corruption. This helps to ensure that small and innovative firms are not held back by the dominance of large companies with political connections. And it helps foster high-quality decision-making regarding policy measures, including long-term investments in infrastructure.

// The importance of a conducive business environment is a further lesson of the EU enlargement process that has spurred growth in EU Candidate Countries as well as new Member States. //

High-quality infrastructure is also part of a conducive environment for private sector growth. This means efficient transport and digital connections, both internationally, with key trade partners, and internally, with less developed cities and rural regions. It also means energy sector investment, particularly interconnections, to ensure reliable and secure energy supplies.

Lastly, to achieve higher living standards, a country needs an educated and healthy workforce. The shortage of skilled workers is a major barrier to business expansion, especially to the innovative adoption of new technologies and practices, which leads to rising labour productivity and per capita incomes. International connections among firms and with research institutions also play a critical role in the spread and development of new knowledge and technology. Health matters, too: The coronavirus pandemic has demonstrated just how much our economies depend on a high level of public health and how healthcare deficits anywhere in the world can ultimately affect us all.

// The coronavirus pandemic has demonstrated just how much our economies depend on a high level of public health. //

Increasing connectivity is thus a third key element of the strategy of EIB Global, the Bank's new development arm, in the context of the EU Global Gateway initiative, alongside climate action and access to finance. We know that investments in connectivity — in transport, digitalisation, energy connections, education and health — need to be undertaken within true, transparent and accountable partnerships, respecting human rights, climate objectives, and best practices on social, environmental and procurement issues. This is the only way to ensure that investments really create lasting benefits for people in the targeted countries and communities.

The challenge of development finance

Before COVID-19, the annual financing gap to achieve the Sustainable Development Goals (SDGs) was huge, and to a large degree, unmet: The gap was estimated at about \$2.5 trillion, made up of \$500 billion for low-income countries, or 15% of their gross domestic product (GDP) in additional spending per year, and \$2 trillion for other developing countries (annual expenditure equalling 4% of their GDP).⁷ The four sources of finance necessary to fulfil the Addis Ababa Action Agenda were already under strain before the pandemic, and have become increasingly so.⁸ During the pandemic, official development finance has played a crucial role, particularly in terms of the strong push to finance the deployment of vaccines and other forms of social protection. Given the increasing budgetary pressures faced by many economies, it will be important to sustain official development assistance budgets in the future.

With low and middle-income countries facing less fiscal space as an effect of the pandemic, renewed efforts are required to ensure the needed SDG financing.

Mobilising private investment also remains essential to achieving the investment needed. However, rising commodity prices, tightening financial market conditions and rising risks of debt distress threaten to affect the availability of this source of finance. With low and middle-income countries facing a reduction in fiscal space as an effect of the pandemic, renewed efforts are required to ensure the needed SDG financing response, including a framework for dealing with countries that enter debt distress.

A particular focus of development assistance should be on the needs of fragile states and other conflict-affected areas to support economic and societal resilience and promote a stable and peaceful future. The recent invasion of Ukraine and its economically destabilising effects for other countries is a stark reminder of the importance of this agenda. There will also be a growing interconnection between climate change, energy and food security, fragility and conflict. Action on climate change mitigation and adaptation cannot be separated from stability concerns and the two issues need to be addressed in an interlinked manner.

In the future, there will be a growing interconnection between climate change, energy and food security, fragility and conflict.

7. Gaspar, V. et al. (2019), "Fiscal policy and development: Human, social, and physical investments for the SDGs", Staff Discussion Note, No. 19/03, International Monetary Fund, Washington, DC. <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2019/01/18/Fiscal-Policy-and-Development-Human-Social-and-Physical-Investments-for-the-SDGs-46444>.

8. The Addis Ababa Action Agenda was adopted at the Third International Conference on Financing for Development, in 2015, and endorsed by the UN General Assembly. It provides a global framework for financing sustainable development, aligning financing flows and policies with economic, social and environmental priorities to support achievement of the Sustainable Development Goals.

EIB Global: Realising the full potential of the EIB as a development finance institution

The EIB can count on decades of experience as a leading multilateral development bank, investing in the EU neighbourhood, sub-Saharan Africa, Asia and Latin America. In the last five years, the Bank has provided €37.7 billion in financing to more than 100 low and middle-income countries.⁹ Acting on behalf of its shareholders, the EU Member States, the EIB works as an integral part of Team Europe, supporting EU external and development policies in close partnership with beneficiary countries.

In doing so, it is ultimately not financing volumes that matter but impact: real positive change in people's lives. The Bank uses its Additionality and Impact Measurement (AIM) system to assess and track the results and impact of its operations as well as the added benefit that comes from EIB involvement.

As a development finance institution, the Bank has also evolved and adapted to emerging needs and priorities. In 2019, it took on the role of being the European Union's climate bank. This means raising the EIB's provision of climate finance to 50% of total financing by the end of 2025, also outside the European Union. It means mainstreaming compatibility with Paris Agreement goals in everything the Bank does. The EIB also acts as a central partner in Europe's Global Gateway initiative to support greater connectivity and mutual benefits through sustainable infrastructure investment around the world.

As of the start of 2022, the EIB's development finance role is being taken forward and intensified through EIB Global. The new structure builds on the strength and experience that the EIB has gained working outside Europe to mobilise more development and climate finance, and increase impact. As a dedicated branch with more local presence in partner countries, EIB Global is fostering strong, focused partnerships in the context of the Global Gateway initiative and within Team Europe, deepening cooperation with clients, EU Member States, civil society and other development finance institutions.

The purpose of this report is twofold. First, it provides an overview of the Bank's activities outside the European Union in 2021, with a focus on the expected results, complemented by reporting on the results already achieved by past operations. Second, it elaborates on the context of the Bank's engagement in countries outside Europe, examining different development challenges and how they confront different regions, drawing on our own development research. This report is complemented by its companion volume EIB Global Report: The story, which delves deeper into the rationale for and experience gained from individual projects financed by the EIB outside Europe.

“ Ultimately, it is not financing volumes that matter but impact: real positive change in people's lives. ”

“ The new structure — EIB Global — builds on the strength and experience that the EIB has gained working outside Europe to mobilise more development and climate finance, and increase impact. ”

9. This report covers the EIB's activities outside the European Union in low and middle-income countries, thus excluding a small number of operations in developed countries such as those in EFTA.

SUB-SAHARAN AFRICA

Sub-Saharan Africa stands out as a region with enormous potential, yet has huge investment needs, stark vulnerability in the face of climate change, and many financial, institutional and security challenges.

The war in Ukraine and the COVID-19 crisis highlighted the fragility of many sub-Saharan economies and their exposure to external shocks and climate change. According to the OECD (2020), recovery from COVID-19 will require an additional \$1 trillion annually, on top of the \$2.5 trillion annual gap in finance for the SDGs that pre-dated the crisis. Some two-fifths of sub-Saharan Africans still live in extreme poverty, with less than \$1.90 per day, and it is estimated that the coronavirus pandemic has seen the number of people living in poverty increase by some 31 million to 478 million people in 2021.

With only 65% of the population able to access basic drinking water services and 33% with basic sanitation and access to public transport, there is a great need for investment in vital infrastructure. Fighting climate change and building up renewable energy generation adds to that need. According to recent analysis performed by the EIB, almost all African countries face elevated, high or very high risk from climate change.¹⁰ Rising temperatures and more frequent droughts could severely undermine the productivity of agriculture, most notably in the Sahel. However, the region has high solar capacity potential and plentiful wind, hydro and geothermal generation resources that can be exploited.

Governments alone cannot close the structural bottlenecks that hinder more inclusive, broad-based development. To support the recovery, a thriving financial system is needed. However, banking sectors remain underdeveloped relative to the size of the region's economies and only 20% of small and medium-sized enterprises (SMEs) have access to a line of credit/loan with a formal financial institution. Banks surveyed for the EIB's 2021 *Finance in Africa* report were able to avoid liquidity shortfalls, but saw the deteriorating financial situation of their small business clients as the worst effect of the pandemic on their business, which may undermine the economic recovery.¹¹

The EIB supports EU policy in sub-Saharan Africa under the EU/Africa-Caribbean-Pacific Partnership Agreement and the EIB's own risk lending, in the context of Global Europe. The Bank signed €2.1 billion in finance for the region in 2021, including for 51 new projects that will, for example, co-finance vaccines for 700 million people, improve water supply or sanitation for nearly 2.5 million people and help to sustain nearly 400 000 jobs in small businesses and microenterprises. Equity funds are a key tool that the Bank uses to support innovative African companies, particularly those that are developing and scaling up solutions for the poorest populations to access energy and healthcare, financial services, education and internet connectivity, for example through off-grid solar power technologies.

10. See Ferrazzi, M., F. Kalantzis and S. Zwart, 2021. "Assessing climate risks at the country level: the EIB scoring model", *EIB Working Paper*, 2021/03. <https://www.eib.org/en/publications/economics-working-paper-2021-03>.

11. EIB, 2021, *Finance in Africa: for green, smart and inclusive private sector development*. https://www.eib.org/attachments/publications/economic_report_finance_in_africa_2021_en.pdf.

Signed in 2021

€2.08 billion

Climate action: 31%

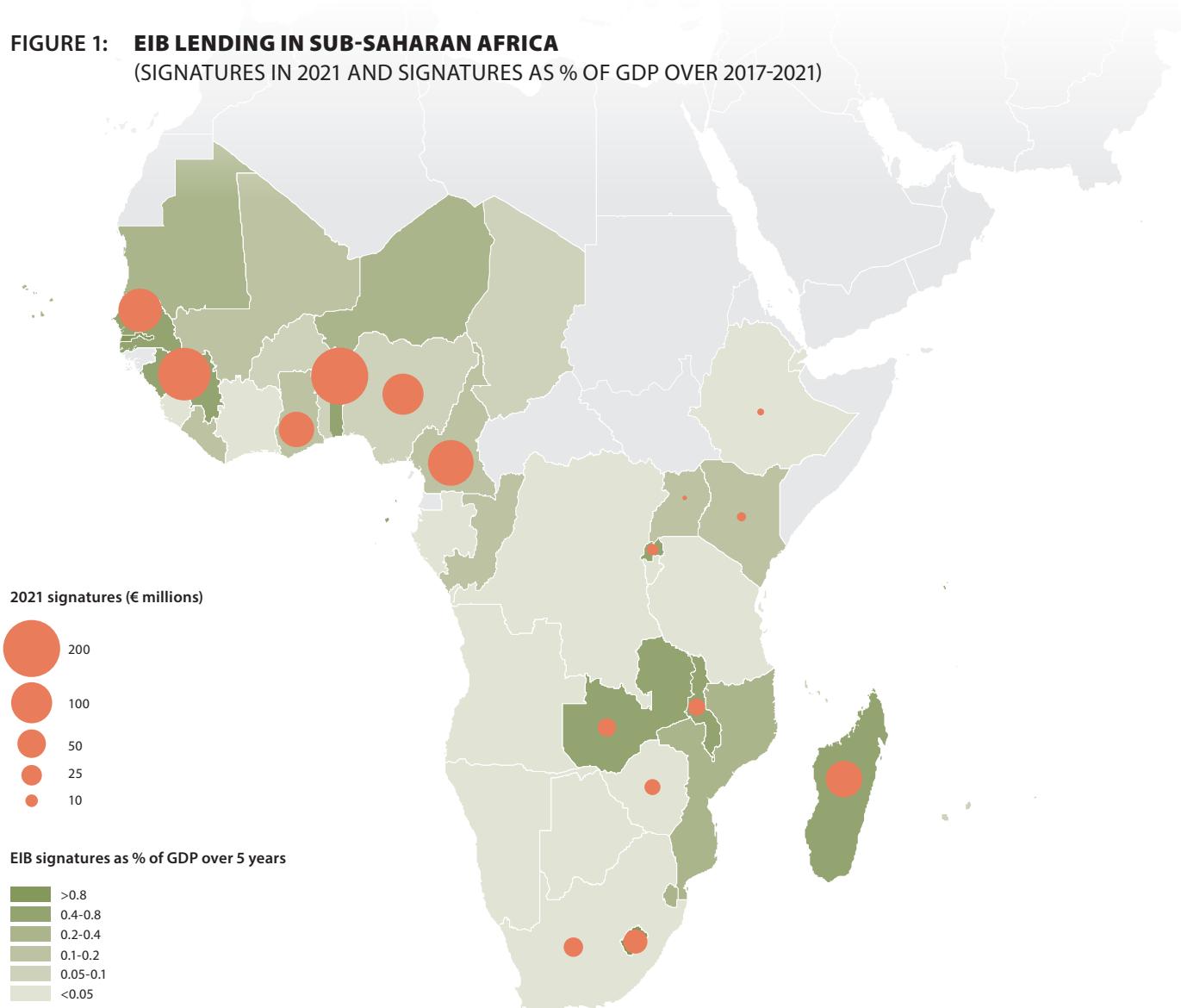
Key expected results of new projects

700 million people vaccinated against COVID-19 and other diseases.

2.54 million people with improved water supply or sanitation.

397 000 jobs sustained in micro firms (up to ten employees), small to medium firms (up to 250 employees) and mid-caps (up to 3 000 employees).

FIGURE 1: EIB LENDING IN SUB-SAHARAN AFRICA
(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)



The European Investment Bank does not endorse, accept or judge the legal status of any territory, boundaries, colours, denominations or information depicted on any map in this section.
€1.08 billion signed in 2021 through regional operations was not yet allocated by country at the end of the year and is not reported on the map.

EASTERN NEIGHBOURHOOD AND CENTRAL ASIA

The Russian invasion of Ukraine is a tragic setback for a region in the midst of economic transition. Creating opportunities through greater connectivity with the EU economy is now even more vital.

The countries of the former Soviet Union have undergone a dramatic transformation, but convergence with high-income living standards will require further economic transformation. Before the pandemic, the macroeconomic outlook was improving, with significant growth rates and stabilising levels of inflation and public debt. However, weaknesses in the business environment pointed to the need for policies to further strengthen competitiveness and improve trade and integration with EU and global markets. These include investments in infrastructure to better connect with European markets and human capital, and support for private sector-led growth.

The invasion of Ukraine has now dramatically undermined prospects across the Eastern Neighbourhood and Central Asia, in addition to the immense human and economic cost to the people of Ukraine. With a large share of the population having fled the country or been internally displaced, the need for short and long-term support for refugees and host communities is huge. Substantial long-term reconstruction support will be required to help Ukraine reverse the invasion's economic and human toll. Across the wider region, the negative economic effects of the war are felt through energy and other commodity prices, trade, remittance flows and less investor confidence.

According to the 2019 Enterprise Survey by the EIB, the European Bank for Reconstruction and Development (EBRD) and the World Bank, "access to finance" is the second most widely cited obstacle to doing business in the Eastern Neighbourhood (after tax rates).¹² Some two-thirds of firms that need a loan have either faced loan rejections or were discouraged from applying by factors such as high interest rates and collateral requirements, with small businesses twice as likely to be credit constrained than larger firms.

Besides supporting small and medium enterprises across the region, achieving greener growth is another significant challenge for the region. Having inherited a very energy-intensive economic model from the central planning era, carbon emissions per unit of GDP have halved since 1990, yet progress has stalled at levels still high relative to those in the European Union. Fossil fuels still account for more than 80% of primary energy supply and tremendous investment needs remain to raise the energy efficiency of buildings and industry and to expand low-carbon transport. Significant fossil fuel subsidies hinder this transition.

Together with the European Union, the EIB's investments in the Eastern Neighbourhood over time have aimed at fostering stability, security, sustainability and prosperity, with a strong focus on building links to the European economy. Investments in transport connectivity have been a major focus of EIB lending in the region, alongside private sector development, but new projects in 2021 also saw a stronger focus on climate action. About half of EIB lending focused on climate-related projects, with a large share aiming to improve sustainability in cities and regions through more efficient and environmentally friendly public transportation and increased energy efficiency of buildings.

12. EIB and EBRD, 2022, *Business resilience in the pandemic: Adaptation, innovation, financing and climate action from Eastern Europe to Central Asia*. <https://www.eib.org/en/publications/business-resilience-in-the-pandemic-and-beyond.htm>.

Signed in 2021

€756 million

Climate action: 39%

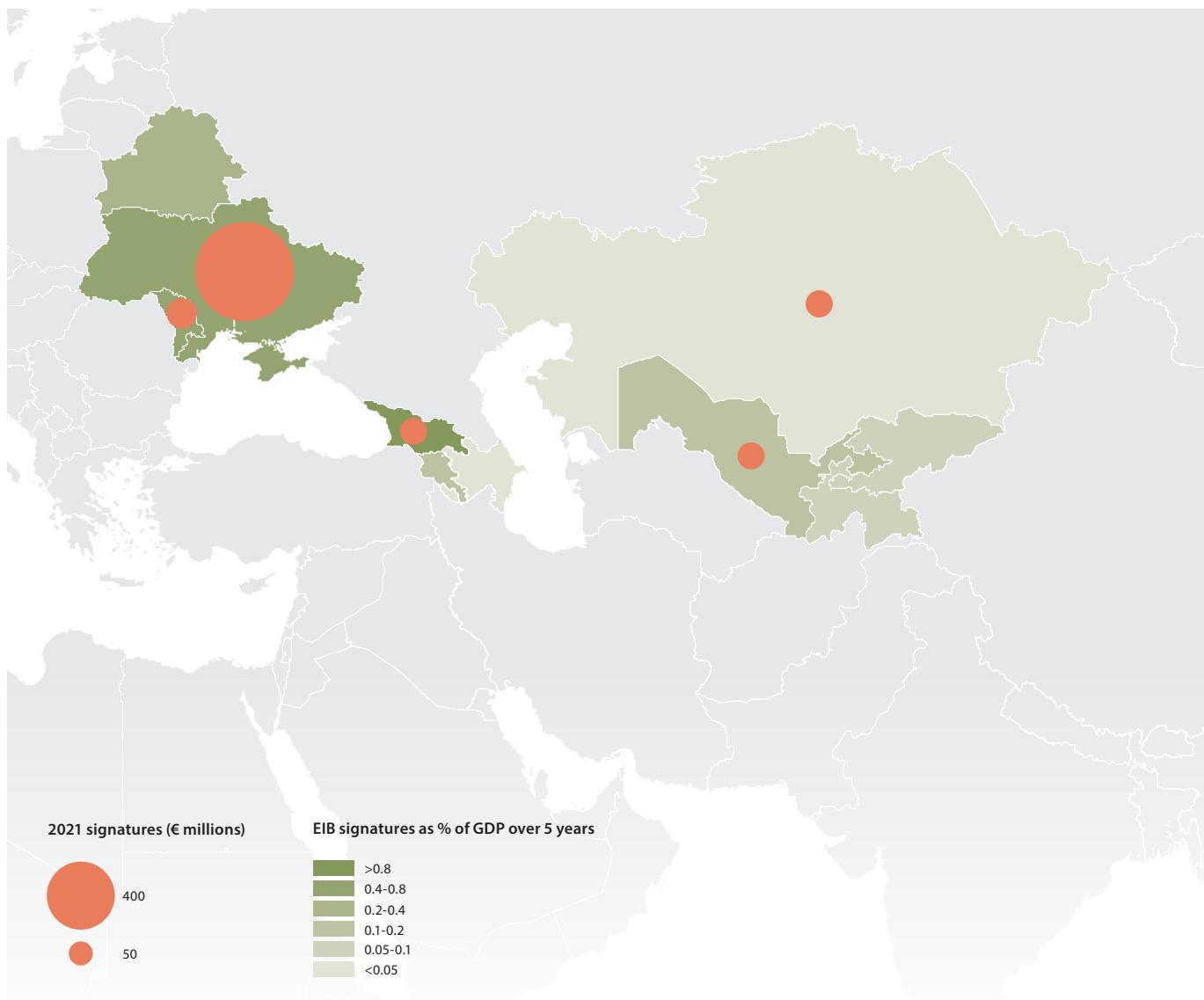
Key expected results of new projects

702 million journeys per year on improved urban public transport.

136 GWh/year saved by energy efficiency improvements.

2 783 places created in vocational education facilities.

**FIGURE 2: EIB LENDING IN THE EASTERN NEIGHBOURS AND CENTRAL ASIA
(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)**



The European Investment Bank does not endorse, accept or judge the legal status of any territory, boundaries, colours, denominations or information depicted on any map in this section.

SOUTHERN NEIGHBOURHOOD

Low investment and weak private sector activity are undermining income growth and job creation, and the effects of the Ukraine war will likely exacerbate economic and social problems.

Since the global financial crisis of 2007-09 and the Arab Spring of the early 2010s, growth in the southern and eastern Mediterranean countries has been slow and uneven, just keeping up with rapid population growth and doing little to raise living standards and ease social pressures. The region has struggled to provide jobs for the high number of young people entering the workforce, and the coronavirus pandemic provided a further setback to employment growth. Slow growth also poses a problem for public finances in the region, with debt-to-GDP ratios growing considerably over the last decade. Lebanon, notably, is experiencing a sovereign debt, balance-of-payments and social crisis, with a 37% drop in GDP since late 2019.

Enabling a more dynamic private sector is essential to improve prospects in the Southern Neighbourhood. Although a joint EIB, EBRD and World Bank study established that firms in the region have sufficient liquidity, slow progress in areas such as regulatory quality, government effectiveness and control of corruption have proven to be significant barriers to investments.¹³ Rates of innovation and the adoption of digital technologies are low relative to similar economies elsewhere. Large investment gaps in infrastructure create other issues, such as unreliable electricity supply and traffic congestion. Another factor is state dominance of the economy: growing public debt coupled with falling levels of investment is consistent with the government outcompeting the private sector for limited financial capital.

Environmental sustainability poses another significant challenge for this region. Growth in CO₂ emissions has been comparatively high — around 50% since 2005 — despite considerable renewable energy potential. Widespread fossil fuel incentives undermine incentives for green investment by the private sector, and relatively few firms have implemented such investments.

The EIB is committed to supporting the implementation of EU Neighbourhood Policy, including the 2021 New Agenda and the Economic and Investment Plan, which foresees new areas of cooperation on the green and digital transitions, as well as on economic resilience and inclusive growth. EIB lending in 2021 continued the Bank's response to the pandemic, with particular support for health preparedness and small and medium-sized businesses. Infrastructure projects focused on sustainable urban transport, water resources management and digital connectivity.

13. EIB, EBRD and World Bank, 2022, *Unlocking sustainable private sector growth in the Middle East and North Africa: Evidence from the Enterprise Survey*, <https://www.eib.org/en/publications/unlocking-sustainable-private-sector-growth-in-mena.htm>.

Signed in 2021

€2.01 billion

Climate action: 39%

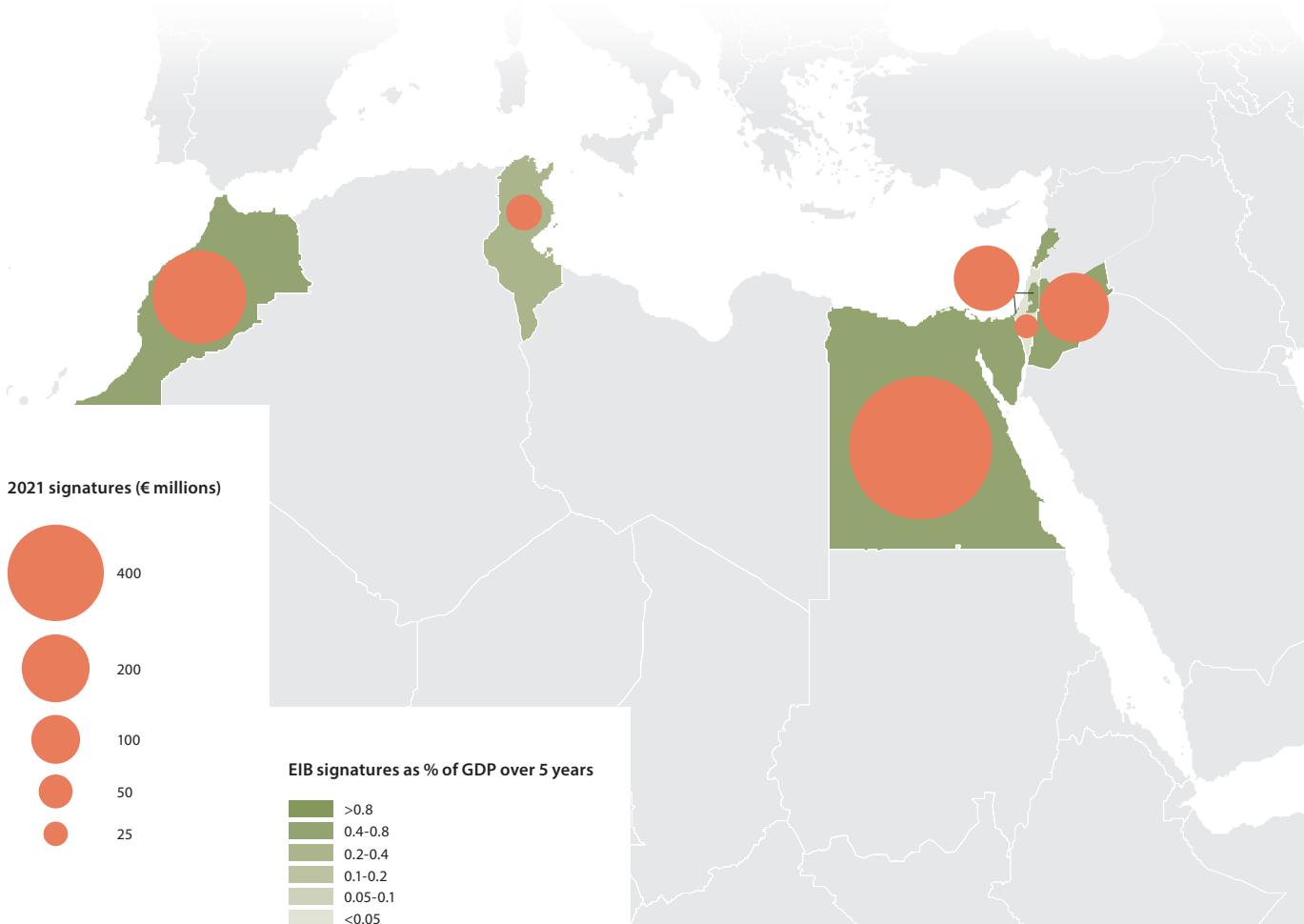
Key expected results of new projects

7.27 million additional mobile data users.

308 000 people with reduced exposure to drought risk.

37 500 pupils in improved facilities.

FIGURE 3: EIB LENDING IN THE SOUTHERN NEIGHBOURHOOD
(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)



Palestine: This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

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€19.8 million signed in 2021 through regional operations was not yet allocated by country at the end of the year and is not reported on the map.

PRE-ACCESSION COUNTRIES: WESTERN BALKANS AND TURKEY

Pre-accession countries have the opportunity to maximise the benefits from greater physical and economic integration with EU markets.

With 70% of their exports going to the European Union, the Western Balkans are already closely linked to the EU economy. Western Balkans economies experienced strong growth in 2021, with economic activity expanding by 7.3% in 2021, supported by both external and domestic demand.¹⁴ The fallout from the Russian invasion of Ukraine is likely to affect the region, particularly through rising commodity prices and potential disruption to gas supplies, nearly all of which come from Russia. To ensure resilient growth, structural developments are needed, including by combating a high degree of informality, low employment rates (13.5%)¹⁵ and poor infrastructure quality.

The most recent round of the EIB's Central, Eastern and South-Eastern Europe (CESEE) Bank Lending Survey shows that the demand for credit from firms has already recovered to pre-pandemic levels.¹⁶ However, governments need to address gaps in firms' competitiveness and invest in skills to make sure external demand continues.

Greening infrastructure and the financial sector is key to ensuring income convergence with EU countries.¹⁷ Fossil fuels still account for around three-quarters of primary energy supply in the Western Balkans, and energy still makes up a relatively high proportion of GDP. Diversifying the energy mix is therefore key. The IMF (2018) estimated that improved transport, energy and information and communications technology infrastructure can increase real per capita GDP by up to four percentage points.

EIB lending supports the accession process, including through Team Europe and the EU Economic and Investment Plan for the region, with a focus on investments to support the green agenda, digital transition, connectivity and small businesses. New projects in 2021 include investments in mobile data networks in Serbia, sustainable transport in Sarajevo, Bosnia and Herzegovina, and energy efficiency improvements in small businesses in Montenegro. Transport connectivity and financing for small and medium-sized firms continue to be key areas of focus.¹⁸

14. World Bank, 2022, *Western Balkans Regular Economic Report Spring 2022*. <https://www.worldbank.org/en/region/eca/publication/western-balkans-regular-economic-report>

15. International Labour Organization, ILOSTAT database.

16. EIB, 2021, *CESEE Bank Lending Survey H2-2021*. <https://www.eib.org/en/publications/cesee-bls-2021-h1>.

17. Atoyan, R. and D. Benedek, 2018, *Public Infrastructure in the Western Balkans: A Highway to Higher Income*. <https://www.imf.org/en/News/Articles/2018/02/01/na020818-public-infrastructure-in-the-western-balkans-a-highway-to-higher-income>.

18. Turkey has been a significant beneficiary of EIB lending. However, due to the European Union's serious concerns about a deterioration in the rule of law and the protection of fundamental rights, no new lending to Turkey was approved or signed in 2021.

Signed in 2021

€849 million

Climate action: 11%

Key expected results of new projects

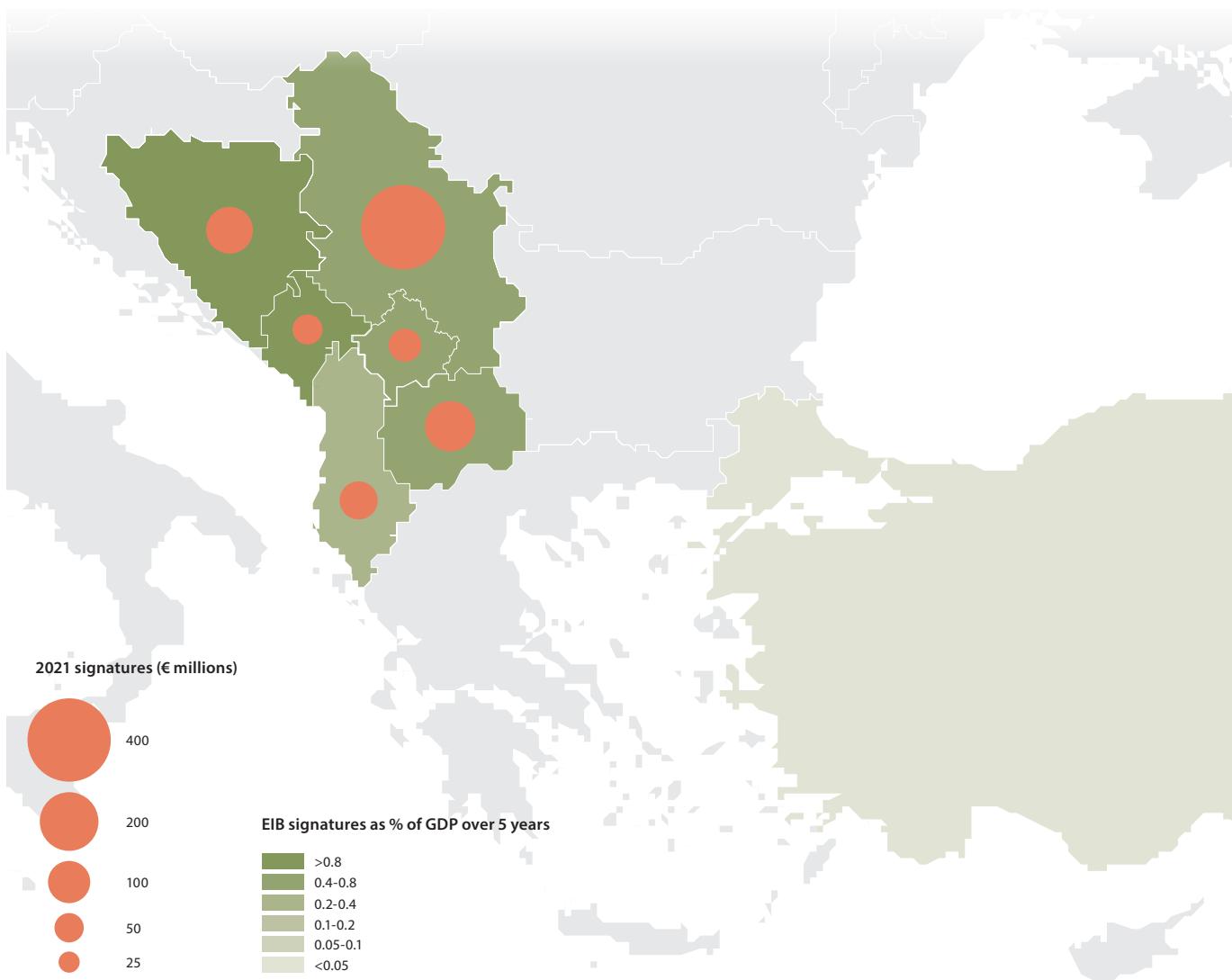
2.25 million mobile users with 5G services.

157 000 jobs sustained in microfirms, small firms and mid-caps.

152 000 benefiting from improved sewage treatment.

FIGURE 4: EIB LENDING IN THE WESTERN BALKANS AND TURKEY

(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)



Kosovo: This designation is without prejudice to the positions expressed by the EU Member States on Kosovo's status and is in line with United Nations Security Council Resolution No. 1244/1999 and the International Court of Justice Opinion of 22 July 2010 on Kosovo's declaration of independence.

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ASIA AND THE PACIFIC

Asia and the Pacific have experienced rapid growth in recent decades. Nonetheless, widespread poverty and social exclusion persist even in some of the region's dynamic, middle-income economies, while other economies remain among the least developed. Climate change poses a particular threat. With vulnerabilities exacerbated by poverty, extensive investment is required to shift growth away from dependence on fossil fuels.

The economies of Asia weathered the initial shock from COVID-19 comparatively well, with China and many Southeast Asian and Pacific island countries pursuing effective containment strategies. However, more contagious strains in 2021 and relatively slow vaccine deployment have delayed recovery. Social and economic effects have been more severe in South Asia where 100 million people are estimated to have been pushed into poverty, making less than the threshold of \$1.90 a day.

Institutional ability to deal with development challenges is mixed across the Asia-Pacific region. Emerging economies in the region are vulnerable to long-term scarring from the pandemic and require productivity-enhancing structural reforms to increase potential growth and boost employment. High public and private debt levels in a number of economies are another source of vulnerability. Sri Lanka, for example, is currently in default and experiencing an economic crisis. Some countries with relatively high public debt burdens and government deficits are exposed to any worsening of funding conditions for emerging markets.

The region is particularly vulnerable to the effects of climate change. Some 450 million people live in low-lying areas where shorelines are already retreating. 19 of the 25 cities most exposed to a one-metre sea level rise are in Asia, with seven in the Philippines alone, while entire Pacific island nations are threatened. Rural populations are confronted with changes in rainfall patterns that will particularly affect rain-fed agriculture, while poor urban populations are highly exposed to volatility in food prices. Economic inequality and weak institutions greatly increase vulnerability in some contexts.

The main priorities of the European Union in the Asia-Pacific region are to support a sustainable, low-carbon emission growth model, while promoting connectivity with the European Union and an open and fair environment for trade and investment. Accordingly, climate change mitigation is a strong focus of EIB activity in the region. 60% of the €771 million of financing signed by the Bank in 2021 will address this objective. The financing includes new investment in a sustainable urban metro system in the Indian city of Agra and in four climate-focused equity funds supporting energy, water and transport sector investments across the region. Another loan will support the procurement of COVID-19 vaccines for 70 million people in Bangladesh.

Signed in 2021

€771 million

Climate action: 60%

Key expected results of new projects

78.4 million journeys per year on urban public transport.

70 million people vaccinated against COVID-19.

42 000 person-years of employment created in project implementation.

FIGURE 5: EIB LENDING IN ASIA AND THE PACIFIC

(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)



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€71.4 million signed in 2021 through regional operations was not yet allocated by country at the end of the year and is not reported on the map.

LATIN AMERICA AND THE CARIBBEAN

Latin America and the Caribbean were among the regions worst hit by COVID-19, highlighting pre-existing economic and social vulnerabilities. Investments to promote more inclusive, green growth are needed to improve stability.

Latin America and the Caribbean, a region inhabited by 8% of the global population, saw 31% of global deaths from COVID-19 in 2021. Unsurprisingly, the pandemic has also had a strong economic and social impact on the region, with the number of people living in poverty rising 10% to 209 million in 2020.¹⁹ While the economic fallout was particularly severe for tourism-dependent countries in the Caribbean, workers in services and the informal sector were also more vulnerable. Women, young people and the less educated all suffered disproportionate losses of employment, exacerbating existing inequalities. Food and fuel prices were already rising in 2021, pushing up inflation and further squeezing poorer households. The global trend to higher interest rates to tackle rising inflation could create further difficulties, particularly in countries with higher debt levels.

Low productivity, low skilled labour and poor infrastructure quality weigh on the region's business environment. Poor business regulations and low technological sophistication as well as limited financial market development create bottlenecks in the private sector's development. The financing gap for smaller firms has been estimated at 20% of GDP, rising to 27% in Brazil.²⁰ Meanwhile, infrastructure investment in Latin America and the Caribbean averaged just 2.8% per year between 2008 and 2017, below other emerging economies.²¹

The need to mitigate and adapt to climate change creates even more pressing investment needs. Caribbean and Central American countries are particularly exposed to risks from any increase in tropical storm intensity or frequency, making it urgent to invest more in climate adaptation. Other parts of the region are exposed to drought risks and there is concern that increasingly frequent droughts could push parts of the Amazon rainforest over an ecological tipping point. Meeting growing energy demands through renewables is essential. While few countries in the region are highly exposed to declining fossil fuel revenues, the development of renewable energies also presents a great economic opportunity for many countries in the region, such as Argentina, Brazil and Peru.

The European Union is committed to supporting a sustainable long-term recovery from the pandemic in Latin America and the Caribbean, prioritising climate change mitigation and adaptation, low-carbon growth and greater resilience and inclusion. Of the EIB's €742 million in loans to the region in 2021, 71% targeted climate action. This included flood protection programmes in Ecuador and Argentina, as well as extensive support for renewable energies. Two other loans supported vaccinations and health sector resilience in Argentina and Barbados.

19. Economic Commission for Latin America and the Caribbean (ECLAC), 2021, *Social Panorama of Latin America*, 2020. <https://www.cepal.org/en/publications/46688-social-panorama-latin-america-2020>.

20. <https://www.smefinanceforum.org/data-sites/msme-finance-gap>.

21. Galindo, et al., 2022, "How Much Will It Cost to Achieve the Climate Goals in Latin America and the Caribbean?", *IDB Working Paper Series*, N° IDB-WP-01310. <https://publications.iadb.org/publications/english/document/How-Much-Will-It-Cost-to-Achieve-the-Climate-Goals-in-Latin-America-and-the-Caribbean.pdf>.

Signed in 2021

€742 million

Climate action: 71%

Key expected results of new projects

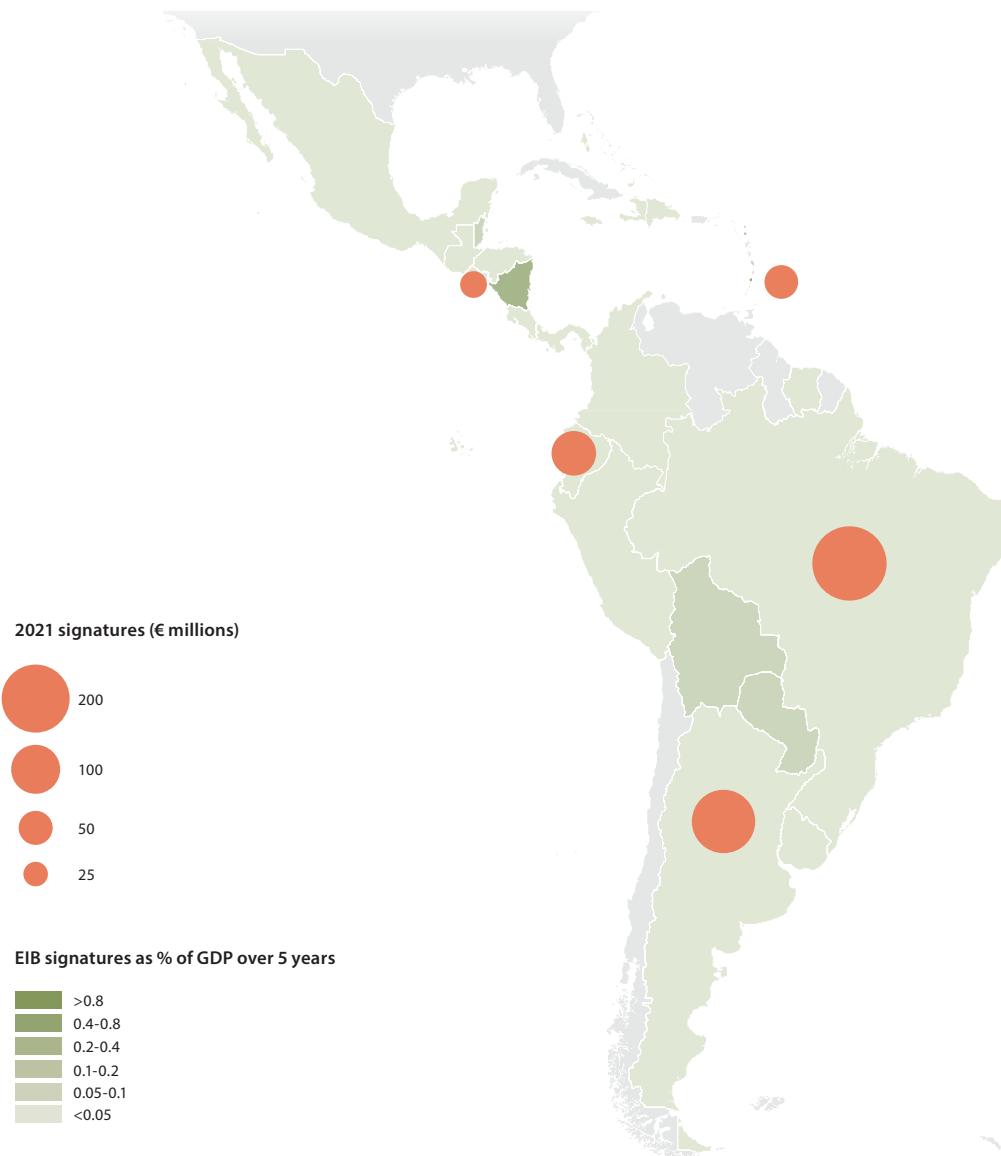
Enough green electricity generation for **2.44 million** households.

Reduced risk of floods for **306 000** people.

3.96 million people vaccinated against COVID-19.

FIGURE 6: EIB LENDING IN LATIN AMERICA AND THE CARIBBEAN

(SIGNATURES IN 2021 AND SIGNATURES AS % OF GDP OVER 2017-2021)



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The Off-Grid Solar Uganda Acceleration project is expected to provide electricity for 276 000 households.

A GLOBAL GREEN DEAL

Accelerating changes to our global climate, caused by rising levels of greenhouse gases (GHG) in our atmosphere, make a global green transition both imperative and extremely urgent. The global economy needs to overcome its dependence on fossil fuels as a source of energy if it is to achieve net-zero emissions by 2050 and keep global temperature rises within 1.5°C, to avoid the worst effects of climate change.

In the context of development, that means three things: replacing fossil fuels in the current energy mix; achieving economic growth and development goals with minimal new emissions; and building the resilience of developing and emerging economies to climate changes that it is already too late to avoid.

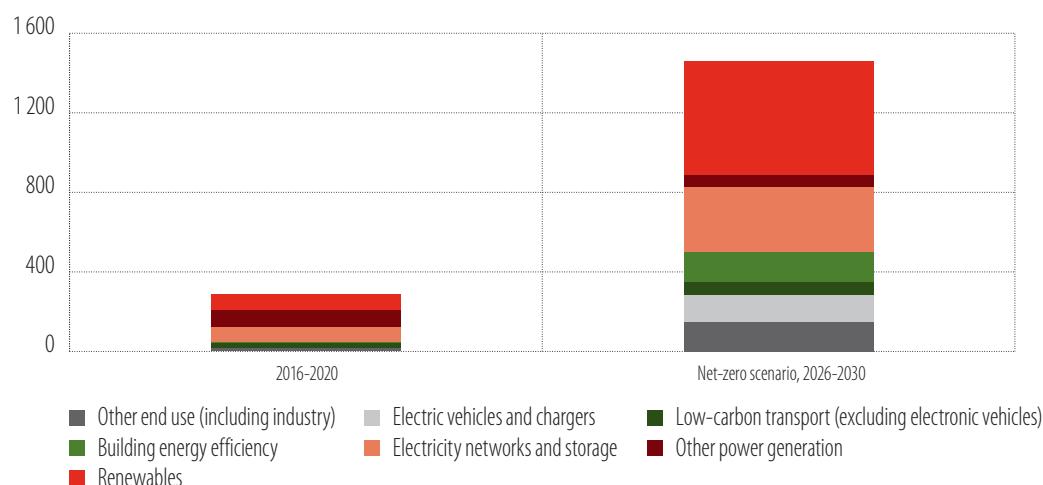
REPLACING FOSSIL FUELS, INCREASING ENERGY ACCESS, BUILDING CLIMATE RESILIENCE

Developing and emerging economies, excluding China, account for two-thirds of the world's population but only one-fifth of investment in clean energy. While most of these countries have relatively low emissions per capita, energy supply needs to grow to ensure universal access to energy and enable better living standards. According to the International Energy Agency, annual energy-related investment in these countries needs to increase fivefold by the end of this decade to be on track to achieve net-zero emissions by 2050. Investments in clean energy need to expand by more than seven times, to above \$1 trillion (Figure 7).²²

Although this represents an enormous challenge, it is also a great opportunity for development. Investments in energy use sectors, such as improving the energy efficiency of buildings and industry, can bring down costs for households and businesses. Renewable energy sources can lower costs and create opportunities for extending access to energy to hard-to-reach communities and creating new jobs. The average cost of reducing emissions in developing and emerging markets is estimated to be around half the level in advanced economies, principally because integrating sustainable choices into new buildings, factories and vehicles from the outset is easier than adapting or retrofitting at a later stage.

FIGURE 7: GETTING ON TRACK FOR NET-ZERO EMISSIONS BY 2050 REQUIRES A FIVE-FOLD INCREASE IN ENERGY INVESTMENT IN EMERGING AND DEVELOPING ECONOMIES

AVERAGE ANNUAL ENERGY-RELATED INVESTMENT, US DOLLARS



Source: International Energy Agency, 2021. *Financing Clean Energy Transitions in Emerging and Developing Economies*. World Energy Outlook Special Report.

22. International Energy Agency, 2021, *Financing clean energy transitions in emerging and developing economies*. <https://www.iea.org/reports/financing-clean-energy-transitions-in-emerging-and-developing-economies>.

Nonetheless, a focus on sustainability needs to be accompanied by a commitment to achieve universal access to clean energy as well. An estimated 770 million people still live without access to electricity, mostly in Africa and developing countries in Asia. The coronavirus pandemic slowed progress on achieving new electricity connections. It also increased by an estimated 90 million (to 790 million) the number of people unable to afford an extended bundle of electricity services, even if they have a connection.²³

Ensuring universal access to affordable, reliable and modern energy services by 2030 (Sustainable Development Goal 7.1) would require connecting almost 100 million people to the grid every year, with an annual investment of around \$35 billion. While good progress is being made in Asian countries, investment in electricity access in sub-Saharan Africa is only around 15% of what is needed.²⁴ Public financial support via concessional and blended finance is often critical for the extension of services to rural areas and very poor communities.

Globally, there is no shortage of financial capital, but channelling those funds to green investments in low and middle-income countries faces many hurdles. Many clean energy technologies have high upfront investment requirements that are offset over time by lower operating costs or energy savings. Low financing costs are therefore critical to making green transitions — and green energy — affordable, yet financing costs in low and middle-income countries can be several times those in developed economies. International efforts to catalyse and accelerate inflows of capital for green investments are therefore essential.

This section draws on EIB research to provide a more in-depth look at key topics in the global climate transition. It examines the economic risks facing countries from the climate transition and from climate change itself, the challenges of greening the private sector in Europe's neighbourhood, and the role of changes in the banking sector, with a focus on Africa. It then looks at how EIB lending for climate action has evolved over time and across regions, before summarising some of the expected results of projects signed in 2021.

23. An "extended bundle of services" covers use of four light bulbs, a fan, a radio or television and a refrigerator. International Energy Agency, 2021, *World Energy Outlook, 2021*. <https://www.iea.org/reports/world-energy-outlook-2021>.

24. Sustainable Energy for All and Climate Policy Initiative, 2020, *Energizing Finance: Understanding the Landscape*, https://www.seforall.org/system/files/2020-11/EF-2020-UL-SEforALL_0.pdf.

CLIMATE RISKS AND DEVELOPMENT

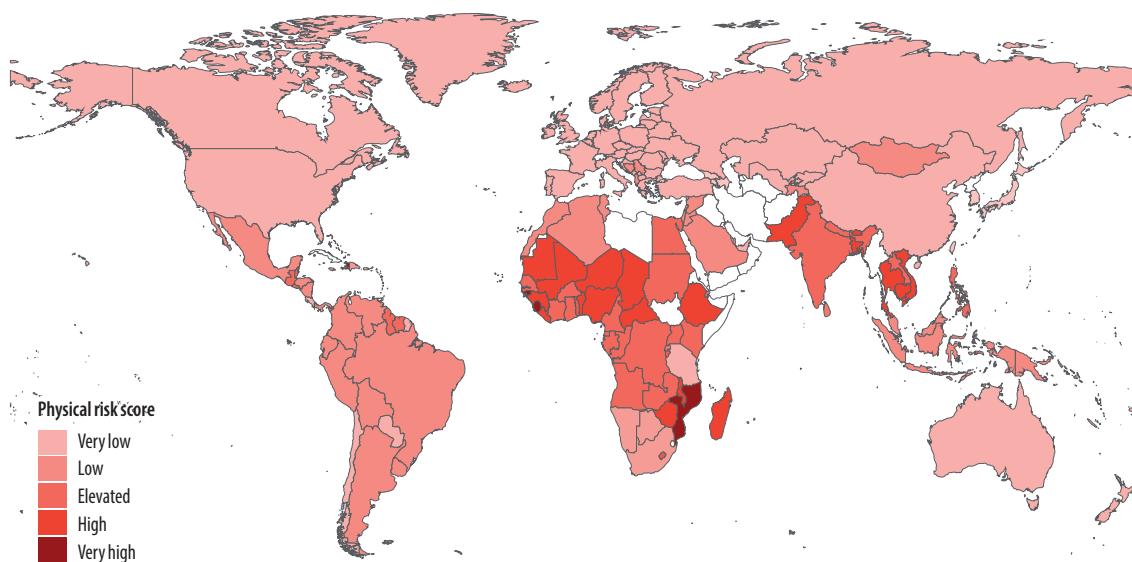
Climate change poses grave risks to many low-income countries that are among the least able to adapt. Meanwhile, progress on development and poverty reduction is itself vital to reduce vulnerability. The EIB screens projects to ensure that our lending takes into account the risks posed by the green transition and climate change itself.

The EIB Climate Risk Country Scores is an index that carefully builds on existing data on the impacts of climate change at the country level.²⁵ It enables us to make comparisons across countries to see where the overall risks are highest and where development intervention supporting climate change mitigation and adaptation can make the most difference. It examines two main types of risk: physical risk, which covers the dangers of weather extremes caused by climatic changes; and transition risk, which arises from the introduction of policies to help countries achieve carbon neutrality in line with the Paris Agreement goals. These policies can affect the cost of doing business and returns on domestic assets, and increase the likelihood of carbon-intensive assets being stranded.

No country is immune to the impact of climate change, but in the foreseeable future, some regions will be much more vulnerable than others (Figure 8). Many African and South Asian countries are particularly vulnerable to long-term impacts on agriculture, as well as the impact of excessive temperatures on labour productivity. Many Asian and Southeast Asian countries, and some coastal African countries, are very vulnerable to rising sea levels, as are small island states in the Caribbean and Pacific, which are also vulnerable to hurricanes and cyclones.

FIGURE 8: LOW-INCOME COUNTRIES ARE THE MOST VULNERABLE TO CLIMATE CHANGE

EIB CLIMATE RISK COUNTRY SCORES: PHYSICAL RISK SCORE

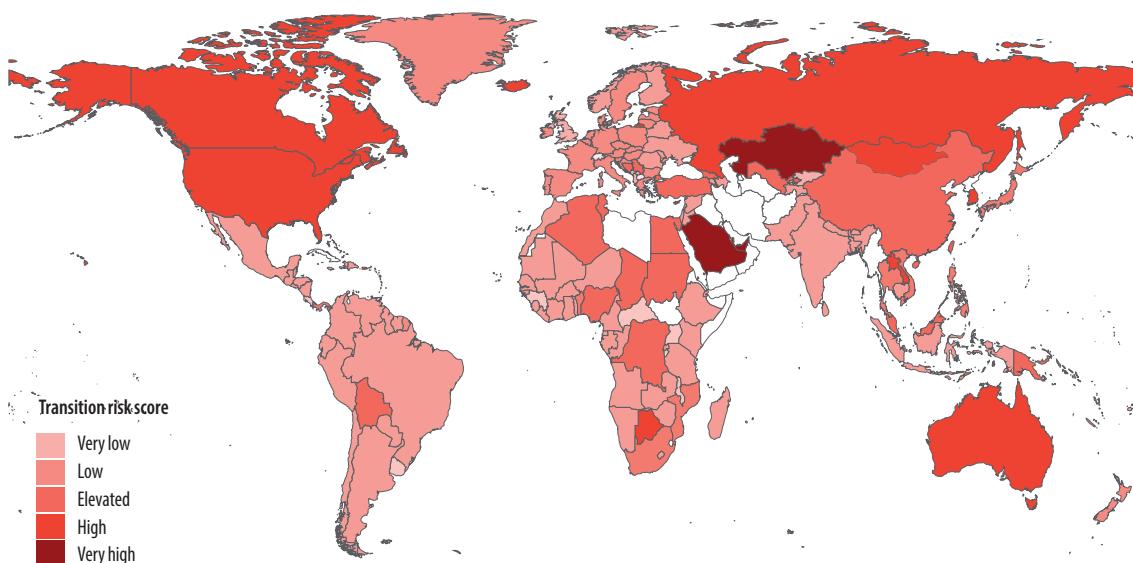


Note: The EU average score is shown for EU Member States.

25. See Ferrazzi, M., F. Kalantzis and S. Zwart, 2021. "Assessing climate risks at the country level: the EIB scoring model", *EIB Working Paper*, 2021/03. <https://www.eib.org/en/publications/economics-working-paper-2021-03>.

FIGURE 9: HIGH-INCOME COUNTRIES FACE GREATER RISKS FROM THE GREEN TRANSITION, BUT MITIGATION IS MORE CHALLENGING FOR LOW-INCOME COUNTRIES

EIB CLIMATE RISK COUNTRY SCORES: TRANSITION RISK SCORE



Note: The EU average score is shown for EU Member States.

Unfortunately, many of the countries most exposed to the direct physical impacts of climate change are also among those least able to adapt, and sub-Saharan African countries stand out in this regard. Poor quality infrastructure and housing amplify the human and economic impact of natural disasters like hurricanes. Over-reliance on agriculture makes many people and economies very vulnerable. High levels of public debt and weak domestic revenue sources hinder timely investments in adaptation. People on low incomes with few savings and little capacity to borrow are very vulnerable to any kind of crisis. This is why poverty reduction and climate resilience go hand-in-hand.

For transition risk, the EIB's country scores paint a different picture. Here, fossil fuel exporters are most at risk. High-income countries, which consume a high share of world resources and generate significant emissions, generally face higher risks from the transition to a low-carbon world economy. That said, transition risks for many low and middle-income countries are still elevated, with their relative dependence on fossil fuels, either as a revenue source or as a source of energy, and weak capacity to manage and finance green investment to mitigate emissions and switch to a more sustainable development pathway.

WHY SOME COMPANIES DO NOT MAKE GREEN INVESTMENTS

Green investments by businesses can include capital-intensive investments such as replacing or upgrading machinery, equipment and vehicles, installing the capacity to generate green energy on-site and investments in waste minimisation, recycling and waste management. Other green investments may be less capital intensive, such as improvements to heating and cooling and to energy or water management, and changes intended to reduce pollution.

Enterprise Surveys carried out by the EIB together with the World Bank and the EBRD in the Eastern Neighbourhood, Western Balkans, Central Asia and selected countries in the Southern Neighbourhood reveal that around 70% of firms in these regions carried out some kind of green investment in the three years prior to the surveys. The analysis in these organisations' report, *Business resilience in the pandemic and beyond*, shows that access to finance is an important factor in whether firms are able to go ahead with green investment. Firms that are rejected for bank loans or discouraged from applying for loans are 4.3% less likely to make such investments. There is also a strong association between green investment and better green management practices, such as setting and monitoring environmental targets.

Many green investments serve to reduce energy use in production and can be classified as energy efficiency investments. Such investments were made by around one-quarter of firms in the surveyed regions. Businesses in energy-intensive sectors were more likely to make such investments, and those that did experienced 36% lower electricity costs (as a share of sales) and 46% lower total energy costs than other firms on average.

Of those that did not invest in energy efficiency, some 60% stated that they did not see this as a priority relative to other types of investments, and 11% specifically saw energy efficiency investments as unprofitable. Of those that might have been motivated to make such investments, a lack of financial resources was cited as the main barrier (12%), followed by uncertainty about regulation and future prices. Fossil fuel subsidies have been shown to have a significant negative effect on firms' adoption of investments to reduce their energy intensity, particularly in better-managed companies where the value of energy efficiency improvements is recognised. The Enterprise Survey data also reveal that firms are more likely to carry out energy efficiency investments if they are located in an area that has experienced extreme weather events, thus raising awareness about environmental issues.

A mix of policies is needed to promote green investment by the private sector, create jobs, tackle poverty and raise standards of living, while reducing carbon emissions and other forms of pollution. Easing access to bank credit is an important part of that mix, particularly for capital-intensive investments. Improving incentives to tackle fossil fuel subsidies and using taxation to internalise environmental costs are also vital, as are efforts to disseminate information and expertise on environmental opportunities, risks and green management practices. Credit lines that target green investments are a potential way to both tackle finance gaps and raise awareness of the benefits of green management practices among firms.

GREENING AFRICA'S FINANCIAL SECTOR

The effects of climate change and the energy transition pose considerable risks for banks in sub-Saharan Africa, reflecting the relative importance of primary industries in the region's economies. The EIB's 2021 Banking in Africa Survey revealed that 20% of banks reported having at least 10% of their lending portfolio in the oil, gas and coal sector, and more than 40% of banks reported having at least 10% of their portfolio in agriculture.²⁶

But the greening of the financial sector is already underway in Africa. The EIB's *Finance in Africa* report reveals that most banks and other financial institutions are aware of the risks related to climate change and are exploring green finance opportunities. Three-quarters of African banks recognise the value of developing and publicising a formal climate strategy and most see opportunities in developing green products for their clients or accessing green funding for themselves. However, only 17% of banks have so far introduced specific green finance products.

Central banks and regulators are playing a role in developing the green finance market and international partners have started to play an important supportive role, not only by providing finance but also in setting standards and definitions. These and the growth of the global green bond market are helping to catalyse investor demand for green finance products in Africa. As demand grows, African financial institutions will also need to deepen their engagement, particularly by further developing green finance products for their clients. Many banks interviewed also cited limited demand from clients like small businesses as a factor constraining their offering of green finance products. Raising awareness of climate risks and opportunities alongside the piloting of new products will therefore also assist in the development of this market. Other limiting factors are a lack of information and expertise and missing or unclear regulatory requirements.

26. EIB, 2021, *Finance in Africa: for green, smart and inclusive private sector development*. https://www.eib.org/attachments/publications/economic_report_finance_in_africa_2021_en.pdf.

EIB LENDING FOR CLIMATE ACTION — STEPPING UP TO THE CHALLENGE

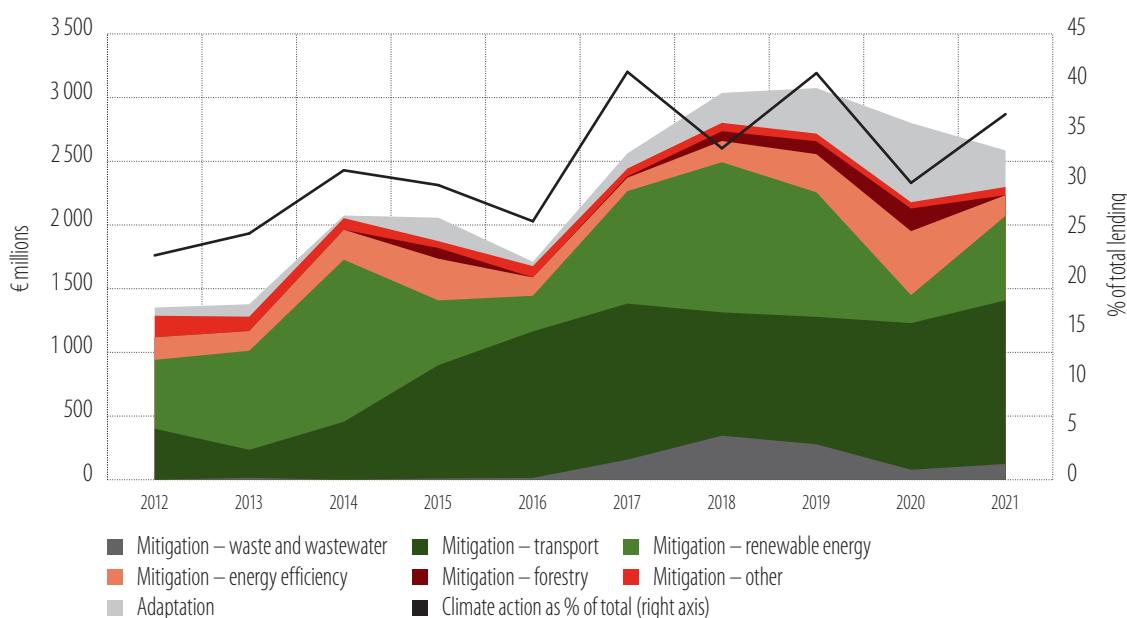
In November 2019, the EIB Board of Directors decided to increase the level of climate and environment commitment for the EIB Group. This increased ambition has far-reaching implications for the Group, effectively transforming it from “an EU bank supporting climate” into “the EU climate bank”. It is summarised in three key commitments:

- **To support €1 trillion of investment** in climate action and environmental sustainability from 2021 to 2030.
- **To gradually increase** the share of EIB Group annual financing dedicated to climate action and environmental sustainability to 50% by 2025 and beyond.
- **To align all new EIB Group operations** with the principles and goals of the Paris Agreement by the start of 2021, thus ensuring that all its activities do no significant harm to the low-carbon and climate-resilient goals of the agreement.

These commitments apply to the Bank’s activities outside the European Union as well as inside it. Specifically, the EIB aims to dedicate 50% of annual financing to climate action and environmental sustainability outside the European Union as well as within it. The Bank is also stepping up its due diligence to check the green credentials of its counterparts, while guarding against superficial greenwashing.

FIGURE 10: THE EIB’S COMMITMENT TO CLIMATE ACTION HAS GROWN

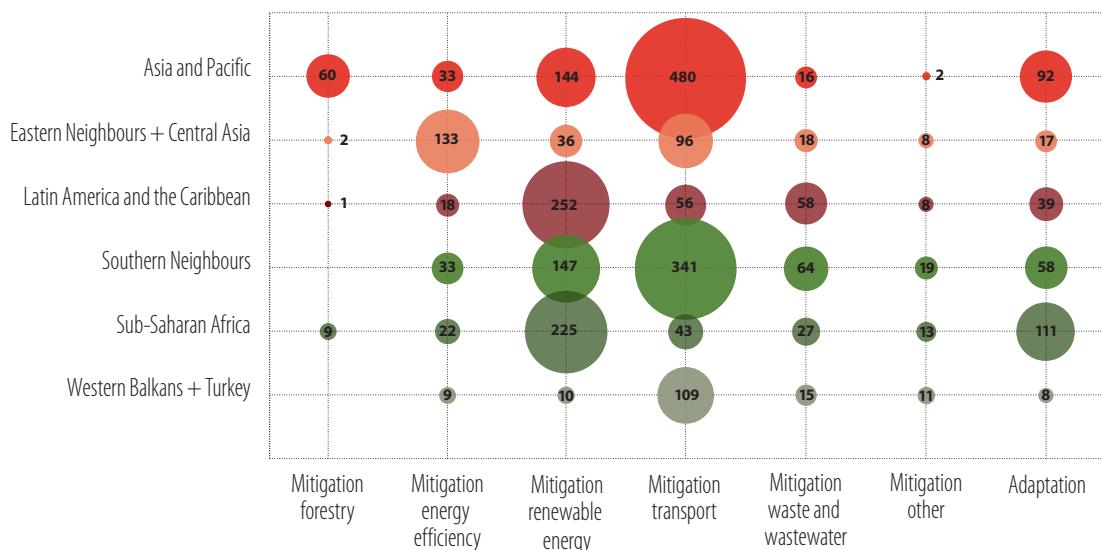
EIB SUPPORT FOR CLIMATE CHANGE MITIGATION AND ADAPTATION,
BY COMPONENT AND AS A SHARE OF TOTAL SIGNATURES, 2012-2021



Note: In line with the focus of this report, the data displayed here focus on low and middle-income countries and exclude any financing provided to European Free Trade Association (EFTA) countries and the United Kingdom. Data shown are for climate action only, whereas the target set out in the 2020 Climate Bank Roadmap of 50% by 2025 refers to climate action and environmental sustainability.

FIGURE 11: EIB SUPPORT FOR CLIMATE ACTION TARGETS REGIONAL PRIORITIES

EIB SUPPORT FOR CLIMATE CHANGE MITIGATION AND ADAPTATION,
BY REGION AND COMPONENT, 2017-2021 (€ MILLION)



The EIB is on track to achieve these commitments, having already progressively increased its commitment to and support for climate action in recent years. In 2013, the Bank pledged to devote at least 25% of its financing to climate action. This objective was duly fulfilled from 2014 onwards (Figure 10). In September 2015, in the run-up to the 2015 UN climate conference in Paris (COP 21), the Bank increased its ambition, setting a target of 35% for its financing in developing countries, by the end of 2020. Accordingly, the EIB was able to step up its climate action financing outside the European Union, exceeding this commitment in 2017, 2019 and 2021. In 2020, climate action lending outside the European Union remained elevated, at €2.8 billion, despite the disruption caused by the pandemic, particularly to contract signatures in the renewable energy sector. The lower level of climate action lending in percentage terms chiefly reflects the extraordinary surge in total lending outside Europe to €9.3 billion in response to the pandemic and its effects on economies around the world.

EIB support for climate action outside the European Union also reflects regional needs and priorities (Figure 11). The two sectors receiving the most support are renewable energy and low-carbon transport. Lending for renewable energy is well distributed across the regions and is the main focus in Latin America and in sub-Saharan Africa, where expanding access to energy is critical.

Low-carbon transport has been the main focus in Asia (mainly India), the Southern Neighbourhood and Turkey. In middle-income countries in these regions, decarbonisation of already large transport sectors through the development of low-carbon urban public transport networks is critical to the success of the climate transition, as well as for tackling the significant issue of congestion in urban areas.

Lending for energy efficiency has been targeted mainly at countries in the Eastern Neighbourhood, where retrofitting outdated buildings to reduce energy consumption for heating can significantly contribute to climate change mitigation. Lending to support adaptation has focused on regions particularly exposed to risks from the changing climate, notably in sub-Saharan Africa and developing Asia, together with significant investment in drought resilience in the Southern Neighbourhood.

2021 IN FIGURES: CLIMATE AND THE ENVIRONMENT

Lending for climate action

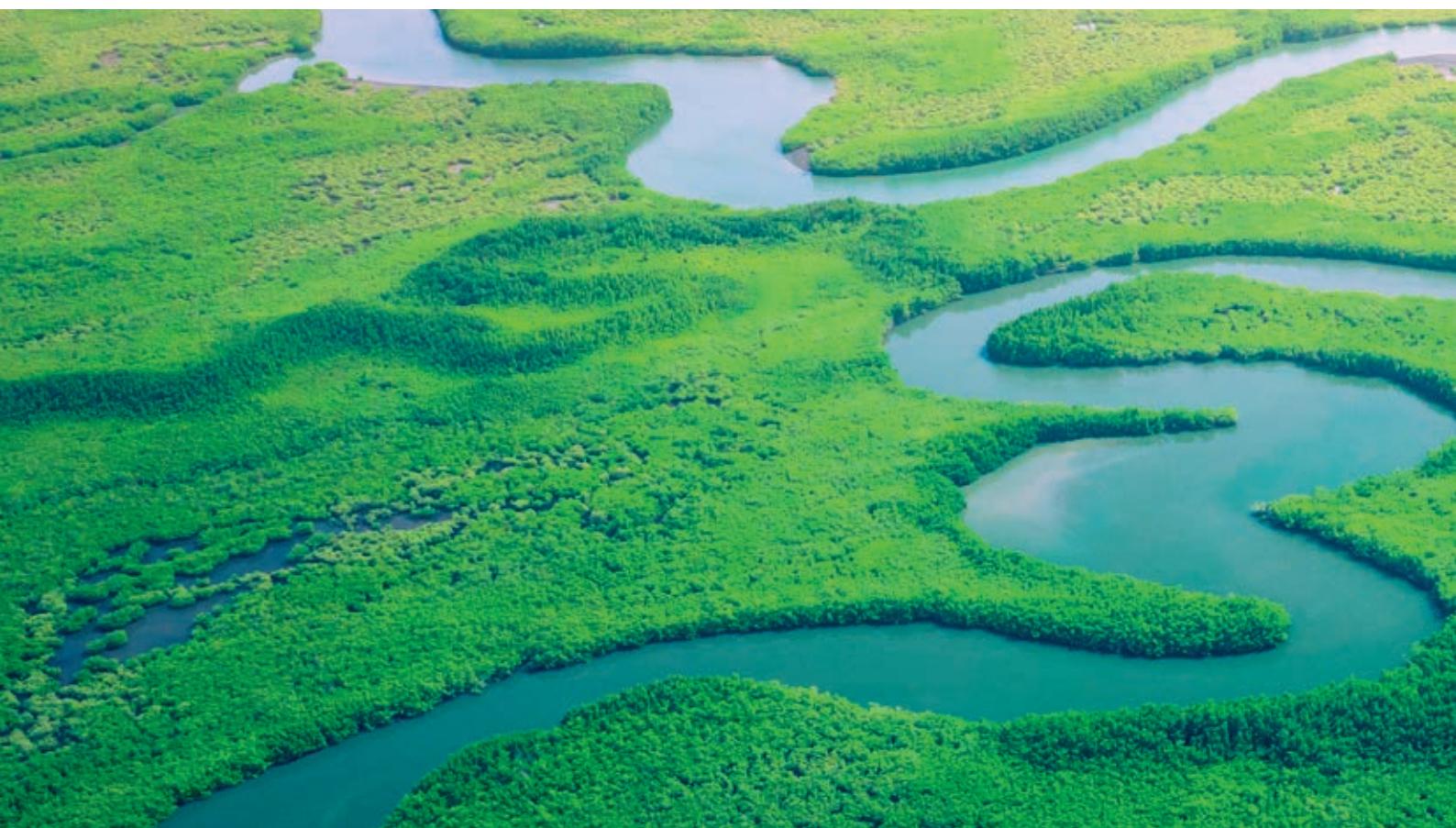
€2.79 billion signed

Climate and the environment, expected results

5 180 GWh/year of electricity generated from renewables,
enough to serve **2.6 million households**

848 million passenger journeys per year on low-carbon transport

4 million people benefiting from improved water supply and sanitation



Estimating the carbon footprint of EIB projects

Supporting global efforts to combat climate change does not just mean more lending for green projects. It also means ensuring that our activities help further the goals laid out in the Paris Agreement.

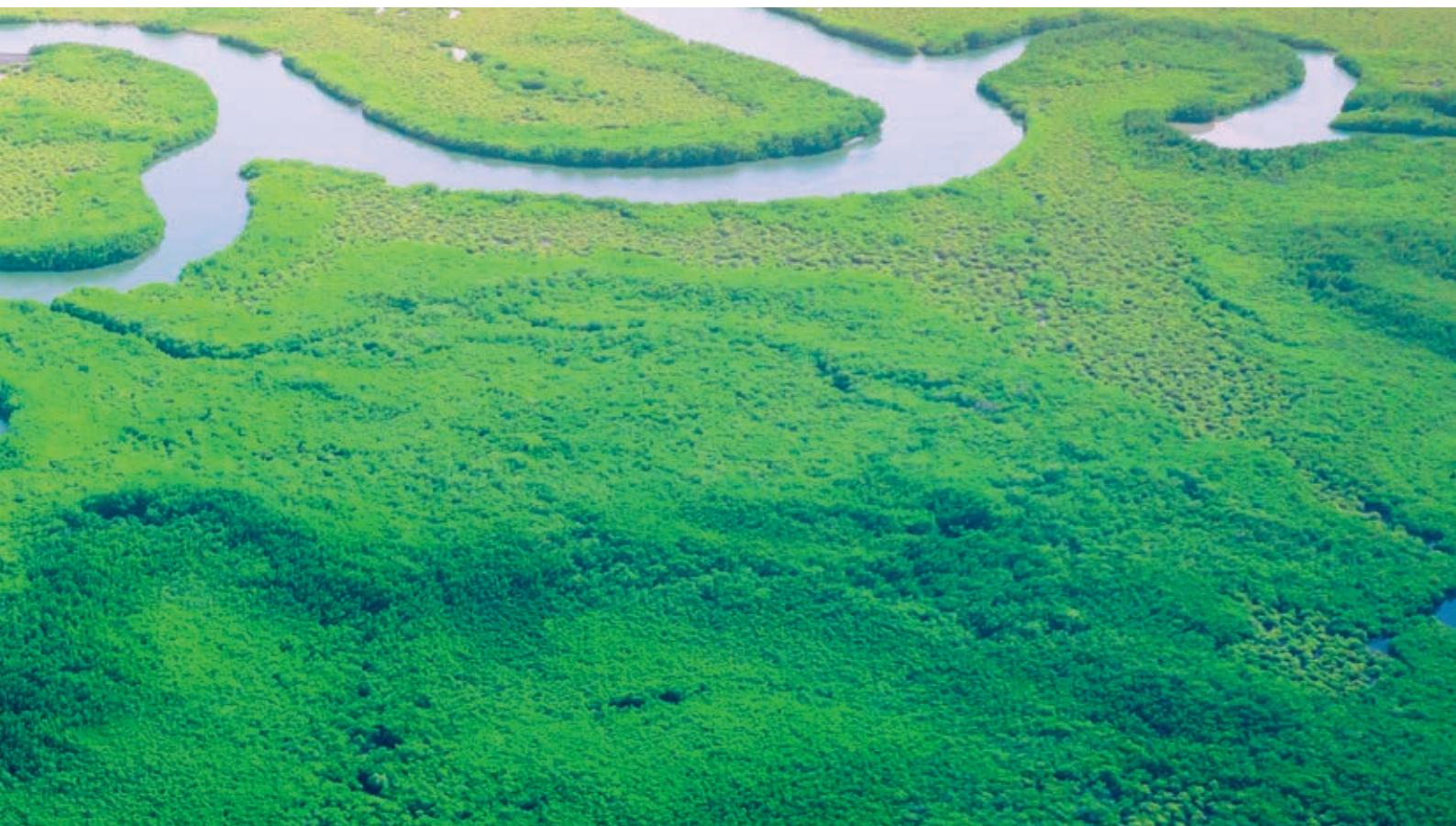
To do that, we carry out an annual carbon footprint exercise to report on the total carbon impact of all projects with significant emissions, or reductions in emissions relative to the status quo. We include:

- **Absolute greenhouse gas emissions** — direct emissions from project implementation, including the energy used
- **Greenhouse gas emissions** avoided because of the projects as compared to the expected alternative without the projects
- **Carbon sequestration** by forestry projects

Details of the 2021 carbon footprint exercise, including reporting thresholds and the number of projects covered, are presented on page 71.

200 000 t CO₂-eq/year
absolute greenhouse gas emissions

200 000 t CO₂-eq/year
emissions avoided





JOBs AND INCLUSIVE GROWTH

Around the world, most people depend on jobs in the private sector. The ability of businesses to create jobs for those entering the workforce, and to provide economic independence for women and men, is critical for the development of more inclusive societies. Their ability to invest to increase productivity levels is crucial for reducing widespread poverty and raising standards of living.

Although private sector development has contributed dramatically to poverty reduction and growth in recent decades, businesses face multiple constraints that have held them back from doing more. When the growth of decent employment opportunities is limited, it is typically the most marginalised that suffer. While total unemployment has remained steady across low and middle-income countries, youth unemployment has grown steadily from 13% in 2008 to 16% in 2019, even before the effects of the pandemic were felt. Countries in the Middle East and North Africa stand out, with youth unemployment at 28% (49% among young women).²⁷

27. International Labour Organization, ILOSTAT database. Figures for Middle East and North Africa exclude high-income countries.

Perhaps an even more pervasive problem is the shortage of decent work. Estimates of informal employment range from 20% to 50% of total employment in the Eastern Neighbourhood to more than 90% in most countries in sub-Saharan Africa. These jobs are without any social protection and typically involve low productivity and labour-intensive tasks that generate little income. For example, 63% of employment in Egypt is outside the formal sector, but this only generates an estimated 29% of GDP.²⁸

Access to finance is one of the main constraints on businesses, alongside issues such as corruption, administrative bottlenecks and poor infrastructure. While access to finance is a challenge for smaller firms even in developed economies, those in low and middle-income countries face additional constraints: limited information on credit risk; less developed banking sectors; less favourable legal frameworks and higher uncertainty over the value of collateral. Banks in developing countries often rely strongly on short-term deposits as a source of funding, which limits their ability to provide the long-term funding that firms need to finance investment. In addition, they are exposed to the volatility of international financial flows that can lead to sudden restrictions on their ability to extend credit to firms, particularly small and medium-sized enterprises.

EIB support for private sector development mostly takes the form of credit lines that enable local banks to extend credit to small firms and some mid-cap companies that they would otherwise be unable to reach. They do this by passing on better terms and conditions, such as longer loan tenor, than would otherwise be available to the beneficiary companies. In addition, credit lines and equity investments in microfinance institutions help them to expand their outreach to very small and mostly informal enterprises, helping microentrepreneurs to build and improve their businesses. Investment in private equity funds helps to provide much needed expertise and risk capital to carefully selected businesses with high growth potential.

28. Elgin, C. et al., 2021. "Understanding Informality", CEPR Discussion Paper, 16497. <https://www.worldbank.org/en/research/brief/informal-economy-database>.

THE EFFECT OF COVID-19, THE UKRAINE WAR AND GLOBAL INFLATION ON SMALL FIRMS' ACCESS TO FINANCE

The coronavirus pandemic exacerbated existing financial constraints, causing serious disruptions in global value chains, depressing demand and putting businesses — particularly small and medium-sized enterprises — under considerable financial pressures. As the pandemic hit, the liquidity needs of small businesses soared due to significant revenue shortfalls, coupled with a worsening of their credit conditions. Many firms were forced to cut costs by laying off workers, contributing to a spike in poverty. They also frequently cut back on planned investment. While some firms benefited from government support, this was available in few lower-middle income and low-income countries and was often skewed towards larger companies. The EIB's 2021 Banking in Africa Survey showed that the main impact of the pandemic on the regions' banks was via the deteriorating financial health of their clients.²⁹

The war in Ukraine is compounding the difficulties faced by businesses in many regions. Although the global economy rebounded in 2021, increases in energy prices and bottlenecks to global value chains have been driving up production costs, particularly for small firms. The Russian invasion of Ukraine has directly added to these strains, with sub-Saharan Africa countries, the Western Balkans and Turkey particularly exposed to increases in raw material prices. Russia and Ukraine together account for about 30% of global exports of wheat, 20% of corn, mineral fertilisers and natural gas, and 11% of oil. Rising costs are likely to increase small companies' need for credit, while also increasing the risk of lending to them, making finance even more expensive or hard to obtain.

The normalisation of monetary policy in response to inflation is an additional threat to small businesses' access to finance. The tightening of US monetary policy is likely to encourage capital outflows from emerging and developing economies, and central banks there are likely to raise domestic interest rates in response. This means that businesses may face yet higher borrowing costs and tighter financing conditions in these countries.

29. EIB, 2021, *Finance in Africa: for green, smart and inclusive private sector development*. https://www.eib.org/attachments/publications/economic_report_finance_in_africa_2021_en.pdf.

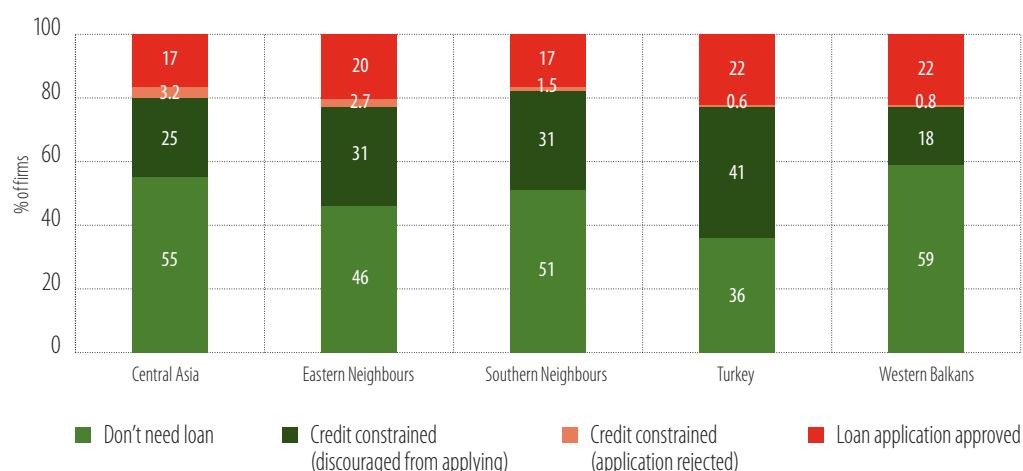
CREDIT CONSTRAINTS AND GAPS FOR BUSINESSES IN THE EU NEIGHBOURHOOD

Companies in the regions neighbouring the European Union face considerable constraints, with issues such as regulatory quality, government effectiveness and control of corruption presenting significant barriers to investment. Although access to finance is not the chief limiting factor in this context and action is needed to address the whole business environment, it remains a constraint, and large gaps in credit provision exist relative to what could be provided under better conditions. Two new reports prepared by the EIB in collaboration with the World Bank and the EBRD — *Business resilience in the pandemic: From Eastern Europe to Central Asia and Unlocking sustainable private sector growth in the Middle East and North Africa: Evidence from the Enterprise Survey* — estimate these gaps and examine the nature of the credit constraints holding companies back, based on the latest data from the Enterprise Survey.³⁰

Access to bank credit plays a critical role in economic development in most low and middle-income economies, and those in Europe's neighbourhood are no exception. With low levels of capital market development, access to bank lending is critical for withstanding crises, raising productivity and seizing growth opportunities. Banking sectors have grown, although this growth has slowed since the global financial crisis, and domestic credit to the private sector now ranges from 17% of GDP in Central Asia to around 25% in the Eastern Neighbours and Western Balkans and 30% in the Southern Neighbourhood. This compares to an average of 39% in the euro area (2019 figures).

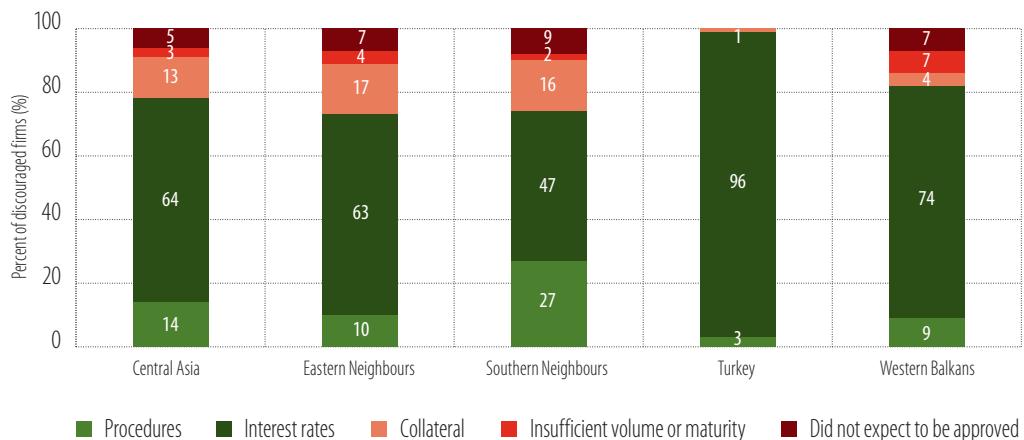
According to Enterprise Survey data for these regions, around one-fifth of firms have recently applied for bank credit (Figure 12). Of the rest, most state that they do not need a loan, but around 20% to 30% of all firms are credit constrained. These have either seen a loan application rejected or (in the great majority of cases) have been discouraged from applying for a loan that they think they need. The main factors discouraging firms from applying for loans are high interest rates, complex procedures and high collateral requirements (Figure 13).

FIGURE 12: MOST FIRMS ARE EITHER CREDIT CONSTRAINED OR DON'T WANT A LOAN AT ALL



30. EIB and EBRD, 2022, *Business resilience in the pandemic: Adaptation, innovation, financing and climate action from Eastern Europe to Central Asia*. <https://www.eib.org/en/publications/business-resilience-in-the-pandemic-and-beyond.htm> and EIB, EBRD and World Bank, 2022, *Unlocking sustainable private sector growth in the Middle East and North Africa: Evidence from the Enterprise Survey*, <https://www.eib.org/en/publications/unlocking-sustainable-private-sector-growth-in-mena.htm>.

FIGURE 13: HIGH INTEREST RATES, COMPLEX PROCEDURES AND COLLATERAL REQUIREMENTS DISCOURAGE LOAN APPLICATIONS



Firms are more likely to be credit constrained if they are small and if they are young. The survey data point to the distorting influence of information constraints — whereby banks find it difficult to assess the creditworthiness of clients — which is particularly a factor for smaller firms without audited financial records, as well as young and recently formalised firms that lack credit history. Young, small innovative firms can be particularly credit constrained, despite their growth potential.

The large share of firms that say they do not need a loan is also an issue. Many firms may simply not identify growth and investment opportunities that would warrant external finance. However, data also show that firms that do not seek external finance are more common in countries where governance is weaker and the financial sector is less developed. This suggests that such financial disconnectedness is partly a response to a difficult operating environment: firms organise themselves in such a way as to avoid having to turn to banks.

FIGURE 14: AMONG FIRMS THAT INVEST, THOSE WITH ACCESS TO EXTERNAL FINANCE ACHIEVE HIGHER EMPLOYMENT GROWTH

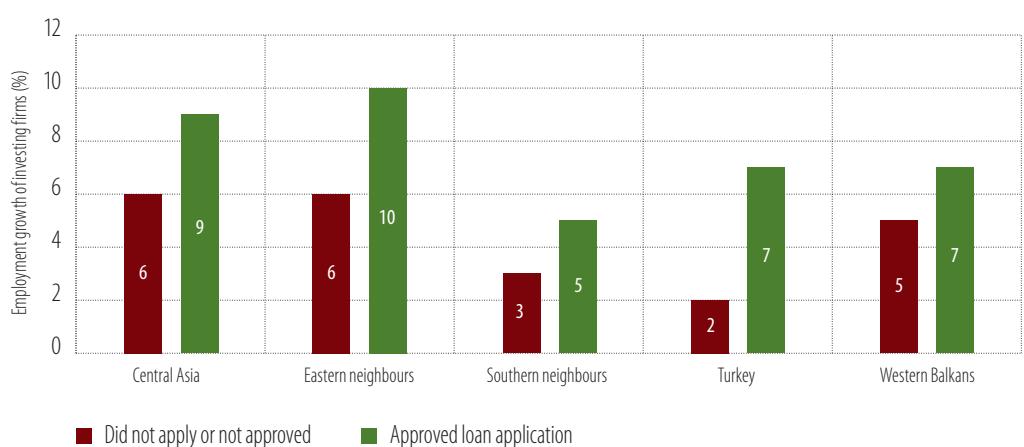
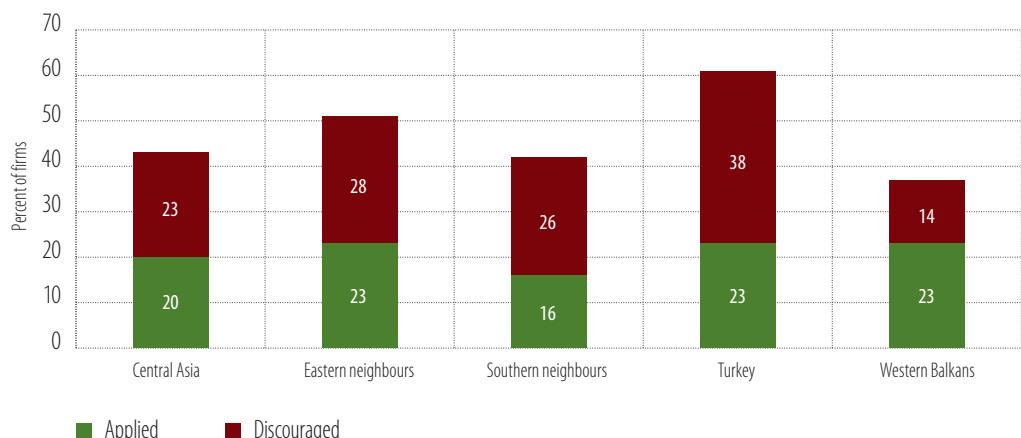


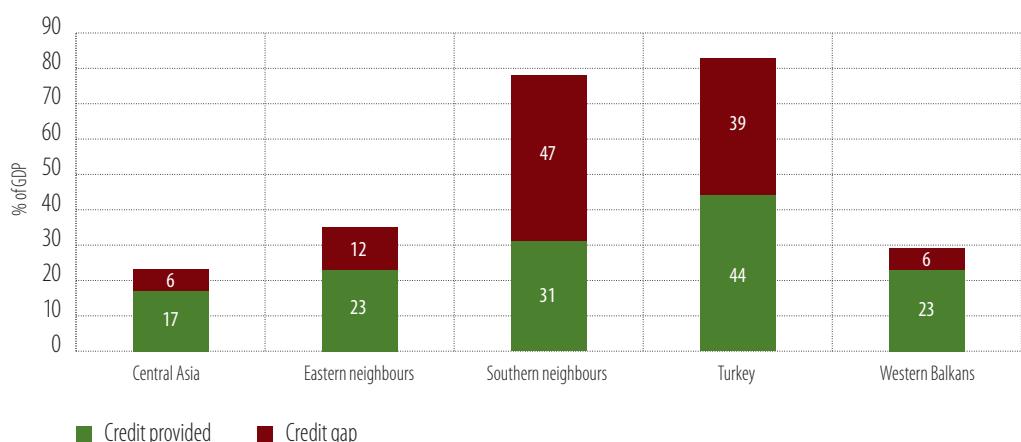
FIGURE 15: THERE ARE AS MANY CREDITWORTHY BUT DISCOURAGED FIRMS AS THERE ARE FIRMS THAT HAVE RECEIVED A LOAN



A lack of external finance, whether voluntary or involuntary, has consequences for growth and jobs. Credit-constrained firms invest less than unconstrained firms, and businesses that do not use external finance invest less than those that do. Firms that obtain loans also show higher rates of employment growth than those that are either rejected for a loan, or did not apply. Figure 14 illustrates this comparison, focusing just on firms that did carry out some investment in fixed assets.

Enterprise survey data also enable us to estimate the size of the gap in the provision of credit at the macroeconomic level. This is done by estimating the additional financing required to meet the needs of discouraged firms — those that identify the need for a loan but do not apply for one — and adjusting for the proportion of them that would be likely to be rejected as not creditworthy. On the basis of firm characteristics and the risk aversion of banks, we estimate that discouraged firms would be twice as likely to be rejected if they applied for a loan than those that do apply. This still leaves a sizeable number of discouraged firms that may be accepted if they applied: between 10% and 20% of all firms, depending on the region, and more than 30% in Turkey where firms have been heavily affected by the macrofinancial crisis in the country (Figure 15).

FIGURE 16: CREDIT GAPS COULD BE AS LARGE AS EXISTING CREDIT TO FIRMS



With so many businesses missing out on credit, it would take a very substantial increase in credit availability to completely close these gaps. Effectively, credit to the private sector would need to double in some regions, with estimated gaps ranging from 6% of GDP in the Western Balkans to 49% in Turkey (Figure 16). Around two-thirds of these credit gaps affect small companies and one-third affects mid-caps and large companies.

Closing these credit gaps would obviously require a large increase in long-term funding for banks that could be passed on to firms, particularly small and medium-sized firms. It would also require addressing the deterrents identified by discouraged firms (Figure 13).

Funding from international financial institutions can help relieve the burden of high interest rates by providing advantageous conditions that banks are required to pass on to firms. Guarantee schemes, meanwhile, help increase the risk-taking appetite of banks, enabling them to offer credit with lower collateral requirements. Technical assistance can play an important role in helping banks enhance their risk assessment and screening capacities (to be able to offer lower rates), and in increasing the financial literacy of small and more inexperienced firms. Reform efforts can contribute through a focus on collateral, to increase the acceptability and collectability of different kinds of assets.

IMPROVING ACCESS TO FINANCE FOR SMALLER COMPANIES: A LOOK BACK AT A DECADE OF CREDIT LINES

Credit lines to support bank lending to small and mid-cap companies are a way for the EIB to support the resilience and development of smaller businesses outside the European Union. These firms are largely dependent on banks as a source of external finance to help them adopt new technologies, raise productivity and grow, or indeed to withstand shocks such as the coronavirus pandemic. Tackling the financial constraints that they face plays a critical role in fostering economic and social development.

To keep track of how intermediary banks use the EIB's lending, and the results it achieves, the Bank requires them to record and report the details of each loan they make with the funds provided, creating an essential source of data on the results of this instrument. Each year the EIB reports on all such "sub-loans" made during the previous year and compares these data to the results expected when the credit lines were appraised and approved (see results for 2021 on p.74). In this section, we look back over the last ten years of data to provide a comprehensive overview of where this lending goes, the types of sectors and firms it supports, and how it sustains employment.

Since 2011, intermediary banks have allocated some €16.1 billion of EIB lending through sub-loans to 53 800 firms that together employed around 2.7 million people. Large shares of this lending have gone to large economies where there are more firms to finance, such as Turkey (where EIB activity is now on hold) and Egypt. EIB credit lines also reached 25 countries in sub-Saharan Africa, including several of the least developed countries, such as Burkina Faso, the Democratic Republic of Congo and Malawi. Lending amounts to these smaller economies are smaller. Figure 18 represents the size of allocated amounts for each country, relative to the regional total.

Another issue affecting the ability of economies to absorb EIB lending for small firms is the scale of lending by domestic banks to the private sector, which tends to be significantly lower in less developed economies. Therefore, as an indicator of the intensity of EIB lending to firms in each country, we look at the amount of EIB lending allocated to companies as a percentage of total domestic lending to the private sector (Figure 17, horizontal axis). The intensity of EIB lending is thus a measure of how much support the Bank has provided, relative to the absorption capacity of each economy.

Comparing EIB lending intensity to GDP per capita, as in Figure 17, reveals two things:

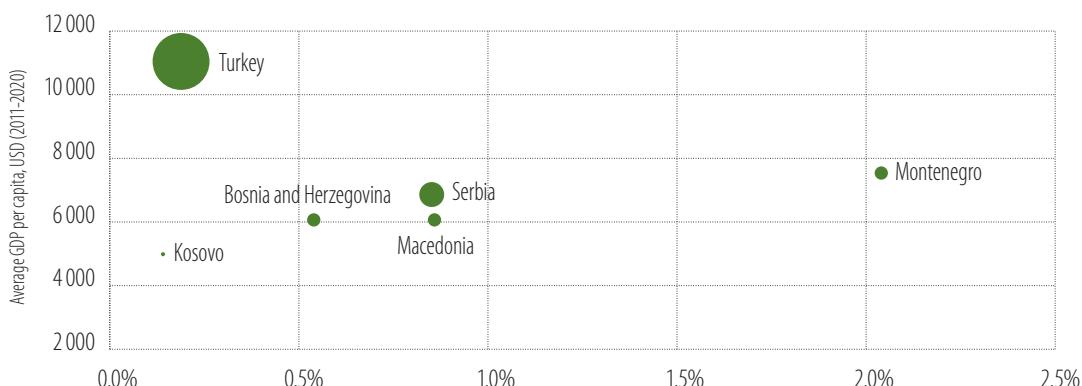
- Lending intensity relative to GDP per capita has been greatest in countries that are EU accession candidates or potential candidates (Western Balkans and Turkey), followed by the Eastern and Southern Neighbourhoods, reflecting the policy importance of these regions to the European Union.
- Within each region, lending intensity is skewed towards poorer countries. It has been greater in Serbia than in Turkey, for example, and greater in Rwanda or Uganda than in South Africa or Nigeria.

The extent of domestic bank lending to the private sector is also an indicator of financial development and of the potential need for intervention to support such lending. When EIB lending intensity is compared to domestic lending to the private sector as a percentage of GDP, the same patterns hold: within regions, EIB lending intensity is broadly skewed towards countries where lending to the private sector is less developed.

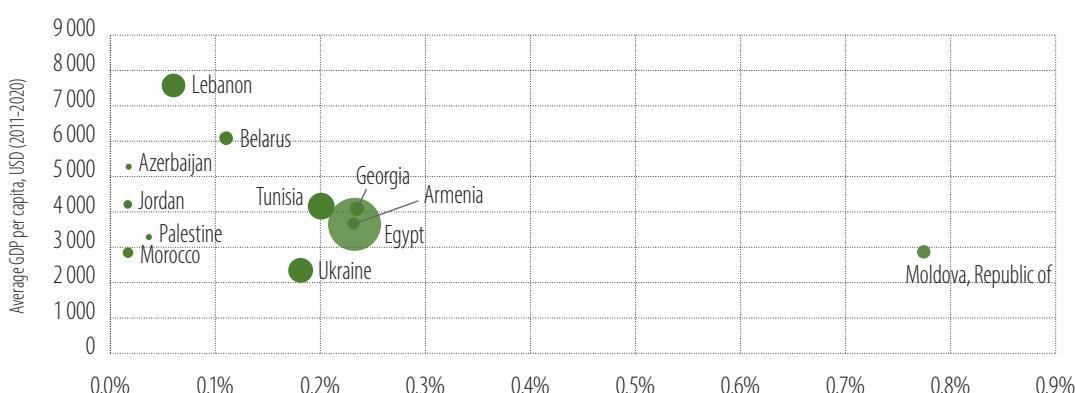
FIGURE 17: WITHIN REGIONS, THE INTENSITY OF EIB LENDING THROUGH CREDIT LINES IS GREATER IN LOWER INCOME COUNTRIES

EIB CREDIT LINES FOR SMALL AND MID-CAP COMPANIES AS A PERCENTAGE OF DOMESTIC CREDIT TO THE PRIVATE SECTOR (EIB LENDING INTENSITY IN %, HORIZONTAL AXIS) VS. GDP PER CAPITA (IN US DOLLARS, VERTICAL AXIS), 2011-2020

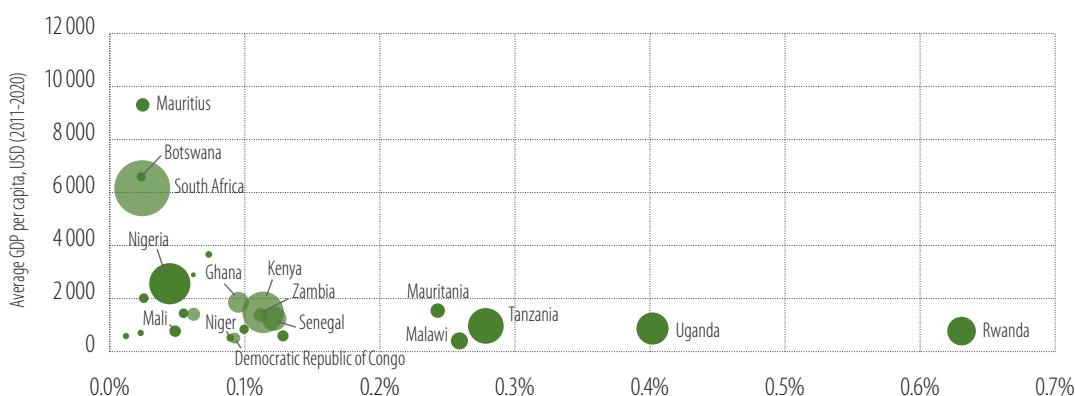
WESTERN BALKANS AND TURKEY



EASTERN AND SOUTHERN NEIGHBOURHOODS



SUB-SAHARAN AFRICA



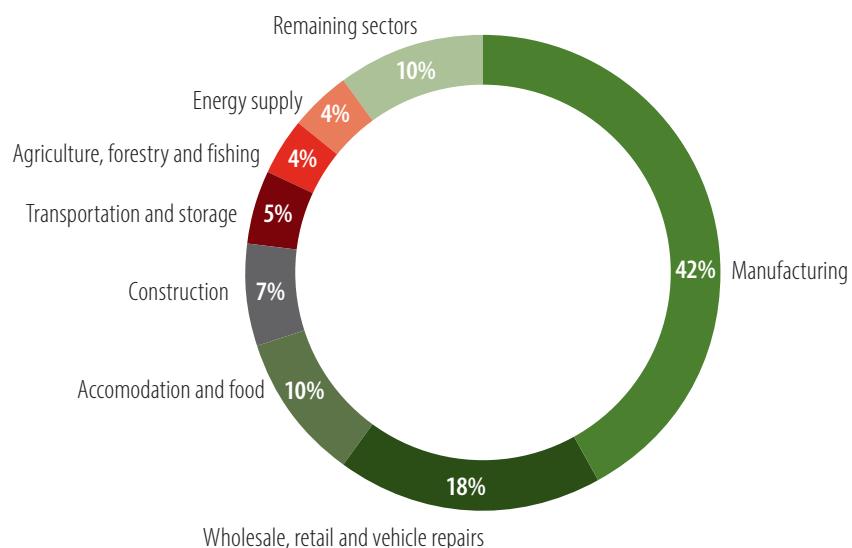
Note: Circle size represents the absolute volume of allocations within each country, relative to the regional total.

Over the same period, sub-loan allocation data reveal that 42% of lending went to firms in the manufacturing sector, with a similar amount going to firms in service sectors, notably wholesale and retail, accommodation and food, and transport (Figure 18). This reveals a bias towards manufacturing: Across the beneficiary countries (using a GDP-weighted average), manufacturing only contributes 18% of value added, compared to 69% from services. This is not necessarily a bad thing, given the importance of manufacturing firms for trade participation, innovation and productivity growth in lower and middle-income countries, and the centrality of bank lending in enabling these firms to adopt new technologies and scale up production to create jobs and raise incomes.

Alongside services, agriculture is also relatively under-represented. This reflects the fact that farming enterprises tend to be very small and rarely formally registered, making them among the hardest businesses for banks to reach. Microfinance institutions typically have a stronger focus on extending financial services to very small agricultural and service sector businesses.

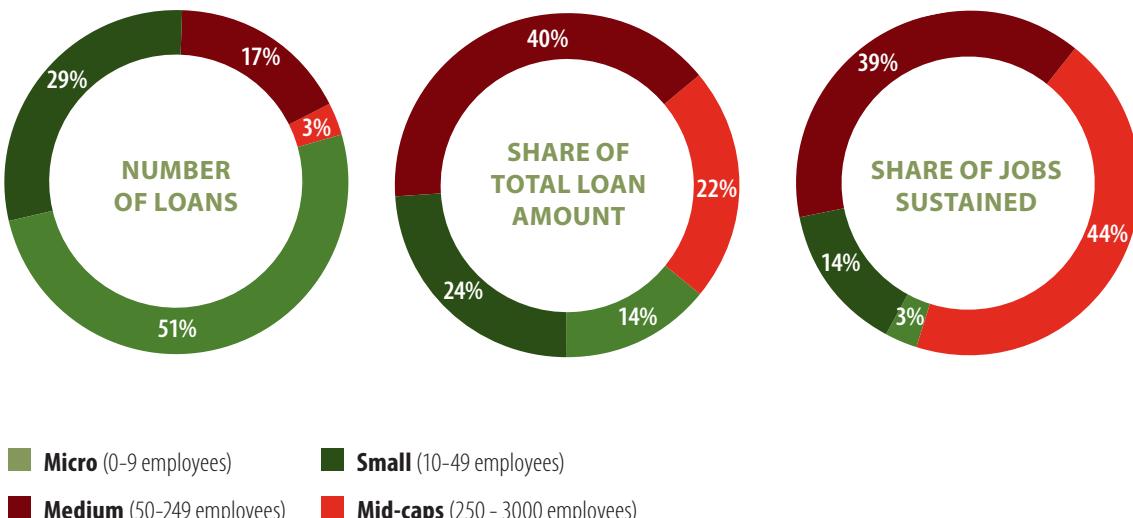
FIGURE 18: A LARGE SHARE OF EIB CREDIT LINES SUPPORTS MANUFACTURING FIRMS

SHARE OF SUB-LOAN AMOUNTS, BY SECTOR (IN %, 2011-2020)



Companies that benefit from EIB credit lines are mostly smaller firms with fewer than 50 employees (Figure 19: left-hand chart). Since 2021, 51% of beneficiaries have been microenterprises with fewer than ten employees, while only 3% have been mid-cap companies. Since larger companies are able to take out bigger loans, the amounts are skewed towards larger companies, although 78% has gone to small and medium-sized enterprises (Figure 19: middle chart). Most of the employment supported by credit lines has been in these companies, though mid-caps also made a significant contribution, with 44% of jobs sustained (Figure 19: right-hand chart).

FIGURE 19: MICRO AND SMALL FIRMS RECEIVE MOST SUB/LOANS, WHILE MOST JOBS SUSTAINED ARE IN MEDIUM-SIZED FIRMS AND MID-CAPS



As an indicator, “jobs sustained” gives a sense of how many people ultimately benefit, as employees, from the support that the EIB provides. It is not a perfect measure, however, as the intensity of this support may vary from company to company. For example, smaller firms are less likely to have multiple loans, so the effect of an EIB-supported loan is more concentrated. Another factor is capital intensity, with some firms requiring larger investments in equipment and premises per employee than others. Increasing capital intensity is generally good, as it increases productivity and incomes.

Firm growth is also an issue: When very small firms take out bank loans, it is sometimes to make investments in new equipment and premises that are large relative to their size and that may lead to relatively large increases in employment. By contrast, larger firms may only need to take out smaller loans relative to their size to finance similar investments. This means that smaller firms may often appear to be more capital intensive than larger firms and the impact of loans to smaller firms on employment may be underestimated. Jobs sustained relative to loan size is relatively low in some service sectors, where the average size of beneficiary firms is also comparatively low.

The EIB’s allocation data provide a window on the outputs and outcomes achieved by credit lines for small, medium and mid-cap companies outside the European Union. To go further and gain a better understanding of the impact of this lending on matters such as firm resilience, employee incomes and employment growth requires much more in-depth impact research. Unfortunately, the paucity of firm registry and financial data makes this task harder outside the European Union, but the EIB is exploring steps that could be taken to improve this. Comparable studies that the Bank has undertaken inside the European Union have estimated the benefits of EIB support on firm growth and productivity.³¹

31. Amamou, R., A Gereben and M. Wolski, 2020, “Making a difference: Assessing the impact of the EIB’s funding to SMEs”, *EIB Working Paper*, 2020/04. <https://www.eib.org/en/publications/economics-working-paper-2020-04>.



2021 IN FIGURES: PRIVATE SECTOR GROWTH AND EMPLOYMENT

Lending for private sector development

€2.38 billion signed

Private sector development, expected results

444 000 jobs sustained through 21 200 loans
to **small, medium and mid-cap** companies

83 600 jobs sustained through 202 200 loans
to **microenterprises** by supported microfinance institutions

365 companies benefiting through private equity funds



The Fonplata framework loan supports projects targeting extreme poverty and adaptation to climate change in Latin America.

CONNECTING THE GLOBE

Development does not happen in a vacuum. From trade and the spread of technology to energy supply and the global fight against disease, investment in social and economic infrastructure is needed to unleash the tremendous potential that exists. This requires finance and expertise in a context of fair and open partnership.

The number of people living in extreme poverty has fallen from 1.9 billion in 1990 to around 600 million now. Nearly all that reduction was achieved in South and Southeast Asia and China, through private sector growth and the seizing of trade opportunities. These were used as a springboard for technology adoption and innovation, leading to dramatic increases in productivity. For that to be possible, many other factors were necessary: not just adequate finance for firms but adequate transport links and digital infrastructure, reliable energy supplies and high standards of healthcare and education.

The **Global Gateway** initiative crystallises the ambition of the European Union to be a supportive partner to fully unlock the potential that also exists in the EU neighbourhood, in sub-Saharan Africa and around the world. Strengthening the links that exist within regions and with the European Union is a way to push forward the process of social and economic development to benefit all partners:

- **Transport** — efficient rail and road networks and other logistics infrastructure are vital to enable countries and firms to seize the opportunities of trade.
- **Digital infrastructure** — communication systems are now as essential to economic prosperity as the movement of goods, underpinning the spread of ideas and know-how, as well as the trade in services and management of global value chains.
- **Energy networks** — while climate change epitomises how interdependent we are as a planet, energy links between countries have a particular role to play in integrating increased electricity generation from renewables and enhancing energy security and economic resilience.
- **Education and knowledge** — new economic activities require new skills, and the spread of new technologies requires the diffusion of knowledge to facilitate adoption and further innovation. Better education facilities and research collaboration both have a role to play.
- **Health** — the coronavirus pandemic has made clear that better healthcare is not just a good in its own right, but critical to economic resilience and well-being in an interconnected world.

The EIB's support for investment in these sectors combines long-term finance matched to the economic life of the assets built, rigorous appraisal of economic sustainability, and often technical assistance to help prepare projects and ensure quality. In the spirit of the Global Gateway initiative, the Bank carefully screens projects and requires standards to mitigate against corrupt practices, negative social and environmental effects and human rights violations. All this serves to ensure that decisions are transparent and that the investments are really in the interests of the economies where they take place.

This section highlights some areas where the EIB has been particularly active, such as its response to the pandemic, and its long track record of investment in transport infrastructure. It also examines the importance of participation in trade and global value chains for productivity growth and innovation in the EU neighbourhood.

COVID-19: THE NEED FOR A GLOBAL RESPONSE

The coronavirus pandemic revealed just how interconnected the world is, including when it comes to an issue like health. As new variants have emerged and spread across the globe, it has become clear that the pandemic is not over for any country or regions when it is not over for everyone. Unfortunately, a lack of investment in public health systems and — especially — the slow rollout of vaccines to all parts of the world, has increased the toll of the disease and the risks that we all still face.

The EIB has been at the forefront of the European response to the pandemic and its effects, both within the European Union and beyond. Building on its rapid mobilisation of financing for vaccine rollout in low and middle-income countries in 2020, the Bank provided further finance for the COVAX initiative, as well as loans to Argentina and Bangladesh, supporting the provision of vaccines for 494 million people. A separate guarantee facility will support GAVI, the vaccine alliance, in providing vaccines for 280 million children against a number of diseases.

The severity and impact of health emergencies like the pandemic also depend on the infrastructure in place, and this has been another focus of the EIB's efforts. For example, the Bank provided a grant to support a new vaccine production facility at the Institut Pasteur de Dakar in Senegal as part of a continent-wide strategy to raise Africa's capacity to produce vaccines. Other 2021 projects support the improvement of health facilities such as the refurbishment of the Rwanda Biomedical Centre as part of the country's COVID-19 National Response Plan, with the revamped National Reference Laboratory expanding the country's testing facilities and improving preparedness and resilience in the face of future infectious disease outbreaks. The EIB also continued its enhanced support to small and medium-sized firms around the world to help them cope with the effects of the pandemic, thereby sustaining employment.

CONNECTIVITY AND ECONOMIC GROWTH IN THE WESTERN BALKANS

The EIB has a long track record of supporting connectivity and economic integration outside the European Union. In no region is this clearer than in the Western Balkans, where the EIB has been a consistent partner with government authorities and other financial institutions, supporting the progressive upgrading of the region's transport network. Since 2010, the Bank has financed 35 projects to build or upgrade rail and road transport infrastructure in the region, lending €2.45 billion and supporting total investment of €7.53 billion.

Most of this investment supports the extension of the TEN-T, a Europe-wide network of roads, railways, inland waterways, maritime routes, ports, airports and multimodal terminals (Figure 21). By closing gaps and removing bottlenecks and barriers on the network, TEN-T policy ultimately aims at strengthening social, economic and territorial cohesion. The Western Balkans Transport Community and the European Union have agreed on an indicative extension of the TEN-T comprehensive and core networks to the region. The improvement of this network is regarded as a key factor in promoting growth and integrating the region with the EU economy.

EIB-supported projects range from new motorway sections and upgraded rail lines to targeted quality and safety improvements across national road networks, upgrading of tunnels and bridges, mitigation of landslide risks and other measures to improve traffic flow and safety. Altogether, the EIB has financed some 2 700 km of new or upgraded road lanes in the region since 2010.

FIGURE 20: EIB SUPPORT FOR TRANSPORT LINKS IN THE WESTERN BALKANS, 2010-2021



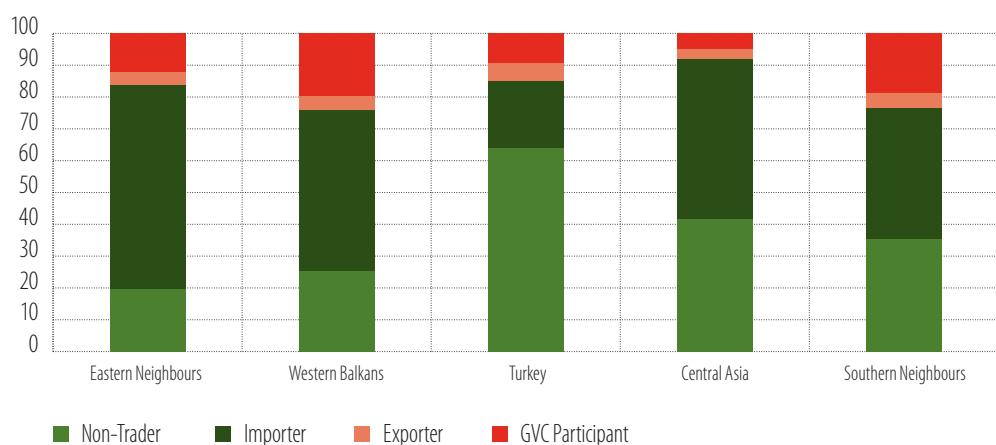
TRADE CONNECTIONS, INNOVATION AND PRODUCTIVITY GROWTH IN THE EU NEIGHBOURHOOD

Across most of the EU neighbourhood, economic growth in the last three decades has been accompanied by deeper trade integration, particularly with the European Union. This has been significant in the Western Balkan countries, following in the footsteps of the Central and Eastern European countries that have joined the European Union. Higher value-added products, such as machinery and electrical equipment, present a growing proportion of the exports from the Western Balkans and Turkey. Export-led industrialisation is also growing in Tunisia and Morocco, with Morocco playing an important role in clothing, automobile and aerospace value chains. By contrast, many countries in the Eastern Neighbourhood and Central Asia are lagging behind, with growth more dependent on primary industries, such as oil, gas, metals and agriculture.

The Enterprise Surveys conducted by the EIB with the EBRD and the World Bank highlight the importance of trade integration to these countries. They show how participation in global value chains is helping to stimulate innovation and productivity growth, and therefore rising living standards.³² Most firms in the EU neighbourhood do engage in trade, with a large proportion of firms importing goods for processing or resale. Among those that export, most also import as participants in global value chains (Figure 21).

FIGURE 21: MOST EXPORTING FIRMS IN THE EU NEIGHBOURHOOD ARE GLOBAL VALUE-CHAIN (GVC) PARTICIPANTS

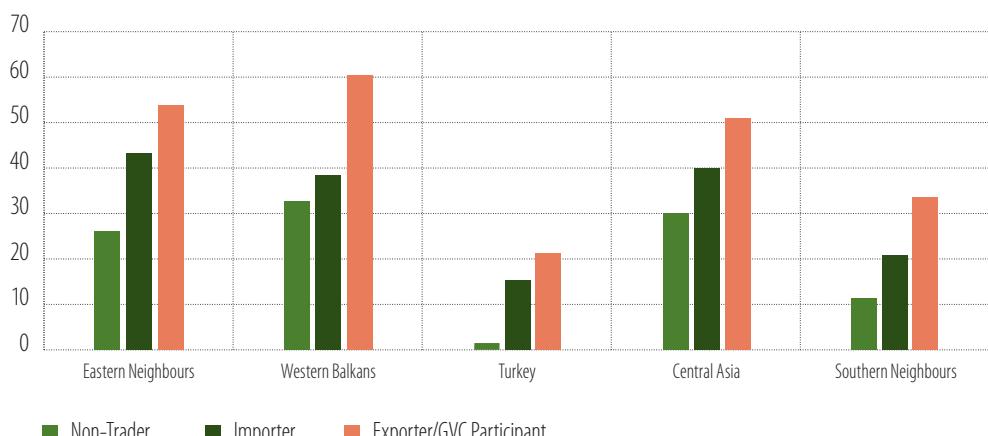
TRADING PROFILES IN % OF FIRMS



32. EIB and EBRD, 2022, *Business resilience in the pandemic: Adaptation, innovation, financing and climate action from Eastern Europe to Central Asia*. <https://www.eib.org/en/publications/business-resilience-in-the-pandemic-and-beyond.htm> and EIB, EBRD and World Bank, 2022, *Unlocking sustainable private sector growth in the Middle East and North Africa: Evidence from the Enterprise Survey*, <https://www.eib.org/en/publications/unlocking-sustainable-private-sector-growth-in-mena.htm>.

FIGURE 22: GVC PARTICIPANTS ARE MORE LIKELY TO INNOVATE

SHARE OF FIRMS (IN %) THAT ENGAGE IN INNOVATION, BY TRADING PROFILE



Participation in trade is closely linked with innovation and productivity growth. Innovation goes beyond the development of new technologies. It also includes the adoption and/or adaptation of technologies and practices developed elsewhere. The adoption and adaptation of new products and processes is particularly important for emerging markets and developing economies, as it enables them to close the gaps with more advanced economies.

Innovation is important for international competitiveness and successful exporting. Both importers and exporters can gain knowledge from exposure to foreign markets and practices, helping them to innovate and enabling them to grow and increase their efficiency. This is particularly true for firms that are part of global value chains and can gain knowledge from foreign partners and competitors or through reacting to the demands of foreign markets.

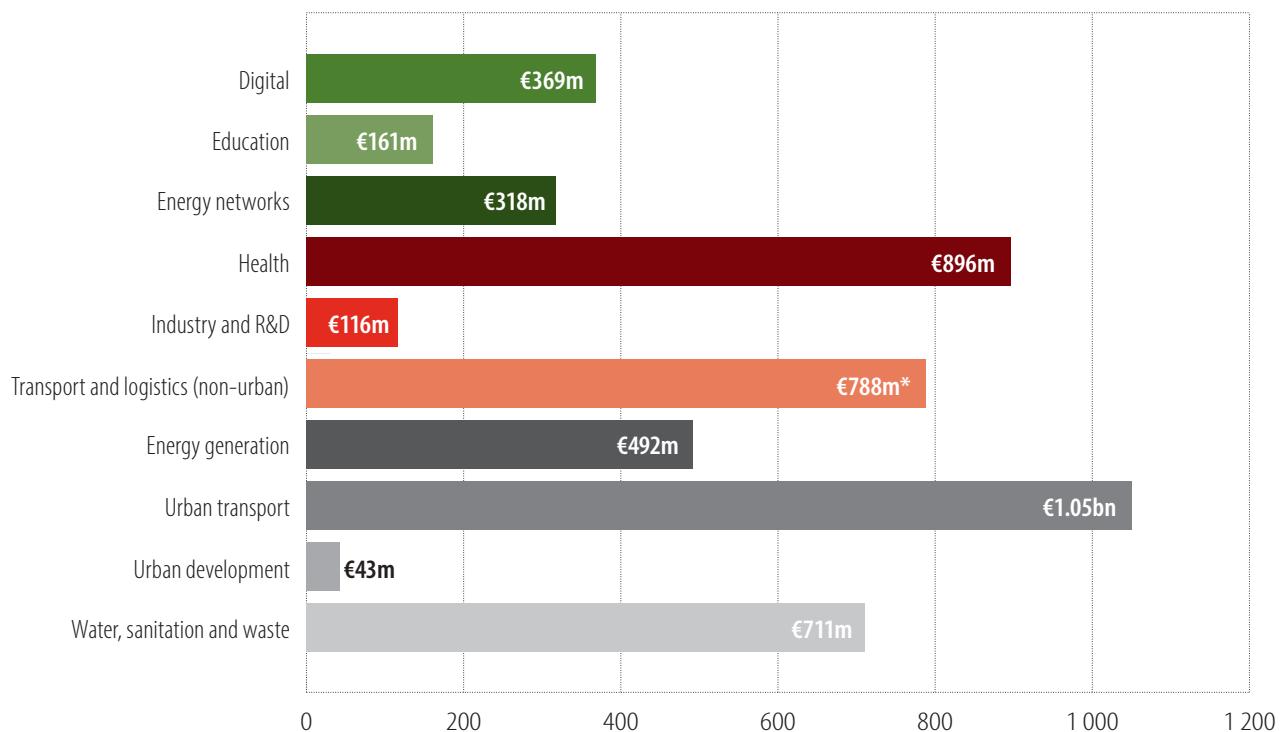
According to Enterprise Survey data, the share of innovative firms is significantly higher among importing firms than among non-traders. It is highest among companies that export. Attracting foreign direct investment also fosters the introduction of new or improved products and processes, while participation in global value chains tends to increase the quality of exports and stimulate product upgrading. Traders also tend to be larger and more productive than non-trading firms, and experience higher sales growth. The positive effects for firms that both innovate and trade are even greater.

These results highlight how barriers to trade can slow development. These include tariffs, but also non-tariff barriers, such as deficient training, skills and management capabilities. Infrastructure also plays an important part, with high-quality road and rail networks, ports and other logistics infrastructure serving to reduce transport times, costs and risks. Digital infrastructure is also an essential factor in coordinating trade and accessing markets. The Enterprise Survey data show that innovative firms cluster in major urban areas, where digital infrastructure is more developed.

2021 IN FIGURES: CONNECTING THE GLOBE

FIGURE 23: LENDING FOR SOCIAL AND ECONOMIC INFRASTRUCTURE

2021 SIGNATURES (NON-CONNECTIVITY SUB-SECTORS SHOWN IN GREY)



*Includes €139 million in support for agri-food value chain logistics reported elsewhere under agriculture and credit lines.

Social and economic infrastructure, expected results

27.7 million new **mobile data users**

58 800 **School and vocational training students** benefiting from improved facilities

774 million people **vaccinated against COVID-19** and other diseases

149 000 tonnes of additional **rail cargo transported**, per year

1.6 million tonnes of **agricultural produce exported**



Investments under the Gambia Renewable Energy programme include off-grid solar units for up to 1 000 schools.



IMPACT IN DETAIL

The EIB supports projects around the globe that make a real difference to people's lives. This is why we rigorously assess the results of our projects through the project cycle and what we are able to bring to each project in terms of financial benefits, catalytic effect and technical support.

To get as full a picture as possible, we use different complementary methods to examine our impact. In addition to tracing the Bank's contribution to each project and its results, we support in-depth studies to obtain a more detailed understanding of the impact of selected projects, and we use macroeconomic modelling to gain insight into the broader economic effects of our lending.³³

In this section, we provide greater detail on the EIB's contribution and the results and impact of our projects:

- **The EIB approach** to results and impact
- **Expected results** of new projects
- **EIB contribution** to new projects
- **Carbon footprint** exercise
- **Modelling** macroeconomic impact
- **Results** of completed projects
- **Aggregate** lending volumes

33. Bending, T. and G. Weiers, 2021, *Measuring the EIB Group's impact: Methods and studies, EIB Thematic Study*. <https://www.eib.org/en/publications/measuring-the-eib-groups-impact-methods-and-studies>.

HOW WE MEASURE RESULTS AND IMPACT

Careful assessment of our impact and contribution is vital. It helps us focus on projects where the EIB can make a big difference, and that are aligned with EU policies and the investment needs and priorities identified for each country. It also enables us to improve our effectiveness by fine-tuning our support, and it is a way of ensuring accountability to all our stakeholders on the positive benefits that we achieve around the world.

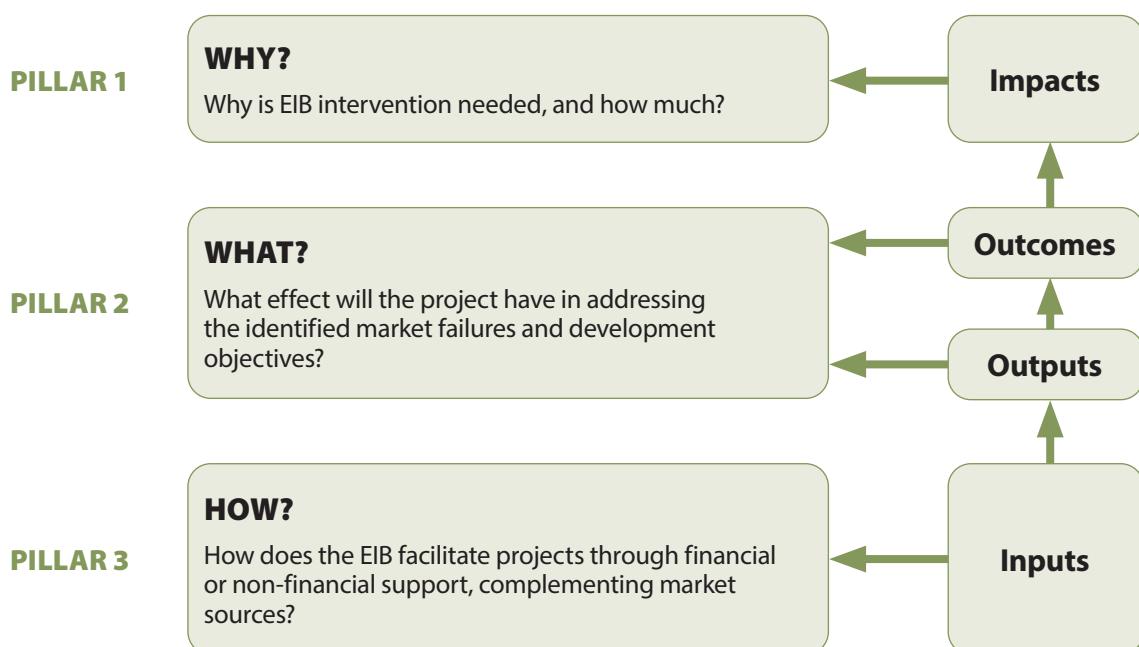
Assessing and tracking results is an integral part of the Bank's whole project appraisal and follow-up process, through our Additionality and Impact Measurement framework. It is a core function that we perform as a development finance institution. At the same time, we go further, through in-depth studies to investigate our impact at a level that is impossible for each individual project. We also use macroeconomic modelling to get a sense of the broad indirect impact of our operations on jobs and growth across the economies in which we work.

Tracking results through the project cycle: The AIM framework

The AIM framework was fully implemented in 2021, bringing together the Bank's previous Results Measurement (ReM) and Three Pillar Assessment (3PA) frameworks for outside and inside the European Union, while allowing project appraisal and monitoring to be tailored to the particular needs of different development contexts.

AIM provides a comprehensive framework for assessing each EIB project in terms of results and additionality, in line with international best practices. It follows an established three-pillar logic that asks *why* an intervention by the EIB is needed, *what* will be achieved, and *how* the EIB will make a difference. These three pillars are conceptually linked to the different elements of the results chain.

FIGURE 24: THE AIM FRAMEWORK AND THE RESULTS CHAIN



The framework forms a key element of ensuring development effectiveness, in terms of managing for results (steering, designing, implementing, reporting and learning). As part of the due diligence process, all three pillars are rated to assess the added value of the operation. These ratings form a key part of the deliberation process and the project results indicators identified during the appraisal form the basis of project monitoring throughout the project cycle. Monitoring results enables lessons to be learnt and fed back into the project's implementation and into future projects and processes.

The AIM framework is aligned with EU policy in the countries and regions where the Bank operates, and with the SDGs. The framework is flexible so that new indicators can be added when new needs emerge.

Going further to investigate impact

While AIM forms the foundation of the EIB's overall approach to assessing impact, its evaluators and research teams also go further in investigating the ultimate effects of the projects the Bank supports.

In-depth **impact studies** are one way to enable the Bank to look much closer at what its projects achieve, going beyond what is feasible within the regular results assessment process. They allow the Bank's economists to use a variety of methods to dig deeper into the impact of particular projects or types of product offered by the EIB Group.

Macroeconomic modelling provides a way to investigate the effects of our lending on jobs and GDP across whole economies, to gauge how big these effects are likely to be. It helps us make sure that we correctly understand how individual projects will ultimately affect people's lives.

EXPECTED RESULTS OF NEW PROJECTS

In 2021, the EIB signed contracts for 103 new projects outside the European Union, the United Kingdom and the European Free Trade Association. The total approved lending for these new projects (excluding contracts signed under older projects) was €6.37 billion (see page 79 for further details on lending volumes). This section summarises the aggregate outputs and outcomes we expect from these new projects.

TABLE 1: EXPECTED RESULTS OF NEW INFRASTRUCTURE PROJECTS

Agriculture and forestry: Three projects, €228 million	
Land under new or improved management (hectares)	300 000
Agricultural product storage capacity (tonnes)	1 370 000
Production of agricultural goods (tonnes/year)	2 181 000
Export of agricultural goods (tonnes/year)	1 635 000
Digital: Five projects, €368 million	
New 5G sites	1 000
New 4G sites	5 421
Number of upgraded sites	2 183
New and upgraded network — length of cables (km)	800
Submarine or terrestrial fibre optic backbone cable installed (km)	5 000
Total capacity of installed submarine and land transmission networks (gigabytes)	2 000
Additional subscriptions with 5G services enabled	2 252 000
Additional subscriptions with data services enabled	27 657 895
Additional mobile subscriptions	27 311 362

Education: Two projects, €175 million

Primary

New or rehabilitated education facilities (m ²)	342 150
Places created in educational facilities	37 500
New equipment supplied (in millions of euros)	10
Students benefiting	37 500

Vocational education and technical training

New or rehabilitated education facilities (m ²)	75 400
Places created in educational facilities	2 873
Students benefiting	21 324
Disadvantaged students benefiting	6 397
Additional students enrolled	2 011
Additional disadvantaged students enrolled	603

Energy: Ten projects, €1.104 billion

Electricity generation

Electricity generation capacity from conventional energy sources (MW)	25
Electricity generation capacity from renewable energy sources (MW)	1 986
Electricity produced from conventional energy sources (GWh/year)	15
Electricity produced from renewable energy sources (GWh/year)	5 180
Households that could be supplied with the electricity generated	2 589 400

Electricity transmission

Power lines constructed or upgraded for transmission and distribution (km)	1 326
Capacity of sub-stations constructed or upgraded (MVA)	490
New connections to the network	621 288

Gas transport and storage

Gas pipelines constructed or upgraded (km)	176
Maximum gas transport capacity (million m ³ /day)	4.9
Quantity of gas storage utilisation (GWh/year)	22 420

Health: Nine projects, €916 million

Health facilities constructed or rehabilitated	9
Health facilities constructed or rehabilitated (floor area, m ²)	8 000
Health facilities constructed or rehabilitated (number of beds)	873
COVID-19 tests implemented	75 000
COVID-19 patients treated	148 816
Population vaccinated against COVID-19 and other diseases	773 958 000

Industry and Research and Development: Ten projects, €95.7 million

EU collaboration agreements with universities and research institutes, per year	2
Additional national or international patents granted, per year	2
Total potential sales resulting from the project (in millions of euros)	29

Transport: 12 projects, €1.192 billion

Urban public transport

Length of bus and tram lanes or metro track constructed or upgraded (km)	82
Stations or stops constructed or upgraded	27
Vehicles or rolling stock purchased or rehabilitated	390
Passenger journeys supported by new or upgraded urban transport, per year	847 360 000
Additional passenger journeys per year (urban transport)	92 360 000
Time savings from improved urban transport (million hours/year)	28

Railways

Length of railway track built or upgraded (line km)	336
Stations constructed or upgraded	9
Passenger journeys supported by new or upgraded railways, per year	1 055 000
Additional passenger journeys per year (railways)	245 000
Time savings from improved rail transport (million hours/year)	3.15
Additional cargo transported (tonnes/year)	149 000

Roads

Beneficiaries (average annual daily traffic)	14 500
Time savings from improved road transport (million hours/year)	13.4

Air transport

Airport (airside system): Area of pavement or strip upgraded (m ²)	315 400
Air traffic movement improvements (Number of air traffic movements/employee/year)	30

Urban development and energy efficiency: Four projects, €69.7 million

Area of open space created or restored (m ²)	1 100 000
Length of urban streets and associated infrastructure built or upgraded (km)	104
Savings from energy efficiency measures (MWh/year)	136 000

Water, sanitation and waste: 13 projects, €628 million

Water supply

Capacity of reservoirs or raw water storage constructed (m ³)	150 800
Capacity of water treatment plant constructed or rehabilitated (person equivalent)	43 000
Length of water mains or distribution pipes built or upgraded (km)	612
Domestic connections to water supply created or rehabilitated	45 000
People benefiting from safe drinking water	1 820 834
People with reduced exposure to drought risk	308 000

Sanitation

Capacity of sewage treatment plant constructed or rehabilitated (person equivalent)	271 000
Domestic connections to sanitation services created or rehabilitated	106 000
Length of sewerage and/or stormwater pipes built or upgraded (km)	4 243
Wastewater treated to acceptable standards (person equivalent)	271 000
Volume of untreated sewage not discharged to environment (m ³)	21 700
People benefiting from improved sanitation services	2 152 000

Flood prevention

Area served by flood prevention infrastructure (hectares)	189 000
Capacity of retentions or room-for-river areas constructed or rehabilitated (m ³)	5 360 000
People facing reduced risk of flooding	306 000

Solid waste management

New waste facility capacity (tonnes/year)	5 400 000
New collection containers	59 100
New collection vehicles	11 240
Amount of waste handled in new waste facility (tonnes/year)	3 400 000
Persons benefiting from new waste disposal facility	3 200 000
Persons benefiting from new waste collection system	12 000 000

Note: Project numbers listed include seven equity funds that contribute to more than one sector (approved finance amounts are prorated by sector).

TABLE 2: EXPECTED EMPLOYMENT RESULTS OF NEW INFRASTRUCTURE PROJECTS

	Temporary employment in project construction (person-years)	Permanent employment in project operation (full-time equivalent)
Agriculture, forestry, fishing	3 000	2 821
Digital	7 224	50
Education	7 500	1 353
Energy	98 333	8 139
Health	1 500	224
Industry	10 035	1 106
Solid waste	10 000	200
Transport	64 695	2 350
Urban development and energy efficiency	3 520	0
Water and sanitation	94 349	1 011
Total	300 156	17 254

TABLE 3: EXPECTED RESULTS OF NEW PRIVATE SECTOR DEVELOPMENT PROJECTS

Credit lines for small to mid-cap companies: 30 operations, €1.422 billion			
	SMEs	Mid-caps*	All
Total loans (in millions of euros)	1 241	315	1 556
Total number of loans	20 676	523	21 199
Average loan size (in euros)	60 024	602 677	73 411
Average loan tenor (years)	4.7	5.7	4.8
Jobs sustained in beneficiary firms	326 864	117 012	443 876
Credit lines for microfinance: Six operations, €47 million			
Total loans (in millions of euros)		222	
Total number of loans		202 121	
Average loan size (in euros)		1 098	
Women as percentage of final beneficiaries		29	
Jobs sustained in beneficiary firms		83 616	
Jobs sustained held by women		31 675	
Jobs sustained held by youth		15 790	
Microfinance investment funds: Two operations, €15 million			
Number of microfinance institutions supported		164	
Loans to final beneficiaries by supported microfinance institutions		10 720 000	
Average proportion of loans to female beneficiaries (in %)		56	
Average size of loans to final beneficiaries (in euros)		954	
Jobs sustained in supported microfinance institutions (existing direct employment)		20 874	
Net jobs created in supported microfinance institutions		9 444	
Equity funds: 18 operations, €442 million			
Total fund size (in millions of euros)		5 390	
Average leverage ratio		15.1	
Number of investee companies		356	
Average investment (in millions of euros)		12.9	
Net jobs created in investee companies		33 169	

* Includes ten loans to other entities, such as municipalities.

THE EIB'S CONTRIBUTION TO NEW PROJECTS

The EIB provides finance to sound projects. It also provides a package of support that includes advantageous financing conditions, technical advice and help to attract further finance. This is what we mean by the EIB contribution, which goes beyond the financing that project promoters could otherwise have obtained in local markets.

AIM Pillar 3 evaluates how the EIB facilitates or strengthens a project by providing financial or non-financial support, which complements what is available from market sources.³⁴ The EIB's contribution is needed because of identified market failures, without which the project would not have gone ahead, or would have been reduced in scale and scope. The types of **financial contribution** assessed are:

- **Financial benefit** — An assessment of financial value added or, where this is not possible, benefits in terms of capital relief.
- **Extension of loan maturity** — The financing repayment period offered by the EIB in excess of what is otherwise available on the market.
- **Customised financing terms** — Additional benefits provided by the EIB's financing structure beyond the price advantage and longer maturity.

The assessment of the **non-financial contribution** covers:

- **Crowding-in effect** — The extent to which the EIB's involvement has a catalytic role in mobilising other financiers, whether by crowding in private sector financiers or through the terms of its involvement with public sector partners.
- **Financial advice and structuring** — The extent to which a product is considered innovative in terms of financial advice and structuring in a specific market and/or for the counterparty.
- **Technical contribution and advice** — The technical contribution made by the EIB, including the involvement of advisory services and/or of external technical assistance financed and/or supervised by the EIB, and the contribution of EIB experts to improving a project during its preparation or implementation.
- **Raising standards** — The extent to which projects beyond the European Union contribute to the dissemination of EU standards in areas such as procurement, technical standards and environmental, social and governance standards.
- **Innovative financing** — A bonus indicator used, when appropriate, to capture how the financing is considered innovative in ways other than financial advice and structuring.

34. This is aligned also with the Multilateral Development Banks' "Harmonized Framework for Additionality in Private Sector Operations". <https://www.adb.org/sites/default/files/institutional-document/456886/mdb-additionality-private-sector.pdf>

TABLE 4: AIM PILLAR 3: THE EIB CONTRIBUTION — SUMMARY FOR DIFFERENT INSTRUMENT TYPES FOR 41 AIM FRAMEWORK ASSESSED NEW PROJECTS

			Loans for infrastructure	Credit lines for MSMEs and mid-caps	Equity funds
Number of projects			16	10	14
EIB contribution — overall rating	Average rating	2.8	2.7	3.6	
Financial contribution	Financial contribution — overall	Average rating	3.2	3.4	3.1
	Longer maturity	Average rating	3.2	3.7	3.2
	Match with economic life	Average (%)	98	100	88
	Customised terms	Average rating	3.4	3.1	2.9
	Extension of tenor	Average (%)	127	217	82
Non-financial contribution	Non-financial contribution — overall	Average rating	2.6	2.3	3.8
	Innovative financing (bonus)	Average rating	1.4	1.	3.3
	Crowding-in	Average rating	2.3	2	3.6
	Subsidy	Average (%)	3.4	4.6	0.0
	Financial advice and structuring	Average rating	2.4	1.6	3.3
	Technical contribution and advice	Average rating	2.5	2.3	3.1
	Raising standards	Average rating	2.9	2.1	3.7

TABLE 5: REM PILLAR 3: THE EIB CONTRIBUTION — SUMMARY FOR DIFFERENT INSTRUMENT TYPES FOR 58 REM FRAMEWORK ASSESSED NEW PROJECTS

			Loans for infrastructure	Credit lines for MSMEs and mid-caps	Equity funds
Number of projects			22	28	7
EIB contribution — overall rating	Average rating	3.1	3.1	3.6	
Financial facilitation	Overall rating	Average rating	3.3	3.6	3.7
	Subsidy	Average rating	2.1	1.2	1.0
	Subsidy	Average (%)	5	1.5	0.0
	Local currency	Average rating	1.0	2.9	3.0
	Extension of tenor	Average rating	3.7	3.7	4.0
	Extension of tenor	Average (%)	164	140	100
	Match with economic life	Average rating	3.8	4.0	3.6
	Match with economic life	Average (%)	93	98	90
Financial facilitation	Overall rating	Average rating	2.2	2.3	3.4
	Innovative financing	Average rating	1.5	2.1	3.1
	Attracting other private sector financers	Average rating	1.4	2.6	3.4
	Raising standards	Average rating	3.2	2.4	3.1
	Working with public sector partners	Average rating	2.3	n/a	3.3
Advice	Overall rating	Average rating	2.8	2.3	2.7
	Financial advice and structuring	Average rating	2.5	1.8	3.1
	Technical contribution and advice	Average rating	2.9	2.5	2.1

Note: EIB contribution ratings for individual projects: **4 = Excellent; 3 = Very good; 2 = Good; 1 = Poor.**
Averages are simple averages across projects.



CARBON FOOTPRINT EXERCISE

The EIB carbon footprint exercise estimates and reports greenhouse gas emissions from projects (not only climate action projects) when either or both of the following thresholds are exceeded:

- **absolute emissions** (actual emissions from the project) exceed 20 000 t CO₂-eq/year;
- **relative emissions** (estimated emissions increases or abatement compared to the expected alternative) exceed 20 000 t CO₂-eq/year.

Absolute emissions refer to the direct emissions of the project itself (Scope 1 emissions) plus emissions from generation of the power supply used by the project (Scope 2 emissions). Scope 3 emissions (other indirect emissions) are not normally included in project data, except for physical infrastructure links such as roads, railways and metros. Relative emissions are estimated by comparing the project emissions with an expected alternative. The Bank uses a set of published methodologies to determine the expected greenhouse gas emissions from EIB-financed projects.³⁵ Those methodologies have been harmonised with the approach of other international financial institutions.

While relative emissions are important for comparing technologies and projects, the absolute emissions from each project lie at the heart of the EIB's footprint approach, as these are what will ultimately affect our climate impact. Individual project-level greenhouse gas data are assessed at project appraisal and reported on the Bank's Environmental and Social Data sheets. For the purposes of aggregated annual reporting, project emissions are calculated proportionally to the volume of EIB financing of each project that year, thus avoiding possible double counting with the reporting of other international financial institutions.

The 2021 exercise included ten projects beyond the European Union (including contracts signed and large allocations approved during the year), representing €1.2 billion of EIB lending. The exercise estimates the greenhouse gas emissions from financing these investment projects as 0.2 Mt CO₂-eq/year. Estimated savings from financing these investment projects are 0.2 Mt CO₂-eq/year.

³⁵. EIB, 2022, *EIB Project Carbon Footprint Methodologies: Methodologies for the assessment of project greenhouse gas emissions and emission variations*. <https://www.eib.org/en/publications/eib-project-carbon-footprint-methodologies>.

MACROECONOMIC IMPACT MODELLING

Economic modelling is an important tool to complement the measurement of outputs and outcomes we measure for each project. It can provide a sense of the scale of the wider, indirect macroeconomic effects of supported investments.

For example, a project to build a metro line will have direct effects in terms of transport services provided and the number of people employed to build it. However, it will also have a number of indirect effects that are hard to trace and measure at the project level. These include:

- **Indirect effects on employment** along the supply chain, such as increased demand for products like concrete and steel used in construction, or for the manufacture of metro carriages. Supplying this demand supports additional employment.
- **The inducement of further demand** and employment through increased incomes. Both direct employment in project implementation and employment supported indirectly along the supply chain give workers more income to spend, which has a further knock-on effect on demand and employment.
- **Indirect effects on productivity** and competitiveness. Reduced congestion and travel times may improve economic efficiency in a range of economic sectors, with further economic impacts.

There are various ways of modelling indirect economic impacts. For operations outside the European Union, the EIB currently uses the Joint Impact Model, which was developed in a joint effort between a number of development finance institutions.³⁶

FIGURE 25: INDIRECT EMPLOYMENT IMPACT OF 2021 LENDING — JOINT IMPACT MODEL RESULTS



36. The Joint Impact Model has been developed in a collaboration effort by the Dutch consultancy firm Steward Redqueen, Proparco of France, CDC Group in the United Kingdom, African Development Bank, Belgian Investment Company for Developing Countries, FinDev of Canada and Financierings-Maatschappij voor Ontwikkelingslanden (FMO) of the Netherlands.



The first metro line in Quito, Ecuador, will cut journey times and pollution.

We have used the Joint Impact Model to investigate the possible indirect impact of EIB-supported investments outside the European Union on employment. The model estimates that EIB-supported investments outside the European Union in 2021 will support some 630 000 indirect jobs along supply chains (for example, supplying the materials and equipment used in the project). The model estimates that a further 480 000 jobs are likely to be induced by the extra income generated throughout the supply chain. Currently, the only structural effect that the model considers is the effect of increased electricity supply, which is estimated to support another 24 000 jobs.

As the results of a modelling exercise, these results should be treated with a degree of caution. As this model is fairly new, the underlying model structure and modelling approach are still evolving. Currently, the results from last year cannot easily be compared to the recent version. Changes in data, portfolio composition and model assumptions can produce varying results. Further enhancements, in coordination with other users of the Joint Impact Model and other modelling initiatives, will likely refine the approach. The values at this stage are indicative and not easily compared with previous values or other users of the model. The EIB is supporting this initiative and is working with other modelling teams to refine this approach further.

RESULTS OF COMPLETED PROJECTS

We assess the project's results at its completion to check the accuracy of our initial appraisal and to draw lessons for future project appraisals and design. This full assessment is applied to projects that were originally appraised from 2012 onwards.³⁷ This section provides a summary of key output and outcome indicators for such projects that reached completion in 2021.

Credit lines for small and medium-sized firms and mid-caps

Eight financial sector operations, all credit lines, which were originally appraised under the ReM framework in previous years, reached completion in 2021.³⁸ This was less than in previous years, reflecting the reduction in the number of operations in Turkey in the preceding years. Seven of the eight credit lines covered Armenia, Belize, Belarus, Georgia, Montenegro, Nigeria and North Macedonia. The eighth credit line included separate contracts covering Bosnia and Herzegovina, Georgia, Moldova, North Macedonia, Serbia and Ukraine.

TABLE 6: RESULTS ACHIEVED FOR EIGHT COMPLETED CREDIT LINES

Results achieved	All SMEs	Micro	Small	Medium	Mid-caps	All
Total loans (in millions of euros)	601	123	222	256	66	667
Total number of loans	2 488	702	1 099	687	65	2 553
Average loan size (in thousands of euros)	242	175	202	373	1 015	261
Average investment size (in thousands of euros)*	333	248	295	481	1 451	359
Average loan tenor (years)	6.1	6.9	5.9	5.9	6.2	6.1
Jobs sustained	77 592	2 785	21 179	53 628	31 911	109 503

* Data not available for one operation.

With the benefit of these credit lines, partner banks extended €667 million through 2 553 loans in total. Of these, 2 488 loans benefited small and medium-sized firms and 65 benefited mid-caps. This lending helped to sustain 109 503 jobs in the final beneficiary companies. The average tenor of the loans provided to final beneficiaries (weighted by loan size) was 6.1 years. Of the loans, 97% went to small and medium-sized businesses, with 71% going to microenterprises (with fewer than ten employees) and small firms.

37. The EIB's Results Measurement framework, the predecessor to the AIM framework, was introduced in 2012.

38. Operations are completed when they are fully allocated. In some cases, when the formal allocation period extends to the following year, cancellations or changes to the allocation data cannot be excluded.

The results of credit lines for small, medium-sized and mid-cap companies can be challenging to estimate in advance, as they depend on the success of intermediaries in finding clients in changing and unpredictable environments. For operations completed in 2021, the significant differences between Table 6 (results achieved) and Table 7 (results expected) are due in particular to the large multi-country credit line. For this credit line, it was not possible to estimate jobs sustained at appraisal, although this operation contributed some 40% of total jobs sustained, as recorded at completion. The cancellation of a substantial part of the operation in Belize (€6.6 million out of €8 million) also affected results.

Overall, the investments supported were more capital intensive than was expected, based on previous experience, resulting in larger average loan sizes and fewer loans overall, although the focus remained on micro- and small companies. The loan tenor provided to final beneficiaries was somewhat longer than expected for this set of credit lines. Despite the lower number of loans, the number of jobs supported was somewhat larger than that estimated at appraisal, even when the multi-country credit line was excluded.

TABLE 7: RESULTS EXPECTED FOR SIX COMPLETED CREDIT LINES

Results expected	All SMEs	Mid-caps	Other	All
Total loans (in millions of euros)	634	25	15	674
Total number of loans	4 929	2	30	4 961
Average loan size (in thousands of euros)	129	12 500	500	136
Average investment size (in thousands of euros)	136	4 050	3 333	-
Average loan tenor (years)	5.3	2.9	7.0	5.2
Jobs sustained	35 379	1 025	700	37 104

Social and economic infrastructure development — results achieved

Of the social and economic infrastructure projects that have been tracked using the Results Measurement framework (since 2012), 17 reached completion in 2021. These include five in the energy sector and four transport projects.

TABLE 8: RESULTS FOR INFRASTRUCTURE PROJECTS COMPLETED IN 2021

	Expected	Achieved (for projects with expected results data)	Achieved (all)
Energy: Five projects			
Electricity produced from renewable energy sources (GWh/year)	1 931	1 628	1 980
Households that could be supplied with the electricity generated by the project	1 822 000	1 458 335	1 604 035
Savings from energy efficiency measures (GWh/year)	37.2	284.0	558.4
Average cost of electricity generated with environmental externalities (euros/MWh)	61.6	63.5	62.3
Number of sub-loans to small and medium-sized firms	-	-	218
Employment sustained in small and medium-sized firms	-	-	11 000
Transport (urban public): Two projects			
Beneficiaries (additional passenger journeys per year on urban transport)	112 000 000	420 00 000	119 000 000
Proportion of passengers who would otherwise use road transport	70%	70%	70%
Time savings — Urban public transport (million hours/year)	99.9	117.9	117.9
Length of metro track constructed (km)	46	46	99.3
Stations or stops constructed or upgraded	22	21	64
Vehicles or rolling stock purchased or rehabilitated	80	80	80
Transport (roads): One project			
Length of road built or upgraded (lane x km)		288	288
Beneficiaries (vehicles per day)		8 863	1 623
Road fatalities saved (lives/year)		7	6
Time savings from improved roads (million hours/year)		1.83	1.62
Vehicle operating cost savings (millions of euros/year)		4.48	3.08
Transport (airports): One project			
Area of airport (airside) pavement or strip upgraded (m ²)		1 182 000	591 000
Additional passengers using airport (per year)		-	2 200 000

TABLE 8: RESULTS FOR INFRASTRUCTURE PROJECTS COMPLETED IN 2021 (CONTINUED)

	Expected	Achieved
Digital infrastructure: One project		
Additional 3G sites installed	763	1 944
Additional 4G sites installed	1 557	4 342
Population with 3G coverage	99%	99.5%
Population with 4G coverage	67%	94.9%
Number of subscriptions with data services enabled	1 225 735	1 331 283
Fiscal revenues generated (in millions of euros)	65	57.8
Forestry: One project		
New area planted (afforestation) (hectares)	-	7 377
Land under new or improved management (hectares)	-	21 465
Area of forest or other habitat protected (hectares)	-	300
Access roads created or maintained (km)	-	739
Forest growth (m ³ /ha/year)	-	2
Number of beneficiaries (farmers and foresters)	-	53 000
Water (flood prevention): One project		
Area served by flood prevention infrastructure	100 000	84 055
People facing reduced risk of river or urban flooding	97 000	81 533
Number of flood prevention and protection structures	508	427
Urban development: Two projects		
Volume of patients treated in improved hospitals (annually)	3 531 000	5 469 504
Construction floor area in improved health facilities (m ²)	532 700	485 664
Number of beds in health facilities	1 842	1 800
Places in new and improved schools	146 000	44 532

**TABLE 9: RESULTS FOR INFRASTRUCTURE PROJECTS COMPLETED IN 2021
— EMPLOYMENT**

	Expected (for projects with expected results data)	Achieved	Achieved (all)
Employment during construction — temporary jobs	128 430	166 634	477 939
Employment during operation — new permanent jobs	4 095	3 198	3 345

All of the **energy** sector projects focused on electricity generation from renewables. The results for seven of these are aggregated in the above table. Together, they are already producing 1 980 GWh per year, enough electricity to supply 1.6 million households. Energy efficiency measures (a key objective of one credit line among the four) are saving some 558 GWh/year.

The **transport** projects included two metro projects: the Bosphorus tunnel, tranche B, in Istanbul, and the Lucknow Metro project in the Indian state of Uttar Pradesh. Together, they enable nearly 120 million additional passenger journeys per year, and facilitate a modal shift away from road transport (70% of Bosphorus tunnel users are estimated to have previously been car and bus users). And the single road project in the Western Balkans is benefiting the users of some 1 600 vehicles per day, saving them more than €3 million per year in vehicle operating costs.

Other completed projects covered **digital infrastructure** (enabling 1.3 million mobile data subscriptions), **forestry** (reforesting or rehabilitating more than 21 000 hectares and benefiting 53 000 rural workers), **flood prevention** (reduced risk of flooding for 82 000 people), and urban development, through an earthquake risk mitigation project that improved hospital and school buildings.

Employment — Altogether, these projects directly supported 478 000 person-years of employment during the construction phase and are supporting 3 300 full-time equivalent jobs associated with the operation of the infrastructure or facilities constructed.

Where it was possible to estimate expected results during the appraisal stage, many of the estimations were reasonably accurate, although some factors led to discrepancies. For example, passenger estimates for the Bosphorus tunnel in its first years of operation were somewhat depressed by lower use during the coronavirus pandemic. At the time of the review of the completed single road project, traffic was still affected by the non-completion of two bridges in the associated road network, reducing the number of vehicles at that time. In the energy sector, the number of households potentially supplied was slightly lower than expected due to lower production in the first year, or higher electricity consumption than expected per household. In some cases, initial estimations of the employment to be created during construction were conservative compared to the actual employment figures supplied by project promoters at completion.

LENDING VOLUMES

Unless otherwise stated, lending volumes in this report are for all contracts signed in 2021 for projects outside the European Union. These include contracts signed for new projects, where the first financing contract was signed in 2021. They also include a smaller number of follow-up contracts signed under older projects that have been mentioned in previous reports (because earlier financing contracts for these projects were signed in previous years). This is in line with standard EIB reporting of lending volumes.

A slightly different scope is used for reporting project results in this *Impact: In detail* section. To avoid double counting, we only report the results of new projects (first financing contract signed in 2021) and not of follow-up contracts, the expected results of which have been reported previously. In the section *Expected results of new lending*, we also present lending volumes by sector and instrument type for new projects only. In this case, we report the full EIB commitment (approved lending). This covers both the amount signed in 2021 and any prospective approved balance to be signed under future contracts. A breakdown of 2021 lending volumes for both new projects and older projects is presented in the table below.

TABLE 10: 2021 AGGREGATE LENDING VOLUMES (IN MILLIONS OF EUROS)

	Total project cost	Funding approved	Contracts signed in 2020	Older projects (first signed before 2020)	Total contracts signed
African, Caribbean and Pacific countries	8 076	1 980	1 891	257	2 148
Asia and Latin America	5 680	1 967	1 287	246	1 533
Eastern Neighbours	1 262	694	598	72	671
Pre-accession countries	2 224	941	806	42	849
Southern Neighbours	2 122	790	770	1 243	2 012
Development of social and economic infrastructure	-	4 667	3 790	1 039	4 828
Local private sector development	-	1 696	1 561	819	2 380
Climate change mitigation and adaptation	-	2 568	1 845	944	2 789
Regional integration	-	1 529	1 515	50	1 566
Total	19 364	6 371	5 353	1 860	7 213

Note: One project in South Africa is included under countries in Africa, the Caribbean and the Pacific (ACP). Central Asia is included under Asia and Latin America. Lending for a given project may support more than one objective.

**For more insight into our projects outside the European Union
and the people they benefit, read the companion volume,
EIB Global Report: The story.**



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