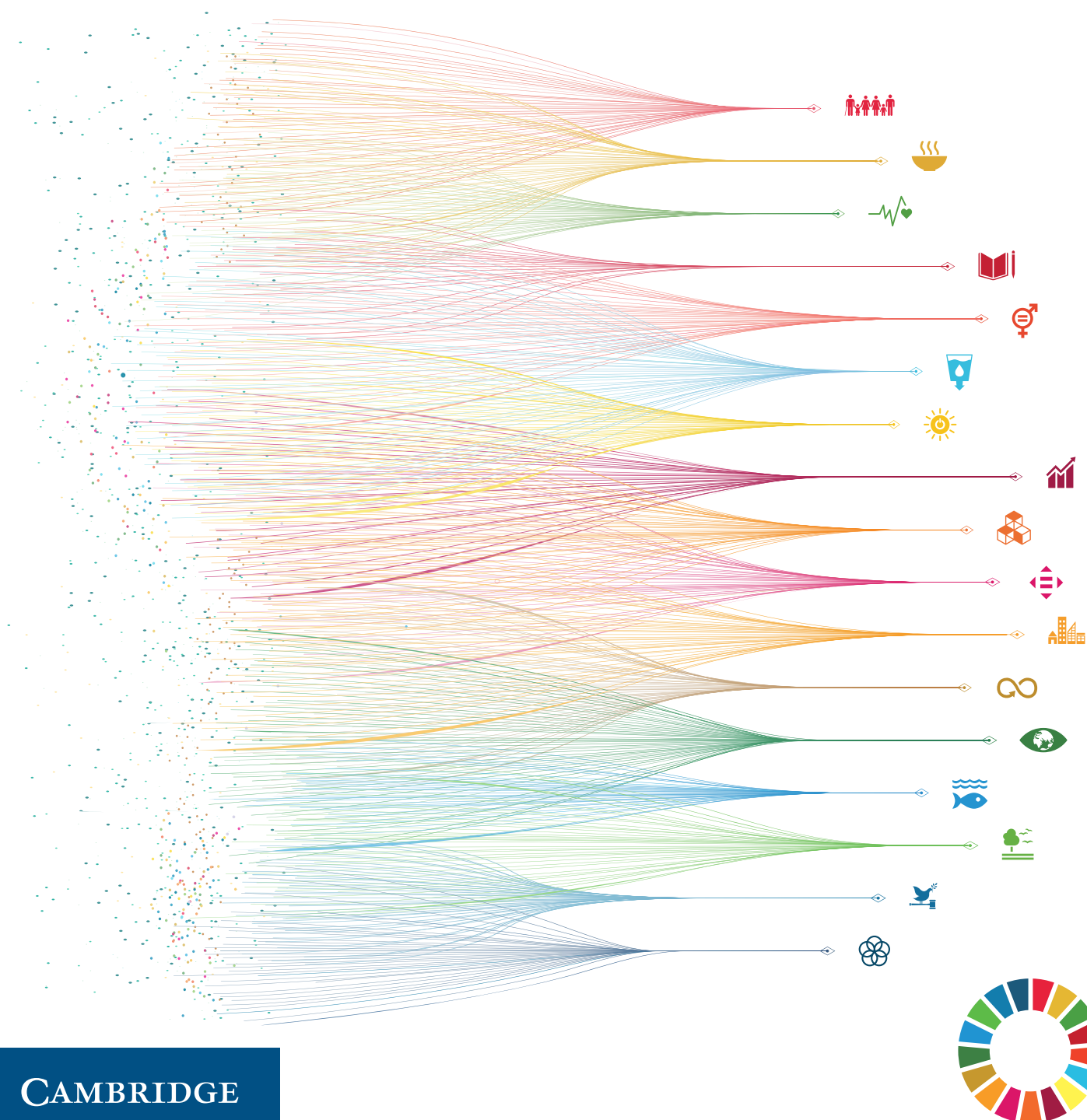# SUSTAINABLE DEVELOPMENT REPORT 2022
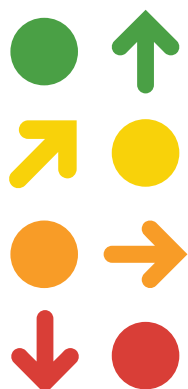
From Crisis to Sustainable Development:
the SDGs as Roadmap to 2030 and Beyond

Includes the SDG Index and Dashboards

CAMBRIDGE

SUSTAINABLE DEVELOPMENT REPORT 2022

From Crisis to Sustainable Development: the SDGs as Roadmap to 2030 and Beyond

Includes the SDG Index and Dashboards

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BertelsmannStiftung

SUSTAINABLE DEVELOPMENT
SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

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Executive Summary

Peace, diplomacy, and international cooperation are fundamental conditions for the world to progress on the SDGs towards 2030 and beyond. The war in Ukraine and other military conflicts are humanitarian tragedies. They also impact prosperity and social outcomes through the rest of the world, including exacerbating poverty, food insecurity, and access to affordable energy. The climate and biodiversity crises amplify the impact of these crises. At the time of this writing in early May 2022, the outcome of the war in Ukraine and other military conflicts, but also of the health crisis, remain highly uncertain. Yet, it is clear that these multiple and simultaneous crises have diverted policy attention and priorities away from medium and long-term goals such as the SDGs and the Paris Climate Agreement: a shift of focus towards short-term issues that threatens to slow down or even stall the adoption of ambitious and credible national and international plans but also squeezes available international funding for sustainable development. Global cooperation and commitment to the bedrock SDG principles of social inclusion, clean energy, responsible consumption, and universal access to public services are needed more than ever to respond to the major challenges of our times, including security crises, pandemics, and climate change. Despite these difficult times, the SDGs should remain the roadmap for achieving sustainable development by 2030 and beyond.

For the second year in a row, the world is no longer making progress on the SDGs. The average SDG Index score slightly declined in 2021, partly due to slow or nonexistent recovery in poor and vulnerable countries. Multiple and overlapping health and security crises have led to a reversal in SDG progress. Performance on SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth) remains below pre-pandemic levels in many low-income countries (LICs) and lower-middle-income countries (LMICs). This is a major setback, especially considering that before the pandemic, over the period 2015–2019, the world was progressing on the SDGs at a rate of 0.5 points per year (which was also too slow to reach the 2030 deadline), with poorer countries making greater gains than rich countries. Progress on climate and biodiversity goals is also too slow, especially in rich countries. Ahead of the heads of state SDG Summit in 2023, restoring and accelerating SDG progress in all countries, including the poorest and most vulnerable, should be a major priority of recovery plans and reforms to the international development finance system.

SDG Index Score over time, world average (2010–2021)
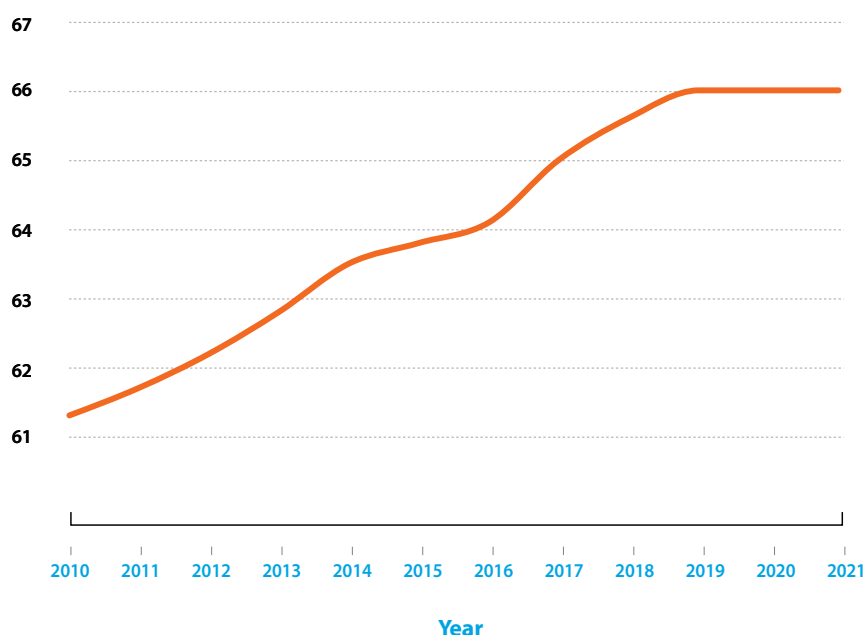
Source: Authors' analysis. *Note:* Population-weighted average

A global plan to finance the SDGs is needed. Achieving the SDGs is fundamentally an investment agenda in physical infrastructure (including renewable energy) and human capital. Yet the poorest half of the world – roughly speaking, the low-income countries (LICs) and lower-middle-income countries (LMICs) – lacks market access to capital on acceptable terms. We highlight five priorities towards a global plan to finance the SDGs. **First**, the G20 should declare clearly and unequivocally its commitment to channel far larger flows of financing to developing countries so that they can achieve economic development and meet the SDG targets. **Second**, the G20 should greatly increase the lending capacity and annual flows of the Multilateral Development Banks (MDBs), mainly through greater paid-in capital to these institutions, but also through greater leverage of their balance sheets. **Third**, the G20 should support other measures as well – notably increased ODA, large-scale philanthropy, and refinancing of debts falling due – to bolster SDG finance for the LICs and LMICs. **Fourth**, the IMF and the credit-rating agencies need to redesign the assessments of debt sustainability, taking into account the growth potential of developing countries and their need for far larger capital accumulation. **Fifth**, working together with the IMF and the MDBs, developing countries need to strengthen their debt management and creditworthiness by integrating their borrowing policies with tax policies, export policies, and liquidity management, all to prevent future liquidity crises.

At mid-point on the way to 2030, policy efforts and commitments supporting the SDGs vary significantly across countries, including among G20 countries. Ambitious and sound national targets, strategies, and plans are crucial to turning the SDGs into an action agenda. Every year, SDSN conducts a survey of government efforts for

Governments' Commitment and Efforts for the SDGs Score (pilot version) versus SDG Index Score

SDG Index Score 2022 (0 worst–100 best)

Governments' Commitment and Efforts for the SDGs Score (pilot version), 2022 (0 worst–100 best)

● G20 countries
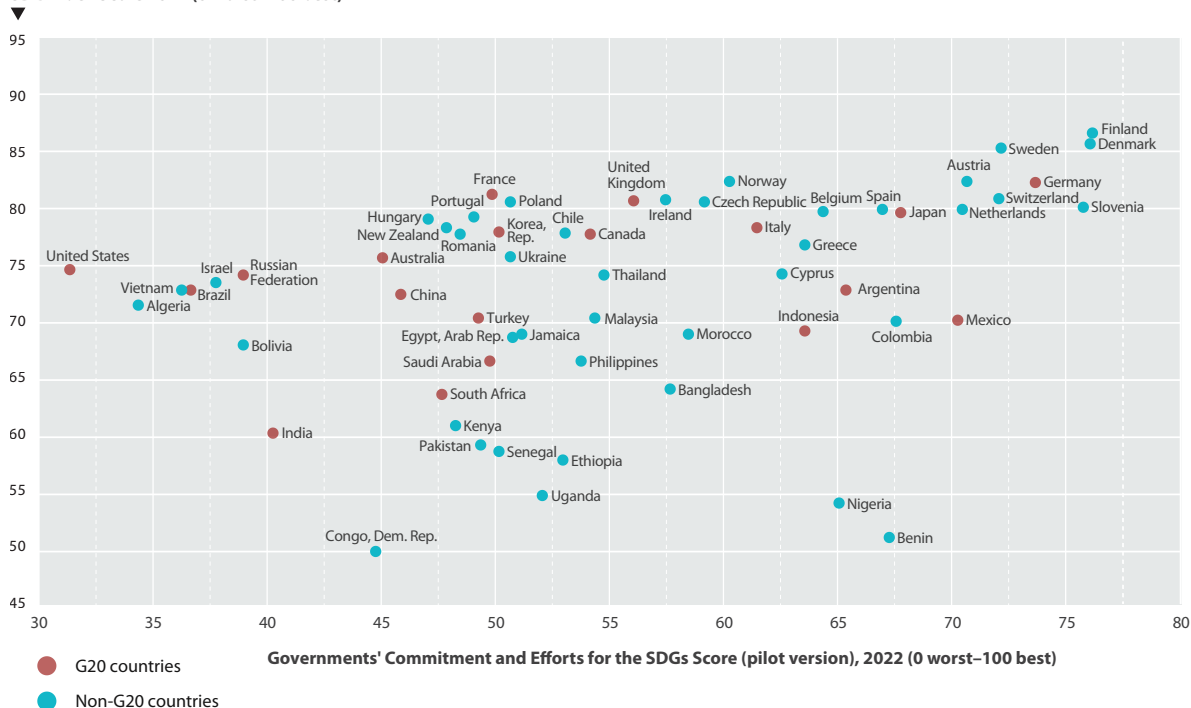
● Non-G20 countries

Note: G20 countries in red. The score for Ukraine reflects the situation as of January 2022.

Source: Authors' analysis. Details on the methodology and the indicators used are available on www.sdgindex.org

the SDGs, to monitor how the goals are integrated into official speeches, national plans, budgets and monitoring systems. SDSN also compiles metrics to gauge the alignment of national objectives and investments with the Six SDG Transformations. This year's pilot score of *Governments' Commitment and Efforts for the SDGs,* compiled for more than 60 countries, reveals that among G20 member states, the United States, Brazil, and the Russian Federation exhibit the least support for the 2030 Agenda and the SDGs. The United States is among the few UN Member States to have never submitted a Voluntary National Review (VNR). By contrast, Nordic countries demonstrate relatively high support for the SDGs, as do Argentina, Germany, Japan and Mexico (all G20 countries). Some countries, such as Benin and Nigeria, for example, have large gaps in their SDG Index yet also earn relatively high scores for their policy efforts. This may help them achieve better results in coming years. Interestingly, Benin and Mexico have both issued SDG Sovereign Bonds in recent years to scale up their sustainable development investments.

Rich countries generate negative international spillovers notably through unsustainable consumption; Europe is taking actions. The 2022 SDG Index is topped by three Nordic countries – Finland, Denmark and Sweden – and all top 10 countries are European countries. Yet even these countries face major challenges in achieving several SDGs. The 2022 International Spillover Index included in this report underlines how rich countries, including many European countries, generate negative socioeconomic and environmental spillovers, including through unsustainable trade and supply chains. The European Union has called for 'zero tolerance' of child labor and has proposed using trade to export European values throughout the world. Several instruments and legislations

SDG Index Score versus International Spillover Index Score
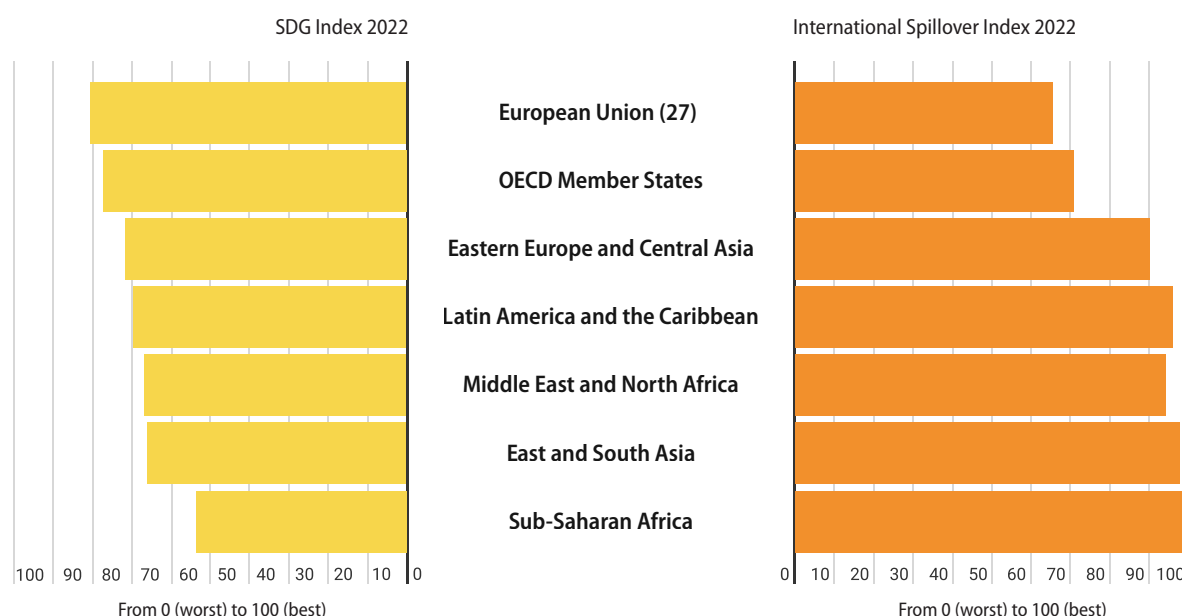
Source: Authors' analysis

are under discussion in the European Union to address international spillover effects in the context of the European Green Deal. At the member states' level, in 2022, Sweden became the first country to announce its intention to set a national target to curb imported CO_2 emissions. Ahead of the 2023 SDG Summit, we underline four major priorities to curb negative international spillovers generated by rich countries: (1) Scale up international development and climate finance; (2) Leverage technical cooperation and SDG diplomacy; (3) Adopt national targets and instruments to address consumption-based impacts on other countries (do no harm); (4) Strengthen monitoring and data systems at international, national, industrial, and corporate levels covering the full supply chains, and make them an integral part of SDG reporting.

The COVID-19 pandemic forced data providers to innovate and build new forms of partnerships; these should be leveraged and scaled up to promote SDG impacts by 2030 and beyond. The pandemic led to a massive and sudden shift in demand for timely and quality data to monitor the health impacts of COVID-19 and inform policy intervention at international and national levels. The health situation and lockdowns impacted traditional mechanisms for data collection, including traditional face-to-face surveys. Data providers were pushed to innovate and modernize their data collection methods and processes, notably leveraging mobile and wireless technologies. This was accompanied by a sharp acceleration in the use of non-traditional data sources, including citizen science, social media, and earth observation data. New dynamic dashboards, GIS instruments, and improved data visualizations and infographics have facilitated a greater understanding of data and statistics. Looking ahead, consolidating and scaling-up data innovations and new forms of partnerships – including between the public and private sectors (including technology providers) – while also maintaining high standards for data quality and privacy, could help to promote evidence-based SDG policies and interventions. More generally, science, technological innovations, and data systems can help identify solutions in times of crises and can provide decisive contributions to address the major challenges of our times. These require increased and prolonged investments in statistical capacities, R&D, and education and skills.

Acronyms and Abbreviations

AI	Artificial Intelligence
CAPI	Computer Assisted Personal Interviewing
CEPEI	Centro de Pensamiento Estratégico Internacional
CSA	Central Statistics Agency
DAC	Development Assistance Committee
DANE	National Administrative Department of Statistics
EO	Earth observation
EU	European Union
FAO	Food and Agriculture Organization
G20	Group of Twenty (intergovernmental forum comprising 19 countries and the European Union)
G7	Group of Seven (intergovernmental forum comprising of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States)
GDP	Gross Domestic Product
GeoGlAM	Group on Earth Observations Global Agricultural Monitoring Initiative
GIS	Geographic Information System
GSS	Ghana Statistical Service
HIC	High Income Country
ICLEI	Local Governments for Sustainability
ICS	International Continence Society
ILO	International Labour Organisation
IMF	International Monetary Fund
LAC	Latin American Countries
LIC	Low Income Country
LMIC	Lower Middle Income Country
LSMS	Living Standards Measurement Study
MENA	Middle East/ North Africa
MRIO	Multi-regional input-output
NBS	National Bureau of Statistics
NGO	Non Governmental Organisation
NSO	National Statistic Office
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
SDR	Sustainable Development Report
SDSN	Sustainable Development Solutions Network
SIDS	Small Island Developing States
STATIN	Statistical Institute of Jamaica
TReNDS	Thematic Research Network on Data and Statistics
UCLG	United Cities and Local Governments
UHC	Universal Health Coverage
UMIC	Upper Middle Income Country
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
VNR	Voluntary National Review
WHO	World Health Organisation

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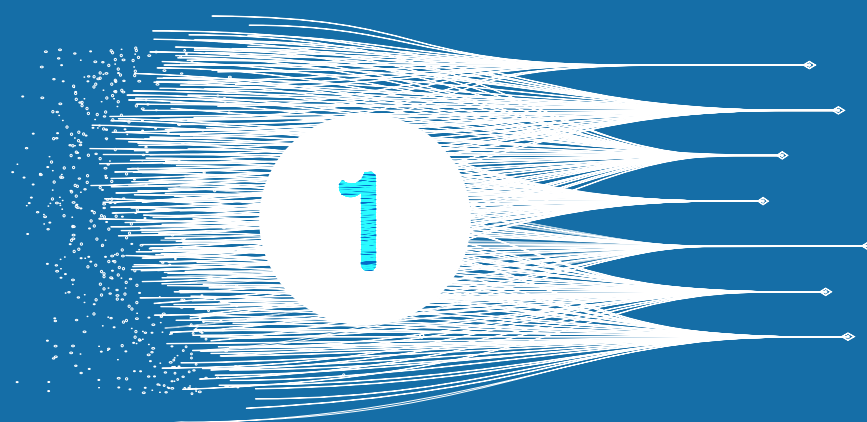
A Global Plan to Finance the Sustainable Development Goals

Part 1
A Global Plan to Finance the Sustainable Development Goals

The SDGs are not being achieved. Success is held back by severe financing constraints facing the developing countries: constraints that have been gravely aggravated by the COVID-19 pandemic and the war in Ukraine. The key to achieving the SDGs, besides preserving peace and lowering geopolitical tensions, is having a plan to finance them. This was emphasized by United Nations Secretary-General António Guterres in his briefing to the General Assembly on major priorities for 2022: "we must go into emergency mode to reform global finance" (UN, 2022a).

At last year's G20 Summit in Rome (October 30–31, 2021), the leaders of the world's largest economies recommitted to the SDGs:

> "We reaffirm our commitment to a global response to accelerate progress on the implementation of the SDGs and to support a sustainable, inclusive and resilient recovery across the world."

Financial constraints faced by developing countries have recently been highlighted by US Treasury Secretary Janet Yellen in a speech to the Atlantic Council in April 2022. Yellen's important words are worth quoting at length:

> "We've made great efforts to provide funding to support human development, the creation of needed infrastructure, and more recently the attainment of climate objectives. Multilateral development banks, bilateral official donors and creditors, and growing private-sector involvement deserve credit for important achievements. That said, the response to date is just not to the scale that's needed. *Experts put the funding needs in the trillions, and we've so far been working in billions*. The irony of the situation is that while the world has been awash in savings – so much so that real interest rates have been falling for several decades –we have not been able to find the capital needed for investments in education, health care, and infrastructure. There's little doubt that there are huge potential returns, both human and eventually financial, in equipping billions of people in developing countries with what they will need to succeed. Going forward, we need to evolve the development finance system, including the World Bank and the regional development banks, to our changing world, in particular to better mobilize private capital and fund global public goods. However, the multilateral development banks alone will never meet the scale of financing needed, so we also need to revisit our strategies for making capital markets work for people in developing countries." (Atlantic Council, 2022)

For these reasons, the G20 urgently needs to adopt a Global Plan to Finance the SDGs. The basis of the plan would be to significantly increase fiscal space in developing countries. The IMF, in particular, should work with developing countries to design SDG-based public investment strategies and the means to finance them.

Chronic underfinancing of sustainable development

According to the IMF's World Economic Outlook, low-income countries (LICs) constitute 8.4% of the world's population, but currently account for less than 1% of the world's investment spending (2019). Lower-middle-income countries (LMICs) constitute 42.9% of the world's population but account for only 15% of investment spending. High-income countries (HICs), by contrast, account for 15.8% of the world's population yet account for about half of the world's investment spending.

The LICs and LMICs make up the poorer half of the world (combined they equal 51% of the world's population), but they account for only around 15% of the world's investments. The UMICs and HICs comprise the richer 49% of the world's population, with more than 80% of the world's investments. The same discrepancy is found regarding fiscal outlays. The LICs and LMICs together account for around 10% of the world's fiscal outlays, while the UMICs and HICs account for about 90%. Annual average fiscal spending per person in the LICs amounted to US$133 in 2019 (USD, nominal), not enough to provide universal schooling, much less to meet all of the SDGs. The dire

shortfall in public outlays is why the SDG agenda and the clean-energy transformation are both far off track. There is overall a positive and statistically significant correlation between total government outlays per capita per year (in USD PPP) and the SDG Index Score (Figure 1.1). Based on this simple correlation analysis, the association between government outlays and SDG outcomes is particularly strong among countries that spend relatively little. Beyond a certain threshold (approximately US$10,000 PPP per capita), the quality of spending and other factors seem to make a bigger difference (Table 1.2).

The need for greatly expanded SDG financing

The SDSN has identified six investment priorities: areas in which major societal "transformations" are needed to achieve the SDGs (Sachs et al., 2019):

1. **Education and social protection** to achieve universal secondary education (SDG 4) and poverty reduction (SDG 1)

2. **Health systems** to end the pandemic and to achieve Universal Health Coverage (SDG 3)

3. **Zero-carbon energy and circular economy to decarbonize** and slash pollution (SDG 7, SDG 12, SDG 13)

4. **Sustainable food**, land use, and protection of biodiversity and ecosystems (SDG 2, SDG 13, SDG 15)

5. **Sustainable urban infrastructure**, including housing, public transport, water, and sewerage (SDG 11)

6. **Universal digital services** (SDG 9) to support all other SDG investments, including online education, telemedicine, e-payments, e-financing, and e-government services.

Figure 1.1

Correlation between general government expenditure per capita (USD, PPP) and SDG Index Score

SDG Index Score 2022 (0 worst–100 best)
▼

General government expenditure per capita (2019), USD, PPP
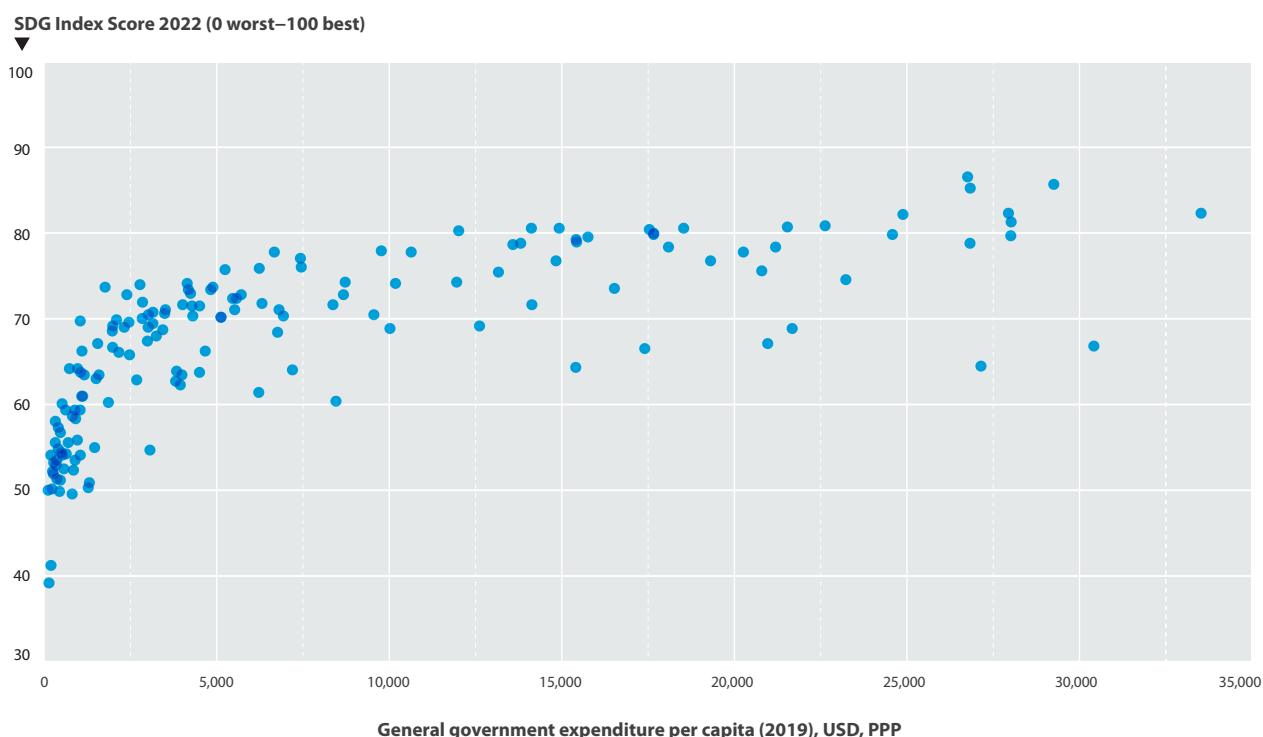
Note: See table at the end of this chapter for detailed regression results. Luxembourg is excluded from the chart (outlier).
Sources: Authors' analysis. Based on "World Economic Outlook Database, October 2021" (IMF, 2021).

At the core of each transformation is a large-scale, long-term public investment program. The major practical challenge facing developing countries is to mobilize the incremental financing needed for these six priority areas.

The need for increased SDG financing to achieve these six transformations is by now well established. Several excellent studies, especially by the IMF, have identified the scale of financing that developing countries need to achieve the SDGs (Senhadji et al., 2021).[1] The bottom line is clear: there is a sizable SDG financing gap for low-income countries (LICs) and lower-middle-income countries (LMICs) amounting to several hundred billion dollars per year, perhaps around US$500 billion per year. Adding in the needs of upper-middle-income countries (UMICs), the incremental financing needs come to more than US$1 trillion per year.

While the incremental SDG financing needs are large relative to the economies of the developing countries, perhaps 10–20% of gross domestic product (GDP) for many LICs and LMICs, the gap is actually quite modest relative to size of the world economy. With gross world product (GWP) now at around US$100 trillion, the global SDG financing gap is perhaps 1–2% of GWP. Global saving is currently around 27% of GWP, or roughly US$27 trillion per year: incremental financing to the order of only 4–8% of global saving is needed to cover the incremental SDG financing needs for approximately 80% of the world's population.

To facilitate a significant increase of funding for the SDGs, developing countries should enter into a new "SDG Investment Compact" with the Bretton Woods institutions, akin to the poverty reduction strategy frameworks under the previous MDG agenda. This would offer a framework for significant increases of SDG financing in line with long-term debt sustainability. The new SDG Investment Compact could be launched in conjunction with the IMF's new Resilience and Sustainability Trust (RST).

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1. Studies to date have estimated SDG costs for social protection (SDG 1); sustainable agriculture and the end of hunger (SDG 2); universal health coverage (SDG 3); universal education from pre-K to upper secondary (SDG 4); universal access to safe water and sanitation (SDG 6); universal access to sustainable energy for all (SDG 7); universal access to digital technologies (SDG 9); sustainable housing and urban infrastructure (SDG 11); comprehensive decarbonization and climate adaptation/resilience (SDG 13); sustainable marine and coastal ecozones (SDG 14); sustainable land use and reforestation (SDG 15); and access of the poor to justice (SDG 16).

Six practical pathways for increased SDG financing

The incremental public financing required can be mobilized in six major ways: (1) increased domestic tax revenues; (2) increased sovereign (government) borrowing from international development finance institutions (DFIs); (3) increased sovereign borrowing from international private capital markets; (4) increased official development assistance (ODA); (5) increased funding by private foundations and philanthropies; and (6) debt restructuring for heavily indebted borrowers, mainly to lengthen maturities and reduce interest rates.

Increased domestic tax revenues. The SDGs require large-scale public investments: in education, health care, infrastructure (green energy, digital access, water and sanitation, transport), and environmental conservation. On top of that, government has ongoing obligations for social protection, public administration, and other public services. The levels of investment needed per year are far greater than current revenues collected by developing countries. A typical LIC collects 15–20% of its GDP in revenues, but SDG public investment needs can reach 40% of GDP or higher, and public administration adds another 5–10% of GDP to budget needs. In short, most countries should increase their public revenues to support needed levels of public spending. As a rule of thumb, LICs should aim for at least 25% of GDP in government revenues; LMICs for at least 30%; UMICs for at least 35%; and HICs for at least 40%.

Increased borrowing from multilateral development banks. Beyond the increase in domestic revenues, the LICs and LMICs need to borrow to finance SDG-related investments. The best source of increased finance will be the multilateral development banks (MDBs), which were created precisely to supply long-term low-interest financing to developing countries. The MDBs have the potential to borrow large sums from the international capital markets on favorable terms and then to use that borrowing to expand lending to developing countries on favorable terms (long maturities at low interest rates). The MDBs can leverage their paid-in capital base severalfold, so that an incremental US$50 billion of paid-in capital each year can support US$250 billion or more in increased annual lending. The G20 should work urgently with the MDBs on a strategy to multiply their SDG financing.

Sovereign borrowing on international capital markets. The LICs and LIMCs should also increase their direct sovereign borrowing from international capital markets, especially by floating sustainability-themed bonds (including sovereign SDG bonds). Yet the amounts and terms of international bond-market borrowing are inadequate. The basic reason is this: Not a single LIC, and only three LMICs – India, Indonesia and the Philippines – currently have an investment-grade rating from the international rating agencies, as shown in Table 1.1. The consequence is that the terms of sovereign bond-market borrowing facing most developing countries are very onerous: short maturities at very high interest rates (often 500–1000 basis points above the highest-rated borrowers). The G20 and IMF should undertake a series of reforms to unlock private capital flows at much larger amounts and on far more favorable terms. This would include a more accurate credit-rating system that recognizes the high long-term growth potential of the developing countries, and measures to increase the liquidity of the global sovereign bond market. We discuss this issue further in the next section.

Increased ODA. The donor countries in the OECD Development Assistance Committee (DAC) are supposed to give 0.7 percent of GNI in ODA, but in 2021 they gave only 0.33 percent (US$179 billion ODA/US$54.2 trillion GNI) (OECD, 2021). By reaching the 0.7 target, ODA would rise by US$200 billion per year. To increase ODA towards 0.7 percent of GNI, it is important to identify additional sources of funding for ODA. Two potential new sources are apparent. The first would be a levy on HICs and UMICs (upper-middle-income countries) on annual carbon dioxide (CO_2) emissions. A levy of US$5/$tCO_2$ on HICs and US$2.5/$tCO_2$ on UMICs would yield annual revenues of around US$100 billion. The second would be a globally coordinated wealth tax on ultra-high-net worth individuals. The world's 3,000 or so billionaires have a combined net worth of around US$15 trillion. Hence, a 2% wealth tax, assuming no leakage, would generate around US$300 billion per year.

Increased philanthropic giving. In 2021, Jeff Bezos donated US$10 billion into a new Bezos Earth Fund to help finance investments in climate change and biodiversity conservation. Mr. Bezos's net worth is around 1% of total billionaire net worth (roughly US$140 billion out of US$14 trillion). Following this model, the potential for a massive increase in philanthropic giving for the SDGs is vast, and could be mobilized in part by a giving campaign initiated by the G20 governments and the United Nations.

Debt restructuring for heavily indebted countries. Many developing countries are in a precarious situation regarding debt servicing, because they owe not only the interest on the debt, but large amortizations of principal as well, with little prospect of routinely refinancing the principal. In other words, many countries are facing a severe liquidity squeeze. In a few cases, there is also a solvency crisis, because the interest service is too high to pay even in the long term. The global official development system, especially the IMF, should take steps to help developing countries to refinance their debts falling due, so that we avoid a new wave of sovereign defaults. It takes years or even decades to re-establish a country's creditworthiness after such a default.

Re-thinking debt sustainability: a conceptual digression

One of the barriers to SDGs financing is conceptual: the widespread belief that sovereign borrowers should avoid building up public debt beyond an upper limit of 50–70% of GDP. This view is shared by the IMF and the credit rating agencies. The belief is that debt levels beyond such ratios are likely to result in default. This is a hasty over-generalization.

To understand why, consider briefly a quantitative illustration. Let us describe a country's GDP as a function of its capital stock per person, K, according to a standard aggregate production function familiar in macroeconomic theory. A typical assumption is that the GDP function has the Cobb-Douglas form:

GDP = tfp*K^b

Here, tfp (total factor productivity) is a measure of overall productivity and the coefficient b is the share of capital in national income. Considering capital broadly to include both physical capital and human capital (mainly education), the coefficient b is around 0.7.

Net domestic product (NDP) equals GDP minus depreciation of capital, which we will take to be 5% per annum. Therefore:

NDP = GDP – 0.05*K

If the country has net international debt, it pays interest to foreign creditors, so that net national product (NNP) equals NDP minus the interest payments. NNP is the baseline measure of real income of the economy, net of depreciation and debt service. We will also assume that the international interest rate is 5%. The cost of capital equals 10%, the sum of the interest rate and the rate of depreciation:

NNP = GDP – 0.05*K – 0.05*Debt

For purposes of illustration, we will choose parameter values tfp = 6.8 and K = US$400,000 in order to mimic a HIC. With this level of capital per person, the GDP equals US$57,100 and NNP = US$37,100, with depreciation equal to US$20,000. The marginal product of capital (MPK) equals 10%, which is also the cost of capital.

Now consider a developing country with K = US$40,000, just one-tenth of the HIC capital per person. Assume also that the developing country starts with zero international debt. Because of the lower stock of capital per person, we can calculate that NNP = US$9,400. A middle-income country such as Egypt is roughly in this position. Now, we can determine that its MPK equals 20%, rather than 10% as in the HIC. That is, the marginal return on investment in the developing country is *higher* than that of the HIC because of the capital scarcity in the developing country.

Assume that the developing country can borrow internationally at a 5% interest rate to increase its capital stock, with all borrowing used to augment K. Let D be the debt per person, so that capital stock per person with borrowing equals K^{NEW} = US$40,000 + D. The new NNP equals:

NNP^{NEW} = tfp*(US$40,000+D)$^{0.7}$ – 5%x(US$40,000+D) – 5%xD

It's now easy to calculate the optimum amount of debt per person in order to maximize NNP^{NEW}. The answer is that the developing country should borrow enough to raise K^{NEW} *to the level of K in the HIC*. Debt per capita, in other words, should equal US$360,000, to increase the

capital stock per person to US$400,000. The government should therefore borrow an astounding 32 times its initial GDP and channel it into increased capital per person!

By borrowing US$360,000, the country's GDP rises from US$11,400 to US$57,100, and its NNP rises from US$9,400 to US$19,100. The borrowing country takes on a massive amount of debt, but also enjoys a 5X increase in GDP and a 2X increase in NNP after interest payments. In the model, this rise in output happens all at once. In the real world, it takes one to two generations. Yet the principle is the same: large-scale borrowing can finance a dramatic rise in living standards and thereby justify a high level of borrowing relative to GDP.

Initially, in the model, the D/GDP ratio reaches 31.5, but after the five-fold growth, D/GDP settles at 6.3 (630%). This too seems to suggest insolvency by conventional standards, but with the interest rate at 5%, the interest servicing is 32% of GDP. That is huge, but in the modeling exercise it is a price worth paying to generate a 5X increase in GDP. Of course, this is merely a heuristic exercise, as it completely ignores the fact that raising 32% of GDP in tax revenues for interest payments would by itself create massive economic distortions. A realistic account of debt-servicing capacity must take into account not only the marginal productivity of investment, but also the ability to service sovereign debt through sufficient tax revenues, and the ability to convert GDP into net exports.

Still, the essential message remains. LICs and LMICs are capital scarce. They have high prospective growth rates and high marginal productivities of capital. They should borrow, and borrow heavily, in order to finance a broad-based increase in investments on human capital (education and health), public infrastructure (power, digital, water and sanitation, transport), and environmental protection.

Removing the barriers to increased capital market flows

Why don't the international capital markets direct such large lending to developing countries, so that they can massively increase their capital stocks and achieve rapid development? There are several important explanations.

First, to service heavy debts, the borrowing country has to run a large trade surplus to pay its interest abroad. In the illustration, the borrowing country would have to run a trade surplus equal to 32% of GDP. Many countries borrow abroad but then fail to take appropriate steps (such as maintaining a competitive exchange rate) to promote the increase in net exports needed to service the increased debts.

Second, the borrowing country needs to collect increased taxes to be able to service the increased interest payments. It's not enough for the national economy to borrow and grow. The sovereign borrower must take care to raise taxes sufficiently to service the higher level of interest payments.

Third, an irresponsible sovereign borrower might take on a huge stock of debt, but then use the debt for consumption or wasteful investment rather than for the kinds of investment really needed to raise national income. Therefore, sovereign borrowers must establish reliable and trusted systems of public administration, so as to prove that incremental borrowing gets translated into incremental, high-quality capital.

Fourth, there are inherent limits to a government's ability to rapidly boost capital stock. Most importantly, human capital investments require a timescale of a full generation: they must educate today's young children so that they can become skilled members of the workforce in twenty years time. Such investments therefore need time to come to full fruition, and sovereign borrowing should be paced according to the timeline of economic growth.

Fifth, governments often fall into unwanted liquidity crises that prevent them from servicing debts even with a growing economy. Typically, governments pay not only interest on the debt (as in the illustration) but on the principal as well. As the principal is paid down (amortized) it should in theory be refinanced with new loans, to keep the debt stock constant (or growing with GDP). In practice, governments are often unable to refinance debts coming due. Lenders often panic and refuse to supply new loans to refinance old debts coming due. If the government loses access to new borrowing, it is often pushed into default. At that point, the country's credit rating collapses, and a short-term liquidity problem quickly becomes a long-term financial crisis!

This analysis points to three main policy conclusions:

First, developing countries can and should take on much larger debts than is now considered normal, but to do so, they need to be able to borrow long-term at reasonable interest rates.

Second, the IMF and credit-rating agencies need to rethink the current rating systems and debt-sustainability indicators to take the future economic growth prospects of the developing countries into account, thereby revealing a much larger debt servicing capacity than is shown in static analyses.

Third, developing countries need to manage their budgets, trade policies, and liquid assets so that they can routinely service their external debts without fear of a liquidity crisis. Improved credibility and liquidity management will be essential to enable LICs and LMICs to tap the international capital markets on a much larger scale.

Next steps towards a global plan to finance the SDGs

First, the G20 should declare, clearly and unequivocally, its commitment to channel far larger flows of financing to developing countries: so that they can achieve economic development and meet the SDG targets. Second, the G20 should greatly increase the lending capacity and annual flows of the MDBs, mainly through greater paid-in capital to these institutions, but also through greater leverage of their balance sheets. Third, the G20 should support other measures as well – notably increased ODA, large-scale philanthropy, and refinancing of debts falling due – to bolster SDG finance for the LICs and LMICs. Fourth, the IMF and the credit-rating agencies need to redesign assessments of debt sustainability, taking into account the growth potential of developing countries and their need for far larger capital accumulation. Fifth, working together with the IMF and the MDBs, the developing countries need to strengthen their debt management and creditworthiness by integrating their borrowing policies with tax policies, export policies, and liquidity management, all to prevent future liquidity crises.

Table 1.1

Creditworthiness of Countries According to World Bank Income Category

	Number of UN Member States	Number with Moody's Ratings	Number with an Investment Grade Rating	% Countries with an Investment Grade Rating	% of population in WB Income Category with an Investment Grade Rating
LICs	27	9	0	0	0
LMICs	53	35	3	8.6	52.9
UMICs	54	40	10	25	72.5
HICs	59	52	44	84.6	97.3
WORLD	193	136	57	41.9	61.4

Source: Moody's (2021) and World Bank (2022b)

Table 1.2

Regression table: SDG Index vs General Government expenditure

SDG index vs. Government Outlays			
	Dependent variable		
	SDG index, 2022		
	All	**Expenditure below USD$10K per capita**	**Expenditure above US$10K per capita**
Log of government outlays per capita (USD PPP, 2019)	6.055***	6.704***	3.491
	-0.296	-0.407	-2.333
Constant	17.940***	13.320***	42.555*
	-2.405	-3.071	-22.748
Income group fixed effects	No	No	No
Observations	157	111	46
R²	0.746	0.703	0.048
Adjusted R²	0.744	0.7	0.027
Note	*p**p***p<0.01		

Source: Authors' analysis. Government outlays data are from the "World Economic Outlook Database, October 2021" (IMF, 2021)

2
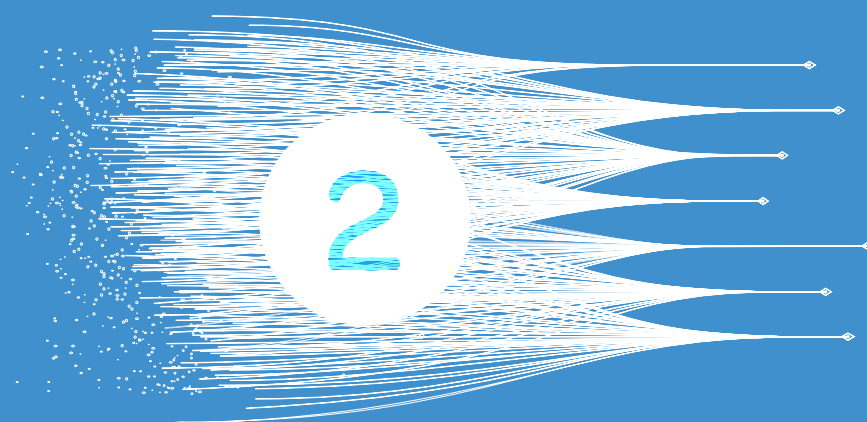
The SDG Index
and Dashboards

Part 2
The SDG Index and Dashboards

The adoption in 2015 of three major international agreements – the 2030 Agenda and the SDGs, the Paris Climate Agreement, and the Addis Ababa Action Agenda on financing for development – represented major global breakthroughs for the international community. For the first time in history, all UN Member States agreed on a common set of goals for sustainable development (to be achieved by 2030, with mid-century goals for the Paris Climate Agreement) and established major principles and priorities for their financing. These commitments were made possible only through decades of work and advocacy by scientists, experts, governments, and civil society. In fact, 2022 marks the 50th anniversary of the first world conference on the global environment – the 1972 Stockholm Conference – and of the release of the landmark report, The Limits to Growth (Meadows et al., 1972). Multiple health and security crises, amplified by the climate and biodiversity crises, are now, however, putting the sustainable development agenda at risk. As the SDG Index highlights, since 2019 these crises have halted progress on sustainable development worldwide.

Although too slow, and unequal across countries and goals, progress was made globally on the SDGs between 2015 and 2019. But on top of their disastrous humanitarian cost, recent health and security crises have shifted attention away from long-term goals such as climate action, and exposed major fragmentation in multilateralism. These successive crises have also hit low-income and vulnerable countries particularly hard, and they may take longer to recover due to more limited access to financing. Members of the Leadership Council of the SDSN have released a statement calling for peace and diplomacy in the context of the war in Ukraine (SDSN, 2022).

Despite these difficult times, the SDGs should remain our roadmap for achieving sustainable development by 2030. They remain the only common language and vision across all UN member states on the triple bottom line of sustainable development: economic, social and environmental. As emphasized under SDG 16 (Peace, Justice and Strong Institutions) and SDG 17 (Partnerships for the Goals), peace and diplomacy are absolute prerequisites for progress on the goals. It is also crucial we learn from the COVID-19 pandemic if we are to prevent and respond in a more coordinated way to future outbreaks and pandemics and other major risks, as underscored by SDG 3 (Good Health and Well-Being). Achieving the SDGs is fundamentally an investment agenda, into building physical infrastructure and key services, while the bedrock principles of the SDGs of social inclusion, global cooperation, and universal access to public services are needed more than ever to fight the major challenges of our times, including security crises, pandemics, and climate change. Recovery plans, notably in high-income countries (HICs), and increased additional financing should be mobilized for restoring and accelerating SDG progress.

In September 2023, the world's heads of state will meet at the United Nations in New York for the second SDG Summit since the adoption of the 2030 Agenda. The Summit can and must be the opportunity to double down on efforts to transform societies by 2030 and beyond.

Box 1. The SDG Index and Dashboards

The SDG Index is an assessment of each country's overall performance on the 17 SDGs, giving equal weight to each Goal. The score signifies a country's position between the worst possible outcome (score of 0) and the target (score of 100). The dashboard and trend arrows help identify priorities for further actions and indicate whether countries are on-track or off-track based on latest trend data to achieve the goals and targets by 2030. Two-thirds of the data come from official statistics (typically UN custodian agencies) and one third from non-traditional statistics, including research centers, universities, and non-governmental organizations. Published since 2015, the SDG Index and Dashboards has been peer-reviewed (Schmidt-Traub et al., 2017) and statistically audited by the European Commission (Papadimitriou et al., 2019). More detailed information is available in the Annex (Method's Summary and Data Tables) and on our website (www.sdgindex.org).

2.1 Global trends and rankings

For the second year in a row, the world was no longer making progress on the SDGs in 2021. At 66.0 points, the average SDG Index score declined slightly from 2020: the pandemic and other crises have clearly been major setbacks for sustainable development.

From 2015 to 2019 the world progressed on the SDG Index at an average rate of 0.5 points a year. This was already too slow to achieve the SDGs by 2030. Progress also varied significantly across countries and goals, with trends for some countries and on some goals heading in the wrong direction. Poorer countries with lower SDG Index scores were progressing faster than richer countries. Since 2019, however, SDG Index scores have declined slightly: by 0.01 points per year on average. Overall, progress on the SDG Index has stagnated across all income groups.

The decline in the SDG Index score since 2019 has been driven primarily by a reversal in progress on socioeconomic goals. SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth) have been especially impacted by multiple crises in this period. The share of people facing extreme poverty has increased significantly since 2019,

including in low-income countries (LICs). Small Island Developing States (SIDS) are also particularly vulnerable to international crises, partly due to their dependence on the international trade system, remittances, and tourism.

As recent editions of the *Sustainable Development Report* (SDR) have highlighted, progress on other SDGs has also been impacted, including SDG 2 (No Hunger), SDG 3 (Health and Well-Being) and SDG 4 (Quality Education), while temporary gains observed during lockdowns on environmental goals in 2020 were rapidly offset once restrictions were lifted (IPCC, 2022). The 2020 and 2021 editions of the SDR discussed and analyzed in detail the impact of COVID-19 on key SDG metrics (Sachs et al., 2020, 2021).

Due to time lags in data reporting, the full impact of the multiple crises including the COVID-19 pandemic is not fully reflected in this year's SDG Index. The ramifications that school closures have had on learning outcomes, as well as the pandemic's direct and indirect effects on health (such as long COVID, mental health impacts, or repercussions of delayed interventions and screening), may have long-term development impacts that could take years to be fully reflected in international statistics. This year's SDG Index also does not yet capture the war in Ukraine and its impact on

Figure 2.1

SDG Index Score over time, world average (2010–2021)

Year
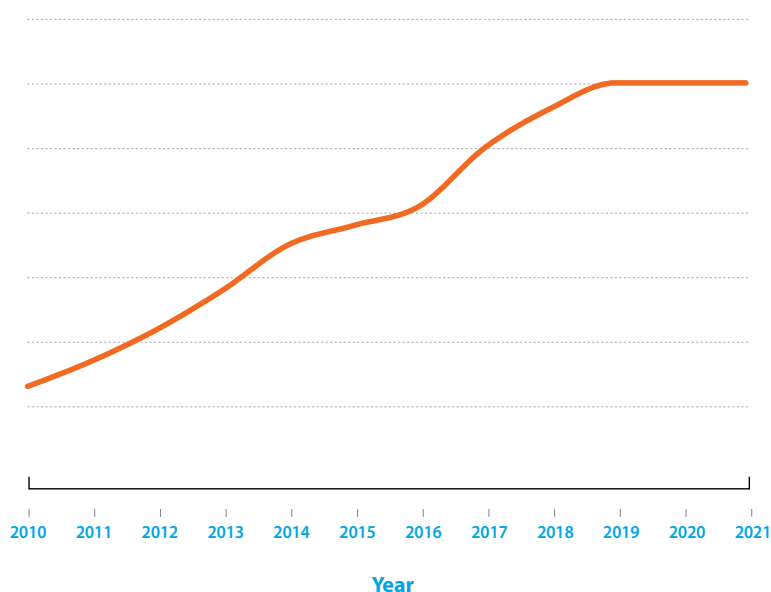
Note: Population-weighted averages. *Source:* Authors' analysis

Figure 2.2

Annualized growth rate of the SDG Index Score
(2015-2019 vs 2019-2021)

Legend:
- World
- HICs
- UMICs
- LMICs
- LICs

2015 to 2019

2019 to 2021
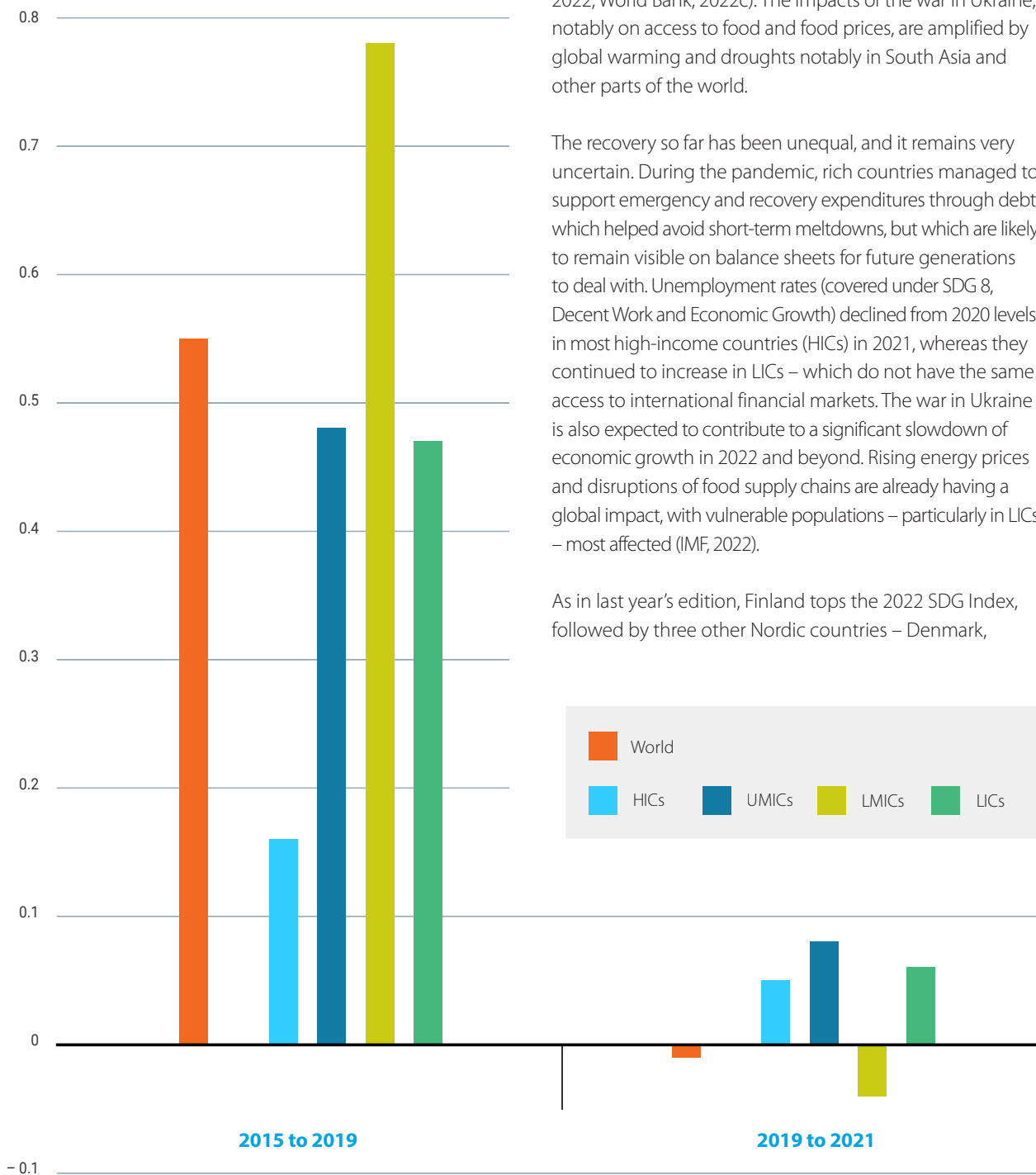
Note: Population-weighted averages. *Source:* Authors' analysis

many countries. Other studies have already documented the impacts and likely impacts of the war in Ukraine on poverty, food security, and other SDGs (FAO, 2022; Wheatley, 2022; World Bank, 2022c). The impacts of the war in Ukraine, notably on access to food and food prices, are amplified by global warming and droughts notably in South Asia and other parts of the world.

The recovery so far has been unequal, and it remains very uncertain. During the pandemic, rich countries managed to support emergency and recovery expenditures through debt, which helped avoid short-term meltdowns, but which are likely to remain visible on balance sheets for future generations to deal with. Unemployment rates (covered under SDG 8, Decent Work and Economic Growth) declined from 2020 levels in most high-income countries (HICs) in 2021, whereas they continued to increase in LICs – which do not have the same access to international financial markets. The war in Ukraine is also expected to contribute to a significant slowdown of economic growth in 2022 and beyond. Rising energy prices and disruptions of food supply chains are already having a global impact, with vulnerable populations – particularly in LICs – most affected (IMF, 2022).

As in last year's edition, Finland tops the 2022 SDG Index, followed by three other Nordic countries – Denmark,

Sweden and Norway. Finland and the Nordic countries are also the happiest countries in the world according to the latest World Happiness Report (Helliwell et al., 2022). The top ten countries in the SDG Index are all in Europe, eight of them members of the European Union. While the detailed dashboards show that major SDG challenges remain even in these countries, especially on SDGs 12–15 (related to climate and biodiversity) and in relation to international spillovers, the European model of social democracies seems conducive to strong performance in the three major dimensions of sustainable development: economic, social and environmental.

Low-income countries tend to have lower SDG Index scores. This is partly due to the nature of the SDGs, which focus to a large extent on ending extreme poverty and providing access for all to basic services and infrastructure (SDGs 1–9). Moreover, poorer countries tend to lack adequate infrastructure and mechanisms to manage the key environmental challenges addressed by SDGs 12–15. Yet before the pandemic hit, most low-income countries, with the exception of those experiencing ongoing armed conflict or civil war, were making progress towards ending extreme poverty and providing access to basic services and infrastructure, particularly in relation to SDG 3 (Good Health and Well-Being) and SDG 8 (Decent Work and Economic Growth). As emphasized in Part 1 of this report, we interpret the performance of low-income countries (LICs) as a call to action for the world community to scale up SDG finance, especially for those countries at the bottom of the ladder.

Overall, East and South Asia has progressed on the SDGs more than any other region since their adoption in 2015, with Bangladesh and Cambodia showing the most progress of all countries. By contrast, Venezuela has declined the most on the SDG Index since 2015.

Figure 2.3

SDG 1 (No Poverty), Goal score by income group, 2010-2021
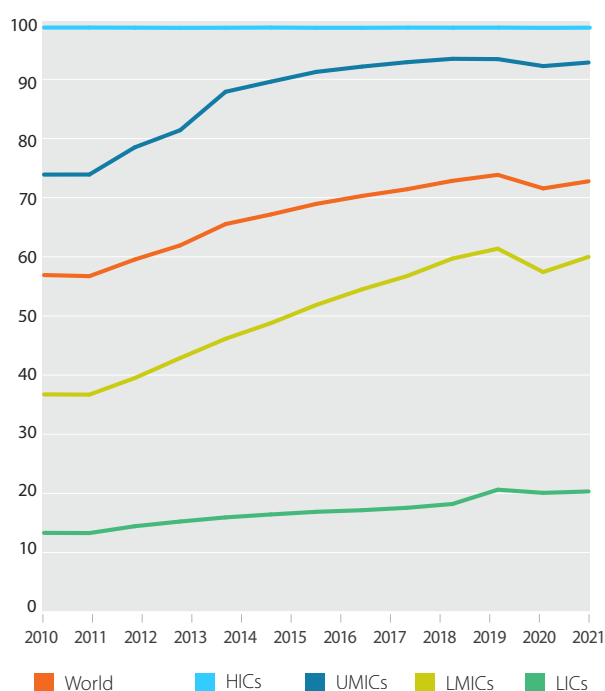
Note: Population-weighted averages. *Source:* Authors' analysis

Figure 2.4

SDG 8 (Decent Work and Economic Growth), Goal score by income group, 2010–2021
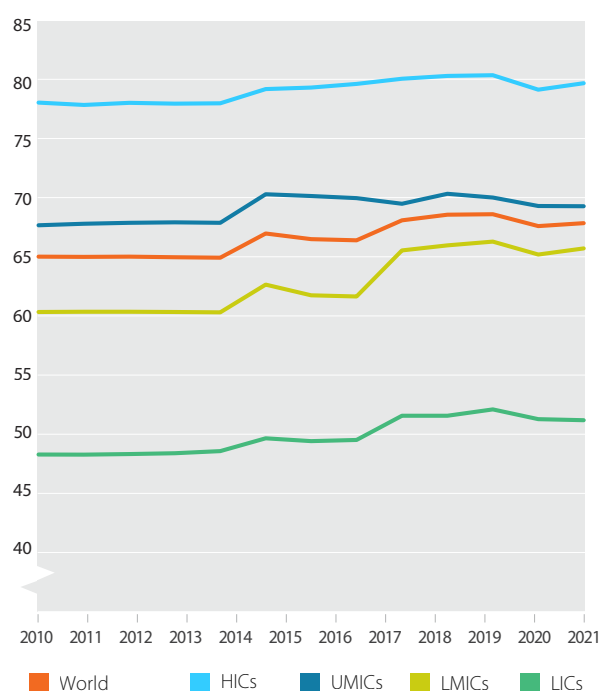
Note: Population-weighted averages. *Source:* Authors' analysis

Figure 2.5

Unemployment rates (SDG 8, Decent Work and Economic Growth) by income group, 2019, 2020, and 2021 (% of labor force)

HICs	4.9 / 6.7 / 5.8
LICs	5.8 / 6.5 / 6.8
World	5.6 / 7.0 / 6.5

2019   2020   2021
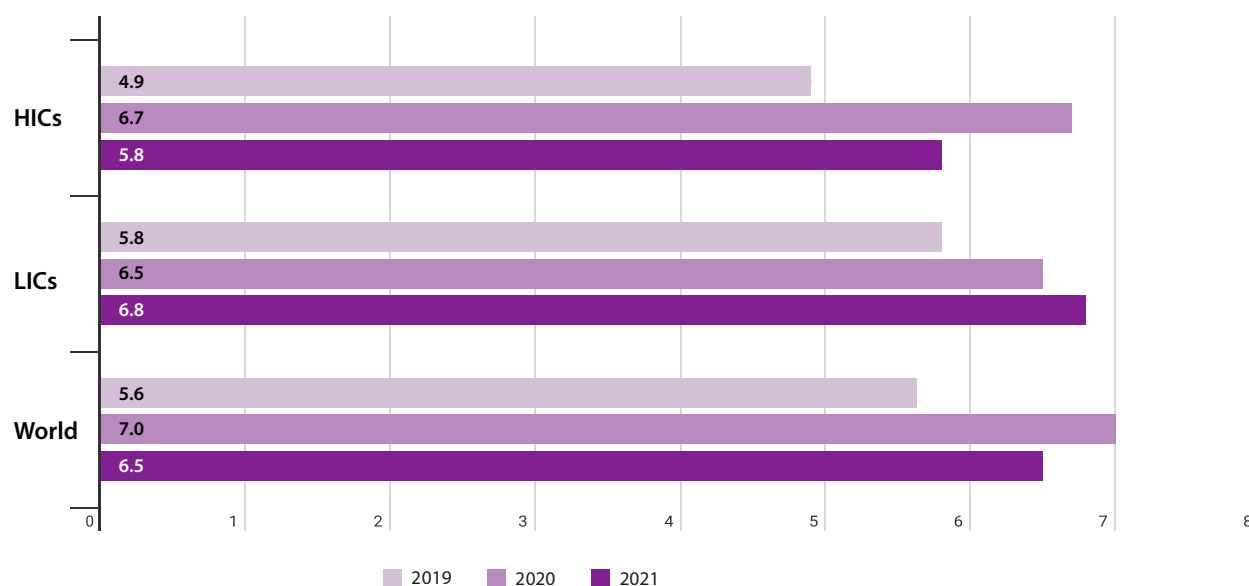
Note: Population-weighted averages.   *Source*: Authors' calculations based on International Labour Organization (ILO)

Figure 2.6

Countries with the greatest change in SDG Index score between 2015 and 2021 (annualized point changes)

Bangladesh

Cambodia

Venezuela, RB
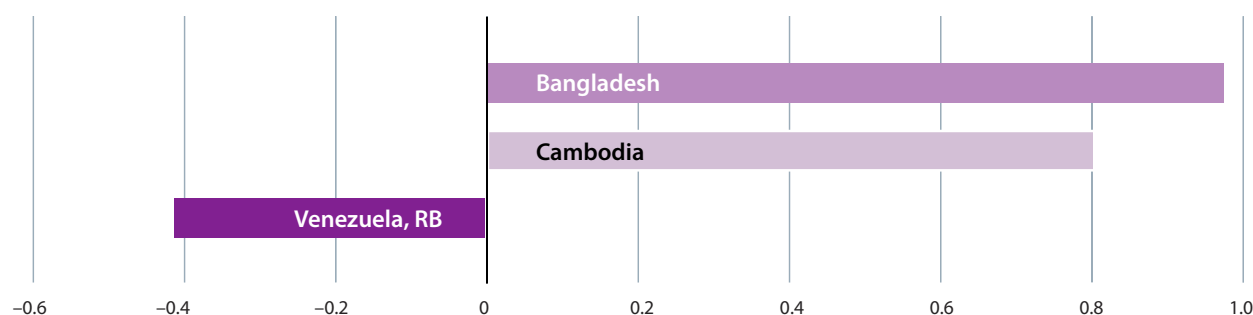
Source: Authors' analysis

Table 2.1

2022 SDG Index ranking and score

Rank	Country	Score		Rank	Country	Score
1	Finland	86.5		42	Bulgaria	74.3
2	Denmark	85.6		43	Cyprus	74.2
3	Sweden	85.2		44	Thailand	74.1
4	Norway	82.3		45	Russian Federation	74.1
5	Austria	82.3		46	Moldova	73.9
6	Germany	82.2		47	Costa Rica	73.8
7	France	81.2		48	Kyrgyz Republic	73.7
8	Switzerland	80.8		49	Israel	73.5
9	Ireland	80.7		50	Azerbaijan	73.5
10	Estonia	80.6		51	Georgia	73.4
11	United Kingdom	80.6		52	Fiji	72.9
12	Poland	80.5		53	Brazil	72.8
13	Czech Republic	80.5		54	Argentina	72.8
14	Latvia	80.3		55	Vietnam	72.8
15	Slovenia	80.0		56	China	72.4
16	Spain	79.9		57	North Macedonia	72.3
17	Netherlands	79.9		58	Peru	71.9
18	Belgium	79.7		59	Bosnia and Herzegovina	71.7
19	Japan	79.6		60	Singapore	71.7
20	Portugal	79.2		61	Albania	71.6
21	Hungary	79.0		62	Suriname	71.6
22	Iceland	78.9		63	Ecuador	71.5
23	Croatia	78.8		64	Algeria	71.5
24	Slovak Republic	78.7		65	Kazakhstan	71.1
25	Italy	78.3		66	Armenia	71.1
26	New Zealand	78.3		67	Maldives	71.0
27	Korea, Rep.	77.9		68	Dominican Republic	70.8
28	Chile	77.8		69	Tunisia	70.7
29	Canada	77.7		70	Bhutan	70.5
30	Romania	77.7		71	Turkey	70.4
31	Uruguay	77.0		72	Malaysia	70.4
32	Greece	76.8		73	Barbados	70.3
33	Malta	76.8		74	Mexico	70.2
34	Belarus	76.0		75	Colombia	70.1
35	Serbia	75.9		76	Sri Lanka	70.0
36	Luxembourg	75.7		77	Uzbekistan	69.9
37	Ukraine	75.7		78	Tajikistan	69.7
38	Australia	75.6		79	El Salvador	69.6
39	Lithuania	75.4		80	Jordan	69.4
40	Cuba	74.7		81	Oman	69.2
41	United States	74.6		82	Indonesia	69.2

Rank	Country	Score		Rank	Country	Score
83	Jamaica	69.0		124	Rwanda	59.4
84	Morocco	69.0		125	Pakistan	59.3
85	United Arab Emirates	68.8		126	Senegal	58.7
86	Montenegro	68.8		127	Cote d'Ivoire	58.4
87	Egypt, Arab Rep.	68.7		128	Ethiopia	58.0
88	Iran, Islamic Rep.	68.6		129	Syrian Arab Republic	57.4
89	Mauritius	68.4		130	Tanzania	57.4
90	Bolivia	68.0		131	Zimbabwe	56.8
91	Paraguay	67.4		132	Mauritania	55.8
92	Nicaragua	67.1		133	Togo	55.6
93	Brunei Darussalam	67.1		134	Cameroon	55.5
94	Qatar	66.8		135	Lesotho	55.1
95	Philippines	66.6		136	Uganda	54.9
96	Saudi Arabia	66.6		137	Eswatini	54.6
97	Lebanon	66.3		138	Burkina Faso	54.5
98	Nepal	66.2		139	Nigeria	54.2
99	Turkmenistan	66.1		140	Zambia	54.2
100	Belize	65.7		141	Burundi	54.1
101	Kuwait	64.5		142	Mali	54.1
102	Bahrain	64.3		143	Mozambique	53.6
103	Myanmar	64.3		144	Papua New Guinea	53.6
104	Bangladesh	64.2		145	Malawi	53.3
105	Panama	64.0		146	Sierra Leone	53.0
106	Guyana	63.9		147	Afghanistan	52.5
107	Cambodia	63.8		148	Congo, Rep.	52.3
108	South Africa	63.7		149	Niger	52.2
109	Mongolia	63.5		150	Yemen, Rep.	52.1
110	Ghana	63.4		151	Haiti	51.9
111	Lao PDR	63.4		152	Guinea	51.3
112	Honduras	63.1		153	Benin	51.2
113	Gabon	62.8		154	Angola	50.9
114	Namibia	62.7		155	Djibouti	50.3
115	Iraq	62.3		156	Madagascar	50.1
116	Botswana	61.4		157	Congo, Dem. Rep.	50.0
117	Guatemala	61.0		158	Liberia	49.9
118	Kenya	61.0		159	Sudan	49.6
119	Trinidad and Tobago	60.4		160	Somalia	45.6
120	Venezuela, RB	60.3		161	Chad	41.3
121	India	60.3		162	Central African Republic	39.3
122	Gambia, The	60.2		163	South Sudan	39.0
123	Sao Tome and Principe	59.4				

Box 2. SDG Indices for regions and cities

This report — the SDR 2022 — focuses on global SDG priorities and trends. For more detailed regional and subnational analyses of SDG data and policies, see SDSN's special editions of the SDR for Africa (2019, 2020), the Arab Region (2019, 2022), Europe (2019, 2020, 2021), Latin America and the Caribbean (2019) and also for national and subnational entities in Benin, Bolivia, Brazil, Italy, Paraguay, Spain, the United States and Uruguay (among others) on our website (www.sdgindex.org). These are developed and prepared in close collaboration with SDSN's global, regional and national networks of experts and research institutions and other local partners.

Figure 2.7

SDG Index and Dashboards: Global, Regional and Subnational editions (2015-2022)

Global editions

Regional editions

Subnational editions

Source: Authors' analysis. Download the reports and databases at: www.sdgindex.org.

2.2 SDG dashboards and trends by income groups and major world regions

The SDG dashboards highlight each country's strengths and weaknesses in relation to the 17 goals, presenting performance in terms of levels and trends. As described in the methodology section, dashboard ratings for each goal are based on data for the two indicators on which the country performs worst. Good performance on five of seven indicators, for example, does not compensate for poor performance on the other two. In other words, our methodology assumes low substitutability or compensation across indicators in the construction of our composite index. The arrow system focuses on structural trajectories since the adoption of the SDGs (and less on year-on-year changes).

As in previous years, the dashboards include population-weighted averages for each region and income group, using the same set of indicators as the SDG Index (Figure 2.8). The OECD dashboards (Figure 2.9) incorporate more indicators than others owing to the greater availability of data for these countries. SDSN is also promoting regional editions of the SDG Index and Dashboards, including editions on Africa, the Arab Region, Europe, and Latin America as well as subnational editions – for instance looking at SDG gaps in cities in Bolivia, Brazil, Italy, Spain and the United States. These regional and subnational editions further contextualize the indicator selection and discuss more specific policy and implementation challenges. For instance, in this global assessment, performance on SDG 1 (No Poverty) only focuses on extreme poverty. In regional editions, we leverage other datasets to track material deprivation and poverty below poverty lines. Besides goal-level analyses, dashboards showing progress on each indicator are included in the country profiles and online database. Table 2.2 shows the ten SDG targets where high-income and low-income countries are facing the greatest challenges and assigns these targets to SDSN's Six SDG Transformations (Sachs et al, 2019).

Overall, high-income countries (HICs) and OECD countries are closer to achieving the targets than other country groups, yet none are on track to achieve all 17 SDGs. These countries perform better on goals related to socio-economic outcomes and basic access to infrastructure

and services, including SDG 1 (No Poverty), SDG 3 (Good Health and Well-Being), SDG 6 (Clean Water and Sanitation), and SDG 7 (Affordable and Clean Energy). For SDG 3, the indicator set does not capture well a country's preparedness for global health security issues (such as pandemics), due to the absence of a robust international measure. The additional indicators included for OECD countries reveal that, while extreme poverty and basic access to services is mostly guaranteed in these countries, gaps persist in health and education outcomes across population groups, with income inequalities rising in some OECD countries. Further effort is also needed to reduce gender pay gaps to achieve SDG 5 (Gender Equality) in many OECD countries. Only moderate performance on SDG 16 (Peace, Justice and Strong Institutions), is partly driven by high homicide rates in large economies (including the United States), but also by persisting issues around access to affordable legal services and justice.

Major efforts are needed in HICs and OECD countries to accelerate progress towards climate mitigation and biodiversity protection (SDGs 12–15) and move towards more sustainable food systems and diets (covered under SDG 2, No Hunger). All HICs and OECD countries generate significant negative socioeconomic and environmental impacts outside their borders (spillovers) through trade and consumption, hampering other countries' efforts to achieve the SDGs. Historically these countries are also responsible for the bulk of greenhouse gas emissions and climate change and hence bear a special responsibility to take actions at the national and international level. Yet their progress on SDG 13 (Climate Action) and SDG 14 (Life Below Water) is mostly stagnant or insufficient to achieve internationally agreed targets.

HICs and OECD countries have very low levels of under-nourishment and among the most productive agricultural systems, yet they perform poorly on SDG 2 (No Hunger) due to high and rising obesity rates and unsustainable agricultural systems and diets. Tax havens and profit-shifting in some OECD countries continue to undermine the ability of other countries to leverage resources to achieve the SDGs.

Overall, poorer countries – low-income countries (LICs) and lower-middle-income countries (LMICs), including many countries in sub-Saharan Africa – as well as Small Island

Table 2.2

Major SDG gaps for HICs and LICs by target

Major challenges for high-income countries

Percentage of countries in red	Official Target	Indicators included	Corresponding Transformations
66	17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries	For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% of GNI)	Other
58	13.2.2 Total greenhouse gas emissions per year (13.2 Integrate climate change measures into national policies, strategies and planning)	CO_2 emissions from fossil fuel combustion and cement production (tCO_2/capita), CO_2 emissions embodied in imports (tCO_2/capita), CO_2 emissions embodied in fossil fuel exports (kg/capita), Carbon Pricing Score at EUR60/tCO_2 (%, worst 0-100 best)	Transformation 3 - Energy Decarbonisation and Sustainable Industry
57.1	14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	Mean area that is protected in marine sites important to biodiversity (%)	Transformation 4 - Sustainable Food, Land, Water, and Oceans
56.7	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Municipal solid waste (kg/capita/day), Electronic waste (kg/capita), Non-recycled municipal solid waste (kg/capita/day), Exports of plastic waste (kg/capita)	Transformation 5 - Sustainable Cities and Communities, Transformation 3 - Energy Decarbonisation and Sustainable Industry
44.1	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Mean area that is protected in terrestrial sites important to biodiversity (%), Mean area that is protected in freshwater sites important to biodiversity (%), Terrestrial and freshwater biodiversity threats embodied in imports (per million population)	Transformation 4 - Sustainable Food, Land, Water, and Oceans
41.6	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	Ocean Health Index: Clean Waters score (worst 0-100 best), Marine biodiversity threats embodied in imports (per million population)	Transformation 4 - Sustainable Food, Land, Water, and Oceans
33.0	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity)	Freshwater withdrawal (% of available freshwater resources), Scarce water consumption embodied in imports (m3 H_2O eq/capita)	Transformation 4 - Sustainable Food, Land, Water, and Oceans
32.0	17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection	Other countries: Government revenue excluding grants (% of GDP), Corporate Tax Haven Score (best 0-100 worst), Financial Secrecy Score (best 0-100 worst), Shifted profits of multinationals (US$ billion)	Other
29.5	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	CO_2 emissions from fuel combustion per total electricity output (MtCO_2/TWh), Share of renewable energy in total primary energy supply (%)	Transformation 3 - Energy Decarbonisation and Sustainable Industry
23.8	2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons (2.2.2 wasting and overweight)	Prevalence of stunting in children under 5 years of age (%), Prevalence of wasting in children under 5 years of age (%), Prevalence of obesity, BMI ≥ 30 (% of adult population), Human Trophic Level (best 2-3 worst)	Transformation 4 - Sustainable Food, Land, Water, and Oceans

Table 2.2

(continued)

Major challenges for low-income countries

Percentage of countries in red	Official Target	Indicators included	Corresponding Transformations
100	1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Poverty headcount ratio at $3.20/day (%)	Transformation 1 - Education, Gender, and Inequality
100	16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	Children involved in child labor (% of population aged 5 to 14)	Transformation 1 - Education, Gender, and Inequality
95.8	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	Population using at least basic sanitation services (%), Population using safely managed sanitation services (%)	Transformation 5 - Sustainable Cities and Communities
95.8	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Anthropogenic wastewater that receives treatment (%), Population using safely managed water services (%)	Transformation 5 - Sustainable Cities and Communities
93.8	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Maternal mortality rate (per 100,000 live births), Births attended by skilled health personnel (%)	Transformation 2 - Health, Well-being and Demography
93.8	9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	Population using the internet (%), Mobile broadband subscriptions (per 100 population), Gap in internet access by income (percentage points)	Transformation 6 - Digital Revolution for Sustainable Development
91.7	16.5 Substantially reduce corruption and bribery in all their forms	Corruption Perceptions Index (worst 0-100 best)	Other
91.7	3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	Traffic deaths (per 100,000 population)	Transformation 2 - Health, Well-being and Demography
91.7	3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	Adolescent fertility rate (births per 1,000 females aged 15 to 19)	Transformation 2 - Health, Well-being and Demography
91.3	8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	Adults with an account at a bank or other financial institution or with a mobile-money-service provider (% f population aged 15 or over)	Transformation 6 - Digital Revolution for Sustainable Development

Developing States (SIDS) tend to face the largest SDG gaps. This is largely driven by a lack of the physical, digital, and human infrastructure (schools, hospitals) needed to achieve the socioeconomic goals (SDGs 1–9) and manage key environmental challenges. Ongoing conflicts in some countries have led to poor and worsening performance on most SDGs for several years, and the pandemic halted years of progress towards eradicating extreme poverty. The war in Ukraine threatens access to food globally, including in countries already facing major challenges on SDG 2 (No Hunger).

By contrast, these countries perform better than the rest of the world on SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). Many of them emit less than 2 tonnes of CO_2 per person each year. Yet they are often the countries that are most vulnerable to the impacts of climate change. Strengthening public-sector capacities as well as statistical capacities remain major priorities in all of these countries, as emphasized under SDG 16 (Peace, Justice and Strong Institutions).

Figure 2.8

2022 SDG dashboards by region and income group (levels and trends)

Legend:
- 🟢 SDG achievement
- 🟡 Challenges remain
- 🟠 Significant challenges remain
- 🔴 Major challenges remain
- ↑ On track
- ↗ Moderately Increasing
- → Stagnating
- ↓ Decreasing
- ⚫ Data not available

Note: Excluding OECD specific indicators. Population-weighted averages. *Source:* Authors' analysis

2. The SDG Index and Dashboards

Figure 2.9

2022 SDG dashboards for OECD countries (levels and trends)

Legend:

- 🟢 SDG achievement
- 🟡 Challenges remain
- 🟠 Significant challenges remain
- 🔴 Major challenges remain

- ↑ On track
- ↗ Moderately Increasing
- → Stagnating
- ↓ Decreasing
- ● Data not available

Note: Including OECD specific indicators.   *Source:* Authors' analysis

Figure 2.10

2022 SDG dashboards for East and South Asia (levels and trends)

	NO POVERTY	ZERO HUNGER	GOOD HEALTH AND WELL-BEING	QUALITY EDUCATION	GENDER EQUALITY	CLEAN WATER AND SANITATION	AFFORDABLE AND CLEAN ENERGY	DECENT WORK AND ECONOMIC GROWTH	INDUSTRY, INNOVATION AND INFRASTRUCTURE	REDUCED INEQUALITIES	SUSTAINABLE CITIES AND COMMUNITIES	RESPONSIBLE CONSUMPTION AND PRODUCTION	CLIMATE ACTION	LIFE BELOW WATER	LIFE ON LAND	PEACE, JUSTICE AND STRONG INSTITUTIONS	PARTNERSHIPS FOR THE GOALS
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Bangladesh																	
Bhutan																	
Brunei Darussalam																	
Cambodia																	
China																	
India																	
Indonesia																	
Korea, Dem. Rep.																	
Lao PDR																	
Malaysia																	
Maldives																	
Mongolia																	
Myanmar																	
Nepal																	
Pakistan																	
Philippines																	
Singapore																	
Sri Lanka																	
Thailand																	
Timor-Leste																	
Vietnam																	

● SDG achievement ● Challenges remain ● Significant challenges remain ● Major challenges remain

↑ On track ↗ Moderately Increasing → Stagnating ↓ Decreasing ● Data not available

Source: Authors' analysis

Figure 2.11

2022 SDG dashboards for Eastern Europe and Central Asia (levels and trends)

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Afghanistan																	
Albania																	
Andorra																	
Armenia																	
Azerbaijan																	
Belarus																	
Bosnia and Herzegovina																	
Bulgaria																	
Croatia																	
Cyprus																	
Georgia																	
Kazakhstan																	
Kyrgyz Republic																	
Liechtenstein																	
Malta																	
Moldova																	
Monaco																	
Montenegro																	
North Macedonia																	
Romania																	
Russian Federation																	
San Marino																	
Serbia																	
Tajikistan																	
Turkmenistan																	
Ukraine																	
Uzbekistan																	

Legend:
- ● SDG achievement
- ● Challenges remain
- ● Significant challenges remain
- ● Major challenges remain
- ↑ On track
- ↗ Moderately Increasing
- → Stagnating
- ↓ Decreasing
- ● Data not available

Source: Authors' analysis

Figure 2.12

2022 SDG dashboards for Latin America and the Caribbean (levels and trends)

Source: Authors' analysis

Figure 2.13

2022 SDG dashboards for the Middle East and North Africa (levels and trends)
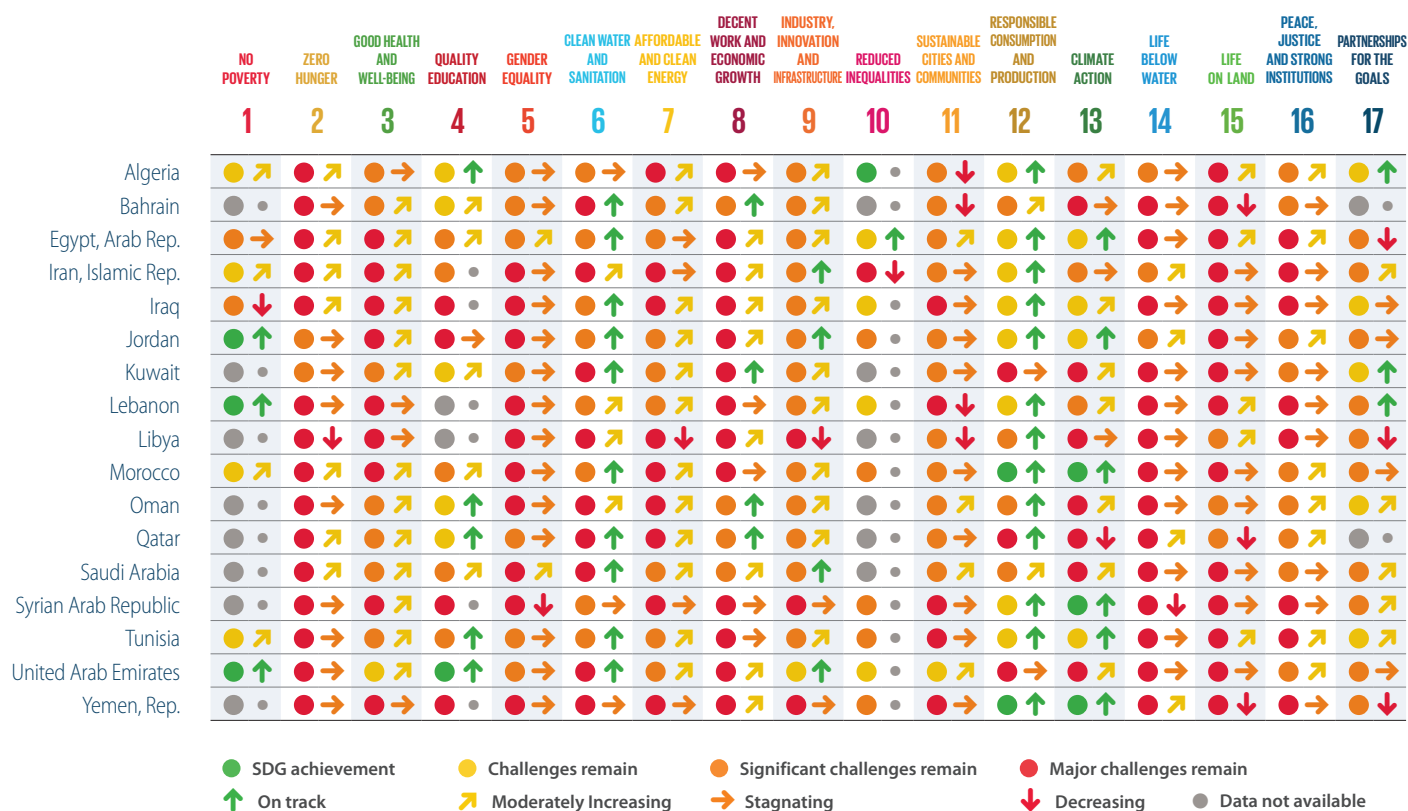
Source: Authors' analysis

Figure 2.14

2022 SDG dashboards for Oceania (levels and trends)
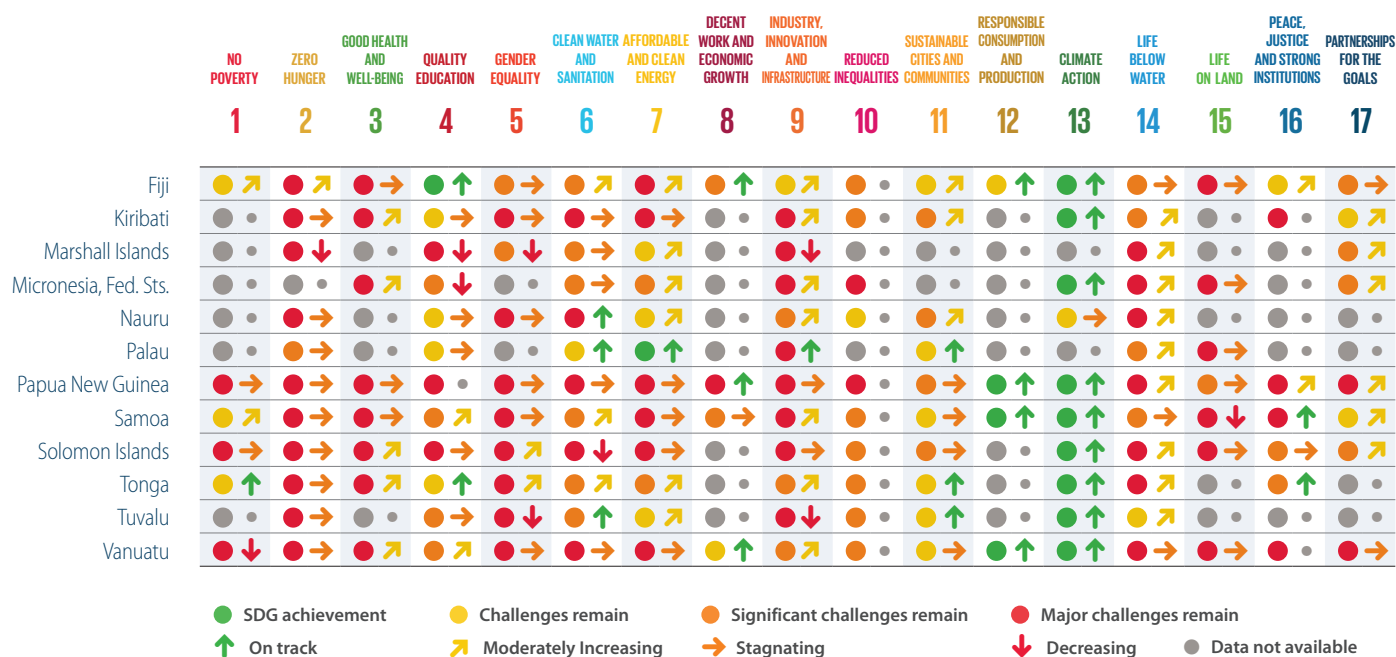
Source: Authors' analysis

Figure 2.15

2022 SDG dashboards for sub-Saharan Africa (levels and trends)

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Angola																	
Benin																	
Botswana																	
Burkina Faso																	
Burundi																	
Cabo Verde																	
Cameroon																	
Central African Republic																	
Chad																	
Comoros																	
Congo, Dem. Rep.																	
Congo, Rep.																	
Cote d'Ivoire																	
Djibouti																	
Equatorial Guinea																	
Eritrea																	
Eswatini																	
Ethiopia																	
Gabon																	
Gambia, The																	
Ghana																	
Guinea																	
Guinea-Bissau																	
Kenya																	
Lesotho																	
Liberia																	
Madagascar																	
Malawi																	
Mali																	
Mauritania																	
Mauritius																	
Mozambique																	
Namibia																	
Niger																	
Nigeria																	
Rwanda																	
Sao Tome and Principe																	
Senegal																	
Seychelles																	
Sierra Leone																	
Somalia																	
South Africa																	
South Sudan																	
Sudan																	
Tanzania																	
Togo																	
Uganda																	
Zambia																	
Zimbabwe																	

Legend:
- ● SDG achievement
- ● Challenges remain
- ● Significant challenges remain
- ● Major challenges remain
- ↑ On track
- ↗ Moderately Increasing
- → Stagnating
- ↓ Decreasing
- ● Data not available

Source: Authors' analysis

Figure 2.16

2022 SDG dashboards for Small Island Developing States (SIDS) (levels and trends)

Legend:
- 🟢 SDG achievement
- 🟡 Challenges remain
- 🟠 Significant challenges remain
- 🔴 Major challenges remain
- ⬆ On track
- ↗ Moderately Increasing
- → Stagnating
- ↓ Decreasing
- ⚫ Data not available
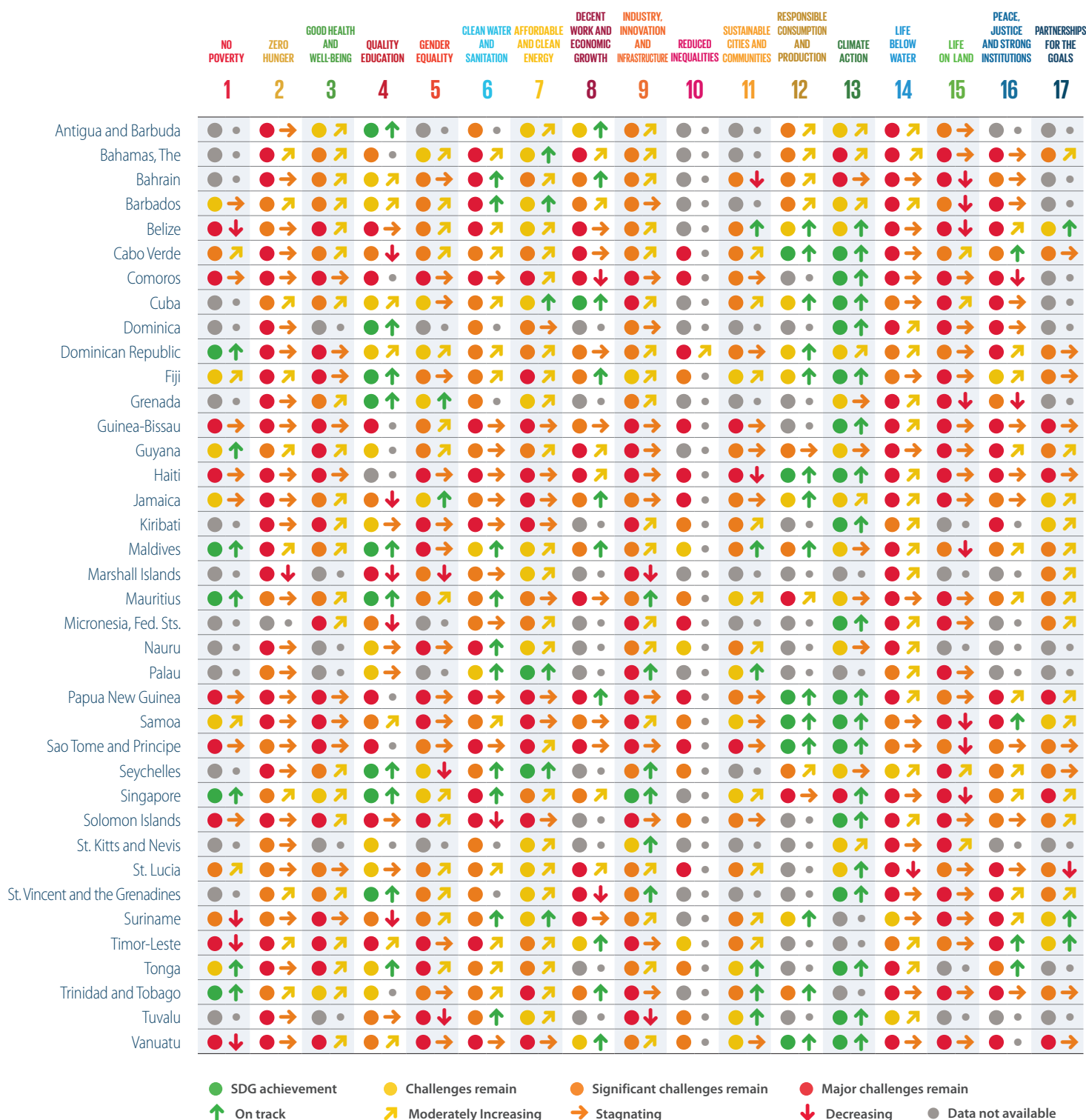
Source: Authors' analysis

2.3 International spillovers

Spillovers, both positive and negative, must be understood, measured, and carefully managed. These benefits or costs may be referred to as positive or negative externalities. Countries cannot achieve the SDGs if such negative externalities from other countries counteract their efforts (Schmidt-Traub et al., 2019). International spillover effects are said to occur when one country's actions generate benefits or impose costs on another country that are not reflected in market prices and therefore are not 'internalized' by the actions of consumers and producers (Sachs et al., 2017).

The 2030 Agenda and the SDGs recognize the importance of international spillovers in several crucial ways. SDG 17 (Partnerships for the Goals) calls for "policy coherence" for sustainable development, SDG 12 (Responsible Consumption and Production) stresses the need for more sustainable production and consumption, and SDG 8 (Decent Work and Economic Growth) demands the eradication of modern slavery and child labor.

Conceptually, international spillovers in the context of the SDGs can be grouped into four categories:

- **Environmental and social spillovers embodied into trade**. These cover international effects related to pollution, the use of natural resources, and social impacts generated by the consumption of goods and services. Multi-regional input-output (MRIO) models combined with satellite datasets provide powerful tools to track impacts generated worldwide by consuming countries. This category of spillovers also includes exports of toxic pesticides, trade in waste, and illegal wildlife trade. They are particularly connected to SDG 8 (Decent Work and Economic Growth), SDGs 12–15 (related to responsible consumption, climate and biodiversity) and SDG 17 (Partnerships for the Goals). They also indirectly affect all other SDGs.

- **Direct cross-border flows in air and water**. These cover effects generated through physical flows – for instance of air and water – from one country to another. Cross-border air and water pollution are difficult to attribute to a country of origin, and this remains an important data gap. Unfortunately, the International Spillover Index does not currently include any indicators to track these types of spillovers. They are particularly related to SDG 6 (Clean Water and Sanitation) and SDGs 12–15 on climate and biodiversity, but also concern many other goals, including SDG 3 (Good Health and Well-Being).

- **Spillovers related to economic and financial flows**. These include unfair tax competition, corruption, banking secrecy, profit shifting, tax havens, and stolen assets – which undermine the capacity of other countries to leverage resources to achieve the SDGs. They also include positive spillovers (or handprints) such as international development finance (for example, ODA). These types of spillovers are closely related to SDG 16 (Peace, Security and Strong Institutions) and SDG 17 (Partnerships for the Goals), and indirectly to all other SDGs, notably through ODA.

- **Peacekeeping and security spillovers**. These include negative externalities such as organized international crime or exports of major conventional weapons or small arms, which can have destabilizing impacts on poor countries. Among the positive spillovers in this category are investments in conflict prevention and peacekeeping. These spillovers are particularly related to SDG 16 (Peace, Security and Strong Institutions) and SDG 17 (Partnerships for the Goals), but also indirectly connected with most of the SDGs – including poverty, hunger, and health, as well as other socioeconomic goals.

The 2022 International Spillover Index includes 14 indicators. Each indicator is included in the total SDG Index score, and also used to generate a stand-alone International Spillover Index.

Rich countries tend to generate the largest negative spillover effects, undermining other countries' efforts to achieve the SDGs. While member states of the European Union and many OECD countries top the SDG Index and the World Happiness Report, they are among the worst performers when it comes to international spillover effects. Approximately 40 percent of the European Union's carbon footprint relating to its consumption of good and services takes place in other countries (SDSN et al., 2021).

Table 2.3

The SDGs and international spillover indicators

SDG	Spillover Indicator
SDG 2 (No Hunger)	Exports of hazardous pesticides (tonnes per million population)
SDG 6 (Clean Water and Sanitation)	Scarce water consumption embodied in imports (m3 H2O eq/capita)
SDG 8 (Decent Work and Economic Growth)	Fatal work-related accidents embodied in imports (per 100,000 population)
SDG 12 (Responsible Consumption and Production)	SO_2 emissions embodied in imports (kg/capita)
SDG 12 (Responsible Consumption and Production)	Nitrogen emissions embodied in imports (kg/capita)
SDG 12 (Responsible Consumption and Production)	Exports of plastic waste (kg/capita)
SDG 13 (Climate Action)	CO_2 emissions embodied in imports (tCO_2/capita)
SDG 14 (Life Below Water)	Marine biodiversity threats embodied in imports (per million population)
SDG 15 (Life on Land)	Terrestrial and freshwater biodiversity threats embodied in imports (per million population)
SDG 16 (Peace, Justice and Strong Institutions)	Exports of major conventional weapons (TIV constant million USD per 100,000 population)
SDG 17 (Partnerships for the Goals)	For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% of GNI)
SDG 17 (Partnerships for the Goals)	Corporate Tax Haven Score (best 0–100 worst)
SDG 17 (Partnerships for the Goals)	Financial Secrecy Score (best 0–100 worst)
SDG 17 (Partnerships for the Goals)	Shifted profits of multinationals (US$ billion)

Source: Authors' analysis

The European Union's consumption of good and services is responsible for 16 percent of the world's tropical deforestation (WWF, 2021), its imports of textile products are associated with 375 fatal and 21,000 non-fatal accidents at work, and its food demand contributes to 16 percent of the particulate matter emissions outside its borders (Malik, Lafortune, Carter, et al., 2021; Malik, Lafortune, Dahir, et al., 2021). Focusing on trajectories: while the European Union has managed to decouple economic growth from domestic CO_2 emissions in recent years, there are no signs of structural decline in its imported CO_2 emissions (CO_2 emissions generated abroad to satisfy EU consumption). Overall, HICs are responsible for more than 80% of cumulative imported CO_2 emissions over the period 2010-2018.

To ensure international legitimacy, the European Union and other rich countries must address negative international spillovers, including those embodied into unsustainable supply chains. The European Union and its member states are taking action. The current President of the European Commission has called for "zero tolerance" of child labor and has proposed using trade to export European values throughout the world (von der Leyen, 2019). The European Union is developing various regulations and tools to strengthen policy coherence and due diligence across supply chains. In 2022, Sweden became the first country in the world to announce its intention to define a target to reduce consumption-based CO_2 emissions (Naturskyddsföreningen, 2022).

Figure 2.17

SDG Index score vs International Spillover Index score

SDG Index 2022		International Spillover Index 2022

European Union (27)

OECD Member States

Eastern Europe and Central Asia

Latin America and the Caribbean

Middle East and North Africa

East and South Asia

Sub-Saharan Africa

From 0 (worst) to 100 (best)   From 0 (worst) to 100 (best)
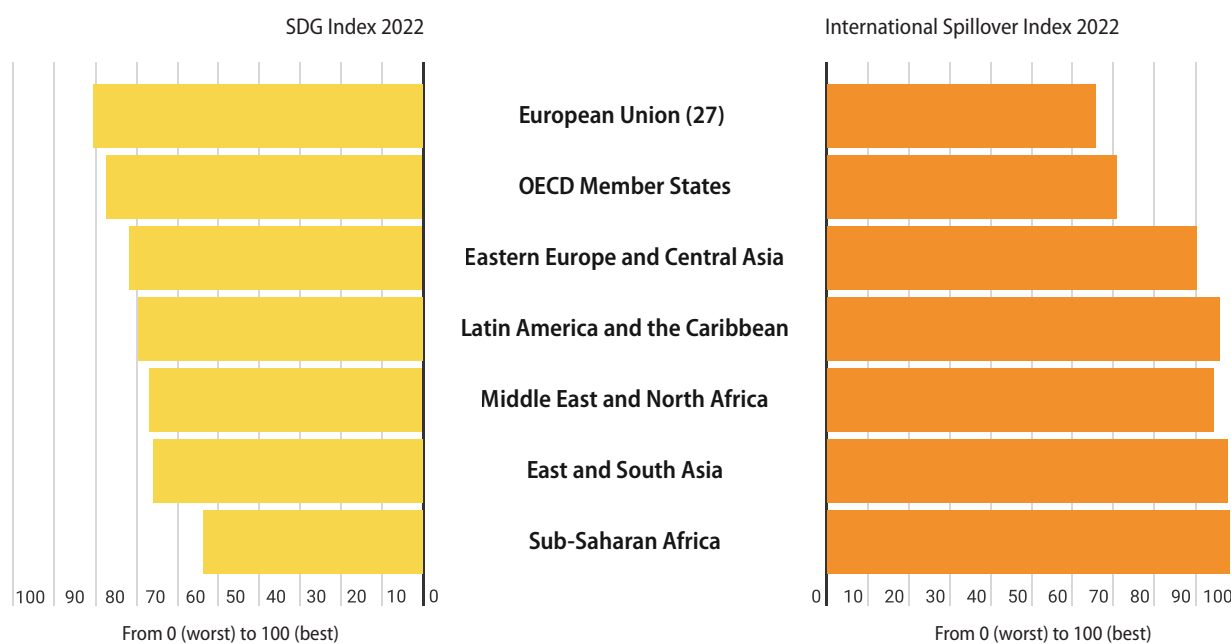
Source: Authors' analysis

Figure 2.18

Growth rate of GDP, production-based CO$_2$ emissions and imported CO$_2$ emissions, EU27, 2000–2019

Annual growth rates (%)

— Imported CO$_2$ (tonnes per capita)   — GDP (per capita)
— Production-based CO$_2$ emissions (tonnes per capita)

Note: Imported CO$_2$ emissions refer to CO$_2$ emissions emitted abroad (e.g., to produce cement or steel) to satisfy EU27 consumption of goods and services. Three-years moving averages. *Source:* Lafortune et al. (2021)

Finland's latest Voluntary National Review (VNR) includes a section on measuring and addressing international spillovers (Prime Minister's Office of Finland, 2020). Finally, EU technical agencies including the Joint Research Centre, Eurostat, and the European Environment Agency have developed tools and indicators to monitor international spillovers.

We have identified **four major priority areas** in addressing international spillovers:

1. **SDG Financing:** Rich countries bear a special responsibility when it comes to climate adaptation and mitigation and safeguarding the Global Commons. They should push for major reforms to the international development finance system to support key SDG Transformations (see Part 1). In 2021, only five OECD Development Assistance Committee member countries (Denmark, Germany, Luxembourg, Norway and

Sweden) achieved the target of dedicating 0.7 percent of their gross national income to official development assistance. Multiple crises are putting further pressure on development finance. Rich countries fell short too in delivering on their commitment to mobilizing US$100 billion each year by 2020 to mitigate further rises in temperature and help poorer countries adapt to climate change. Several positive moves were made at COP26 in November 2021, including the US and European Union's pledge to slash methane emissions and the European Union's commitment of €1 billion to protect world forests. Rich countries must also lead the way in combating illicit financial flows, unfair tax competition, and profit shifting – all of which undermine other countries' capacity to leverage resources towards realizing the SDGs. The international agreement to implement a global minimum corporate tax rate by 2023 is a step in the right direction but will require effective implementation.

Figure 2.19

Imported CO_2 emissions by country income groups, cumulative average per person per year, 2010-2018
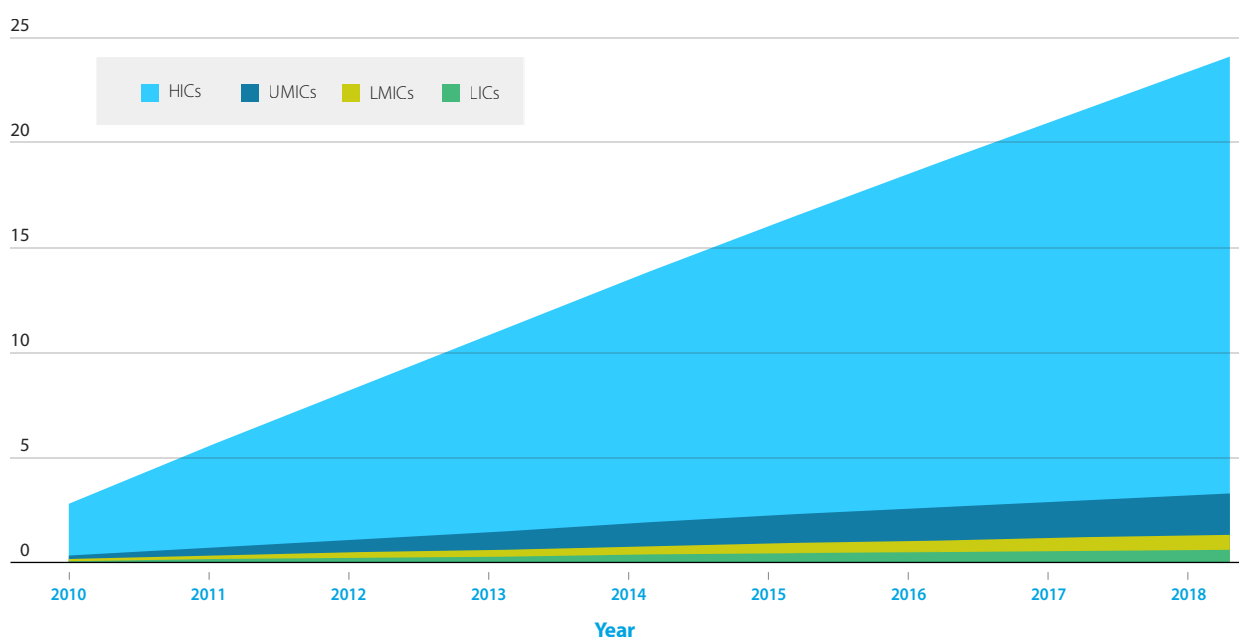
Source: Authors' analysis based on Lenzen et al. (2020)

2. **Technical Cooperation and SDG diplomacy:**
Technical cooperation and knowledge transfer can
support greater sustainability in producing countries.
In the European Union, SDG/Green Deal diplomacy
can help to achieve sustainable development
worldwide while advancing the region's geopolitical
interests. It is critical that major international
infrastructure investment programs – including the
United States' Build Back Better plan, the European
Union's Global Gateway strategy, and China's Belt and
Road Initiative – align with the SDGs and modernize
production systems and connectivity in developing
countries. Rich countries must leverage diplomacy to
advance key multilateral processes towards achieving
the SDGs: at the UN General Assembly, the High-Level
Political Forum on Sustainable Development, the G7
(under German presidency in 2022), the G20 (under
Indonesian presidency in 2022), and the Annual
Meetings of the IMF and the World Bank.

3. **National targets and instruments:** In 2022, Sweden
became the first country to commit to setting a
national target to curb its imported consumption-
based CO_2 emissions. National targets can help
catalyze action. Due diligence regulations and other
monitoring and regulatory instruments must be
leveraged to hold businesses accountable for the

impacts generated through their value chains. If
well designed, measures such as the Carbon Border
Adjustment Mechanism or mirror clauses currently
under discussion in the European Union could boost
policy coherence and encourage other countries
to align with the European Green Deal goals and
requirements. Yet these same measures might arguably
be considered protectionist – since they will inevitably
impact trade partners, including poorer countries that
are not historically responsible for climate change. To
counter this, they must be implemented alongside
increased commitments to international financing
and development cooperation. Rich countries should
also curb trade in waste and toxic pesticides and
reduce unsustainable consumption, including through
improved diets and lower material consumption.

4. **Accountability, data, and statistics**: Robust data
systems are paramount at the international, national,
industrial, and corporation levels: to track negative
impacts throughout the entire supply chain and to
inform global action to address spillovers. Over time,
consumption-based metrics should become part of
official statistics. International spillovers must also be
included more systematically in voluntary national
reviews (VNRs) presented by rich countries, following
the example of Finland.

3
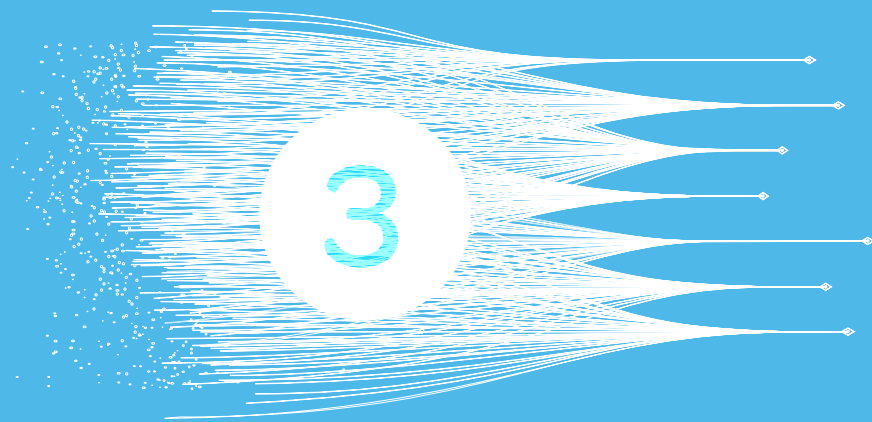
Policy Efforts and Commitments for the SDGs

Part 3
Policy Efforts and Commitments for the SDGs

Restoring and accelerating SDG progress requires financing (see Part 1), data and statistics (see Parts 2 and 4) and sound and ambitious SDG policies and roadmaps. To operationalize the 17 SDGs and 169 targets, SDSN and partners promote six SDG Transformations that must be implemented in parallel and adapted to local contexts. These include quality education (SDG 4); access to good quality and affordable health care (SDG 3); renewable energy and a circular economy (SDGs 7, 12, and 13); sustainable land and marine management (SDGs 2, 14, and 15); sustainable urban infrastructure (SDGs 6, 9, and 11); and universal access to digital services (SDG 9). Scientific knowledge and networks are key to model structural changes over a time horizon of 10–30 years, which can inform policy discussions and consultations on the six SDG transformations.

This section discusses efforts made by governments (primarily the executive branch) to integrate the SDGs into public policies. The SDG Index and Dashboards focus on internationally standardized outcome statistics. Due to data gaps and time lags in international reporting, national policies and commitments must also be considered in gauging a country's efforts to achieve the SDGs. We present an assessment of governments' efforts to achieve the SDGs, including the 2022 SDSN Policy Coordination Survey for the SDGs and the Six Transformations Scorecards. For the first time, we also present prototype scores of government commitments and efforts in support of the SDGs.

3.1 Political leadership and policy environment: results from the 2022 SDSN Policy Coordination Survey for the SDGs

Every year, SDSN mobilizes its global network of experts to track public statements by governments and the strategic use of public practices in support of the SDGs. Since 2018, this information has been collected through the SDSN survey on national coordination and implementation mechanisms at the central/federal level of government. This year's survey covers 60 countries (13 more than the 48 covered in 2021) plus the European Union, including all countries in the G20 and most OECD members as well as many countries with a population greater than 100 million inhabitants. The results are presented in Table 3.1. Data are collected and analyzed in close partnership with SDSN's global network, and results are shared with UN Permanent Missions for comments prior to publication.

Six years after the adoption of the 2030 Agenda and the SDGs in 2015, a majority of governments had by 2021 developed strategies and action plans to implement the goals. For many governments, this takes the form of a national sustainability strategy that is explicitly linked to the 2030 Agenda goals and targets. Some governments though have preferred to take a mainstreaming approach, whereby the SDGs are implemented by each government ministry within the scope of its mandate (instead of via an overarching national action plan). Our survey is unable to evaluate, in practice, political and administrative support for the implementation of these strategies, although SDSN has published a detailed analysis of SDG integration in recovery and resilience plans within the European Union (Lafortune et al., 2021).

Regarding SDG coordination units and mechanisms: we find that most countries have appointed a lead unit or agency responsible for coordinating implementation of the SDGs (Figure 3.1). Yet less than a third of the countries surveyed have located this unit at the center of government (offices of the President or Prime Minister, or cabinet offices).

Many countries have also developed strategies for SDG monitoring. 46 out of the 61 governments covered in the survey have adapted the SDG framework to their context and identified a set of nationally relevant indicators. On average, such national sets comprise around 135 indicators. Several countries have also developed online platforms to report on progress towards the SDGs. These efforts to strengthen mechanisms to monitor sustainable development are critical to inform SDG interventions. Challenges related to the COVID-19 pandemic also sparked new innovations in monitoring and data collection, which are discussed in Part 4.

Figure 3.1

Designated lead unit for SDG coordination, at the central/federal level of government

yes (84%)

no 16%

yes 84%

8%

14%

31%

47%

■ The designated unit is located at the center of government (e.g., President's or Prime Minister's Office, cabinet office)

■ At a central coordinating ministry (e.g., ministry of finance, economic development, planning, public service or administration, environment or similar)

■ At ministry of foreign affairs, international collaboration or similar

■ Other

Source: SDSN 2022 Survey on national coordination and implementation mechanisms at the central/federal level of government (February 2022)

Official speeches and government efforts to prepare voluntary national reviews (VNRs) are also relevant proxy measures to gauge commitment to the SDGs. Over the past 12 months, just over half of the surveyed countries have reinforced their commitment to the SDGs in the context of an official speech or statement made by the head of state (president or prime minister). Since 2016, 187 UN Member States have prepared VNRs – the official government-led process to report on SDG progress, gaps, and policy efforts (see Figure 3.2). This year, 45 countries have committed to submitting a VNR, which is compara-ble to the pre-pandemic period. But while some countries are preparing their fourth VNR, six countries have still never submitted one – Haiti, Iran, Myanmar, South Sudan, the United States, and Yemen (UN, 2022b).

As in previous years, there is some discrepancy between expressed political support for the SDGs and integration of the goals into strategic public policy processes, most notably national budgets. About a third of the governments surveyed (21 out of 61) mention the SDGs or use related terms in their latest official budget document – no improvement over last year. And only half of these include the SDGs in a dedicated section of

their national budgets or in a dedicated budget line. The other half refer to the SDGs only in the general narrative, providing less SDG-specific budget allocations. Several countries surveyed do specifically refer to the SDGs in their national budget to support both domestic SDG implementation (including national health, education, social protection, or economic development reforms) and SDG implementation abroad (for example, aid allocation or foreign policy).

This discrepancy is evident also in COVID-19 recovery plans. Among the 44 countries with national recovery plans in place, we found that most (26) do not refer to the SDGs at all. Only 9 have a COVID-19 recovery plan in which the SDGs form a central pillar to guide a sustainable, inclusive, and resilient recovery. This aligns with some of the findings from green recovery policy trackers (Green Economy Tracker, 2022; O'Callaghan et al., 2022; Vivid Economics, 2021; Wuppertal Institut and E3G, 2021). As countries work to recover from the pandemic, it is important to maintain – and increase – the focus on achieving the long-term goals agreed by the international community in 2015, including the SDGs, the 2030 Agenda, and the Paris Climate Agreement.

Figure 3.2

Submissions of voluntary national reviews (number of countries)
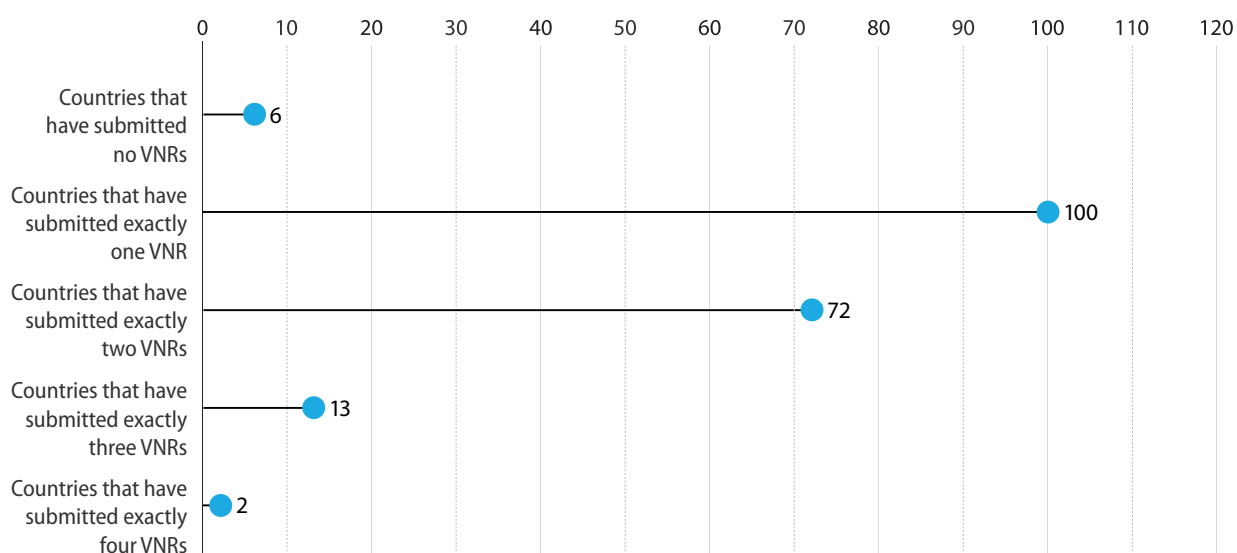
Note: Data includes VNRs that will be submitted by countries this year.   *Source:* Authors' analysis. Based on data from the United Nations (2022).

Figure 3.3

Integration of the SDGs into key policy processes, G20 countries versus other countries

● G20 Countries   ● Other Countries
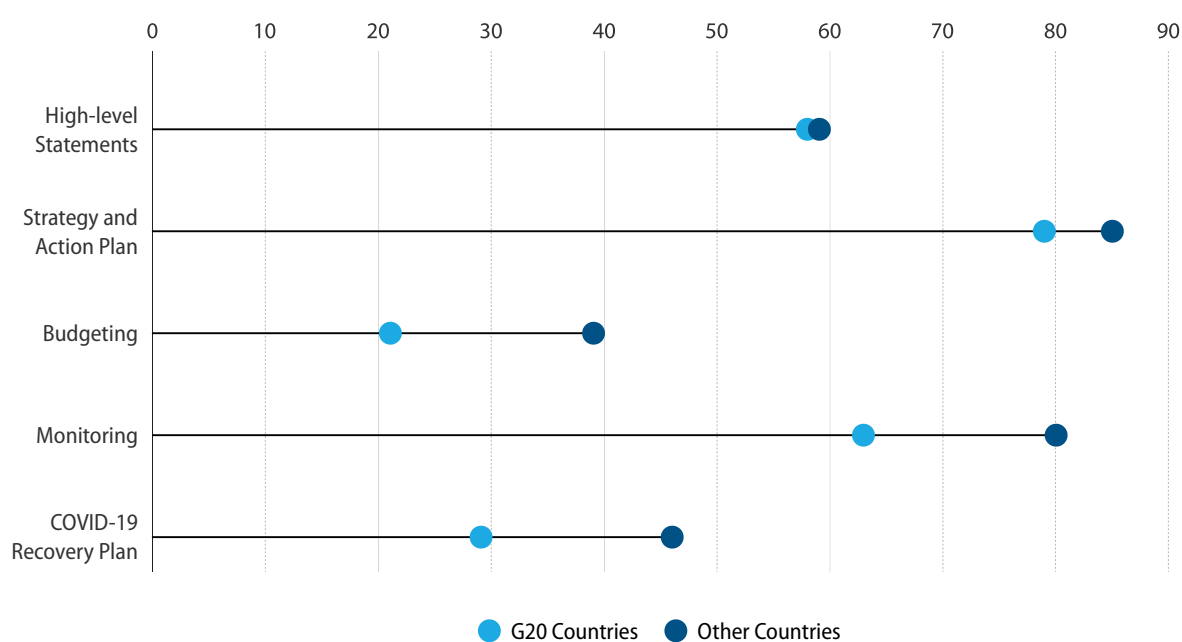
Note: Percentage of countries where Table 3.1 shows a "yes" for the respective question. For COVID-19 recovery plans: Percentage of countries where Table 3.1 shows a "yes" out of the number of countries that have adopted a recovery plan.

Source: Authors' analysis. Based on SDSN 2022 Survey on national coordination and implementation mechanisms at the central/federal level of government (February 2022).

3. Policy Efforts and Commitments

Table 3.1. National government efforts to implement the SDGs

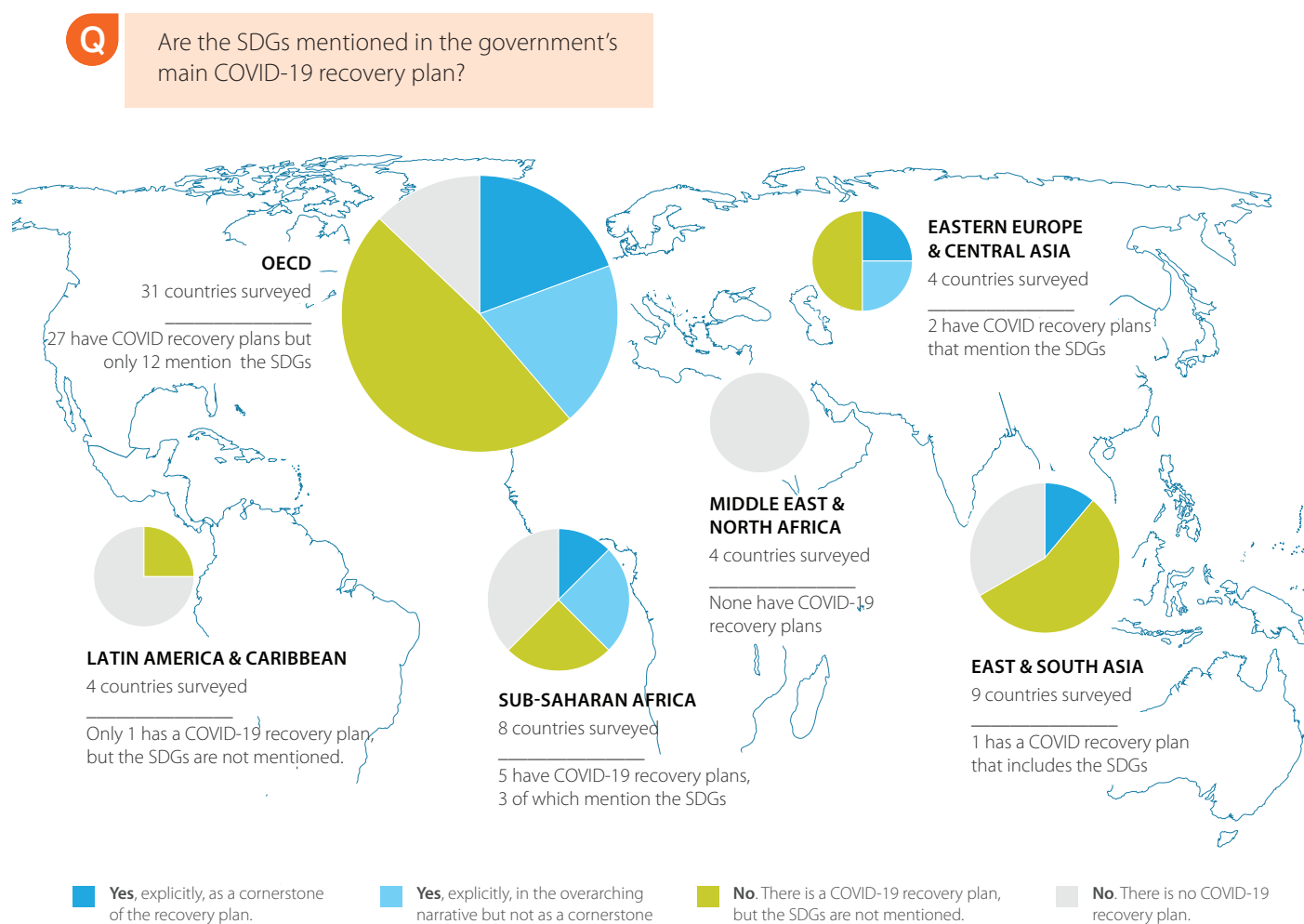|	VNR	High-level statements	SDG strategy/ SDGs into sectoral action plans	SDGs in national budget		National SDG monitoring		Designated lead unit	SDGs in national COVID-19 recovery plan
	Year submitted	yes/no	yes/no	yes/no	Overarching narrative/section or budget line	yes/no	no. of indicators	yes/no	- yes, as a central pillar (5 mentions or more) - yes, in the general narrative (1-4 mentions) - no
Algeria	2019	no	yes	no		yes	71	no	
Argentina	2017, 2020, & 2022	yes	yes	no		yes	242	yes	
Australia	2018	yes	no	no		no, but online reporting		no	no
Austria	2020	yes	yes	yes	section or budget line	yes	200	yes	no
Bangladesh	2017 & 2020	yes	yes	no		yes	40	yes	no
Belgium	2017	yes	yes	yes	overarching narrative	yes	86	yes	yes, as a central pillar
Benin	2017, 2018, & 2020	no	yes	yes	section or budget line	yes	164	yes	yes, in the general narrative
Bolivia	2021	yes	yes	no		yes	104	yes	no
Brazil	2017	no	yes	no		no, but online reporting		no	
Canada	2018	yes	yes	no		yes	76	yes	no
Chile	2017 & 2019	no	yes	no		yes	231	yes	no
China	2016 & 2021	yes	yes	no		no, but it is planned		yes	no
Colombia	2016, 2018, & 2021	yes	yes	yes	overarching narrative	yes	161	yes	no
Congo, Dem. Rep.	2020	no	yes	no		yes	59	yes	
Cyprus	2017 & 2021	yes	no	yes	overarching narrative	yes	140	yes	yes, as a central pillar
Czech Republic	2017 & 2021	no	yes	no		yes	192	yes	no
Denmark	2017 & 2021	yes	yes	yes	section or budget line	yes	197	yes	yes, as a central pillar
Egypt, Arab Rep.	2016, 2018, & 2021	no	yes	no		no, but online reporting		yes	
Ethiopia	2017 & 2022	no	yes	yes	section or budget line	yes	60	no	no
European Union	planned (TBC)	yes	yes	yes	overarching narrative	yes	102	yes	yes, in the general narrative
Finland	2016 & 2020	yes	yes	yes	overarching narrative	yes	48	yes	no
France	2016	no	yes	no		yes	98	yes	no
Germany	2016 & 2021	yes	yes	yes	overarching narrative	yes	75	yes	yes, in the general narrative
Greece	2018 & 2022	yes	yes	no		yes	158	yes	yes, as a central pillar
Hungary	2018	yes	no	no		yes	103	yes	no
India	2017 & 2020	no	no	no		no, but online reporting		no	
Indonesia	2017, 2019, & 2021	yes	yes	yes	overarching narrative	yes	319	yes	no
Ireland	2018	yes	yes	yes	overarching narrative	yes	143	yes	no
Israel	2019	no	yes	no		no, but online reporting		yes	
Italy	2017 & 2022	yes	yes	no		yes	130	yes	yes, in the general narrative
Jamaica	2018 & 2022	yes	yes	no		yes	119	yes	
Japan	2017 & 2021	yes	yes	yes	section or budget line	no, but online reporting		yes	
Kenya	2017 & 2020	no	no	no		no		no	
Korea, Rep.	2016	yes	yes	no		yes	214	yes	no
Malaysia	2017 & 2021	yes	yes	yes	section or budget line	yes	146	yes	no
Mexico	2016, 2018 & 2021	no	yes	yes	section or budget line	yes	54	yes	yes, as a central pillar
Morocco	2016 & 2020	no	yes	no		yes	102	yes	
Netherlands	2017 & 2022	yes	yes	no		yes	267	yes	
New Zealand	2019	yes	no	no		yes	166	no	no
Nigeria	2017 & 2020	yes	yes	yes	section or budget line	yes	141	yes	yes, as a central pillar
Norway	2016 & 2021	yes	yes	yes	section or budget line	no, but online reporting		yes	no
Pakistan	2019 & 2022	no	yes	yes	section or budget line	no, but online reporting		yes	no
Philippines	2016, 2019, & 2022	no	yes	no		no, but online reporting	155	yes	
Poland	2018	yes	yes	no		yes	65	yes	yes, as a central pillar
Portugal	2017	no	no	yes	overarching narrative	yes	46	yes	yes, in the general narrative
Romania	2018	yes	yes	no		yes	98	yes	no
Russian Federation	2020	no	no	no		yes	175	yes	no
Saudi Arabia	2018 & 2021	no	yes	no		yes	244	yes	
Senegal	2018 & 2022	no	yes	no		yes	142	yes	yes, in the general narrative
Slovenia	2017 & 2020	yes	yes	no		yes	54	yes	yes, in the general narrative
South Africa	2019	yes	yes	no		yes	258	yes	no
Spain	2018 & 2021	yes	yes	yes	section or budget line	no, but online reporting		yes	yes, as a central pillar
Sweden	2017 & 2021	yes	yes	yes	overarching narrative	yes	45	yes	yes, in the general narrative
Switzerland	2016, 2018, & 2022	yes	yes	no		yes	108	yes	
Thailand	2017 & 2021	yes	yes	no		no, but online reporting		yes	yes, as a central pillar
Turkey	2016 & 2019	no	yes	no		yes	131	yes	yes, in the general narrative
Uganda	2016 & 2020	no	yes	no		yes	64	yes	
Ukraine*	2020	no	no	no		yes	183	yes	yes, in the general narrative
United Kingdom	2019	yes	yes	no		no, but online reporting		no	no
United States		no	no	no		no, but online reporting		no	no
Vietnam	2018	no	yes	no		yes	158	yes	

Note: For the European Union, the answer to the question on the national COVID-19 recovery plan is based on the "Guidance to Member States Recovery and Resilience Plans". The answers for Ukraine reflect the situation as of January 2022. Due to the situation, we were not able to verify the answers for Ukraine with the Permanent Mission of Ukraine to the United Nations.

Source: SDSN 2022 Survey on national coordination and implementation mechanisms at the central/federal level of government (February 2022)

Figure 3.4. National government efforts to implement the SDGs

Q Are the SDGs mentioned in the government's main COVID-19 recovery plan?

OECD
31 countries surveyed
_____
27 have COVID recovery plans but only 12 mention the SDGs

EASTERN EUROPE & CENTRAL ASIA
4 countries surveyed
_____
2 have COVID recovery plans that mention the SDGs

MIDDLE EAST & NORTH AFRICA
4 countries surveyed
_____
None have COVID-19 recovery plans

LATIN AMERICA & CARIBBEAN
4 countries surveyed
_____
Only 1 has a COVID-19 recovery plan, but the SDGs are not mentioned.

SUB-SAHARAN AFRICA
8 countries surveyed
_____
5 have COVID-19 recovery plans, 3 of which mention the SDGs

EAST & SOUTH ASIA
9 countries surveyed
_____
1 has a COVID recovery plan that includes the SDGs

■ **Yes**, explicitly, as a cornerstone of the recovery plan.

■ **Yes**, explicitly, in the overarching narrative but not as a cornerstone of the recovery plan.

■ **No**. There is a COVID-19 recovery plan, but the SDGs are not mentioned.

■ **No**. There is no COVID-19 recovery plan.

	East & South Asia	Eastern Europe & Central Asia	Latin America & Caribbean	Middle East & North Africa	OECD	Sub-Saharan Africa
Q Since January 2021, has the head of state issued an official statement endorsing implementation of the SDGs?	● ● ● ● ● ● ○ ○ ○	● ● ○ ○ ○ ○	● ● ● ○ ○ ○	○ ○ ○ ○	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ○ ● ● ● ● ● ● ○ ○ ○ ○ ○ ○ ○	● ● ● ○ ○ ○ ○ ○
Q Are the SDGs being integrated into sectoral action plans?	● ● ● ● ● ● ● ● ○	● ● ○ ○	● ● ● ●	● ● ● ●	● ○ ○ ○	● ● ● ● ● ● ● ● ○
Q Are the SDGs mentioned In the latest central/federal budget document?	● ● ● ● ● ● ○ ○ ○	● ● ● ● ○ ○	○ ○ ● ● ○ ○	○ ○ ○ ○	● ● ● ● ● ● ● ● ● ● ● ● ● ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	● ● ● ○ ○ ○ ○ ○
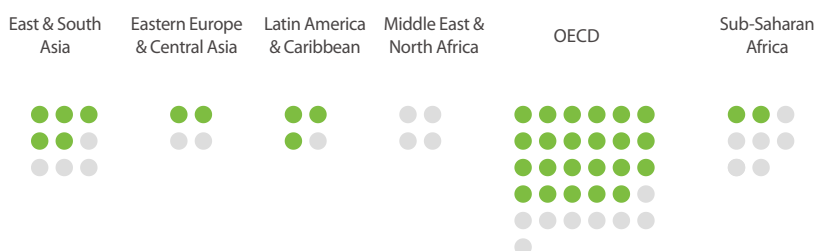
As shown in Figure 3.3, G20 countries are on average less ambitious than others when it comes to integrating the SDGs into key policy processes. Particularly with regards to linking budgets to the goals and developing national SDG indicator sets, G20 countries lag behind. As G20 countries represent two-thirds of the world's population and 85 percent of global GDP, integrating the SDGs into their governance systems is particularly important.

Besides the executive branch of government, parliamentary committees and groups promoting SDG action have also emerged over the years. For instance, the SDG Alliance is an informal group of European Parliament Members from different committees and political groups who are mobilized around the SDGs. In France in 2022, a Member of Parliament put together a comprehensive assessment of the country's SDG gaps and priorities (Provendier, 2022). Public participation processes at various levels (including regions and cities), whether organized through national legislature, citizen assemblies, or councils, can also help to identify better policy interventions, build legitimacy, and strengthen ownership of SDG actions.

3.2 The six SDG Transformations scorecards

The six SDG Transformations provide a detailed framework on which to construct integrated strategies for the SDGs (Sachs et al., 2019). They can be implemented in every country to help address trade-offs and synergies across the SDGs. They can also be used to recover from COVID-19 and to build back better (Sachs et al., 2020; Schmidt-Traub, 2020).

The core of the six Transformations is the recognition that all 17 SDGs can be achieved through six major societal transformations, focused on: (1) education and skills, (2) health and well-being, (3) clean energy and industry, (4) sustainable land use, (5) sustainable cities, and (6) digital technologies. All are guided by the twin principles to "leave no one behind" and "ensure circularity and decoupling" (see Sachs et al., 2019 for details, page 3). The six Transformations provide an action agenda for government ministries, businesses, and civil society.

Building on the work of last year, we present an updated and improved version of the SDG Transformation scorecards in this section. Each scorecard consists of a collection of headline policy measures to track implementation of the SDGs. The scorecards complement the SDG Index, which is based on outcome data (for example, poverty rate, life expectancy, and CO_2 emissions). At the international level, outcome data tend to present significant time lags: they may not adequately reflect the impact of transformative policies and investments introduced by governments since the adoption of the SDGs, as these often yield results only in the medium or longer term. The scorecards focus instead on the enabling legal, regulatory, and investment conditions needed to achieve the SDGs and the objectives of the Paris Climate Agreement.

This exercise has several caveats and limitations. First, internationally comparable policy trackers and measures (such as laws, regulations, investments, and subsidies) tend to be less available than international outcome data. They rely on more qualitative methods and require an advanced understanding of policy areas and country policies and contexts. Generally, more comparable policy trackers and measures are available for OECD countries than for others. Second, policy efforts need to be interpreted with an understanding of national challenges and contexts (for instance, the absence of an advanced cybersecurity policy matters less in a country with low internet access and poor digital infrastructure). Third, apart from a few exceptions, government pledges and policies do not capture their effective implementation. And fourth, fewer internationally agreed targets or thresholds for policy measures are defined at the international level.

The rest of this section provides a brief overview of countries' policy efforts and commitments relating to achieving the six SDG Transformations and highlights where more research and policy trackers are required to broaden our understanding of national SDG efforts. We present detailed results for the G20 countries as well as population-weighted averages by geographic region and income group. Detailed information on indicator sources and thresholds and results for all 193 UN Member States are accessible online at www.sdgindex.org.

Figure 3.5

Six SDG Transformations

Source: Sachs et al. (2019)

Transformation 1: Education, Gender and Inequality

Education builds human capital, which in turn promotes economic growth, innovation, decent work, and the elimination of extreme poverty and helps overcome gender and other inequalities. Countries must further expand and transform education systems. SDG target 4.1 calls for universal access to 12 years of free primary and secondary education, with at least 9 years compulsory.

The scorecards show that many countries around the world currently fall short of this target. To reduce inequalities, governments also need to expand social safety nets. These should be complemented by anti-discrimination measures (including gender), improved labor standards, and measures to end all forms of modern slavery, trafficking, and child labor. Investments in research and development will also help to promote economic growth, which can contribute to reducing inequalities.

Table 3.2

Scorecard – Transformation 1: Education, Gender and Inequality

Note: Regional and income level averages are population weighted. Details on definitions, sources, and thresholds are available on www.sdgindex.org
Source: Authors' analysis

	Transformation 1: Education, Gender and Inequality				
	Years of free education in the law (#, 2020, UNESCO)	**Years of compulsory education in the law (#, 2020, UNESCO)**	**Commitment to Reducing Inequalities: Tax Progressivity & Protection of Labor Right (score, 2020, Oxfam & DFI)**	**Gender Equality in the Law (score, 2022, World Bank)**	**Expenditure on research and development (% of GDP, 2018, UNESCO)**
G20 Countries					
Argentina	12	12	0.63	79.4	0.5
Australia	13	10	0.69	96.9	1.9
Brazil	12	12	0.57	85.0	1.2
Canada	12	10	0.74	100.0	1.5
China	9	9	0.54	75.6	2.1
France	12	10	0.72	100.0	2.2
Germany	13	13	0.75	97.5	3.1
India	8	8	0.45	74.4	0.7
Indonesia	12	9	0.54	64.4	0.2
Italy	8	12	0.67	97.5	1.4
Japan	9	9	0.69	78.8	3.3
Korea, Rep.	9	9	0.63	85.0	4.5
Mexico	12	12	0.56	88.8	0.3
Russian Federation	11	11	0.67	73.1	1.0
Saudi Arabia	12	9	NO DATA	80.0	0.8
South Africa	12	9	0.69	88.1	0.8
Turkey	12	12	0.56	82.5	1.0
United Kingdom	13	11	0.67	97.5	1.7
United States	12	12	0.66	91.3	2.8
By regions					
East and South Asia	8.9	8.7	0.51	72.1	1.1
Eastern Europe and Central Asia	11.3	10.4	0.62	73.6	0.6
Latin America and the Caribbean	11.6	11.2	0.57	84.1	0.7
Middle East and North Africa	10.9	9.6	0.54	50.2	0.6
Oceania	8.8	9.6	NO DATA	61.9	NO DATA
OECD members	11.4	11.1	0.66	91.3	2.1
Sub-Saharan Africa	8.8	8.1	0.44	71.8	0.3
By income level					
Low-income countries	9.0	7.9	0.45	65.8	0.3
Lower-middle-income countries	8.7	8.7	0.48	70.4	0.5
Upper-middle-income countries	10.3	9.6	0.56	74.8	1.4
High-income countries	11.4	10.8	0.68	91.3	2.3

	More ambitious	≥ 12 years	≥ 12 years	≥ 0.7	≥ 90	≥ 2.3%
	Moderately ambitious	≥ 9 years	≥ 9 years	≥ 0.5	≥ 70	≥ 1.0%
	Less ambitious	less than 9 years	less than 9 years	below 0.5	below 70	below 1.0%

Transformation 2: Health, Well-Being and Demography

This Transformation promotes key investments in health and well-being. It aligns closely with SDG target 3.8, of achieving universal health coverage and ensuring that all people have access to the health services they need. In the SDGs, UHC is considered as a target in itself but for the purpose of the SDG Transformation scorecards we consider UHC as an enabler (input) for greater health outcomes. Even before the pandemic, the WHO and other international institutions had lamented the slow progress being made towards achieving universal health coverage (WHO, 2019). Compared with the rest of the world, a higher percentage of people in OECD countries tend to be covered by public or mandatory private health insurance, and incidence rates of catastrophic out-of-pocket health expenditures are lower – although there are exceptions, including Mexico, Costa Rica, Poland, and the United States. The SDGs also call on all countries to strengthen their capacity for early warning, risk reduction, and management of national and global health risks (SDG target 3.d). The Global Health Security Index, a measure of pandemic preparedness, turned out to be a rather poor predictor of effective early response to COVID-19, as measured in number of cases and deaths (Lafortune, 2020), indicating that there are important factors at play which are not yet adequately captured by existing policy trackers. Looking ahead, it will be important to define solid international measures and monitoring systems to better gauge countries' preparedness for global health security threats.

Transformation 3: Energy Decarbonization and Sustainable Industry

This Transformation aims to ensure universal access to modern energy sources, decarbonize the energy system by mid-century (in line with the Paris Agreement), and reduce industrial pollution of soil, water, and air. Many countries, especially OECD members and high-income countries, have made commitments to reaching net-zero emissions my mid-century. Over 130 countries are signatories to the UN Climate Ambition Alliance and more than 50 have anchored their net-zero commitment in a law or policy document (Net Zero Tracker, 2022;

UNFCCC, 2022). However, there continues to be a major discrepancy between countries' self-declared ambitions and their tangible efforts and policies. The Climate Action Tracker, an independent scientific analysis of governments' climate actions, finds that not a single G20 country has adopted a sufficient mix of policies and actions compatible with achieving the objectives of the Paris Climate Agreement (2022). Many countries continue to provide significant subsidies for fossil fuels, undercutting efforts to decarbonize the energy system. Countries must also ensure that any economic stimulus provided by COVID-19 recovery packages aligns with Paris climate objectives and supports the transition to net-zero emissions by 2050.

Transformation 4. Sustainable Food, Land, Water, and Oceans

Today's land-use and food systems have led to persistent hunger, malnutrition, and obesity. They account for a quarter of greenhouse gas emissions, over 90 percent of scarcity-weighted water use, most biodiversity loss, the overexploitation of fisheries, eutrophication through nutrient overload, and the pollution of our water and air. At the same time, food systems are highly vulnerable to climate change and land degradation. Integrated strategies are needed to make food systems, land use, and oceans sustainable and healthy for people.

Efforts to track commitments and objectives on Transformation 4 are constrained by the complexity of policies relating to land use, oceans, and agriculture and the absence of internationally agreed targets for biodiversity and land degradation. The debate continues on the "30x30" target for biodiversity: a proposal to have at least 30 percent of the Earth's surface under conservation status by 2030. There is concern on whether the target is sufficient, whether the global community should instead focus on biodiversity "hot spots", and how to address potential negative impacts on communities living in surrounding areas.

We consider that for the moment there is no comprehensive tracker or headline policy indicators (apart from those related to protected areas) available to assess in a meaningful and comprehensive way countries' commitment and efforts on this Transformation. SDSN has launched the

Table 3.3

Scorecard – Transformation 2: Health, Well-being and Demography

Note: Regional and income level averages are population weighted. Details on definitions, sources, and thresholds are available on www.sdgindex.org

Source: Authors' analysis

Transformation 2: Health, Well-being and Demography

	UHC index of service coverage (score, 2019, WHO)	Catastrophic out-of-pocket health spending: Pop. spending 10%+ of household income on health (%, 2016, WHO)	Population coverage for health care (%, 2020, OECD)	Global Health Security Index: Pandemic Preparedness (score, 2021, NIS & Johns Hopkins)
G20 Countries				
Argentina	73.0	9.6	NO DATA	54.4
Australia	87.0	2.5	100.0	71.1
Brazil	75.0	11.8	NO DATA	51.2
Canada	89.0	3.5	100.0	69.8
China	82.0	24.0	NO DATA	47.5
France	84.0	NO DATA	99.9	61.9
Germany	86.0	1.5	100.0	65.5
India	61.0	17.3	NO DATA	42.8
Indonesia	59.0	4.5	NO DATA	50.4
Italy	83.0	9.3	100.0	51.9
Japan	85.0	10.5	100.0	60.5
Korea, Rep.	87.0	12.0	100.0	65.4
Mexico	74.0	1.6	72.4	57.0
Russian Federation	75.0	7.7	NO DATA	49.1
Saudi Arabia	73.0	1.3	NO DATA	44.9
South Africa	67.0	1.0	NO DATA	45.8
Turkey	79.0	3.2	98.8	50.0
United Kingdom	88.0	2.3	100.0	67.2
United States	83.0	4.3	90.3	75.9
By regions				
East and South Asia	67.7	17.3	NO DATA	44.3
Eastern Europe and Central Asia	69.1	10.3	NO DATA	43.2
Latin America and the Caribbean	72.6	10.4	NO DATA	45.4
Middle East and North Africa	68.5	16.4	NO DATA	30.7
Oceania	37.8	NO DATA	NO DATA	25.1
OECD members	82.5	5.9	94.4	63.5
Sub-Saharan Africa	44.5	8.4	NO DATA	32.9
By income level				
Low-income countries	42.4	7.9	NO DATA	28.6
Lower-middle-income countries	57.6	14.8	NO DATA	38.5
Upper-middle-income countries	76.4	15.5	NO DATA	48.0
High-income countries	83.1	6.4	96.7	64.0

	More ambitious	≥ 80	≤ 4%	≥ 99%	≥ 80
	Moderately ambitious	≥ 60	≤ 10%	≥ 95%	≥ 50
	Less ambitious	below 60	above 10%	below 95%	below 50

Table 3.4

Scorecard – Transformation 3: Energy Decarbonization and Sustainable Industry

Note: Regional and income level averages are population weighted. Details on definitions, sources, and thresholds are available on www.sdgindex.org
Source: Authors' analysis

	Transformation 3: Energy Decarbonization and Sustainable Industry				
	UN Climate Ambition Alliance Signatory (March 2022, UN)	**Policy- or NDC-based commitment to reach net-zero emissions by 2050 (March 2022, Net Zero Tracker)**	**1.5°C Paris-agreement-compatible climate action (March 2022, Climate Action Tracker)**	**Unconditional fossil fuel subsidies (USD per capita, March 2022, Energy Policy Tracker)**	**Green COVID-19 Recovery (1 worst – 5 best, April 2022, Green Economy Tracker)**
G20 Countries					
Argentina	✓	X	Highly Insufficient	29.82	2.00
Australia	X	✓	Highly Insufficient	65.53	2.00
Brazil	X	X	Highly Insufficient	2.71	2.00
Canada	✓	✓	Highly Insufficient	537.99	4.00
China	X	2060	Highly Insufficient	17.55	2.00
France	✓	✓	Insufficient	116.01	5.00
Germany	✓	✓	Insufficient	195.23	3.00
India	X	X	Highly Insufficient	27.19	2.00
Indonesia	X	X	Highly Insufficient	23.66	2.00
Italy	✓	✓	Insufficient	65.76	3.00
Japan	✓	✓	Insufficient	12.93	2.00
Korea, Rep.	✓	✓	Highly Insufficient	97.46	3.00
Mexico	✓	X	Highly Insufficient	61.88	2.00
Russian Federation	X	X	Critically Insufficient	35.50	NO DATA
Saudi Arabia	X	X	Highly Insufficient	158.17	1.00
South Africa	X	X	Insufficient	10.66	2.00
Turkey	X	2053	Critically Insufficient	165.68	2.00
United Kingdom	✓	✓	Almost Sufficient	589.53	4.00
United States	X	✓	Insufficient	217.32	3.00
By regions					
East and South Asia	10 of 21	6 of 21	NO DATA	NO DATA	NO DATA
Eastern Europe and Central Asia	14 of 27	7 of 27	NO DATA	NO DATA	NO DATA
Latin America and the Caribbean	22 of 30	7 of 30	NO DATA	NO DATA	NO DATA
Middle East and North Africa	4 of 17	0 of 17	NO DATA	NO DATA	NO DATA
Oceania	12 of 12	2 of 12	NO DATA	NO DATA	NO DATA
OECD members	32 of 37	32 of 37	NO DATA	171.45	NO DATA
Sub-Saharan Africa	40 of 49	4 of 49	NO DATA	NO DATA	NO DATA
By income level					
Low-income countries	26 of 29	3 of 29	NO DATA	NO DATA	NO DATA
Lower-middle-income countries	31 of 49	6 of 49	NO DATA	NO DATA	NO DATA
Upper-middle-income countries	31 of 54	10 of 54	NO DATA	NO DATA	NO DATA
High-income countries	46 of 61	39 of 61	NO DATA	NO DATA	NO DATA

More ambitious	signatory	net-zero by 2050	1.5°C compatible	0 USD/capita	≥ 4
Moderately ambitious	N/A	net-zero by 2060	Almost sufficient	≤ 50 USD/capita	≥ 3
Less ambitious	not a signatory	no commitment	Insufficient	50+ USD/capita	below 3

3. Policy Efforts and Commitments

Food, Environment, Land and Development (FELD) Action Tracker to examine national commitments to achieving sustainable land use, resource management, and food systems – including policies, regulations, and investments. A first assessment of the integration of food and land issues in the Nationally Determined Contributions of G20 countries showed that current commitments and actions are largely insufficient (FOLU and FELD, 2021).

Transformation 5. Sustainable Cities and Communities

Cities and other urban areas are home to around 55 percent of humanity and account for 70 percent of global economic output. By 2050, these shares will increase to 70 and 85 percent, respectively (Jiang and O'Neill, 2017). The OECD estimates that 105 of the 169 SDG targets will not be reached without sufficiently engaging sub-national governments (OECD, 2020). The COVID-19 pandemic too will likely have lasting impacts on urban mobility, land use, and transport systems in developed and developing countries alike. Many urban organizations and associations have mainstreamed the SDGs into their work programs, including UN-Habitat, the United Cities and Local Governments (UCLG), C40, the OECD, Local Governments for Sustainability (ICLEI), and others.

By design, Transformation 5 calls for regional and local policy trackers. These would notably track efforts at the regional and city level to curb urban pollution, increase the affordability of housing, and strengthen access to public transport and mobility. Other policy measures could be considered as proxies of local government commitment to achieving the triple objective of being economically productive, socially inclusive, and environmentally sustainable. SDSN is working with local partners to strengthen policy frameworks in regions and cities, and to reinforce the science–policy interface at the subnational level.

Transformation 6. Digital Revolution for Sustainable Development

Artificial Intelligence and other digital technologies are disrupting almost every sector of the economy, including agriculture (precision agriculture), mining (autonomous vehicles), manufacturing (robotics), retail (e-commerce), finance (e-payments, trading strategies), media (social networks), health (diagnostics, telemedicine), education (online learning), public administration (e-governance, e-voting), and science and technology. Digital technologies can raise productivity, lower production costs, reduce emissions, expand access, dematerialize production, improve matching in markets, enable the use of big data, and make public services more readily available. They can also improve resource-use efficiencies, support the circular economy, enable zero-carbon energy systems, help monitor and protect ecosystems, and assume other critical roles in support of the SDGs.

Tracking commitments and efforts towards Transformation 6 remains difficult, as countries face very different challenges depending on their current level of digitalization. For example, highly connected and digitized countries may need to prioritize issues surrounding cybersecurity, artificial intelligence, and e-government. Less-connected countries, however, may first need to focus on ensuring widespread and affordable internet access and computer literacy education. So far, we have been unable to come up with a reliable framework to gauge countries' commitments and efforts on Transformation 6 that would allow for such distinctions across country contexts. This remains an important item on our research agenda at SDSN.

3.3 Governments' SDG commitments versus SDG Index gaps

Building on the SDSN survey of government efforts for the SDGs as well as the Six Transformations scorecards, this year we present pilot scores rating the commitments and efforts that governments have made towards achieving the SDGs (Figure 3.6). These scores range from 0 (very low SDG commitment) to 100 (very high SDG commitment) and cover all 60 countries in the 2022 SDG Policy Coordination Survey presented in section 3.1, including all G20 countries and most OECD countries. It includes a total of 18 indicators on policy efforts and commitments.

As discussed earlier in this report, the policy data currently available is subject to several caveats and limitations, especially with regards to Transformations 4, 5, and 6. Therefore, this year's scores of government efforts and commitments should be considered as a pilot and interpreted with caution. The methodology and rationale for these scores are explained in a separate note that is available on www.sdgindex.org. We welcome critical comments and feedback that may help to strengthen future iterations of this work.

This pilot assessment reveals that policy efforts and commitments for the SDGs vary significantly across countries, including among G20 countries. The United States, Brazil, and the Russian Federation show the least support for the 2030 Agenda and the SDGs, with the United States being among the few UN Member States to have never submitted a VNR. But even in these countries, despite low federal or national support for the 2030 Agenda and the SDGs, notable commitments and efforts can be found at subnational levels: in regions, states, metropolitan areas, and cities. SDSN has worked, for
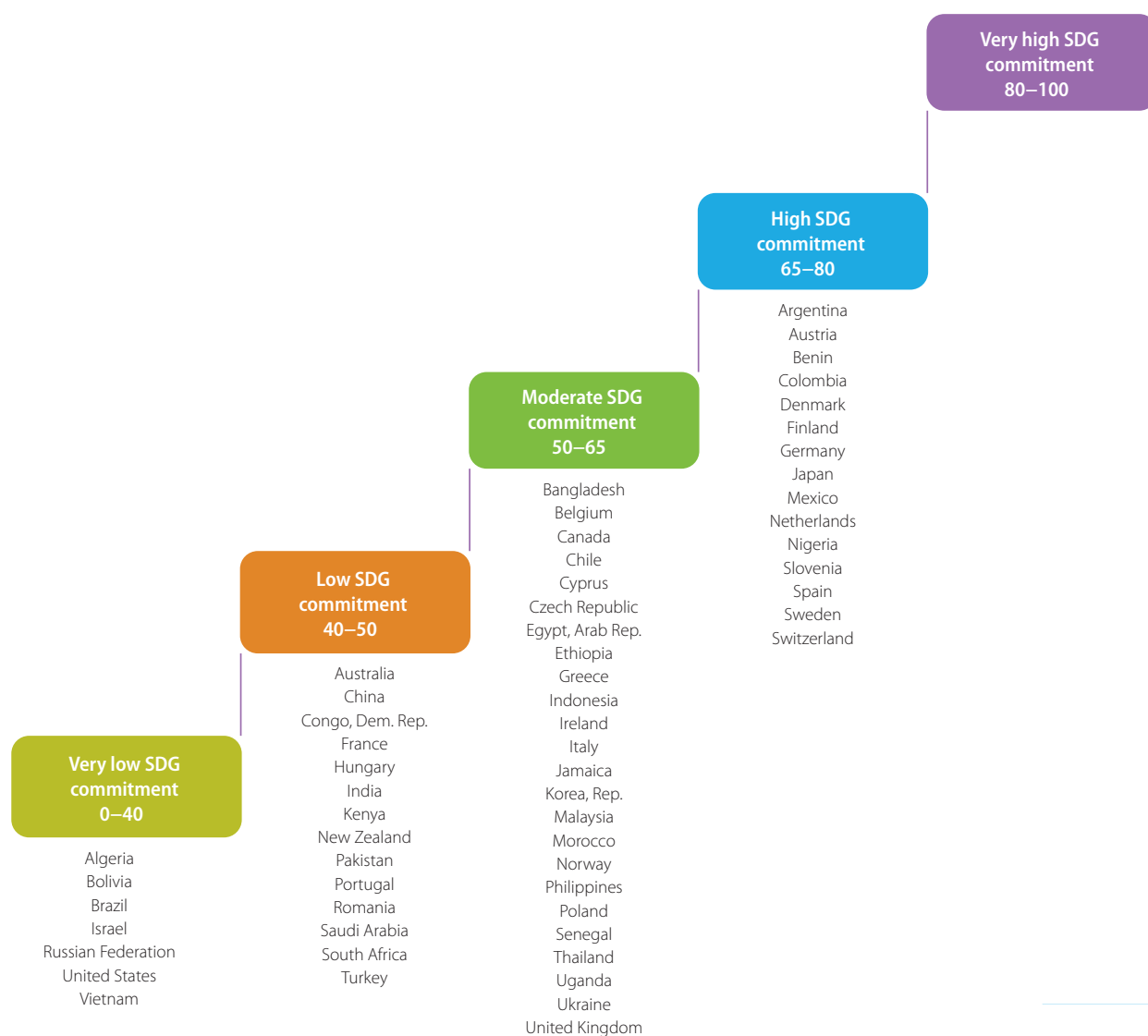
instance, with associations of metropolitan and municipal areas in the United States and Brazil (ICS and SDSN, 2021; Lynch et al., 2019). By contrast, Nordic countries and, among G20 countries, Germany and Mexico, show more support for the SDGs.

Figure 3.7 shows pilot *Governments' Commitment and Efforts for the SDGs* scores in relation to national scores on this year's SDG Index. Benin and Nigeria, for example, have large gaps in their SDG Index yet also earn relatively high scores for their policy efforts. This may help them achieve better results in coming years. Interestingly, Benin and Mexico have both issued SDG Sovereign Bonds in recent years to scale up their sustainable development investments. Establishing the right policy frameworks for sustainable development, building on scientific knowledge and networks, and connecting these frameworks with discussions on access to financing should be major priorities of the international community towards restoring and accelerating SDG progress by 2030 and beyond.

None of the 60 countries included in this assessment attained a score of 80 or more for their commitments and efforts, indicating that none of them has an appropriate set of policies in place to achieve the objectives of the 2030 Agenda. Even among the top performers in Europe, the assessment made by the Climate Action Tracker considers that the strategies and actions of these governments are insufficient to achieve the objectives set out in the Paris Climate Agreement. Many of these countries could also further connect key instruments, such as the national budget and COVID-19 recovery plans, with the SDGs. Ambitious and sound national targets, strategies, and plans are crucial to turn the SDGs into an action agenda.

Figure 3.6

Governments' Commitments and Efforts for the SDGs scores (pilot version)

Very high SDG commitment 80–100

High SDG commitment 65–80

Argentina
Austria
Benin
Colombia
Denmark
Finland
Germany
Japan
Mexico
Netherlands
Nigeria
Slovenia
Spain
Sweden
Switzerland

Moderate SDG commitment 50–65

Bangladesh
Belgium
Canada
Chile
Cyprus
Czech Republic
Egypt, Arab Rep.
Ethiopia
Greece
Indonesia
Ireland
Italy
Jamaica
Korea, Rep.
Malaysia
Morocco
Norway
Philippines
Poland
Senegal
Thailand
Uganda
Ukraine
United Kingdom

Low SDG commitment 40–50

Australia
China
Congo, Dem. Rep.
France
Hungary
India
Kenya
New Zealand
Pakistan
Portugal
Romania
Saudi Arabia
South Africa
Turkey

Very low SDG commitment 0–40

Algeria
Bolivia
Brazil
Israel
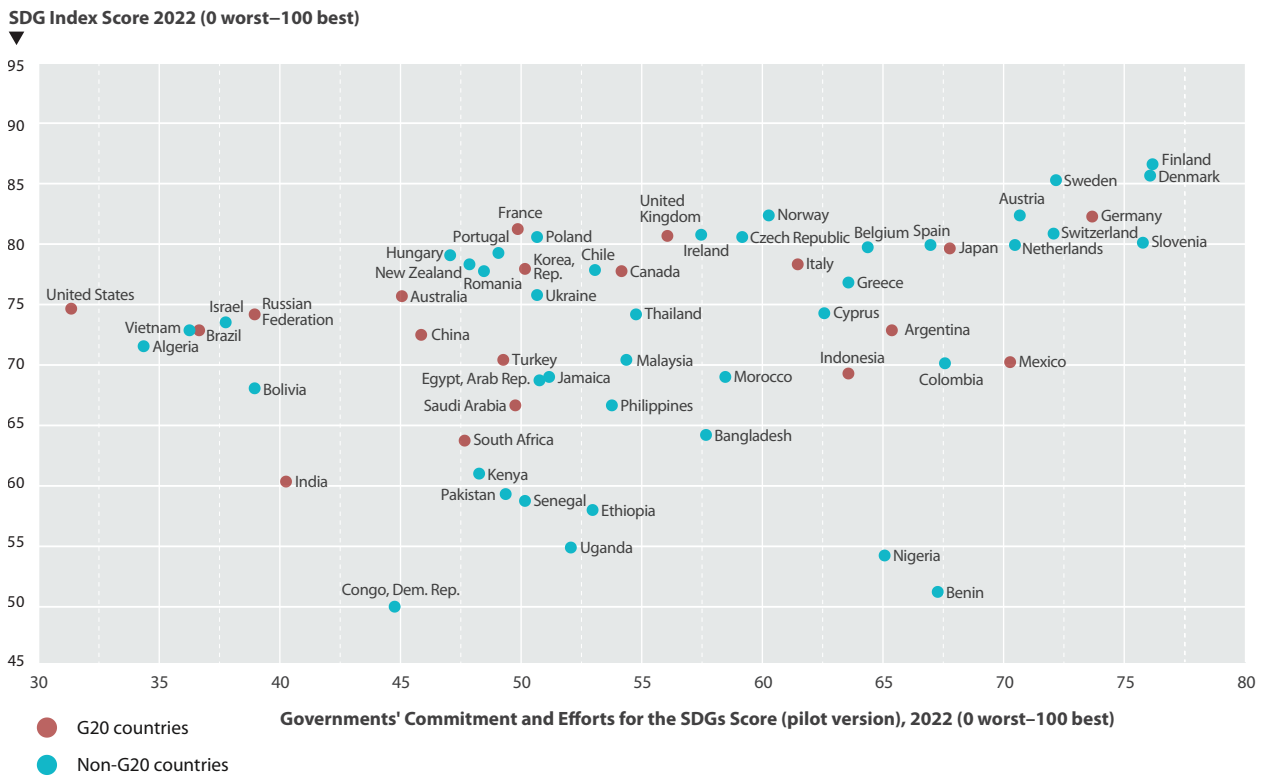Russian Federation
United States
Vietnam

Note: G20 countries in orange. The score for Ukraine reflects the situation as of January 2022.

Source: Authors' analysis. Details on the methodology and the indicators used are available on www.sdgindex.org

Figure 3.7

Governments' Commitment and Efforts for the SDGs Score (pilot version) versus SDG Index Score

SDG Index Score 2022 (0 worst–100 best)
▼

● G20 countries

● Non-G20 countries

Note: G20 countries in red. The score for Ukraine reflects the situation as of January 2022.

Source: Authors' analysis. Details on the methodology and the indicators used are available on www.sdgindex.org