

Opportunities for Green Growth: In Search of Multilateral Coordination



by Luca Franza and Nicola Bilotta



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ABSTRACT

The opportunity for a green recovery in the post covid-19 crisis requires long-term commitments and policies. The G20 is in an ideal position to facilitate constructive dialogue among advanced and emerging economies about re-orienting investment and fiscal action towards a new development paradigm. The Italian Presidency of the G20 can advance the agenda in two interlinked macro-priorities that are fundamental to boost a green recovery and have been at centre of the G20 Summits in recent years: green finance and sustainable infrastructure.

G20 | Climate change | Sustainable development | Finance | Infrastructures

keywords

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by Luca Franza and Nicola Bilotta*

1. Setting the scene

The economic response to the covid-19 pandemic is unprecedented in terms of size of the stimulus packages put up by governments and the speed with which they are being rolled out. Spending in the ongoing phase of reconstruction will have a major impact on, amongst other things, the global greenhouse gas emission trajectory of the next decade. Allocating such spending both wisely and quickly is one of the biggest challenges that policy-makers face. The present time is indeed being experienced as a “make-or-break” moment for the ambitious objective of restructuring the world’s economic development model to make it sustainable from a climate perspective. COP26, the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change scheduled for November 2021, is an important occasion to assess actions taken in support of green growth to date and raise the level of ambition.

This feeling of being close to a decisive moment stems from the awareness that there will not be many other occasions (as countries will have to go back to keep public debt under control) and that the injection of huge amounts of cash may have negative effects (such as potentially high inflation), making it crucial that spending is both wise and impactful. If spending goes to carbon-intensive sectors, the phenomenon of “carbon lock-in” (i.e., being stuck with polluting productive assets) is almost unavoidable.

Of the many worrisome predictions that have circulated in the last few months, perhaps the most striking is that we would need emission reductions on at least the same scale as those observed in 2020 every year from now until 2030 to bring the

* Luca Franza is Scientific Advisor in the Energy, Climate and Resources Programme of the Istituto Affari Internazionali (IAI). Nicola Bilotta is a Researcher in International Political Economy at IAI.

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world onto a Paris-compatible emission trajectory (i.e., limiting global warming to 1.5°C by 2100).¹ This basically means that the huge sacrifices made in 2020 due to covid-19, when economic activity and international mobility were subjected to extensive limitations, have “only” reduced greenhouse gas emissions by what was needed (-7 per cent), and not more.

Clearly, we do not want to achieve the climate targets by having to sacrifice our way of life as much as in the year of the pandemic. Instead the time is propitious for building back better and decoupling economic growth from fossil fuel demand and carbon emissions. Such decoupling is the only way to achieve climate targets without facing perhaps unbearable economic costs.

The good news is that this is possible. The conventional notion that decarbonisation is an economic burden and that there is trade-off between economic growth and the preservation of the environment is giving way to a new realisation that climate change entails high costs, that the energy transition offers lucrative economic opportunities and that long-term “green growth” is achievable. A number of studies point to the fact that low-carbon sectors might offer better returns than carbon-intensive ones (see below). In the year of the pandemic, renewable energy consumption continued to grow in spite of falling energy demand while the consumption of fossil fuels shrank.² Renewables have been experienced as a safe haven by the financial sector in the face of extreme volatility in the commodity market.

The bad news is that much of the stimulus that has been so far allocated in response to covid-19 around the world has gone to traditional, polluting sectors. For the moment, studies and indexes show that “brown” stimulus is either surpassing³ or essentially equalling green stimulus in terms of allocated money.⁴ If this trend is not reversed, we risk a carbon lock-in process, as trillions of US dollars are being spent on boosting economic activity and building or reviving carbon-intensive assets (including infrastructure), extending their lifetime and thus prolonging the carbon era.

An emission rebound is already visible in the first half of 2021,⁵ just like there was a rebound after the 2008–9 global financial crisis. One main reason is larger coal use, particularly in China (which emerged from the crisis earlier than other countries).

¹ UN Environment Programme (UNEP), *Cut Global Emissions by 7.6 Percent Every Year for Next Decade to Meet 1.5°C Paris Target: UN Report*, 26 November 2019, <https://www.unep.org/node/26811>.

² International Energy Agency (IEA), *World Energy Outlook 2020*, Paris, OECD Publishing, October 2020, <https://www.iea.org/reports/world-energy-outlook-2020>.

³ Vivid Economics, *Greenness of Stimulus Index*, February 2021, <https://www.vivideconomics.com/?p=10020>.

⁴ Organisation for Economic Co-operation and Development (OECD) website: *Green Recovery Database*, <https://www.oecd.org/coronavirus/en/themes/green-recovery#Green-recovery-database>.

⁵ Fiona Harvey, “Carbon Emissions to Soar in 2021 by Second Highest Rate in History”, in *The Guardian*, 20 April 2021, <https://www.theguardian.com/p/h5kdh>.

This is yet another example of why we should distinguish announcements (China has pledged to reach carbon neutrality by 2060) from reality. The rebound is not so surprising as history often repeats itself: past crises have indeed all provoked a temporary emissions decline, followed by a strong recovery that has more than compensated for the previous reductions.

2. The rationale for green growth

Fighting global warming has a solid economic rationale. This is the first important realisation to keep in mind when comparing green growth with unsustainable economic growth models. The costs of climate inaction are estimated to be extremely high. A report by Morgan Stanley has shown that the cost of natural disasters provoked by climate change amounted to 650 billion US dollars between 2016 and 2018.⁶ An observable phenomenon is that increased weather variability has already affected food production and is making crops more difficult to grow.⁷ Global warming has the potential to reduce agricultural yields by 30 per cent between now and 2050, affecting up to 500 million farms.⁸ Urban settlements located in coastal regions and in river deltas will be increasingly subjected to floods. This will require substantial amounts of money for clean-up and in some cases resettlement.⁹

Climate change has an economic dimension because it creates costs for the system. More funds are needed for adaptation because climate change is to some extent unavoidable and -indeed it is already happening. An estimate by the UN Environmental Programme has found that the cost of adapting to the consequences of climate change will grow to 140–300 billion US dollars per year by 2030 and 280–500 billion per year by 2050 globally.¹⁰

The negative economic consequences of climate change are not equally distributed across the world. Some countries and regions are much more exposed than others, adding a geopolitical and geo-economic layer to the discussion. Unsurprisingly, today's most fragile economies already are and are going to be ever more the most vulnerable to climate change.

⁶ Tom DiChristopher, "Climate Disasters Cost the World \$650 Billion over 3 Years — Americans Are Bearing the Brunt: Morgan Stanley", in *CNBC*, 14 February 2019, <https://www.cnn.com/2019/02/14/climate-disasters-cost-650-billion-over-3-years-morgan-stanley.html>.

⁷ Deepak K. Ray et al., "Climate Change Has Likely Already Affected Global Food Production", in *PLoS ONE*, Vol. 14, No. 5 (2019), Article e0217148, <https://doi.org/10.1371/journal.pone.0217148>.

⁸ Global Commission on Adaptation, *Adapt Now: A Global Call for Leadership on Climate Resilience*, September 2019, <https://gca.org/?p=333>.

⁹ Energy and Climate Intelligence Unit (ECIU), "Climate Economics: Costs and Benefits", in *ECIU Briefings*, 2014, <https://eciu.net/analysis/briefings/climate-impacts/climate-economics-costs-and-benefits>.

¹⁰ UNEP, *The Adaptation Finance Gap Report*, Nairobi, UNEP, 2016, <https://unepdtu.org/publications/the-adaptation-finance-gap-report>.

A report by the Economist Intelligence Unit has found that climate change could directly cost the world economy 7.9 trillion US dollars by mid-century due to increased drought, flooding and crop failures bringing food scarcity and destroying essential infrastructure.¹¹ This figure translates into a 3 per cent reduction of global GDP by mid-century. Africa was identified as the region most severely hit, as it is estimated to lose 4.7 per cent of its GDP, followed by Latin America with a loss of 3.8 per cent. The most exposed countries are Angola, Nigeria, Egypt, Bangladesh and Venezuela (all developing countries). In comparison, North American and Western European GDPs would only shrink by 1.1 and 1.7 per cent respectively.¹²

The lack of high-quality infrastructure and stronger economic dependence on ecosystems (as the share of subsistence farming in GDP is higher) aggravate the economic damage of climate change in less developed countries. Some latitudes are also more exposed to extreme weather and to the risk of crop failures because the rise in temperature and changing weather patterns are not uniform across the world. Besides, rich nations are much more resilient with respect to the impact of climate change as they have more diversified economies and depend less on natural ecosystems. This cleavage is a political issue and will certainly colour COP26 discussions and negotiations.

The fact that climate change is to some extent unavoidable, as mentioned, should not lead to resignation. To the contrary, limiting global warming sooner rather than later is a sensible course of action also from an economic perspective. Seemingly small variations in the global average temperature can have important economic repercussions. The Intergovernmental Panel on Climate Change estimates that the risks to economic growth due to climate change by 2100 will be significantly lower if global warming is limited to 1.5°C than it would be if it goes up by 2°C.¹³ Relative to the period 1961–1990, the projected additional cost of damages provoked by global warming in 2100 for 1.5°C and 2°C is 54 trillion and 69 trillion US dollars, respectively.¹⁴

A recent study on the costs of historical inaction on climate change estimates that there will be an increase in costs from climate damage if mitigation is postponed, with a median increase of 600 billion US dollars in discounted future damage per year of delayed mitigation (taking 2020 as point of departure). Mitigation costs have increased as a result of the delay accumulated so far and of the fact that decarbonisation now has to happen very rapidly rather than gradually. The

¹¹ Economist Intelligence Unit (EIU), "Global Economy Will Be 3 Percent Smaller by 2050 Due to Lack of Climate Resilience", in *The EIU Update*, 20 November 2019, <https://www.eiu.com/n/global-economy-will-be-3-percent-smaller-by-2050-due-to-lack-of-climate-resilience>.

¹² Ibid.

¹³ Ove Hoegh-Guldberg et al., "Impacts of 1.5°C Global Warming on Natural and Human Systems", in Intergovernmental Panel on Climate Change (IPCC), *Global Warming of 1.5°C. An IPCC Special Report...*, 2018, p. 175-311 at p. 178, <https://www.ipcc.ch/sr15/?p=541>.

¹⁴ Ibid., p. 264.

late start in mitigation requires high costs in the short term (up to 3–5 per cent of global GDP) and further delays would make costs rise rapidly.¹⁵

A number of studies show the economic benefits of investing in low-carbon technologies and infrastructure, both in absolute terms and relative to non-green spending (see below). A huge caveat is that these studies rest on more or less bold assumptions and they make general conclusions from a partial coverage of the economy (in terms of sectors and especially of indirect costs and benefits that are being considered).

For these reasons, a consensus has not been reached, although institutions like the Organisation for Economic Cooperation and Development (OECD) and the International Monetary Fund seem increasingly supportive of green growth.¹⁶ A paper by prominent economists published shortly after the outbreak of covid-19 contained a global survey of senior officials from finance ministries and central banks. It showed that green projects are widely perceived as capable to generate more jobs, offer higher short-term returns per money spent, and guarantee higher long-term cost savings compared with non-green fiscal stimulus.¹⁷

Before covid-19, a report by the Global Commission on the Economy and Climate showed that moving from business-as-usual economic growth to green growth models would generate direct economic gains of 26 trillion US dollars and create over 65 million new jobs by 2030.¹⁸ Also, renewables are now widely recognised to be more labour-intensive than fossil fuels, as labour requirements are high in the construction phase but low in the maintenance phase. A paper by Heidi Garrett-Palmer shows that every 1 million US dollars invested in renewable energy infrastructure or energy efficiency generates more than 7.5 full-time jobs compared with only 2.7 in fossil-fuel infrastructure.¹⁹

In light of this, the International Energy Agency has advised governments to favour shovel-ready projects in the wake of the pandemic to restart the economy while building future-proof infrastructure that would limit mitigation costs to

¹⁵ Benjamin M. Sanderson and Brian C. O'Neill, "Assessing the Costs of Historical Inaction on Climate Change", in *Scientific Reports*, Vol. 10 (June 2020), Article 9173, <https://doi.org/10.1038/s41598-020-66275-4>.

¹⁶ OECD website: Green Recovery Database, cit.; Nicoletta Batini et al., "Building Back Better: How Big Are Green Spending Multipliers?", in *IMF Working Papers*, No. 21/87 (March 2021), <https://doi.org/10.5089/9781513574462.001>.

¹⁷ Cameron Hepburn et al., "Will COVID-19 Fiscal Recovery Packages Accelerate or Retard Progress on Climate Change?", in *Oxford Review of Economic Policy*, Vol. 36, Supplement 1 (8 May 2020), p. 359-381, <https://doi.org/10.1093/oxrep/graa015>.

¹⁸ Global Commission on the Economy and Climate, *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*, Washington, New Climate Economy, 2018, <https://newclimateeconomy.report/2018>.

¹⁹ Heidi Garrett-Peltier, "Green Versus Brown: Comparing the Employment Impacts of Energy Efficiency, Renewable Energy, and Fossil Fuels Using an Input-Output Model", in *Economic Modelling*, Vol. 61 (February 2017), p. 439-447.

be incurred later. Projects of this kind notably include building retrofitting but also the installation of new renewable energy capacity. These activities have the advantages of creating jobs during the most critical years.²⁰

Green construction projects are also less susceptible to offshoring,²¹ which plays well with governments given the increasingly pervasive objective of gaining “strategic autonomy”. The EU for instance is using both an ethical and a realist narrative when supporting green growth, saying that saving the planet is not only a moral imperative but also an instrument to gain geo-economic competitiveness relative to fast-growing countries like China. From this perspective, it is certainly desirable to focus public support on projects that have a local multiplier effect rather than on sectors that require imports from competitors.

An objective of governments engaging in green spending should be that of “kick starting the green innovation machine”,²² and making sure that investing in innovative sectors has spill overs that benefit the wider economy.²³ To maximise the geo-economic effect of green spending, a certain degree of specialisation is needed. Countries should focus on areas where they see a strong potential to gain comparative advantage. Europe for instance should not balk at the idea of losing labour-intensive low-carbon productive activities to countries where labour is cheap. Instead, it should focus spending on high added-value productions and niche technologies.

A clear strategy on energy transition is needed when investing in low-carbon technologies because many energy transition-related investments are interdependent (today’s investment in A only leads to the desired outcome if also B and C receive investments in X and Y years from now). On the one hand, it is sensible to adopt a technology-neutral approach that does not pick winners and that stays open to a number of solutions, because energy transition scenarios operate with moving targets and there is significant uncertainty with regard to what pathway to net-zero will eventually materialise. However, this should be reconciled with the need to avoid dispersion. If a bit of money is invested in dozens of (often mutually incompatible) energy transition solutions, the potential benefits of public spending will be greatly diluted. Finally, while strategic considerations might help energy transition because they incentivise countries to invest in low-carbon technologies, there is also a risk that strategic autonomy turns into protectionism (which can in turn create costly trade barriers and increase the overall cost of the

²⁰ IEA and International Monetary Fund (IMF), *Sustainable Recovery*, Paris, IEA, 2020, <https://www.iea.org/reports/sustainable-recovery>.

²¹ Michael Jacobs, “Green Growth: Economic Theory and Political Discourse”, in *Grantham Research Institute Working Papers*, No. 92 (October 2012), <https://www.lse.ac.uk/granthaminstitute/?p=4062>.

²² Daron Acemoglu et al., “The Environment and Directed Technical Change”, in *The American Economic Review*, Vol. 102, No. 1 (February 2012), p. 131-166, <https://economics.mit.edu/files/8076>.

²³ Philippe Aghion et al., “Path Dependence, Innovation and the Economics of Climate Change”, in *Grantham Research Institute Policy Papers*, November 2014, <https://www.lse.ac.uk/granthaminstitute/?p=11064>.

energy transition).

An important task of policy-makers when implementing green growth strategies is to reduce uncertainty for investors. Public money alone is not enough and private players need to be brought on board. Ideally, the primary role of public support would be that of mobilising substantial private investment that would have not been mobilised otherwise. Reducing uncertainty for private investors is done for instance by avoiding undoing climate policies and regulations (the so-called “do-no-harm” principle, which is indeed embedded in Next Generation EU) and by providing long-term carbon price signals. Provided that they are designed to stand the test of time, taxonomies are a potentially important instrument to measure the embedded carbon footprint of goods (an important basis for carbon pricing) and drive investors’ choices in the long term. Ultimately, however, many low-carbon technologies and sectors can contribute to long-term green growth but there is no one-size-fits-all recipe as the preferred option depends on a country’s socio-economic structure, current energy mix, skills and resource endowment.

3. Towards a green growth: The role of the G20

A green growth paradigm cannot only envision short-term fiscal stimulus, it requires instead long-term commitments and policies. Mobilising private capital and redirecting public finance are key challenges in the definition of a new sustainable development model. A green recovery can only be fully addressed in its complexity at a multilateral level and cannot be appropriately framed by a group of advanced countries or individual nations alone. This is first and foremost due to the irreducible interrelationship between the necessary economic, environmental and social developments that underpin green growth models, and which must be pursued simultaneously.

International cooperation and coordination are then essential to sustain such a shift. The G20 forum is in an ideal position to facilitate constructive dialogue among advanced and emerging economies about re-orienting investment and fiscal action along this pattern. The green growth debate within the G20 has fortunately deep roots. Coordination among G20 countries will be vital for sending market signals to the private sector and ensuring that the most vulnerable receive adequate support.²⁴ Yet, despite its potential, the G20 forum has so far failed to reach consensus on effective common green growth policies, as divergent views on priorities and policy actions among G20 countries persist. The covid-19 pandemic can however provide a unique opportunity to set new collective actions and multilateral coordination towards an innovative paradigm of development.

²⁴ Tanzeed Alam et al., “Covid-19 Recovery: How the G20 Can Accelerate Sustainable Energy Transitions in the Power Sector by Supporting the Private Sector”, in *T20 Saudi Arabia 2020 Policy Briefs*, 2020, <https://www.g20-insights.org/?p=15663>.

How has the G20 position on green growth evolved over the years?

Since the 2009 Summit, the G20 has been discussing global issues related to climate change. Gradually, the G20 leaders have fostered a more comprehensive discussion on how international coordination could promote and support green growth through the sharing of good practises and approaches. At the 2010 Seoul Summit, G20 nations committed to supporting country-led green growth policies that pursue environmentally sustainable growth along with job creation, while ensuring energy access for the poorest. To achieve this goal, G20 member countries started to discuss setting up consistent environmental standards, mobilising funds and supporting education, enterprise and research & development. During the 2011 Cannes Summit, G20 leaders committed to raising 100 billion US dollars every year until 2020 to help developing countries mitigate and adapt to climate change, thus acknowledging the link between green growth and climate change. Yet this goal is far from being achieved.²⁵ Under Mexico's presidency in 2012, the priority of green growth was finally addressed through a cross-cutting approach, resulting in the proposal to establish a Green Climate Fund.²⁶ Moreover, G20 leaders welcomed international efforts to introduce a Green Growth Knowledge Platform and requested an effective mechanism to mobilise public and private funds to boost inclusive green growth investments in developing countries.

During the 2013 Saint-Petersburg G20 Summit, G20 countries decided to promote further green development, dissemination and implementation of the non-prescriptive, voluntary toolkit of policy options for inclusive green growth in the context of sustainable development, including a workshop with developing countries and the initiation of the G20 Dialogue Platform on Inclusive Green Investments for sustainable development and poverty eradication. The 2014 Brisbane G20 Summit final communiqué contained a hotly debated passage on climate change, which expressed support for strong action and "mobilising finance for adaptation and mitigation, such as the Green Climate Fund" – to which the US pledged 3 billion US dollars and Japan 1.5 billion. In 2016, under the Chinese Presidency, building on the work of the G20 Green Finance Study Group, for the first time the global leaders presented green finance as an effective means to support global sustainable growth also in the final declaration.

It was in 2017, during the Hamburg Summit, that G20 leaders finally came out with a specific Climate and Energy Action Plan for Growth. G20 leaders also committed to working jointly to transform their energy systems into affordable, reliable, sustainable and low greenhouse gas emission energy systems as soon as feasible and consistent with the Paris Agreement. The Riyadh G20 Summit in 2020, finally,

²⁵ Independent Expert Group on Climate Finance, *Delivering on the \$100 Billion Climate Finance Commitment and Transforming Climate Finance*, December 2020, <http://bit.ly/ClimateFinanceReport>.

²⁶ Sung Jin Kang, "Green Growth and Sustainable Development in G20: Performance and Prospects", in Sung Jin Kang and Yung Chul Park (eds), *The International Monetary System, Energy and Sustainable Development*, London/New York, Routledge, 2015, p. 273-293.

developed the G20 Action Plan, which set out key principles and commitments to drive forward international economic cooperation during the pandemic crisis, and took steps to support the recovery and achieve strong, sustainable, balanced and inclusive growth.

What stands out from the past summits is that the G20 has gradually evolved its approach from a focus on fossil fuel subsidies to a cross-cutting perspective aimed at linking climate change and green growth. However, the challenge is to transform words into policy actions. Of course, the spectrum of measures and policies needed to lay the foundations for a sustainable recovery from the pandemic crisis is extremely broad, from financing for clean energy infrastructure to providing credit guarantees, to adopting measures to attract more private-sector financing.²⁷ The Italian 2021 presidency of the G20 can advance the agenda in two interlinked macro-priorities that are fundamental to boost a green recovery and have been at centre of the G20 Summits in recent years: (i) green finance, which is a key subset of sustainable finance, and (ii) sustainable infrastructure.

Green financing can be broadly defined as “financing of investments that provide environmental benefits in the context of environmentally sustainable development”.²⁸ This year the G20 Finance Ministers and Central Bank Governors elevated the Sustainable Finance Study Group to the status of Working Group,²⁹ acknowledging the centrality of this priority. The appointment of the US and China as co-chairs of this Working Group can help advance the agenda on these issues. Financial markets will have to play a fundamental role in enabling the shift towards sustainable development. The challenge is to devise new ways to reorient financial flows from brown investments into green ones. Although several new forms for financing green projects have been developed recently – such as green bonds – much more needs to be done.

To scale up finance for green projects, there is the need to mobilise banks and non-banking financial institutions. However, there are factors that tend to undermine private investments in green projects. Banks might be discouraged from investing in projects that are considered too risky due to the tight Basel capital requirements³⁰ under which they operate. Moreover, the business model of banks is mainly based on deposits as source of funding. Deposits are however short-medium liabilities whereas most green investment requires long-term finance. An effort should be made to attract non-bank financial institutions – such as pension funds and insurance companies.³¹ These economic players hold long-term liabilities, being

²⁷ Ibid.

²⁸ Green Finance Platform website: *Green Finance Measures Database Technical Note*, <https://www.greenfinanceplatform.org/financial-measures/browse>.

²⁹ See G20, *G20 Sustainable Finance Working Group*, 16 April 2021, <https://www.g20.org/g20-sustainable-finance-working-group.html>.

³⁰ Basel III requirements refer to a set of international regulations which require banks to maintain certain level of reserve capital to mitigate risks of insolvency.

³¹ Gianfranco Gianfrate and Gianni Lorenzato, “Stimulating Non-Bank Financial Institutions’

thus suitable to finance long-term projects. Another driver will be central banks, which can help smooth the transition toward green financing. Through their oversight and regulatory policy, central banks can enforce new green finance models and adequate pricing of environmental and carbon risk by financial institutions.³² Central banks could ease the commitment of private financial institutions to transit lending and investment portfolios to net zero.³³

Both objectives – further mobilisation of banks and non-bank financial institutions, and deeper central bank policy actions – would require improvement of the quality of standardised climate disclosure as well as harmonisation of global green finance standards. Countries should increasingly share best practices to accelerate this transition and coordinate to policy actions and regulations.

Interlinked with green financing is the issue of investment in sustainable infrastructure. The G20 countries produce around 79 per cent of global CO₂ emissions, of which 70 per cent comes from the energy, construction and transport sectors. Thus, the G20 can play a key role in accelerating a shift from primary energy sources to low-carbon and energy efficiency infrastructure. Even before the pandemic, there was already a large gap in sustainable infrastructure in terms of existing infrastructure that is incompatible with sustainability goals or requires significant upgrades to incorporate new green technologies, and in terms of new infrastructures.

Global annual investment into core infrastructure³⁴ is estimated at 6–6.8 trillion US dollars.³⁵ The investment need is mainly concentrated in energy and transport infrastructure, which accounts for 3.9 trillion and 2 trillion US dollars, respectively.³⁶ However, in aligning investments with the Paris goals additional costs would pile up, adding financing needs for about 6 trillion US dollars. The gap of sustainable infrastructure investments is estimated to be around 3.2 trillion US dollars per year – 2.1 per cent of global GDP.³⁷ The World Bank calculates that in emerging economies, this gap is between 1.5 and 2.7 trillion US dollars on an annual basis.³⁸

Participation in Green Investments”, in *ADBI Working Papers*, No. 860 (August 2018), <https://www.adb.org/node/445026>.

³² Jeffrey D. Sachs et al., “Why Is Green Finance Important?”, in *ADBI Working Papers*, No. 917 (January 2019), <https://www.adb.org/node/481936>.

³³ Alexander Lehmann, “Banks in a Net Zero Europe”, in *Bruegel Blog*, 1 June 2021, <https://www.bruegel.org/?p=42932>.

³⁴ Core infrastructure includes power generation and distribution, transport, water and sanitation systems and telecommunications.

³⁵ Amar Bhattacharya et al., *Aligning G20 Infrastructure Investment with Climate Goals & the 2030 Agenda*, Foundations Platform F20: A Report to the G20, June 2019, p. 39, https://www-foundations-20.org/wp-content/uploads/2019/06/F20-report-to-the-G20-2019_Infrastrucutre-Investment.pdf.

³⁶ *Ibid.*, p. 29.

³⁷ *Ibid.*, p. 4.

³⁸ Dana Vorisek and Shu Yu, “Understanding the Cost of Achieving the Sustainable Development Goal”, in *World Bank Policy Research Working Papers*, No. 9146 (February 2020), <http://hdl.handle.net/10986/33407>.

4. Setting the path towards sustainable finance and infrastructure

To promote a green recovery, the Italian Presidency of the G20 should³⁹:

- *Advance the multilateral agenda in support of net-zero investments.* A practical step is to support a “common ground” taxonomy process within the International Platform on Sustainable Finance. This multilateral effort could help enable and scale up private capital participation in sustainable investments. The Green Bond Principles from the International Capital Markets Association or the Climate Bonds Standard set positive examples on which the G20 could build its effort. These initiatives aim at creating standardised guidelines and requirements when issuing green bonds.
- *Promote a standardisation of green finance mechanisms and practises through shared reporting procedures and indicators for all asset classes.* The G20 leaders should advance international regulatory standards – such as those enforced by Basel III and Solvency II⁴⁰ – to incorporate environment risks in financial institutions’ balance sheet as well as to ease regulatory requirements for sustainable investments to enhance the provision of credit to environmentally sustainable projects.
- *Promote the standardisation of the socioenvironmental metrics and evaluation processes that are being used by different financial institutions* to create a unified environmental, social and governance (ESG) risk matrix for infrastructure projects. The G20 could foster a review of the environmental impact reports of major infrastructure investments and categorise these impacts to create a socioenvironmental risk taxonomy for each type of infrastructure asset. Once these risks are listed, an objective scoring method should be employed to classify them based on the magnitude, duration and reversibility of their potential socioenvironmental impact.
- *Promote innovative financing mechanisms for sustainable infrastructure.* For example, the development of Sustainable Development Bond (SDB) markets could help in providing new funds to finance sustainable projects. SDBs differ from a traditional bond in establishing explicit commitments by the issuers with projects that generate a positive, measurable and auditable sustainability impact. Because of the value-added related to the final use of the resources, SDBs are better suited for impact investors and funds that need to meet ESG-related investment targets, and are associated with better financial conditions to the issuer.

³⁹ Dennis Görlich, Juliane Stein-Zalai and Katharina Lima de Miranda, *Infrastructure Investment and Financing. T20 Recommendations Report*, 16 January 2020, <https://www.g20-insights.org/wp-content/uploads/2020/04/T20-Recommendations-Report-Infrastructure-Investment-and-Financing.pdf>.

⁴⁰ Basel III and Solvency II are the regulatory framework which ensure the quality and level of capital held by banks and insurers.

- *Support a shared framework to establish Green Banks*, defined by the OECD as public-private entities that promote investments in sustainable and climate-resilient infrastructure. These banks could be fundamental in enhancing credit supply in the first phases of a green project, facilitating investments from traditional financial institutions once the project has started.
- *Advance the standardisation and transparency of data associated to an infrastructure project*. G20 countries should leverage technological solutions to improve the quality and quantity of data related to infrastructure. The exploitation of more precise and standardised data could reduce information asymmetry and, ultimately, attract private investors.

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Tanzeed Alam et al., "Covid-19 Recovery: How the G20 Can Accelerate Sustainable Energy Transitions in the Power Sector by Supporting the Private Sector", in *T20 Saudi Arabia 2020 Policy Briefs*, 2020, <https://www.g20-insights.org/?p=15663>

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