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The socio-economic impacts of COVID-19 and how to deploy ICF in the context of green stimulus packages
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The socio-economic impacts of COVID-19 and how to deploy ICF in the context of green stimulus packages

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Executive summary

This report synthesizes findings related to the socio-economic impacts of the COVID-19 pandemic on emerging and developing economies, status of countries’ green stimulus packages, and implications for international climate finance to enhance such green elements in domestic recovery strategies. The synthesis includes two levels: first, an international review on these topics is provided, and second, respective country perspectives from Brazil, India, Indonesia, South Africa, and the EU are presented. Recommendations as to how to deploy international climate finance to enhance green recovery packages were provided by Brazil, India, Indonesia, South Africa.

The report finds that low- and middle-income countries are particularly affected by the socio-economic impacts of the COVID-19 pandemic. We refer to these as 'red' issues - meaning a focus on socio-economic challenges. They often face greater downside exposure to the COVID-19 outbreak as many of them rely extensively on some of the most affected sectors, such as tourism and commodity exports. Debt crises in developing countries are expected to deepen as their governments’ borrowing increases while simultaneously their ability to meet financial obligations diminishes. As of July 2020, $11.8 trillion in recovery packages have been announced internationally; however, most of these recovery programs do not support sustainability or climate resilience in the recipient sectors. Potentially, a wide range of international finance instruments related to grants, loans, concessional loans, debt relief, and conditional funding are available and are discussed in terms of potentials and possible pitfalls.

Country perspectives on the deployment of international climate finance to support green recovery strategies show that many governments appear to make decisions that ignore the synergies that can be achieved by also taking into consideration red and green objectives. International climate finance may support the inclusion of green elements in such recovery packages according to individual country circumstances: based on an analysis, this may vary between assistance to further development of fiscal instruments and taxes, to just transition transactions in energy sectors, or to deploy market mechanisms like green bonds and loans to tackle liquidity issues and finance climate actions. The EU is expected to play a dual role here in terms of leading by example for green recovery as well as by being a provider of climate finance to support green recovery programs in developing and emerging economies. Finally, debt relief mechanisms in the area of climate change are also proposed.
CHAPTER ONE

Global review of socio-economic impacts of COVID-19 and how to deploy ICF in the context of green stimulus packages
The COVID-19 pandemic has led governments around the world to implement a range of policy measures aiming to contain the viral spread and mitigate the loss of life. Many containment measures – such as movement restrictions and closures of airports, borders, non-essential shops, and restaurants – have greatly decreased economic activity. Consequently, the private consumption of non-essential goods and services dropped sharply. The demand shock induced a revenue loss that has led to the permanent closure of many businesses. The fall in demand for commodities further prompted a sharp decrease in their price, particularly harming exporting nations (World Bank Group, 2020). Lockdown measures also increased unemployment; the ILO found a decrease in global working hours of 14% during the second quarter of 2020, corresponding to 480 million full-time workers, 280 million of which are located in Asia and the Pacific (International Labour Organization, 2020).

Low- and middle-income countries are heavily affected by the socio-economic impacts of the COVID-19 pandemic and, hence, face particularly difficult policy choices. With larger shares of population in absolute poverty, the socio-economic issues are higher on their policy agendas. Developing countries often face greater downside exposure to the COVID-19 outbreak as many of them rely extensively on some of the most affected sectors, such as tourism and commodity exports. The slowdown in global trade created significant disturbances to global supply chains – many of which are based in emerging markets. Developing nations have suffered from a significant capital outflow of approximately 0.8% of GDP in 3 months (World Bank Group, 2020) due to market and policy uncertainty. Moreover, most small businesses can only survive 6-28 weeks of lockdown in developing countries (Panizza and Djankov, 2020), leading to many business closures during the last months. The pandemic has also had a significant impact on education. Many children lack the financial resources necessary for remote learning and, thus, have been completely deprived of education during lockdowns. Lastly, developing countries often spend less than 5% of GDP on public health. This creates many public health challenges that wealthier nations do not face as their health systems are already strained (Akyüz, 2017). The aforementioned socio-economic challenges require difficult policy choices to be made as well as a large amount of spending to finance.
1.2

Greening red recoveries

**Debt crises in developing countries are expected to deepen as their governments’ borrowing increases while their ability to meet financial obligations simultaneously diminishes.** The Prime Minister of Ethiopia Abiy Ahmed stated, “in 2019, 64 countries, nearly half of them in sub-Saharan Africa, spent more on servicing external debt than on health” (Panizza and Djankov, 2020). The pandemic puts an additional strain on countries already struggling to meet their financial obligations, working to increase their indebtedness. Furthermore, many developing countries’ ability to service their outstanding debt is simultaneously weakened by the depreciation of their currencies and the loss in tax revenues (Panizza and Djankov, 2020). In Kenya, for instance, 56% of projected revenue collection for 2020/2021 will be used to pay debt costs (Cilliers et al., 2020). Furthermore, the US, Europe, Japan, and other developed countries can rely on quantitative easing to lessen their debt burden, a policy mechanism that may be too risky to use for developing countries that have substantial borrowings in foreign currencies. Ricard Hausmann of the Harvard Kennedy School expects that many of these countries will depend heavily on the IMF for financial support (Hausmann, 2020).

**A big challenge of the COVID-19 pandemic is to provide relief to economies worldwide while also promoting sustainable recovery.** Addressing both a health emergency and an economic crisis are extremely challenging tasks for countries around the world. Facing acute economic recessions, many governments offer support to the largest existing sectors in their economy. These measures inevitably lead to maintenance of the economic ‘status quo’ that was prevalent before the pandemic started. However, the largest economic sectors – such as energy, transport, agriculture, and industry – have significant environmental impacts. If the recovery packages for these sectors do not account for environmental considerations, then stimulus may severely aggravate the already precarious state of the climate emergency, especially in countries that are less prepared to address the pandemic. In order to ensure environmentally conscientious economic prosperity, recovery efforts must provide relief to sectors in financial distress while simultaneously promoting sustainability or, at the least, not undermining the Paris Agreement goals.

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1 In April 2020, the US was buying roughly $41 billion in assets daily to inject liquidity and stimulate economic activity.
As of October 23, 2020, $12.7 trillion in recovery packages have been announced internationally, however, most of these recovery programs do not support sustainability or resilience in the recipient sectors (Vivid Economics, 2020). Almost thirty percent of governmental recovery payments are dedicated to sectors with high environmental impact (agriculture, industry, manufacturing, waste, energy, transportation) and stimulus packages in 18 of 23 countries have a net negative impact on the environment. In the energy sector, for example, G20 nations dedicated $44.49 per capita to fossil fuels – 87% of which not conditional on any climate targets – compared with only $30.23 for clean energy (Energy Policy Tracker, 2020; as of 26th August 2020).

The Green Stimulus Index indicates that emerging economies tend to have smaller and less sustainability-oriented stimulus packages when compared to developed economies. To assess the environmental impacts of COVID-19 recovery efforts, Vivid Economics (2020) developed the Green Stimulus Index (GSI), which examines the share of stimulus funds flowing into environmentally relevant sectors. The GSI is a number between minus 100 and 100 where negative values indicate a net negative environmental contribution and vice versa. The larger the GSI (displayed in Figure 1), the ‘greener’ the stimulus package. Even though low- and middle-income countries are particularly affected by COVID-19, their recovery packages tend to be smaller than those of developed nations. This reflects the debt and liquidity constraints many emerging countries are facing. Moreover, their stimulus packages are less sustainability-oriented and more focused on providing swift relief of the significant socio-economic challenges developing countries are facing.

Climate action is a necessary complement to COVID-19 economic recovery efforts due to the high cost of climate inaction. Vice President of the European Commission, Frans Timmermans, stated “The cost of climate action may be high but it is dwarfed by the cost of inaction” (Energy Policy Tracker, 2020). The acute severity of the employment crises around the world calls for substantial and immediate action. For example, aviation has been drastically impacted by COVID-19 due to a stark drop in global demand (IATA, 2020). Stimulus efforts targeting the airline industry would result in immediate relief for the thousands forced into unemployment, thus yielding high short-term benefits per dollar spent. Aviation is incredibly carbon intensive, so despite the short-term benefits, a stimulus to aviation effectively acts as a subsidy for a carbon-intensive industry. Implementing currently proposed recovery packages without taking into account sustainability could contribute to accelerated global warming, more frequent natural disasters, and loss of biodiversity. Moreover, many of the poorest countries today are also the most vulnerable to the effects of climate change; failure to climate-proof the world economy could result in climate-driven inequities for decades to come. Therefore, the question is not “whether we can afford to be green” but rather “whether we can afford not to be green” – and leaders from countries around the world agree that the answer is “no” (Green Climate Fund, 2020).
Despite the immense cost to human life and the economy, the COVID-19 pandemic also presents an opportunity for moving toward a more sustainable future. There are four main long-term benefits to sustainable COVID-19 recovery efforts. These are underscored in Box 1.

**BOX 1**

**Benefits from sustainable COVID-19 recovery efforts**

- **Economic growth:** as global climate change deepens, demand for services in sustainable sectors is projected to grow (UNPRI; Vivid Economics; and Energy Transition Advisors, 2019). As a result, investments in these sectors will yield greater long-term GDP and employment effects. This is sometimes referred to as a stronger “multiplier effect,” as every dollar spent on sustainable recovery has the potential to create more long-term growth relative to carbon intensive recovery efforts.
Resilience to future crises: sustainable recovery efforts will lower the risk of exposure to future climate and health crises. This has the potential to create significant financial savings as climate change worsens.

Reducing global inequalities: developing countries are most exposed to climate risk despite having historically contributed the least to global carbon emissions. These countries stand the most to gain economically in the long run from sustainable development and any reduction in global pollutants will improve economic outcomes for inhabitants of developing countries. This will help to “narrow the gap” and support a “just transition.”

Indirect benefits from conservation: preservation and conservation of the natural world have a plethora of indirect benefits. Global food security, increased mental health from green space, and affordable energy are just a small sample from a long list of benefits (Thomas, 2018). These benefits generally fall under one of three main categories: economic, health, and social.

Sustainable stimulus packages may generate greater long-term benefits than traditional stimulus. In a global review of expert views, Hepburn et al. (2020) find an unequivocal agreement that green recovery programs are much more likely to yield long-run benefits. The pandemic-induced, sharp increase in unemployment presents an immense opportunity to create employment in ‘green’ sectors with long-term benefits (environmental sustainability), which are less likely to disappear in the future (economic sustainability). For example, re-directing investment into green infrastructure projects can be highly beneficial, especially in times of recovery, as these endeavors are labor-intensive in their early stages, thus creating many jobs (Hepburn et al., 2020). Garrett-Peltier (2017) estimates that a stimulus targeting renewable energy creates almost three times as many jobs as one directed at fossil fuels. Moreover, the pandemic underscores weaknesses in our system, emphasizing which sectors require investment to adapt to the current circumstances. A shift toward more flexible and digitalized work patterns would not only be more considerate of the environment, but also render our economy more resilient to future crises. This is supported by Cilliers et al. (2020), who argue that the pandemic might “accelerate a digital transition in Africa and facilitate new technologies,” effectively fast-tracking Africa toward a more sustainable future.
It is crucial to provide financial support to those countries most affected by COVID-19 and climate change, to ensure they can recover swiftly and leverage long-term benefits. As low- and middle-income countries are most affected by the dual challenge of COVID-19 and climate change, suitable response mechanisms can significantly enhance their prospects both economically (short-term relief, long-term growth) and environmentally (disaster risk reduction, food security). Due to the liquidity and debt constraints of many emerging economies, developed nations must support these efforts financially. This is particularly important in light of the disproportionate burden that has been placed on less well-off countries and the historical responsibility of developed countries in causing climate change.
Deploying ICF in the context of green stimulus packages

A variety of financial tools can assist low- and middle-income countries in greening their COVID-19 recovery plans. Developing countries are most exposed to the economic impacts of both COVID-19 and climate change. As part of a ‘just transition’ to a zero-carbon future, redistribution may be a desirable policy objective to spread the COVID-19 impacts more evenly. Table 1 provides descriptions of the five main international financial tools available to support COVID-19 recovery, including examples and a non-exhaustive list of advantages and disadvantages for each. Table 4 in the annex provides a longer list of examples of each of these instruments. There is not a one-size-fits-all solution; which of these tools is/are most effective will depend on the specific circumstances of both donor and recipient.

### Table 1

**International finance tools available for COVID-19 recovery**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
<th>Example</th>
<th>Benefits</th>
<th>Potential challenges</th>
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<tr>
<td><strong>Grants</strong></td>
<td>Standard non-repayable grant with no strings attached</td>
<td>Kenya: $50 million USD funded by World Bank for COVID-19 relief</td>
<td>Immediate relief for countries drastically in need</td>
<td>Redistributive</td>
</tr>
<tr>
<td><strong>Loans</strong></td>
<td>Repayable loans at market rate</td>
<td>Moldova: $235 million USD rapid financing from the IMF</td>
<td>Loans contain a market-based mechanism (interest payments) that incentivize efficient spending</td>
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Developed countries could issue funding in the form of grants or loans to support green recovery planning and implementation in developing countries. Low- and middle-income countries will require additional capital to stem the disproportionate burden of the COVID-19 pandemic, particularly if stimulus packages should be aimed at both economic recovery and environmental sustainability. To that end, donors could deploy either repayable loans or non-repayable grants.

### Tool Description Example Benefits Potential challenges

| **Concessional loans** | New or existing loans with below market rates, long grace periods, or long maturity periods | **Madagascar:** $171 million USD from Rapid Credit Facility (RCF) from the IMF | Immediate relief for countries in need  
Debt servicing does not begin until post crisis (potentially)  
Provides immediate relief to countries that have a limited fiscal space | Serves as a ‘bridge’ between market rate loans and grants but this might not be enough. Serious crises may last long enough that even below market rate interest could be detrimental |

| **Debt forgiveness** | Forgiveness of existing debt | **Tanzania:** $14.3 million USD debt relief funded by IMF | Frees up funding for direct relief efforts instead of debt servicing | Potential moral hazard issue: may encourage risky borrowing behavior in future  
Not clear if money will be spent on COVID-19 measures  
Exchange rate risks |

| **Conditional funding** | Funding that is received only if the recipient meets specific climate targets (result-based funding). Conditionality can be combined with any of the tools above | **Madagascar:** $20 million USD for debt-for-climate swaps from the Government of France | Relieves acute COVID-19 impacts and promotes sustainability  
Potential to jumpstart green sectors | The use of policy conditions to induce ownership over a reform agenda has long been understood a failed strategy (Dollar & Pritchett, 1998; Easterly, 2001).  
Poor design by international elites may lead to adverse local reactions  
May create incentive to misreport progress |

**Note:** The financial tools presented here are a representative subset of the tools outlined by the IMF for a COVID-19 recovery. The IMF focuses on narrow categories for defining the financial tools they use. These categories lead to some redundancies since the different categories might be delivered through the same tool.

**Source:** Vivid Economics
The former should be considered carefully, however, as it would add further pressure to the anticipated debt crisis in developing countries and are linked to exchange-rate risks for the loan-taker. Grants may be more desirable as they present an opportunity to redistribute both the impacts of COVID-19 and the deepening climate crisis. However, the absence of a market-based mechanism may lead to market distortion and less efficient spending of grants.

**Donors could also decide to issue new loans on concessional terms or introduce conccessionality to existing loans.** Loans could be offered at rates substantially lower than market rates or with an extended grace/maturity period. The IMF has pursued an aggressive COVID-19 recovery through the expansion of concessional finance via its Rapid Credit Facility (RCF). Loans received from the RCF have a zero interest rate, a 5 ½ year grace period, and a 10 year maturity (IMF, 2020). A report by the Bloomberg New Energy Finance Group (BNEF, 2019) finds that concessional finance has precedence of promoting sustainable development. In particular, Mexico received $100 million in concessional finance that jumpstarted its wind energy industry. Wind power in Mexico is now worth over $11.8 billion. Despite the successes of concessional financing, dialogue and fair negotiations must take place around the terms of conditionality so that liquidity provided by loans is used efficiently (Benoît, 2015). Moreover, as loans are typically issued in the lender’s currency, exchange-rate risk remains an important factor.

**In light of potential debt emergencies, donors could also consider relieving recipients from part of their debt commitments.** Developed countries could forgive part of the debt held by low- and middle-income countries as part of a debt relief program. Debt forgiveness would help to mitigate the intensity of the potentially impending debt crisis or and could even avoid it altogether. Given the immediate financial demands of COVID-19 relief, many countries risk defaulting on existing debt in the absence of sufficient debt relief. However, debt relief has a salient downside: moral hazard. Loan forgiveness incentivizes debtors to accumulate more debt than they are capable of fulfilling as they may expect borrowings to be forgiven again in the future (Dreher, 2004). Additionally, there is growing evidence that debt forgiveness is not sufficient for environmental protection (Bhattarai and Hammig, 2001). It needs to be coupled with effective institutions that can efficiently reallocate funds in a manner that makes citizens wealthier as a result of the decreased debt burden.

**Financial support could also be granted conditional on the recipient country meeting specific climate targets.** Result-based funding incentivizes recipient countries to meet their climate targets while simultaneously assisting them in addressing the detrimental economic effects of COVID-19.

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2 By April 2020, three countries (Venezuela, Argentina, Lebanon) had already defaulted.
3 This position is driven by the idea of an ‘Environmental Kuznets Curve’ (or EKC). The EKC states that environmental conservation is a luxury good and, thus, demand for conservation (or environmental quality) increases after a certain “satiation” level of income is reached (Stern, 2004). The main implication from the EKC is that demand for environmental quality can potentially be increased via increasing GDP per capita.
For example, debt relief could take the form of debt-for-climate swaps, in which the creditor forgives part or all of the debt in exchange for a commitment by the debtor to invest in a national climate mitigation and adaptation program (Fuller et al., 2018). Moreover, countries could form "climate teams" in which partners (donors) pre-commit to total maximum funding along with a price per ton of mitigation beyond the Nationally Determined Contributions (NDCs) that hosts (recipients) receive in results-based payments (Climate Teams, 2019). Result-based ICF is the subject of a wide range of criticism. According to a 2015 report by Perspectives Climate Change, there is a multitude of issues affiliated with debt-for-climate swaps including efficient spending concerns, high transaction costs, shortfalls in domestic budgets, risks of inflation, and perceived sovereignty issues (Perspectives Climate Change, 2015). For example, a debt-for-climate swap case in Madagascar indicates local resentment for the conservation projects (Kaaristo, 2007).
This section evaluates domestic green recovery measures and scores them against multiple indicators to facilitate decision-making in the international climate finance sphere. There are three criteria for scoring international climate finance – economic effectiveness, sustainability, and equity – each depending on the green recovery measures they are financing. This section provides a brief overview and analysis of the different tools available to recipient countries (as opposed to donor countries, as in the last section) to green their recovery efforts. It is intended to assist a) recipients in deciding which recovery actions to take, and b) donors in deciding which measure to support using the ICF tools available to them. Jointly with the preceding section, this analysis aims to support the dialogue between donors and recipients when evaluating which ICF/policy mix is most appropriate given the specific local circumstances.

**COVID-19 recovery efforts are evaluated against three key dimensions: economic effectiveness, sustainability, and equity.** These are defined in Box 2. Table 5 (Annex) includes evaluations of some announced policies based on these criteria. The policy evaluation in Table 5 is based on a preliminary literature review and is tentative, as it is inevitably limited in scope and depth by the lack of experience with COVID-19 recovery packages to date, as well as the constrained, but constantly increasing, availability of literature.

**BOX 2**

**Criteria for scoring COVID-19 recovery efforts**

- **Economic effectiveness** is defined as the degree to which the policy supports economic recovery (e.g. GDP, employment retention/creation), independent of environmental considerations.

- **Sustainability** evaluation indicates whether the example creates a shift to more sustainable institutions, policies, markets, or practices. The higher a policy scores in this dimension, the more likely it is to engender “transformational change.”
Equity takes into consideration which groups benefit most from the policy and whether it exacerbates or ameliorates inequality (of opportunity). This measure is an indicator of the policy’s potential to support a “just transition.”

**Bailouts with green strings attached tend to be highly economically effective but are generally weak in their sustainability and equity considerations.** Green bailouts are aids provided to firms in financial distress; the funding is conditional on the firms’ compliance with green standards set by governmental entities, entailing the implementation of sustainable corporate policy. These bailouts can be applied to a wide range of industries as shown by Canada’s Large Employer Emergency Financing policy, but mostly concern high-emissions sectors, such as the Air France – KLM bailout (Vivid Economics, 2020). With their key objective being to protect industry and jobs, bailouts are strong in their effectiveness to engender economic recovery. Unfortunately, the “green strings attached” are often loosely defined, not compulsory, or not disclosed to the public, thus limiting their environmental orientation (Partington, 2020). Lastly, while bailouts do protect the jobs of many low-paid workers in some sectors, they can easily be taken advantage of by executives and shareholders if not carefully designed, thus widening the inequality gap. Additionally, bailouts create a moral hazard issue in that they incentivize receiving firms to expose themselves to more financial risk than they can (potentially) bear in the future.

**Green public programs, on the other hand, are only moderately economically effective in the short-run but display medium-to-high sustainability and equity standards.** These programs are a direct financial injection into the economy. Green public programs generally score well in terms of sustainability as investments are directed at increasing the size and scope of climate friendly sectors. However, this can lead to some structural unemployment in the short-term. Projects often deal with the expansion and strengthening of renewable energy infrastructures, such as the development of renewables in Nigeria (Evans and Gabbatiss, 2020). Other projects support the green transition of a specific industry, like agriculture (Stevens, 2011). These programs often target producers or consumers at the lower end of the wealth distribution. Households without access to electricity or rural farmers are common targets, supporting the aim of a “just transition.”

**Financial incentives for the private sector, in the form of loans, grants, subsidies, and tax reductions, display medium-to-high sustainability but vary considerably in their effectiveness and equity scores.** Funding in the form of financial incentives for the private sector is a core component of the green transition, as it can transform markets and behaviors. There is a trade-off between economic effectiveness and equity with this financial tool. For example, higher purchase subsidies for electric and hybrid cars in Germany boosts a core industry but mostly benefits automotive firms and those households that can afford a sustainable vehicle (Evans and Gabbatiss, 2020). On the other hand, the UK’s grants for conservation and wildlife protection target less well-off cattle farmers but do not foster substantial economic growth.
CHAPTER TWO

Country perspectives on international climate finance to support a green recovery
In the following section, four country perspectives from Brazil, India, Indonesia and South Africa are presented according to two points:

First, the impacts on the national economy due to the COVID 19 pandemic are described, including the status of green and climate change elements within the national recovery strategies.

Secondly, conclusions for international climate finance are provided so as to assist countries in increasing the share of green and climate change elements in their economic recovery strategies.
2.1

Brazil –
Impacts of COVID-19 on the economy and status of the country’s recovery plan

Although it is too early to assess the full impacts of the coronavirus crisis on the Brazilian economy, economists consulted by the Brazilian Central Bank in August 2020 estimated that the GDP will fall by 5.28% in 2020. Public finances will also be affected as a result of an increase in public expenditures (due to relief measures) and a drop in tax collection, with the primary deficit expected to reach 11.63% of the GDP in 2020 (against 0.85% in 2019). In addition, the unemployment rate grew in the second quarter of 2020, leaving a total of 12.8 million people unemployed.

In March 2020, the Brazilian government announced an economic stimulus package of US$ 150 billion (R$ 750 billion) to address the economic impacts of COVID-19 in Brazil. These funds are directed for measures related to creating fiscal space, supporting the socially vulnerable population, maintaining jobs and aid for informal labor, supporting local governments and airlines, and enhancing liquidity in financial markets, among others. The Brazilian government, as of mid-November 2020, has not proposed any economic recovery initiatives with green objectives and, economically, seems more focused on resuming its reform agenda (as planned before the covid-19 pandemic).

In this regard, the issue of tax reform appeared to gather momentum, becoming a prominent topic on the government’s agenda. In July 2020, Brazil’s federal government submitted to Congress a Draft Bill proposing the first stage of a tax reform that seeks to unify and simplify existing taxes while aligning Brazil’s tax code with international best practices of value-added taxation.

Brazil ranks 184 out of 190 countries in the “Paying taxes” category in the 2020 report for the Doing Business project of the World Bank Group, which records the taxes and mandatory contributions that a medium-size company must pay or withhold in a given year, as well as the administrative burden of paying taxes and contributions.
Deploying ICF in the context of green stimulus packages

Such a move was, for instance, recommended by the Organisation for Economic Co-operation and Development (OECD), which suggested that Brazil could follow India’s example. Early estimates suggest that such a proposal could increase the productivity of the Brazilian economy by 0.2% to 0.5%, GDP per capita by 1.0%, and create between 142,000 and 373,000 new jobs.

At later stages, discussions shall involve so-called “selective” taxes, which could have green elements, such as a carbon tax, as suggested by a special advisor of the Ministry of Economy. On this point, proposals for a green tax reform have been offered by both civil society organizations and multilateral organizations. For instance, the International Monetary Fund (IMF) suggests that revenues from a green tax be (partially) channeled to low-income families.

Possible role of international climate finance to support a greener recovery

With regards to the proposed tax reform, international climate finance could specifically offer technical assistance so that green elements are included in its later stages. Indeed, as of 2020, internationally, 30 national and subnational jurisdictions had already implemented carbon taxes, and initiatives such as the Partnership for Market Readiness (PMR) are in place to help countries to “prepare and implement climate change mitigation policies – including carbon pricing instruments.” In this sense, international cooperation partners could fund and develop technical studies, thus supporting more detailed policy proposals for the design of tax measures aligned with a 2oC scenario and with the objectives of the tax reform, such as carbon pricing mechanisms or removal of existing subsidies for fossil fuels (in 2018 alone, these subsidies amounted to almost EUR 20 billion).

Amazon Fund: Brazil’s vice president and head of the National Legal Amazon Council, Hamilton Mourão, indicated that Brazil is in discussions with representatives from the German and Norwegian governments, striving to re-establish donations to the Amazon Fund (the two governments suspended donations in August 2019 due to changes in the Fund’s governance). Created in 2008, the Amazon Fund seeks to raise funds that are then used for projects that contribute to preventing, monitoring, and combating deforestation as well as for projects promoting the conservation and sustainable use of the Legal Amazon region.

5 See, for instance, http://estafaltandoverde.org.br/
6 (World Bank, 2020). In addition, another 31 Emissions Trading Systems (ETSs) were implemented or scheduled to be implemented.
7 The PMR is a World Bank Group multi-donor trust fund.
8 Currency values for December 31, 2019: 1 EUR = 4.44 Brazilian reais (BRL).
9 The National Legal Amazon Council is responsible for coordinating and monitoring public policy implementation in the Legal Amazon region.
If donations are resumed, the government plans to employ part of the Fund’s resources for landholding regularization efforts and for funding bio-economy-based projects. It is worth noting that donations would probably not work under a results-payment scheme, considering that deforestation rates have increased 34% between 2018 and 2019.

Brazilian Central Bank: In September 2020, the Brazilian Central Bank launched its sustainability agenda. Among other actions, the Bank plans to increase financing for green operations; to adopt sustainability criteria in the selection of asset managers; to improve Resolution 4,327\(^\text{10}\) by including the concept of climate risk; and to require improved disclosure by financial institutions, based on the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). Since 2018, the Central Bank is working with the German bilateral corporation agency GIZ\(^\text{11}\) and the Brazilian Ministry of the Economy on a technical cooperation project (the Brazilian Sustainable Finance – FiBraS) that aims to strengthen the conditions for the development of a green financing market in Brazil. The Bank is also a signatory to the Network for Greening the Financial System (NGFS) and a partner of the Climate Bonds Initiative (CBI), exchanging experiences and best practices on how to manage socioenvironmental and climate risks in the financial sector.

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\(^{10}\) “Provides for the guidelines that must be observed in establishing and implementing social and environmental policies by financial and other institutions authorised to operate by the Brazilian Central Bank.”

\(^{11}\) [https://www.giz.de/](https://www.giz.de/)
2.2

India – Impacts of COVID 19 on the economy and status of the country’s recovery plan

The COVID scenario has seen a fall in the economic growth of India. Keeping this in mind, an economic recovery package of USD 272 Billion (INR 20 Trillion/INR 20 lakh crore)\(^\text{12}\) was announced to manage the unprecedented effects caused the pandemic on the country’s economy. The package announced was targeted to be ~10% of the country’s GDP, with the focus on “Land, Labor, Liquidity, and Law.”

The need for economic aid was felt due to the rising fiscal crunch being felt by the states, especially among Micro, Small, and Medium Enterprises (MSMEs), infrastructure projects, the power sector, and the agricultural market. This economic recovery program is focused on building a self-reliant economy through five pillars: economy, infrastructure, technology driven system, leveraging the vibrant demography, and capitalizing on domestic demand.

There was no specific mention of green measures to assist the economic recovery. Although structural reforms in the coal sector, minerals sector, and infrastructure mentioned the goal of a green recovery, the plans fail to provide specific guidance. Policy reforms to fast track investment were announced, specifically focusing on incentivizing schemes to assist development of sectors like solar PV manufacturing. Short term and long-term measures for supporting the poor, including migrants, farmers, micro businesses, and street vendors, was also announced, seeking, in part, to increase employment. Under this, the utilization of the Compensatory Afforestation Fund (CAMPA act) was announced, channeling about USD 8 billion toward an afforestation program that is designed to stimulate the rural and semi-urban economy while providing essential ecosystem benefits. One outcome of this afforestation program is job creation related to plantation work, forest management, wildlife protection and afforestation.

\(^{12}\) USD 1 = INR 76.9 (average for August 2020)
Though not labelled as part of the recovery package, the government is implementing measures to increase demand for electric vehicles. The electric vehicle policy introduced in the national capital — New Delhi — offers incentives for purchasing EVs. While this will be useful to increase demand for EVs, thereby boosting the production and related supply chain of EV manufacturing, these measures are limited to action by individual states. Currently, ten Indian states have final EV policies, with four having draft policies, which together support the national electric mobility policies. These policies range between aiming for 25% to 100% transition to EVs over the next five to ten years including deployment of EV bus fleets.\(^\text{13}\) Such subnational action is also a favorable action toward the long term greening and recovery plans, though not included in the formal recovery package of the government.

The economic recovery initiatives provided an opportunity to make transformative changes towards greening the economy. However, it was a missed opportunity, as mainstreaming of a green or sustainable angle into the recovery process was not initiated. The reforms mostly focused on short-term measures, with little thought given to medium- and long-term measures. The self-reliant framework followed during the announcement of the recovery measures does not explicitly look at climate change risks and the need to address these. With respect to the manufacturing and energy industries, the recovery package principally supported India’s current brown trajectory.

**Possible role of international climate finance to support a greener recovery**

Although the current, as of November 2020, economic recovery package does not attempt to green the recovery or explicitly make investments in green technologies, international climate finance can play a pivotal role in leveraging green investments. Two vital cases in point in this regard are:

   - First, funding by World Bank of $750 million to the MSME Emergency Response program. While the intention of the program is to support increased access to finance, it could potentially lead to solvency problems.

     a. The MSME sector comprises the backbone of the economy. It not only contributes to 30 percent of India’s GDP, 40 percent of exports, and employs about 150-180 million people, it also forms a very strong supply chain for India’s core industries.

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b. The key potential that international finance holds in this area is to support green investments. The biggest barrier facing green investments by MSMEs is the high cost entry barrier. Innovative financial mechanisms from international finance organizations can help overcome this.

One such mechanism is to create a revolving fund of finance lent to MSMEs. The fund can first enable overcoming the initial investment barrier. This money can be recovered over a period of time as efficiency benefits are reaped by the MSMEs. Subsequently, this recovered finance can be used to repay the lenders. For the revolving fund mechanism to be effective, it is necessary to have strong policy and institutional frameworks. International financial institutions can assist in developing this conducive framework as well.

The second vital case in point is the Green Window Approach, which is being developed by the Ministry of New Renewable Energy (MNRE) (hosted by the Indian Renewable Energy Development Agency (IREDA) with support from knowledge partners NRDC and CEEW). This is envisaged as an institutional clean energy finance solution called “Green Windows,” designed to have a transformative impact in catalyzing clean energy investment and spurring favorable market growth. This is a vehicle to successfully mobilize blended finance in areas of green investment where there is market interest but limited capacity.

The concept, based on the model of international green investment banks, envisages Green Windows to act as intermediaries in attracting international climate finance for greening the infrastructure in India. Because these green windows will be backed by strong domestic financial institutions, they can help alleviate perceived risk, thus attracting international finance and private investment.

International finance can play a crucial role in this context. International financiers can act as co-capitalizers of Green Windows. Given its objectives, each Green Window will likely need a portion, or all, of its sources of capital to be patient, in the form of concessional equity and debt. Funds like the GCF, GEF, and multilateral development banks, that aim to increase the flow of climate finance to investments in low-emission and climate-resilient development can invest in Green Windows to offer financing for green investments that have market interest but are not scaled. Once operationalized, each Green Window can be used to attract commercial capital. Here international finance will enter the Indian market as blended finance.

This concept was announced by the Indian government in December 2019 at the COP26. This can play a significant role in attracting green investment, creating more sustainable economic growth following the pandemic.
The stimulus packages developed in India should be developed with the triple win of reviving the economy, progressing the SDGs, and integrating climate action; however with limited fiscal and monetary capacity, the recovery will benefit from international assistance. Potential financial instruments that can be used, in addition to those described above, include:

- **Emergency Concessionary Debt Facility** designed to save jobs, as well as enable green businesses (like renewable energy companies) to take the lead in post-COVID world.

- **Debt for nature swaps (DNS)**
  - Debt relief for developing countries, by offering debt restructuring through a green lens.
  - Swap agreements can be categorized by the creditor, i.e. public/bilateral swaps (public, bilateral DNS) or private/commercial swaps (private, commercial DNS; in the literature also called third party).
  - A commercial DNS typically involves a commercial creditor and a third-party donor but can also include official creditors, making deals of a hybrid type.

- **Blended Finance** as a useful means to attract the bearish private sector to invest in large scale, low carbon development projects, such financing can be a useful avenue. This can help dilute risk, send market signals toward favorable investment avenues, and contribute to India’s fast economic recovery.
In the Indonesian context, there was an economic deficit and an increase in unemployment and poverty rates as a result of social distancing policies and limiting activities to reduce the risk of the spread of the Covid-19 outbreak. The 2020 budget deficit is estimated to reach -0.4% in a very severe scenario with an increase in the unemployment rate of 5.23% and poverty by 4.86%. This has triggered an increase in financial concerns for restoring the Indonesian economy. Consequently, Indonesia is implementing US$46 billion in fiscal stimulus measures.

For Indonesia, during the 2020 pandemic, it seems like a forest fire will pose a threat to the forestry sector, which is expected to play an important role in achieving NDCs as a result of economic recovery activities by the community. These various economic recovery activities can also affect the management of other sectors, such as the waste and energy sectors, where the sector’s activities will increase and affect emissions production. This condition is exacerbated since the Ministry of Finance indicated that there are negative effects on the climate budgeting landscape. This may be because of the following chain of impacts: The Government focuses on a reallocation of the budget within the context of the National Economic Recovery Program, which aims to protect, maintain, and improve the economic capabilities of business actors in running their activities. Thus, the efforts to recover the national economy are also presumed to narrow the fiscal space for financing climate change actions. Learning from financing experiences with the current short-term climate goal for 2020, where budgets were already insufficient, will be important for the integration of economic recovery activities with the climate change agenda covered in a term entitled “green stimulus package.” Based on the assessment of Green Stimulus Index, conducted by Vivid Economics (2020), the fiscal stimulus provided by the Government of Indonesia is still dominated by Brown Instruments rather than Green.
The Government of Indonesia developed a fiscal policy strategy aimed at economic recovery with detailed targets as follows: (1) Open Unemployment Rate (TPT) in the range of 7.7-9.1 percent; (2) poverty rate in the range of 9.2-9.7 percent; (3) the level of inequality (Gini ratio) in the range of 0.377-0.379; and (4) Human Development Index (HDI) expected to reach 72.78-72.95. These efforts will be supported by structural reforms contained in the fiscal policy for 2021. Based on this information, the position of the NDC achievement target and the integration of green aspects into the fiscal stimulus issued by the Government of Indonesia is not clear as of November 2020. Posture changes and details of the State Revenue and Expenditure Budget for the 2020 Fiscal Year, as stated in the Presidential Decree No. 54 Year 2020, also does not show budget items that lead to efforts to achieve the NDC.

In the budgeting policy contained in PEN (Govt Regulation No.23 / 2020) and Presidential Decree No. 54 Year 2020, the Government of Indonesia prioritizes the development of the health, education, and information technology sectors.

Possible role of international climate finance to support a greener recovery

To encourage the implementation and integration of green aspects into various policies and stimulus programs, both domestic and foreign funding support is required. To identify the need and urgency for a climate change financing strategy, we need to look at the performance of the climate change budget as a baseline for identifying climate change financing needs. The following picture describes the performance of the climate change budget for the year from 2016 to 2020.

**FIGURE 2**

*Indonesia Climate Change Budget Performance (in Trillion Rupiah)*

Source: Fiscal Policy Agency, 2020
Based on the aforementioned data, in nominal terms, the climate change budget in Indonesia experienced an increasing trend from 2016-2018. Based on the results of the 2019 and 2020 Climate Budget Tagging data reconciliation with technical ministries and agencies, it shows that in 2019 and 2020, the climate change budget (temporary data) tends to decline, especially in the 2020 fiscal year, which experienced a significant decline due to budget reallocation and refocusing policies. This reduces the fiscal capacity to fund climate financing.

On average, between 2016 and 2020, the Indonesian government allocated an average climate change budget of IDR 89.6 T per year, or 3.9% of public funds through the state budget (APBN) per year. This means that between 2016 and 2020, the APBN was only able to fund around 34% of its total climate change financing needs, which are valued at IDR 3,461 trillion (IDR 266.2 trillion / year) to achieve the NDC target. Various climate change policies and programs need to be encouraged and integrated into stimulus policies so as not to be left behind.

Broadly speaking, there are three sources of climate finance in Indonesia. First, financing using APBN allocation. Second, financing originating from international support, which can be received in the form of a grant or loan. Third, financing provided by the private sector, one of which is the company’s CSR (Corporate Social Responsibility), which is used to carry out activities that have a social impact on society. There is also private funding in the form of green bonds or green sukuk. These various climate change financing mechanisms are used in various types of funding instruments, including the Environment Fund (BPDLH), Green Climate Fund, Global Environment Facility, Adaptation Fund, including private sector engagement such as green sukuk, bond investors, and philanthropy (See table below).

Thus, International Climate Finance can be focused on these existing instruments, which will then be regulated by the Ministry of Finance. However, it must be underlined that the challenges in the climate change financing mechanism in Indonesia are not only whether there is an appropriate funding window or funding instrument, but also how the transfer of assistance from the international side can encourage the implementation of programs that should be implemented to control climate change.

Regarding the funding window, based on the results of public discussions with Centre for Climate Change and Multilateral Financing Policies of the Ministry of Finance, there are several Current Climate Finance Options for climate change funding outside State Budget:
Based on Table 2, of all current financing instrument in Indonesia, Green Sukuk still has the potential to be developed and issued as a state budget deficit financing instrument that cares about controlling climate change in the midst of the COVID-19 pandemic. ICF can support financing with existing mechanisms such as green sukuk and REDD + Result Based Payment. For now, the Government of Indonesia is reducing the use of loans to reduce the burden of financing. The Indonesian government tends to encourage the optimization of financing mechanisms through grants and investment, especially through bonds and sukuk because they tend to have lower interest rates and tend to be flexible in the midst of an economic crisis. This is because green sukuk supports green investment, which also increases revenue in the state budget. Retail green sukuk also has the potential to become a window for climate change financing in the midst of the Covid-19 pandemic, especially in the energy sector. In contrast to the issuance of bonds and loans, which are more difficult to evaluate at this stage, considering the lag time between arrangement, issuance, and trading in secondary markets, green sukuk are a promising investment, where they provided several conditions such as (1) Proceeds clearly earmarked for green investments, which are more trustful for investors. (2) Green Sukuk as a state bond is automatically inherent in it a green certificate, which can be used as a means of financing green activities that have not been earmarked, by claiming the value of those activities through activities tagged in the Climate Budget Tagging (CBT). (3) Sustainability-linked: Green sukuk is considered to be a pandemic-related thematic ‘social’ financial instrument since these are focused on supporting social infrastructure, like the development of renewable energy in various remote areas in Indonesia, thus providing job opportunities and a chance for economic development in these settings.
Several things must be considered by the Indonesian government in structuring its green stimulus package:

1. Calculating the risk of the change of NDCs’ implementation scheme, which is being hampered by the changes in both policy and budget posture due to the Covid-19 pandemic. This risk must be calculated for several time-based scenarios, including 1-, 2-, and 3 year postponement scenarios and so on.

2. Based on the results of the risk calculation, it is necessary to restructure the NDC roadmap by prioritizing programs that have a large investment value at the beginning with regards to keeping the achievement of NDC still on track and open up greater funding opportunities; this aspect should be followed by more sustainable criteria such as job opportunities and emission reduction potential. As input, the green program characterization can be carried out according to the policy category first.

3. Ensure that climate change programs are aligned with short-term policies, such as fiscal stimulus, as well as medium-term policies, such as Medium Term Development Planning, and long-term policies.
According to independent assessments by UN agencies, the overall GDP of South Africa may fall almost 8 percent during 2020 due to the measures undertaken to contain the COVID-19 pandemic. Furthermore, it is projected that it will take at least five years for the economy to recover, with more than 50% of households at risk of losing formal employment and falling into poverty.

As of November 2020, the response of the South African government consisted of a rescue and recovery program, essentially of a red color denoting socio-economic spending and funding (tables 3 and 4) with expected impacts mostly on fairness, empowerment, justice and equality (President Ramaphosa).

South Africa started developing its package with fiscal re-allocation, some of which took from budgets for social and environment purposes. An issue that may come into play is the limited sovereign borrowing capacity being used for red spending as the priority. The Government of South Africa is aiming at a EUR 50 bn (ZAR 1 trillion) stimulus and officially, as of November 2020, announced a EUR 26 bn (ZAR 500 bn) package. In November 2020, there is an ongoing debate regarding how much would actually be implemented. One issue in this debate regards the sources of these finances, considering the conditions and potentials in the country. South Africa went into COVID with extremely limited fiscal space, and has taken up more debt for rescue and recovery. There is also consideration of using SA government pension funds for recovery, though these funds has also been proposed in relation to bailing out the national electricity utility, Eskom.

14 According to a scorecard developed by the Institute for Economic Justice, this is a fair concern as only a quarter of the package was spent by June 2020, while R375 bn remained unspent. Source: Institute for Economic Justice.
The use of pension funds is an alternative to a just transition transaction, being developed in South Africa and seeking support from the development and climate finance communities. (Winkler et al., 2020).

Other funding will come from reprioritization within the SA budget. Loans have been taken from the IMF and New Development Bank, so COVID recovery packages will be financed by local and international sources. The latter type of finance raised also concerns about conditionalities of loans, as exemplified by the conditions of IMF:

There is a pressing need to strengthen economic fundamentals and ensure debt sustainability by carrying out fiscal consolidation, improving the governance and operations of SOEs, and implementing other growth-enhancing structural reforms.... Specific reform commitments at the time of the October Medium-Term Budget Policy Statement will be a critical step to buttress the credibility of the reform efforts and should be followed by steadfast implementation. Efforts to preserve the central bank’s inflation mandate and proactive bank regulation and supervision, particularly for small banks, will also be important

IMF press release NO. 20/271
The South African Treasury is concerned about increasing debt and the share of the budget consumed by servicing debt, while other, more left-leaning, economists advocate increasing the spending side. As of November 2020, loans approved include:

- New Development Bank – Covid-19 Emergency Programme – USD 1 bn, maybe another USD 1.5 bn
- International Monetary Fund - Rapid Financing Instrument - SDR 3.051 bn (~USD 4.3 bn), at 1%, to be repaid over 5 years.

Prior to the COVID crisis, South Africa’s fiscal space was already severely constrained. While some of the aforementioned loans are at low interest rates, the principal debt has to be repaid. In October 2020, the Presidency announced an economic reconstruction and recovery plan, which noted:

"The COVID-19 global pandemic represents a severe and unexpected exogenous shock to the South African economy, in a context of already weak economic performance. Prior to the onset of the pandemic, the economy was in recession, the rate of unemployment was at its highest level in over a decade, poverty and inequality remained deeply entrenched, and the fiscal situation was deteriorating due to lower than expected revenue earnings and growing sovereign debt"

(The Presidency Republic of South Africa, 2020)

The Finance Minister had previously expressed concerns, noting that 21 cents of every Rand spent went to interest, projecting that gross national debt “will be close to R4 trillion, or 81.8 per cent of GDP by the end of this fiscal year” (National Treasury, 2020) up from 65.6% in the previous projections. Debt-service costs are the fastest growing and third largest category of expense for the budget, while investment in public infrastructure is shrinking (Mboweni, 2020). Without external support, SA’s borrowings will almost entirely consume all of annual domestic saving, leaving no scope for investment or borrowing by anyone else.

Debt relief, outright debt forgiveness (as advocated by the Jubilee campaign), and debt restructuring are likely to become important in the future to keep similarly debt-burdened economies running. In the absence of collective action to address debt, especially for developing countries, there is the risk of a major global debt crisis (Jerome Roos, 2020; Stegliz & Rashid, 2020). From a climate perspective, debt-for-climate swaps would benefit from further research.
Green elements in the national recovery strategy

The South African government has decided to allocate most of the spending on social issues, prioritizing social issues, although there has been some debate about environmental spending. Work is being undertaken for the Presidency to consider jobs in green industries, like renewable energy and electro-mobility. What is less clear is how green spending would create social employment, i.e. work for the poorer and, typically, less skilled part of the population. The tension between red and green colors arises again with respect to decisions about how to direct recovery spending, on the economy (e.g. boost spending and relief to save businesses) vs. social (increase welfare grants, investing in sanitation for schools - some of which lack running water or toilets) vs. the environment. This exclusive focus on social issues and the omission of environmental and climate change topics is criticized, not only for being blind with respect to the environmental damages this would incur but also for the missed opportunities to create jobs and income in green sectors and transformation in South Africa.

Possible role of international climate finance to support a greener recovery

A just transition in the energy sector becomes more relevant than ever under the conditions of a COVID 19 induced economic recession. The just transition connects seamlessly with the social issues that the government is addressing through its recovery package, while it simultaneously addresses climate change mitigation: The climate emergency means that a radical transition is required in the electricity sector globally - from fossil fuels to lower-emissions energy. In South Africa, a shift away from coal-fired electricity is critical. To be just, the transition must protect the livelihoods of communities and workers dependent on coal. A just transition transaction (JTT) is a form of climate finance, in that it accelerates the phase-out of coal-fired power. This inherently reduces emissions while also creating space for renewable energy – with wind and solar PV already being competitive in SA. This shifts our thinking of international climate finance from investing in ‘green’ technologies to supporting the transition away from coal. Thus, the JTT is understood as transition finance, bridging the gap between pressure to divest from coal and rise of green finance.
Although unevenly distributed across EU member states, the economic impact of COVID-19 was significant and caused by the protective measures introduced by governments to contain the spreading of the virus and massive insecurity for market participants. As of October 2020, economic outlooks, e.g. by the International Monetary Fund, indicate that the economic (and social) crisis will persist and that returning to pre-crisis growth rates will take time (noting here that the pandemic will reverse the progress made since the 1990s in reducing global poverty and will further increase inequality).

During the corona crisis, there was no EU-wide harmonized approach on how to react to the pandemic and, accordingly, measures ranged from prolonged lockdowns, such as in Italy and Spain, to countries with less stringent measures, like Sweden. Member States also adjusted their national budgets – in some cases (Germany, France) – significantly and in parallel to EU measures.

All Member states faced shrinking GDP (EU = minus 11.4 % during the second quarter of 2020), the economic impacts, however, differ for each member state (Figure 3), in particular negatively affecting the growth rates (and related employment rates) in countries such as Italy, Spain, and France.
Interestingly, the expectations of European companies, industry and service sectors were still relatively optimistic in the first quarter of 2020. As the number of people impacted by the Corona crises rose, the index fell to historic depths since its introduction in 1985 (figure 5).

**FIGURE 3**

*Gross domestic product at market prices, quarterly data*

![GDP Chart](chart1.png)

No data for Slovakia.
Click or tap on the legend to show or hide variables.
*Source: Eurostat*
© Statistisches Bundesamt (Destatis), 2020

**FIGURE 4**

*Economic sentiment indicator*

![Sentiment Indicator Chart](chart2.png)

Click or tap on the legend to show or hide variables.
*Source: Eurostat (DG ECFIN)*
© Statistisches Bundesamt (Destatis), 2020
Against this backdrop of an unprecedented economic downturn, the EU Commission proposed an updated EU budget for 2021-2027 of 1.100 bn EUR (this budget was already negotiated in 2019) and a dedicated EU recovery budget for 2021-2024 of 750 bn EUR in May 2020 (so called “Next Generation EU,” NGEU). Combined, these budgets are framed as “The EU Green Deal,” as it intends, on the one hand, to contribute to economic recovery, while, on the other hand, also addressing the need for a transformational “green” change in order to achieve climate targets, e.g. climate neutrality by 2050. It is the first time that the EU Commission is approaching the capital market to refinance its budget (in this case the 750 bn EUR Next Generation EU budget).

Why linking recovery programs with the green transition?

When proposing the Green Deal, there was a discussion whether it is more important to first to revive the economy and create jobs than worry about climate protection. However, neglecting green elements in such economic stimulus packages was seen as risky for climate protection, especially given the high level of national debt that is emerging and the risk of financing stranded assets. There is also evidence from past financial and economic crises that the inclusion of climate-friendly elements in an economic policy not only leads to economic growth and jobs in the short term, but also creates the basis for long-term innovations and climate-friendly economic development. Cameron et al (2020) show examples in which experts from business, politics and industry, estimate that climate protection and growth potential go hand-in-hand - e.g. expenses for R&D, education and infrastructure investments. On the other hand, much smaller positive effects arise from economic stimulus packages for many traditional industries, such as aviation, or generally unconditional assistance for companies. Even the IMF noted in its 2020 World Economic Outlook the need for a green economic stimulus.¹⁵

Green elements in the EU recovery program

As mentioned above, climate protection was one of the top priorities of the European Commission before the outbreak of the Corona crisis and it became more prominent during negotiations over the 2021-2027 multiannual financial framework. Before the crisis, the European Commission earmarked 25% of its budgets to be used for climate protection (mitigation and adaptation). During the negotiating of the updated budget – with pressure from the European Parliament – the climate share of the budget was increased to 30%.

¹⁵ “Without further action to reduce greenhouse gas emissions, the planet is on course to reach temperatures not seen in millions of years, with potentially catastrophic implications. The analysis in this chapter suggests that an initial green investment push combined with steadily rising carbon prices would deliver needed emission reductions at reasonable transitional global output effects, putting the global economy on a stronger and more sustainable footing over the medium term.”
At the same time, the European Parliament voted to update the EU’s climate target for 2030, backing a 60% reduction in greenhouse gas emissions by the end of the decade (up from the current 40% target). For 2050, the European Commission’s goal is to be climate neutral.

The largest budget line, at 670 bn EUR, is the Recovery and Resilience Facility. The general objective of the Recovery and Resilience Facility is the promotion of the EU’s economic, social, and territorial cohesion by improving the resilience and adjustment capacity of the Member States, mitigating the social and economic impact of the crisis, and supporting the green and digital transitions, thereby contributing to restoring the growth potential of the economies of the European Union, fostering employment creation in the aftermath of the COVID-19 crisis, and promoting sustainable growth.

In addition, the Just Transition Fund, financed with approximately 19 bn EUR, will help Member States to absorb negative effects, especially of the energy transition (e.g., transitioning coal regions). All other budget lines have a climate earmark; therefore, a certain portion will be spent for climate protection.\(^{16}\)

While the financial package is not finalized as of November 2020, there is evidence, that the European Commission will link its economic recovery with a green transition in Europe. At that time, there was still uncertainty among others, of the final volume of the budgets (here, for instance, the role of the European Investment Bank), clear definitions of green\(^{17}\) (e.g. role of the EU Taxonomy), exclusion lists (some budget lines exclude e.g. fossil fuels, others do not). In addition, not all Member States are fully supportive of putting the “green recovery” on the agenda, even though they play a crucial role when transferring EU budgets into national economies. For the majority of the funding, program design by member states and the European Investment bank will ultimately determine how green the EU recovery program will be, hence the ongoing design and subsequent review process remains essential.

\(^{16}\) stronger and more sustainable footing over the medium term”, see https://www.imf.org/en/Publications/WEO/issues/2020/09/30/world-economic-outlook-october-2020

CHAPTER THREE

Conclusions
Table 5 summarizes the findings from the five country perspectives according to the three elements major aims of the recovery program, gaps toward green recovery and potential roles of international climate finance to support a green recovery.

**TABLE 5**

**Synopsis of views from Brazil, India, Indonesia, South Africa and the EU / Germany**

<table>
<thead>
<tr>
<th>Country</th>
<th>Focus of economic recovery strategy</th>
<th>Gaps toward a green recovery strategy</th>
<th>Main intervention options for international climate finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Mainly socio-economic: create fiscal space, support for the socially vulnerable population, maintenance of jobs and aid for informal labor, support local governments and airlines, enhance liquidity in financial markets.</td>
<td>Green elements not yet considered.</td>
<td>Support to green fiscal instruments (e.g., taxes), the central bank’s new initiative on green and sustainable finance, as well as resumed contributions to the Brazilian Amazon Fund.</td>
</tr>
<tr>
<td>India</td>
<td>Recovery package of approx. 10% of India’s GDP focusing on “Land, Labor, Liquidity, and Law”.</td>
<td>Only indirectly considered as structural reforms through coal sector, minerals sector, and infrastructure are mentioned without specificity.</td>
<td>Access to international finance can potentially address two issues: remedy solvency problems and provide investments in green sectors. Blended finance can catalyze renewable energy development. Debt for climate swaps can facilitate climate action against debt relief.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Developed a fiscal policy strategy aimed at economic recovery targeting improvements of unemployment and poverty rates, levels of inequality as well as the Human Development Index (HDI).</td>
<td>The integration of green aspects into the fiscal stimulus program is not yet clear. However, the build back better initiative under development by the government aims at being a strategic instrument to achieve green and socio-economic recovery.</td>
<td>The government promotes the green sukuk (bonds) as it both supports green investment and also revenues for the state budget.</td>
</tr>
<tr>
<td>South Africa</td>
<td>The South African rescue and recovery program is essentially of a socio-economic nature with expected impacts mostly on fairness, empowerment, justice, and equality.</td>
<td>Inclusion of green elements in the recovery program is starting as of November 2020: strategic job creation in green industries, such as renewable energy and electro-mobility, while safeguarding social employment, i.e. work for the poorer and typically less skilled part of the population.</td>
<td>A just transition transaction mechanism in the energy sector is promoted to address both pressing issues in the economic crisis: creating employment and moving away from fossil fuels to renewable energy.</td>
</tr>
</tbody>
</table>
Based on the country and global perspectives regarding the linkages between international climate finance and green recovery post-COVID 19, this report offers several conclusions:

- The immediate responses of those governments included in this synthesis report consisted of addressing fiscal and social-economic issues: governments sought to safeguard liquidity, to support socially vulnerable parts of the population, and to support economically weakened actors, including small and medium sized enterprises. Major enterprises, like airlines, were also targeted by these stimulus packages.

- At most, the subsequently proposed recovery strategies and stimulus packages were only addressed green elements indirectly, targeting activities that coincidently affected the climate and environment. However, subsequent to the releases of the initial proposals, actors related to environment directorates in ministries, thinktanks, NGOs, and academia began to demand and work for the inclusion of green elements in these recovery packages. It also became apparent that a more precise definition of green finance is important in order to prevent confusion regarding terms and approaches on national levels around what constitutes green finance and what distinguishes it from other types of finance.

- The initiatives to integrate green elements in the recovery packages are very useful entry points for the strategic allocation of international climate finance: they show how broad economic problems (such as liquidity problems and diminishing fiscal space) can be addressed while simultaneously supporting activities connected to climate change mitigation, which produce also social and economic benefits.

- Although the report focuses more on the government’s role in the formulation and implementation of (green) recovery programs, the role of private sector finance and investment cannot be underestimated as governmental funds will not be sufficient. Instead, these programs should seek to trigger private sector investments. This should be kept in mind if international public finance is provided to stimulate a greener recovery.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Germany / EU</td>
<td>30 % of the €750 billion EU recovery package should be directed toward climate-related actions.</td>
<td>According to estimates, 30 % will not be enough to achieve the EU climate targets: an additional € 2.44 trillion is needed to mobilize the necessary investments. Currently, the recovery package lacks specific implementation details.</td>
<td>Germany, as a funder, does not yet have a national strategy; rather it disburses through targeted projects. Examples: added finance to ongoing BMU IKI projects and making economic advisers available for green recovery. Example of KfW / BMZ in Peru: EUR 250 million loan with objectives to link addressing impacts from COVID-19 with the country’s commitment to achieve climate goals.</td>
</tr>
</tbody>
</table>
The report finds that the range of possible instruments for the delivery and implementation of international climate finance may not change during the COVID-19 pandemic, but that specific mixes and applications may alter due to changed strategic priorities. These can relate to the increased use of blended finance, where domestic and international funds are directed toward green investments, or greater importance for mixes of financial cooperation (addressing access to and availability of finance) with technical cooperation (directed toward green areas with oftentimes higher cost entry barriers and associated needs for technical support). The role of technical cooperation is also highlighted as the case of technical capacities needs for the design and implementation of appropriate fiscal instruments such as carbon taxes shows (Brazil). The potential for innovation for international climate finance is shown by the just transition transaction in energy sectors, which combines red and green colors of a recovery package.

While there is considerable variations among the types of application of international climate finance, there are also commonalities: they show that during the COVID-19 pandemic, even more than before, the feasibility of ICF will be measured according to the synergies it can realize between climate change and the socio-economic aspects that can be achieved in the design of such packages.
References


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Deploying ICF in the context of green stimulus packages


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A Green New Deal after Corona: What we can learn from the financial crisis, Kröger, Xi, Chiappinelli, Clemens, May, Neuhoff, Richstein, DIW Focus 4, 2020
**Annex**

**TABLE 6**

*International financial tools examples available for COVID-19 relief and an evaluation*

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grants</strong></td>
<td>UNICEF funded $8.8 m for schools across 87 developing countries to assist children in need during national lockdowns and school closures.</td>
<td>Economic effectiveness: high</td>
</tr>
<tr>
<td></td>
<td>Djibouti received $3.5 m in grants for COVID19 relief to be used across a variety of sectors.</td>
<td>Sustainability: unknown</td>
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<td></td>
<td>Mali received $7 m in grants for COVID19 relief to be used across a variety of sectors with a special focus on gender sensitive measures of development.</td>
<td>Equity: medium</td>
</tr>
<tr>
<td><strong>Loans (market rate and concessional)</strong></td>
<td>The IMF funded $235 m of concessional loans to Moldova for COVID19 relief aimed to mitigate the social and economic impacts of the pandemic.</td>
<td>Economic effectiveness: medium</td>
</tr>
<tr>
<td></td>
<td>The IMF funded $28.9 m of concessional loans for COVID19 relief for the Maldives.</td>
<td>Sustainability: unknown</td>
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<tr>
<td></td>
<td>The World Bank funded $12 billion in loans for 60 countries aimed to upgrade health systems in developing countries.</td>
<td>Equity: high</td>
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<tr>
<td><strong>Debt Relief</strong></td>
<td>The “Debt Service Suspension Initiative” launched jointly by the World Bank and the IMF allows countries to suspend existing debt payments for countries most in need.</td>
<td>Economic effectiveness: medium</td>
</tr>
<tr>
<td></td>
<td>The IMF launched the “Catastrophe Containment and Relief Trust” to provide grants specifically for debt relief to 28 countries.</td>
<td>Sustainability: unknown</td>
</tr>
<tr>
<td><strong>Conditional Financing</strong></td>
<td>Madagascar received $20 million for debt-for-climate swaps from the Government of France.</td>
<td>Economic effectiveness: low</td>
</tr>
</tbody>
</table>

**Note:** Sustainability is difficult to measure for COVID-19 international finance tools because assistance received by countries in need can generally be spent on a wide array of sectors for relief. A retrospective analysis of where these grants were invested will reveal the sustainability of the various investments.

**Source:** Vivid Economics, The World Bank, and The IMF policy tracker
A multitude of policy instruments have been announced or implemented to support post-pandemic recovery of affected sectors; these tools have varying degrees of effectiveness, sustainability, and equity.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Sectors</th>
<th>Evaluation</th>
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</thead>
<tbody>
<tr>
<td>Bailouts with green strings attached</td>
<td>Canada’s Large Employer Emergency Financing facility support is coupled with the disclosure of yearly climate-related reports with an assessment of the impact of the future operations on sustainability.</td>
<td>Agriculture, energy, industry, transport, waste</td>
<td>Economic effectiveness: high  &lt;br&gt;Sustainability: low  &lt;br&gt;Equity: low</td>
</tr>
<tr>
<td></td>
<td>The Celsa Steel bailout in the UK is subject to diverse legally binding conditions including protecting jobs, tackling global warming, and restraining executives’ pay and bonuses.</td>
<td>Industry</td>
<td>Economic effectiveness: high  &lt;br&gt;Sustainability: low  &lt;br&gt;Equity: medium</td>
</tr>
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<td></td>
<td>The Air France - KLM bailout is conditional on the commitment to half emissions by 2030, to use more sustainable fuel sources, and to upgrade to more efficient aircrafts.</td>
<td>Energy, industry, transport</td>
<td>Economic effectiveness: high  &lt;br&gt;Sustainability: medium  &lt;br&gt;Equity: low</td>
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<tr>
<td>Green public investment programmes</td>
<td>In its recovery plan, the Nigerian government included a “Solar Home Systems Project” that will provide electricity to 25 million people through the installation of 5 million home solar systems. This program will also create job opportunities.</td>
<td>Energy</td>
<td>Economic effectiveness: medium  &lt;br&gt;Sustainability: high  &lt;br&gt;Equity: high</td>
</tr>
<tr>
<td></td>
<td>India launched a USD780 million afforestation program that will spur the rural and semi-rural economies, creating jobs for tribal communities.</td>
<td>Agriculture</td>
<td>Economic effectiveness: medium  &lt;br&gt;Sustainability: high  &lt;br&gt;Equity: high</td>
</tr>
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<td></td>
<td>China will expand its charging network by 50% this year, with an additional 600,000 charging points.</td>
<td>Energy, transport</td>
<td>Economic effectiveness: medium  &lt;br&gt;Sustainability: medium  &lt;br&gt;Equity: medium</td>
</tr>
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<td></td>
<td>The Danish government proposed a fund for green renovation of social housing between 2020 and 2026.</td>
<td>Infrastructure</td>
<td>Economic effectiveness: medium  &lt;br&gt;Sustainability: high  &lt;br&gt;Equity: high</td>
</tr>
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<td></td>
<td>The EU proposed an increase in the European Agricultural Fund for Rural Development in order to support rural producers in the green transition.</td>
<td>Agriculture</td>
<td>Economic effectiveness: medium  &lt;br&gt;Sustainability: medium  &lt;br&gt;Equity: high</td>
</tr>
</tbody>
</table>
### Loans and grants for green investment

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>Sectors</th>
<th>Evaluation</th>
</tr>
</thead>
</table>
|        | The Danish government proposed a grant for energy efficiency in industry between 2020 and 2024. | Energy, industry | Economic effectiveness: low  
Sustainability: high  
Equity: low |
|        | The US Department of Agriculture introduced a USD 100 million grants for agricultural producers of renewable or biofuels. | Agriculture, energy | Economic effectiveness: medium  
Sustainability: medium  
Equity: medium |
|        | Germany will inject equity into Deutsche Bahn to support the modernization, expansion, and electrification of the railway network. | Industry, transport | Economic effectiveness: medium  
Sustainability: medium  
Equity: medium |
|        | The UK announced a USD 49 million grant for conservation and wildlife protection programs targeting cattle farmers in Scotland. | Agriculture | Economic effectiveness: low  
Sustainability: medium  
Equity: high |
|        | The UK provided extra funding to the “Automotive Transformation Fund” to sponsor innovating R&D projects on efficient electric motors and powerful batteries. | Transport | Economic effectiveness: medium  
Sustainability: medium  
Equity: low |

### Subsidies or tax reductions for green products

<table>
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<tr>
<th>Policy</th>
<th>Description</th>
<th>Sectors</th>
<th>Evaluation</th>
</tr>
</thead>
</table>
|        | Germany announced a cut to the renewable energy levy on electricity bills. | Energy | Economic effectiveness: low  
Sustainability: high  
Equity: high |
|        | Germany will increase the tax research allowance up to EUR4 million per company. | Industry | Economic effectiveness: low  
Sustainability: medium  
Equity: medium |
|        | Germany will double the purchase subsidy for electric and hybrid car through the end of 2021. | Transport | Economic effectiveness: high  
Sustainability: medium  
Equity: low |

**Note:** These are listed according varying degrees of effectiveness, sustainability, and equity

**Source:** Vivid Economics (based on Bundesministerium der Finanzen, 2020; Evans and Gabbatiss, 2020; Holder, 2020)