

---

## A Solutions Approach to the GST

### Interim Technical Paper for Consultation<sup>1</sup>

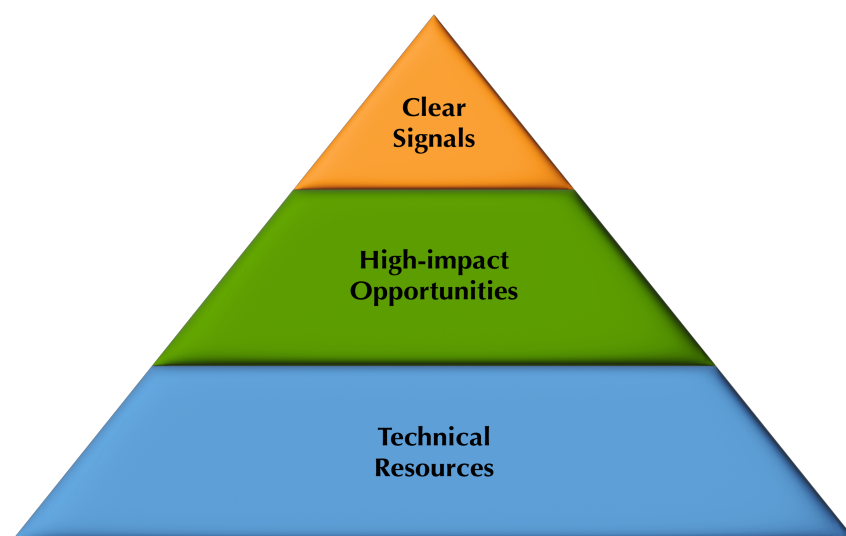
#### May 2023

---

The global stocktake (**GST**) process and outcome at COP28 must send clear and specific signals as to opportunities for Parties and non-Party stakeholders (**NPS**) to achieve the goals of the Paris Agreement and to avoid catastrophic climate change. Both greater formal climate ambition, including through nationally determined contributions (**NDCs**), as well as enhanced international cooperation to implement action will be critical. In that context, and to a large extent, what happens after GST ends at COP28 will define its success. Parties should commit to a post-COP28 response to the GST.

The outputs of an effective GST process could usefully be conceptualized in three tiers:

- a limited number of high-level **clear signals/high level asks** for mitigation, adaptation, loss and damage (**L&D**), and means of implementation (**MOI**) that catalyze the shift of the global economy toward the achievement of the goals of the Paris Agreement;
- a defined set of specific, available, and implementable **high impact opportunities** to enhance and implement ambition. These must speak to constituencies (such as national-level policy makers and NPS) best placed to convert the signals/high level asks into action, including through science-based policy pathways that emerge from the GST technical dialogue process. These opportunities should be supported by accessible and scaled up means of implementation;
- consolidated **technical resources** that Parties and NPS can draw on when developing and implementing climate action, consistent with the goals of the Paris Agreement.



---

<sup>1</sup> Please send any comments or suggestions to Jennifer Huang via: <https://www.c2es.org/content/global-stocktake-an-opportunity-for-ambition>.



This paper draws upon, and is produced in the context of, the GST technical dialogue process that has revealed a broad spectrum of opportunities to address the challenges of climate change, as well as a wealth of work on pathways and agendas for 2030 and 2050 climate action, including the International Energy Agency's *Credible Pathways to 1.5 °C: Four pillars for action in the 2020s* report,<sup>2</sup> the Intergovernmental Panel on Climate Change chapter on "Climate Resilient Development Pathways,"<sup>3</sup> the High Level Climate Champions' Breakthrough Agenda,<sup>4</sup> and the Marrakech Partnership for Global Climate Action Pathways,<sup>5</sup> among others.

To effectively achieve its mandate, **the GST should in its outcomes focus on those opportunities that will have the best chance of resulting in positive near-term "high-impact."** Identifying high-impact implementable opportunities necessitates the application of selection criteria, such as:

- certainty of impact (which may vary significantly according to geography)
- feasibility
- key relevant initiatives
- barriers
- synergies as well as trade-offs in achieving the Sustainable Development Goals (*SDGs*).

Applying these criteria, this paper identifies a range of suggested signal and opportunities to action them that have the potential for accelerating climate action and support in the near-term.<sup>6</sup> C2ES will further test the viability of these solutions and welcomes comments and suggestions. At the same time, the general approach to identifying solutions has broader applicability to decision makers and stakeholders looking to identify and implement actionable solutions with near-term positive impact, including through enhanced international cooperation.

---

<sup>2</sup> <https://iea.blob.core.windows.net/assets/ea6587a0-ea87-4a85-8385-6fa668447f02/Crediblepathwaysto1.5C-Fourpillarsforactioninthe2020s.pdf>.

<sup>3</sup> [https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC\\_AR6\\_WGII\\_SOD\\_Chapter18.pdf](https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SOD_Chapter18.pdf).

<sup>4</sup> <https://climatechampions.unfccc.int/system/breakthrough-agenda/>.

<sup>5</sup> [https://unfccc.int/climate-action/marrakech-partnership/reporting-and-tracking/climate\\_action\\_pathways](https://unfccc.int/climate-action/marrakech-partnership/reporting-and-tracking/climate_action_pathways).

<sup>6</sup> This work builds on earlier work: landscape analyses, Distilling Critical Signals from the Global Stocktake, and TD1.3 submissions. See <https://www.c2es.org/content/global-stocktake-an-opportunity-for-ambition>.



<b>A. Mitigation</b>	<b>5</b>
1. Increase the share of renewable energy sources—particularly wind and solar—in global electricity generation, aiming for 55–90 percent by 2030 and 98–100 percent by 2050, while simultaneously reducing the share of fossil sources	5
2. Reduce methane emissions from the fossil fuel sector by 75 percent by 2030	7
3. Increase the share of electric vehicles (EVs) in light-duty vehicle (LDV) sales to 75–95 percent by 2030 and 100 percent by 2035. Increase the share of EVs in bus sales and medium- and heavy-duty vehicle sales to 60 percent and 30 percent by 2030, respectively	10
4. Halt and reverse forest loss and land degradation by 2030	13
5. Reduce the carbon intensity of building operations, minimize embodied emissions, and increase the rate of building retrofits to 3.5 percent by 2040, aiming for all new and existing assets to be net zero across their life cycles by 2050	16
<b>B. Adaptation and Loss and Damage</b>	<b>18</b>
1. Increase the climate resilience of the global population by 50 percent by 2030 and by at least 90 percent by 2050, recognizing that adaptation action is iterative	18
2. Halt and reverse biodiversity and ecosystem loss and degradation and put nature on a path to recovery by 2030	18
3. By 2030 foster climate resilient, sustainable agriculture that increases yields and agroforestry by 17 percent and reduces farm level greenhouse gas emissions by 21 percent without expansion of the agricultural frontier; and halve the share of food production lost and per capita food waste relative to 2019,	21
4. Ensure, by 2027, universal coverage of early warning systems, connected to longer-term risk management systems, and supported by effective risk communication and public stakeholder dialogue to prompt informed action, and by 2030 universal coverage of climate services in priority climate-sensitive sectors (agriculture and food security, health, disaster risk reduction, energy, and water),	24
5. Significantly increase by 2030 the capacity and resources of developing countries, with a focus on those that are particularly vulnerable to the adverse effects of climate change, to avert, minimize, and address L&D, including at the local, national, regional, and international level	27
<b>C. Means of Implementation</b>	<b>30</b>
1. Urges Parties, multilateral development banks (MDBs), and NPS, in particular financial institutions (IFIs), to significantly increase by 2030 the proportion of investments in renewable energy	30
2. Urges bilateral, multilateral, and private creditors to create mechanisms for debt payments suspension, restructuring, and cancelation with a view to addressing climate-related needs,	32
3. Call upon multilateral development banks, international finance institutions, climate funds, and other multilateral and bilateral cooperation agencies to increase the share of grants and highly concessional instruments for developing countries, particularly for the design, implementation, and monitoring of adaptation actions,	34



4. Urges tying fossil fuel subsidies reform to broader economy-wide just transition plans, and provide support to developing countries to implement it, .....	36
5. Calls for capacity building support to developing countries to operationalize Article 2.1.c of the Paris Agreement .....	38
6. Urges MDBs, IFIs and private investors to revise and adjust their investment plans and portfolios by 2030 to align with the temperature and resilience goals of the Paris Agreement .....	40
7. Call upon institutional investors and corporate actors to enhance understanding, disclosure and management of climate-related financial risks and opportunities.....	42



## C. Means of Implementation

<b>Signal/high level ask</b>	<b>1. Urges Parties, multilateral development banks (MDBs), and NPS, in particular financial institutions (IFIs), to significantly increase by 2030 the proportion of investments in renewable energy, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Leveraging public and private financing to foster greater investments in support to the development and deployment of renewable energy and renewable energy technologies, with particular focus in developing countries</li> </ul>
	<ul style="list-style-type: none"> <li>• Redirecting funding from fossil fuel subsidies and investments, carbon pricing instruments, and canceled debt payments, to create and feed national Just Energy Transition funds and plans.</li> </ul>
	<ul style="list-style-type: none"> <li>• Pursuing further research and case studies for redesigning the provision of public services such as electricity, scaling down energy subsidies or cross-subsidies at the consumer level, to strengthen cooperative- and community-owned distributed renewable energy generation schemes.</li> </ul>

### Impact

- According to the International Renewable Energy Agency (IRENA)'s estimations, a 1.5 degree C path that supports the energy transition would result in the reduction of 37 gigatons of annual CO<sub>2</sub> emissions by 2050.
- As requested in the Sharm el-Sheikh Implementation Plan, meeting climate finance needs—estimated at about US \$4 trillion per year in renewable energy up until 2030—is a necessary step to ensuring “immediate, deep, rapid and sustained reductions in global greenhouse gas emissions,” to transform “energy systems to be more secure, reliable, and resilient,” and to stay on track to reach net-zero emissions by 2050.

### Feasibility

- In recent years, the world has seen a profound shift in the cost-competitiveness of renewable energy, which is now cheaper than any other form of power generation in virtually every market and geography—even before externalized costs of energy are taken into account. The global weighted-average, levelized cost of electricity from solar photovoltaic projects fell 85 percent between 2010 and 2020, from concentrated solar power 68 percent, from onshore wind 56 percent, and from offshore wind 48 percent. Between 2020 and 2021, investments in clean energy increased by 12 percent, compared to a bare 2 percent throughout the five years after the signing of the Paris Agreement. In 2021, governments', companies', and households' investments in renewable energy projects and small-scale systems increased 6.5 percent in comparison with 2020. And in 2022, the pace accelerated even further, with a 17 percent year-on-year increase in renewable energy investment. Public finance has also increased.

### A selection of key existing initiatives

- The **IRENA Coalition for Action** brings together over 130 leading renewable energy players including private sector, civil society, industry associations, intergovernmental organizations, and research



institutes to discuss industry trends, determine actions, share knowledge, and exchange best practices with the vision to drive the global energy transition.

- The **Glasgow Financial Alliance for Net Zero (GFANZ)** is a global coalition of financial institutions committed to accelerating and mainstreaming the decarbonization of the world economy and reaching net-zero emissions by 2050. Despite these commitments, however, GFANZ's success has been limited in reducing investments in fossil fuels among its members.
- The UN-convened **Net Zero Asset Owner Alliance (NZAOA)** is a member-led initiative of institutional investors committed to transitioning their investment portfolios to net-zero greenhouse gas emissions by 2050—consistent with a maximum temperature rise of 1.5 degree C. Responsible for \$10 trillion in assets, NZAOA committed to phase out most thermal coal assets by 2030 for industrialized countries and worldwide by 2040.
- The **Powering Past Coal Alliance (PPCA)** is an initiative, launched at COP23, committed to turn individual commitments to a diplomatic offensive to advance the transition from coal power to clean energy. It includes both the PPCA declaration and the PPCA finance principles, the latter which commits private and financial actors to cease investments in coal, phase-out existing coal capacity, and boost investment in clean energies. At COP26, the PPCA declaration had been joined by a quarter of all countries.

### Barriers

- The elevated cost of capital and lack of fiscal space in debt-distressed emerging markets and developing countries continue to stymie capital flows for renewable energy. Public climate finance is not on track to grow six-fold, as needed to achieve a 1.5 degree C future. Only 6 percent of the G20's COVID recovery funding between 2020 and 2021 went to clean energy. In addition, it is crucial to engage: (1) MDBs and IFIs to increase public and multilateral investments in the sector, including by driving in private finance at scale; (2) legislators and policymakers, to create the enabling conditions at a national level; (3) and local communities, where renewable energy projects will operate, in order to guarantee their right to free, prior, and informed consent.
- The pandemic and the energy crisis have deepened inequality and energy poverty, leaving 75 million people without the ability to pay for extended electricity services and 100 million people for clean cooking solutions.
- The just energy transition will also require addressing relevant supply chains. For instance, demand for critical minerals for clean energy technologies is set to quadruple by 2050, indicating the need for strong social and environmental safeguards for mining operations.
- The fossil fuel lobby continues to expand efforts not just in the national legislative bodies, but also in the international arena of negotiations.

### Sustainable Development Goals

- **SDG 7 Affordable and clean energy:** Considering that around 80 percent of the global population resides in net-energy importing countries, fostering renewable energy investment worldwide will also have a welcome impact in enhancing access to and more democratic control over energy sources, and putting an end to the geopolitical gridlocks in global fossil fuel transport routes and general access to energy supply.



### Options for the outcome at COP28

The GST outcome should recognize the need to rapidly ramp up global investment in renewable energy generation, mobilizing both public and private sources, and prioritizing developing countries across the board. Parties could:

- Call on relevant stakeholders to shift investments of public and private capital toward renewable energy to reduce the risks of stranded assets in the fossil fuel industry and/or avoid lock-in of long-lived carbon intensive assets.
- Call upon the largest energy consumers and emitters, such as the G7 countries, to lead the way, strengthening existing policies, regulations, and investment plans (i.e., NDCs) by 2030, while facilitating funds, knowledge, and technology transfer to developing countries—for instance through Just Energy Transition Partnerships.
- Call the international financial system to support capital flows toward renewables energy, as part of their current reform.

<b>Signal/high level ask</b>	<b>2. Urges bilateral, multilateral, and private creditors to create mechanisms for debt payments suspension, restructuring, and cancelation with a view to addressing climate-related needs, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Instituting Debt-for-Climate and nature swaps, or conditioned debt forgiveness for developing countries, supported by redistributed Special Drawing Rights and other existing tools, in exchange for trackable and ambitious action in fostering a just energy transition, as well as in protecting key ecosystems and carbon sinks.</li> </ul>
	<ul style="list-style-type: none"> <li>• Canceling debt related to fossil fuel projects to enable the early retirement of polluting energy plants, mines, and wells, under the condition that profits are reinvested directly into renewable energies and a green electric grid.</li> </ul>
	<ul style="list-style-type: none"> <li>• Canceling or suspending debt payments for developing countries recently struck by extreme weather events, to free up budget space for the country's disaster response and recovery efforts.</li> </ul>

### Impact

- Almost 80 percent of all climate finance being provided and mobilized over the last decade was in the form of loans, contributing to the already unsustainable debt burden of many climate-vulnerable countries. This has created a phenomenon called “climate-induced debt,” increasing the cost of capital and reducing the fiscal space to invest in climate action. Lower-income countries are spending five times more on debt repayments than on tackling climate change. In 2020 alone, low- and middle-income countries spent US \$372 billion on debt repayments.
- Debt relief—including an immediate moratorium on debt payments after a climate event and a pre-designed debt restructuring process, including debt cancellation, as soon as the damages and losses are evaluated—constitutes one of the most efficient and fast mechanisms at hand to provide support when it is most needed. In addition, debt payment suspension has the potential to provide immediate access to resources that are already in the hands of the authorities and thus do not have to be mobilized through lengthy pledging exercises. According to estimates from The Nature Conservancy,



US \$10 billion of debt forgiveness can harness into US \$2 billion in conservation actions, with not one penny of new philanthropy coming from private sector.

### Feasibility

- According to the OECD estimates, “green” recovery measures by many governments could already be around US \$312 billion, including “grants, loans and tax reliefs directed toward green transport, circular economy and clean energy research, development and deployment.”
- Debt-for-Nature swaps have been regularly implemented since 1987. They have generated by 2010 an estimated US \$140 million in local currency for conservation projects, as a result of the purchase of approximately US \$170 million in debt at face value for approximately US \$49 million. While the rate of debt-for-nature swaps has diminished drastically since the 2000s to only about two per year, there are already rich experiences to draw from in this regard, not only limited to conservation projects.

### A selection of key existing initiatives

- From May 2020 to December 2021, the **Debt Service Suspension Initiative**—supported by the World Bank and the International Monetary Fund—suspended US \$12.9 billion in debt-service payments for 48 countries.
- The **IMF Resilience and Sustainability Trust** helps low-income and vulnerable middle-income countries build resilience to external shocks and ensure sustainable growth, contributing to their longer-term balance of payments stability.
- The **Network for Greening the Financial System (NGFS)** and the **Coalition of Finance Ministers for Climate Action (CFMCA)** have both recently taken significant steps to advance their understanding of nature-related risks, recognizing the significant economic, financial, and fiscal implications associated with nature loss.
- At COP27, numerous developing countries voiced their demands to engage in **Debt-for-Nature Swaps**, including Gambia, Sri Lanka, Pakistan, Kenya, Colombia and Eswatini.

### Barriers

- The swaps are still a niche business, mainly because of high transaction costs, the need to monitor conservation or climate projects, and the requirement that a debtor country makes a long-term financial commitment.

### Sustainable development goals

- With the implementation of debt relief measures, countries with high vulnerabilities will be in a better capacity not only to invest in addressing climate impacts, but also in decent work, social programs, and economic progress (**SDG 8**).
- Debt-for-Nature swaps could become important pillars in the conservation strategies of key ecosystems (**SDGs 14, 15**).

### Options for the outcome at COP28

The GST Outcome should acknowledge the international debt crisis, and its deep interlinkages with climate change and nature, as well as its differential impacts upon developing countries. The system requires a full overhaul, including the contribution of innovative debt arrangements to expand the fiscal space in developing economies, in order to enable these countries to commit to ambitious climate policies. Parties could:



- Call upon Paris Club members, MDBs, DFIs, and the private sector to implement innovative debt solutions, such as haircuts, write-offs, Debt-for-Nature, and Debt-for-Climate swaps, among other tools, allowing developing countries to dedicate budget space to strategic climate change mitigation and adaptation actions.
- Also call upon G20 countries to reform the G20 Common Framework for Debt Treatments, to better allow developing countries to service debt payments, while also dedicating resources to addressing their climate-related needs and actions.

<b>Signal/high level ask</b>	<b>3. Call upon multilateral development banks, international finance institutions, climate funds, and other multilateral and bilateral cooperation agencies to increase the share of grants and highly concessional instruments for developing countries, particularly for the design, implementation, and monitoring of adaptation actions, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Advancing the full replenishment of multilateral channels that support developing countries, such as the Green Climate Fund, the Global Environment Facility, the Adaptation Fund and the Loss and Damage Fund, and significantly increase their proportion of funding in the form of grants and highly concessional instruments</li> </ul>
	<ul style="list-style-type: none"> <li>• Developing tools and methodologies to better appraise and track climate finance for adaptation action in the form of grants and concessional instruments.</li> </ul>
	<ul style="list-style-type: none"> <li>• Incentivizing vehicles for long-term adaptation solutions, including via blended finance.</li> </ul>
	<ul style="list-style-type: none"> <li>• Promoting interlinkages between adaptation and mitigation when setting up adaptation measures to generate co-benefits in both areas.</li> </ul>

### Impact

- In 2020 alone, developing countries spent US \$372 billion on servicing debt. Several studies provide a general sense of how much adaptation finance developing countries will need. UNEP's Adaptation Gap Report 2022 estimates that the annual cost of adaptation in developing countries could be between US\$ 160 billion and US\$ 340 billion by 2030 and between US\$ 315 and US\$ 565 billion per year by 2050.<sup>151</sup> The Climate Policy Initiative (CPI) in its 2021 edition on *Global Landscape of Climate Finance* highlighted that the public sector continues to provide almost all adaptation financing, and it represented just 14 percent of total public finance.<sup>152</sup> On top of this, almost 80 percent of all climate finance being provided and mobilized in the period 2017–18 was in the form of loans, contributing to the already unsustainable debt burden of many climate vulnerable countries.
- In that sense, scaling grants and other concessional finance for adaptation will deliver beneficial climate impacts in at least two major respects: building resilience to the impacts of climate change; and boosting fiscal space for investment in climate mitigation and adaptation alike.

<sup>151</sup> <https://www.unep.org/resources/adaptation-gap-report-2021>

<sup>152</sup> <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/>



### Feasibility

- All relevant technological and policy instruments exist within MDBs and IFIs to expand grants and concessional finance for adaptation actions in developing countries. However, further efforts should go to strengthening implementation and monitoring efforts at the national level, to ensure adequate reporting of results in order to fully access the benefits of concessional instruments.

### A selection of key existing initiatives:

- **Coalition of Finance Ministers for Climate Action:** Launched in April 2019 with the participation of 26 countries, the Coalition “brings together fiscal and economic policymakers from over 80 countries in leading the global climate response and in securing a just transition toward low-carbon resilient development.”
- **Coalition for Climate Resilient Investment (CCRI):** Launched at the UN Climate Action Summit in 2019, CCRI was established as a multi-industry, multi-region, public/private coalition. With over 120 members of the private sector representing over US \$20 trillion in assets.
- **UN4NAP:** In 2021, the UNFCCC secretariat launched a UN-wide partnership, UN4NAPs, to mobilize the whole UN system to support the most vulnerable countries in preparing and implementing their National Adaptation Plans (NAPs).

At COP27, MDBs delivered a **joint statement** highlighting their interest in booster support to build climate resilience providing particular attention and support to Low-Income Countries, Small Island Developing States.

### Barriers

- Limited private finance has been directed toward adaptation to date: for the period of 2018, only 1.6 percent of the global adaptation flows were sourced from private financing.
- Lack of consistent information regarding costs and methodologies for the identification of adaptation needs.
- The majority of adaptation finance is provided in the form of loans rather than grants, and this percentage has been increasing over the last few years.
- It is always a challenge to build government capacity to institutionalize climate change in planning and budgeting in particular for addressing the gaps and needs on adaptation and loss and damage.

### Sustainable development impacts

- **SDG 8 Decent Work and Economic Growth:** Predictable funds for the implementation of adaptation measures will allow countries to be prepared for the adverse effects of climate change and to avert and minimize future losses and damages.
- **SDG 13 Climate action:** Subsidies for adaptation measures could help countries to establish mechanisms to reduce impacts of climate change and support the fulfillment of international commitments without hindering the development of other national activities.
- **SDG 17 Partnerships for the goals:** Financial mechanisms in place for adaptation measures that allow the participation of different stakeholders, such as countries, civil society and cooperants, will contribute to sustainable development.

### Options for a GST outcome:

Parties could:

- Promote concessional financing to deliver transformative climate adaptation actions by innovative financial mechanisms such as non-debt instruments, and philanthropic funding.



- Call for MDBs, IFIs, climate funds, and bilateral agencies to work with governments and businesses to incentivize vehicles for long-term adaptation solutions, including via blended finance. Promote interlinkages between adaptation and mitigation when setting up adaptation measures to generate co-benefits in both areas.
- Further call upon MDBs and DFIs to increase the share of climate finance provided in the form of grants and highly concessional instruments, especially for the design, implementation and monitoring of climate projects that do not generate returns for the private sector to engage.

<b>Signal/high level ask</b>	<b>4. Urges tying fossil fuel subsidies reform to broader economy-wide just transition plans, and provide support to developing countries to implement it, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Carrying out comprehensive research on the economic sectors and population likely to be affected by fossil fuel subsidy reform, including existing levels of subsidy support and the distributional impacts of withdrawing it.</li> </ul>
	<ul style="list-style-type: none"> <li>• Gradually phasing out fossil fuel subsidies to enable households and firms to adjust over time.</li> </ul>
	<ul style="list-style-type: none"> <li>• Conducting effective public communication and stakeholder engagement campaigns to secure buy-in across society and different sectors.</li> </ul>
	<ul style="list-style-type: none"> <li>• Using part of the savings from phased-out fossil fuel subsidies to strengthen efforts toward Just Energy Transitions.</li> </ul>

### Impact

- Globally, fossil fuel subsidies amounted to US \$5.9 trillion or 6.8 percent of GDP in 2020 and are expected to increase to 7.4 percent of GDP in 2025. According to the IPCC, removing fossil fuel subsidies could reduce emissions by 1–10 percent by 2030 while improving public revenue and macroeconomic performance.

### Feasibility

- While results have varied strongly, numerous countries across the globe have led the way in fossil fuel subsidy reform, including Indonesia, Chile, Iran, France, and Ghana, garnering valuable experience for similar efforts elsewhere. Methodologies for the analysis of energy subsidies and their impacts of households have been tried and tested, such as the Energy Sector Management Assistance Programme (**ESMAP**) Energy Subsidy Reform Assessment Framework.

### A selection of key existing initiatives

- In 2009, the **G20 Pittsburgh Summit** agreed “to phase out and rationalize over the medium-term inefficient fossil fuel subsidies while providing targeted support for the poorest.”
- At COP26 in 2021, 197 countries agreed to accelerate efforts to phase down inefficient fossil fuel subsidies. 34 countries and 5 public finance institutions also signed the **Statement on International Public Support for the Clean Energy Transition**, committing to end new direct international public support for unabated fossil fuels by the end of 2022 and shifting it into clean energy.



- In 2022, **G7 Climate and Energy Ministers** made a similar commitment, reinforcing and building from the G20's 2009 Pittsburgh Summit commitment, to phase out inefficient fossil fuel subsidies while providing targeted support for the poorest.
- Alliances between academia and civil society are emerging to document fossil fuel subsidies worldwide and keep national governments accountable, grouped under umbrella initiatives as the **Energy Policy Tracker**, which includes the Stockholm Environment Institute, the International Institute for Sustainable Development, and the Institute for Global Environmental Strategies, OilChange International, the Overseas Development Institute and Columbia University.

### Barriers

- The absence of public support for subsidy reform is in part due to a lack of confidence in the ability of governments to shift the resulting budgetary savings to programs that would compensate the poor and middle class for the higher energy prices they face. It is thus critical for stakeholders to develop society-wide dialogues and communications campaigns, to convey the environmental and distributional benefits of subsidy reform to a larger audience, to better grasp and assess the differentiated impacts of reform at a local level, and to co-design implementation strategies with local governments and the citizenry. Moreover, the high degree of volatility of fossil fuel price generates uncertainty; the decline in the market price of fossil fuels—especially coal—may help facilitate the timely removal of subsidies, since its impact will be felt less by consumers. Nevertheless, some fossil fuel prices have spiked in the recent past in the wake of Russia's invasion of Ukraine. At the same time, a fossil fuel subsidy reform is also likely to be more cost-effective than alternative policies, such as subsidies for clean technologies.

### Sustainable development goals

- **SDG 7 Affordable and clean energy:** Fossil fuel subsidy reform can free up funds to provide targeted assistance for the poorest households and free up financing sources for a just transition through “swapping” or reallocating some of the savings from subsidy reform to fund the clean energy transition, generating social and economic benefits.

### Options for the outcome of the GST

Parties could:

- Consider, in the context of Decision 1.CP/26, following up on the implementation and plans to advance toward the phase-down of fossil fuels subsidies, including by identifying and promoting ways to ensure that the transition is and will be done in a just, fair and equitable manner without further delay.
- Take stock of progress in global fossil fuel subsidy phase-out since COP26, as well as on the impact these measures have had on economy, society, and overall climate change mitigation efforts.
- Encourage countries to redirect the freed-up funds toward investment in renewable energies, and response mechanisms, such as initiatives for social protection, skills training, development of labor market policies, and community development.



<b>Signal/high level ask</b>	<b>5. Calls for capacity building support to developing countries to operationalize Article 2.1.c of the Paris Agreement, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>Promoting the establishment and implementation of monetary/financial policy and regulation (standards, plans, accounting systems, lending requirements), fiscal policy (taxation, levies, royalties, public procurement, price support or controls), information instruments (certification and labeling, transparency initiatives, disclosure requirements, taxonomies), public finance, and use of different financial instruments (loans, grants, guarantees, equity, insurance)</li> </ul>
	<ul style="list-style-type: none"> <li>Fostering capacity building actions, such as training and education for government officials and stakeholders to understand and implement emissions reduction policies and programs; information and technology sharing to access to data and research to help developing countries identify best practices and strategies for reducing emissions, increase adaptive capacity; facilitate collaboration and networking between developing countries and other stakeholders to share experiences and best practices; and assist developing countries to measure, report, and verify their emissions, and build climate resilience.</li> </ul>

### Impact

- Operationalizing Article 2.1(c) in the developing world can create a more favorable enabling environment for the deployment of public and private capital alike.
- It can also create awareness amongst different stakeholders of the financial and private sectors as to the benefits of investing in strong action on climate change that includes economic growth, innovation, improved public health, and job opportunities.
- It can further avoid entrenching economies in unsustainable, low-productive, and unequal paths, and unnecessary stranded assets.

### Feasibility

- Financial policies and regulation are increasingly being put into place to achieve binding climate targets. The outputs of such planning processes are likely to look different between countries. Some may prefer an approach that pursues taxonomies for climate-consistent activities for adaptation and mitigation, while others may adopt existing taxonomies and focus on fiscal policy reform, such as phase-out of fossil fuel subsidies, and others will not use taxonomies at all. Estimates for total climate finance flows (including domestic and international primary investment globally) accounted for US \$632 billion annually, between 2019 and 2020. However, the estimated G20 budgetary transfers and tax expenditures, price supports, public finance and state-owned enterprise investments to fossil fuels was estimated to amount to US \$584 billion annually, between 2017 and 2019.

### A selection of key existing initiatives

- Several countries have either begun to develop or completed their own taxonomies. Asian countries such as Indonesia, Sri Lanka, and Kazakhstan have completed their taxonomy documents. Latin American countries are also adapting taxonomies to fit their specific context: Colombia was the first country in the Americas to launch a green taxonomy, and other countries in the region are doing the



same (e.g., Mexico, Peru, Chile). The Dominican Republic was the first country in the Caribbean to start developing a green taxonomy. The European Union also introduced its green taxonomy regulation in 2020.

- Development cooperation is playing a role in shifting finance flows, e.g., in supporting green budgeting and reform of climate and environmentally harmful subsidies and the introduction of carbon-pricing instruments.

### **Barriers**

- A significant barrier is the lack of a common definition for climate finance, making it difficult to accurately track and report on finance flows. There is no internationally agreed definition of 'climate finance.' In determining the amounts to be reported as climate finance, entities rely on their operational definitions and differences can affect estimates of overall finance flows. This makes it challenging to accurately track, for example, climate finance objectives against the targets outlined in an NDC.
- Another barrier is the lack of resources for hiring or training to build relevant technical and financial capacity, competing priorities, inadequate access to information regarding what is needed to match local needs with the minimum requirements to access key sources of public and private finance.
- Additional barriers include the lack of an adequate tracking system for access and utilization of climate finance, including private finance flows. Such a system would enable the government and other stakeholders to make informed decisions regarding climate finance and investments, with a deeper analysis of trends and distributions.
- Other barriers include gaps in data on adaptation finance, especially quantitative data, making it difficult to assess compliance with the Paris Agreement.
- Yet another barrier is the lack of clarity on how to measure progress toward Article 2.1(c) of the Paris Agreement, as well as both perceived and real double standards in operationalizing Article 2.1(c).

### **Sustainable Development goals**

- **SDG 16 - Peace, Justice and Strong Institutions:** Capacity building efforts will help strengthen effective, accountable and transparent institutions at all levels, especially in developing countries.
- **SDG 17 - Partnerships for the Goals:** Supporting the operationalization of Article 2.1(c) at a national level will strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for implementing national plans to implement all the sustainable development goals, including through North-South, South-South, and triangular cooperation.

### **Options for an outcome at COP28**

The GST must provide a clear signal as to how important it is to operationalize Article 2.1(c) as a whole and in particular to mandate the provision of capacity building support to developing countries so that they will be situated to optimally access sources of public and private capital for climate solutions, according to their national circumstances and needs. Any guidance on operationalizing Article 2.1(c) will need to allow for country-specific contexts, thus helping countries take ownership and determine how to finance their own low-carbon, resilient pathways.



<b>Signal/high-level ask</b>	<b>6. Urges MDBs, IFIs and private investors to revise and adjust their investment plans and portfolios by 2030 to align with the temperature and resilience goals of the Paris Agreement, by:</b>
<b>High-impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Strengthening mandates and incentives to deliver transformative and scaled-up climate action.</li> </ul>
	<ul style="list-style-type: none"> <li>• Adopting core definitions and mechanisms to ensure alignment with the 1.5 degrees Celsius limit.</li> </ul>
	<ul style="list-style-type: none"> <li>• Scaling up public finance and investments, particularly for low-carbon infrastructure, in addition to de-risking instruments in MDBs and IFIs and increase optimize the risk-taking by development banks to invest in decarbonization and resilience technologies, policies and measures in developing countries.</li> </ul>

### Impact

- The IPCC has reiterated in its last assessment report that a dramatic increase in funding will be essential and has the potential to substantially reduce emissions while supporting adaptation and resilience efforts, while reducing longer term costs.

### Feasibility

- Innovative instruments have been deployed for the debt relief of developing countries, e.g., debt and trilateral swaps. Although debt swaps have not resulted in significant amounts for developing countries (US \$2.6 billion in total, according to UNDP (2017), funding about US \$1.2 billion in nature- or development-related spending), they have the potential to become targeted instruments for climate change.
- Important experience on risk assessments for both concessional financing and loan operations already exists, although an adjustment must be made in a way that the risk reduction of future debts is considered as a result of the implementation of adequate investments in adaptation and mitigation.

### A selection of key existing initiatives

- In response to the fiscal and financial stress of most economies but, in particular, developing countries' debt crisis, Barbados Prime Minister Mia Mottley launched the **Bridgetown Initiative** in 2022, to propose the reform of the global financial architecture to drive financial resources toward climate action and SDGs, through the provision of emergency liquidity, the expansion of multilateral lending to governments by US \$1 trillion, and the activation of private sector savings for climate mitigation and fund reconstruction after a climate disaster through new multilateral mechanisms.
- Multilateral banks have the **2025 climate finance goals**, outlined at the 2019 UN Secretary General's Climate Action Summit in New York amounting to an expected collective total of US \$50 billion for low- and middle-income economies, and at least US \$65 billion of climate finance globally, with a projected doubling of adaptation finance to US \$18 billion, and private mobilization of US \$40 billion.



### Barriers

- MDBs have mobilized very little private finance to date. According to the MDB Joint report on Climate Finance, current provision and mobilization of climate finance corresponds to a range of 2.4 (Asian Development Bank) to a maximum of 13.7 percent (Asian Infrastructure Investment Bank) of climate finance, therefore, increasing the consistency of financial flows toward decarbonization and resilience pathways requires greater ambition.
- Developing countries increased their external debt stocks to US \$11.1 trillion in 2021. In addition, 60 percent of the low-income economies are classified by the IMF and the World Bank as being either in debt distress or at high risk of debt distress. Therefore, instead of devoting funds from the public treasury to address the effects of the climate crisis, countries pay the debt and/or become more indebted in order to carry out efficient mitigation and adaptation investments to respond to the crisis.
- The cost of capital for investing in climate solutions has been rising for the very same countries that are most vulnerable to climate impacts and/or seeing worsening debt crises tied to worsened climate impacts that they already are enduring.

### Sustainable Development goals

- **SDG 17 Partnerships for the goals:** Strengthening the long-term perspective and the efficiency of climate funds would play an important role in reducing waste and ensuring resources reach those who need them the most.
- **SDG 13 Climate action:** The consistency of financial flows to achieve the long-term goals of the Paris Agreement are required, in order to achieve the sub-target 13.4 on implementing the UNFCCC.

### Options for a GST Outcome

Decision 1/CP.27 already calls MDBs and IFIs to reform their operational models and align its resources to climate action. To build on that language, Parties could:

- Call upon MDBs and IFIs to align all operations, internal incentives, and investments with the 1.5 degree C goal by 2025, at the latest.
- Call upon MDBs and IFIs to adopt core definitions and mechanisms to ensure Paris alignment at the system level.
- Call upon MDBs and IFIs should increase the use and quantity of availability of concessional financing (i.e., grants, guarantees, blended finance, and non-debt instruments) strategically to deliver transformative climate action.
- Call upon MDBs and IFIs to create fiscal relief in developing countries and new de-risking mechanisms and approaches in consultation with leading private financial institutions or alliances to enable successful calibration for mobilizing private investment for climate solutions at scale.
- Call upon MDBs and IFIs to include loss and damage (L&D) and adaptation needs in their assessment criteria for support.



<b>Signal/high level ask</b>	<b>7. Call upon institutional investors and corporate actors to enhance understanding, disclosure and management of climate-related financial risks and opportunities, by:</b>
<b>High impact opportunities/solutions</b>	<ul style="list-style-type: none"> <li>• Reporting, publishing, and sharing information related to governance structures, strategies, risk management practices, metrics, and targets.</li> <li>• Accelerating efforts to manage climate-related financial risks and opportunities, including with a focus on addressing the financial impacts and implications of extreme weather events, gradual changes on climate and the transition to a low-carbon economy on revenues, expenditures, assets and liabilities, and capital and financing.</li> </ul>

### Impact

- The transition to a low-carbon economy, consistent with the objectives of the Paris Agreement, requires a radical shift of resource allocation and, thus, a seminal response by the private sector, including institutional investors and non-financial corporations. In addition, damage to assets serving as collateral creates losses that prompt banks to restrict their lending in certain regions, reducing the financing available for reconstruction in affected areas—even as insurers likewise pull back from markets with heightened vulnerability to climate impacts. By enhancing understanding about the financial implications of climate change and transitions to low-carbon economies among investors and companies, risks and opportunities will be more accurately priced, allowing for the more efficient allocation of capital in support of the necessary transition to a net zero emissions economy. With the benefit of mandatory climate risk disclosure, there will be increased awareness and understanding of climate-related risks and opportunities within companies, resulting in better risk management and more informed strategic planning.

### Feasibility

- The Task Force on Climate-related Financial Disclosures (TCFD) reported the following advancements and maturity of disclosure practices from 2017 to 2022, based on over 1,400 large companies reports and TCFD surveys: The percentage of companies disclosing TCFD-aligned information continues to grow, but more urgent progress is needed. For 2021, 80 percent of companies disclosed in line with at least one of the 11 recommended disclosures; however, only 4 percent disclosed in line with all 11 recommended disclosures and only around 40 percent disclosed in line with at least five. The percentage of companies disclosing the TCFD recommendations in financial filings or annual reports has increased each year. 70 percent of companies implementing the TCFD recommendations disclosed climate-related information in financial filings or annual reports for 2021 compared to 45 percent for 2017.
- A majority of asset managers and asset owners report to their clients and beneficiaries. Over 60 percent of asset managers and over 75 percent of asset owners surveyed indicated they currently report climate-related information to their clients and beneficiaries, respectively. Nearly 50 percent of asset managers and 75 percent of asset owners reported information aligned with at least five of the 11 recommended disclosures. Investors and others use disclosures in decision-making and pricing.



### A selection of key existing initiatives

- The **Financial Stability Board (FSB)** is an international body that designs recommendations related to the financial global system to promote international financial stability.
- The **Task-Force on Climate-related Financial Disclosures (TCFD)** is an FSB initiative that aims to improve and increase reporting of climate-related financial information to support informed capital allocation.
- **Glasgow Financial Alliance for Net Zero (GFANZ)** is a global coalition of financial institutions committed to accelerating and mainstreaming the decarbonization of the world economy and reaching net-zero emissions by 2050. GFANZ brings together representatives from the major finance sector net zero alliances and has released extensive net zero transition planning guidance for financial institutions.
- The **Network for Greening the Financial System (NGFS)** aims to accelerate the work of central banks and supervisors on climate and environmental risk and on scaling up green finance.
- The **Bank for International Settlements** which coordinates the Basel Committee on Banking Supervision (BCBS) is the primary global standard setter for the prudential regulation of banks and provides a forum for regular cooperation on banking supervisory matters.

### Barriers

- The market and, in some cases, regulators are requiring more comprehensive information, particularly on potential business impacts, and on doing so, companies may incur the risk of disclosing potentially commercially sensitive information.
- Data and methodologies for assessing climate-related metrics over extended time horizons and across diverse global value chains are still relatively immature compared to traditional financial metrics and there is considerable uncertainty in the underlying assumptions. Therefore, there is a need for the standardization of methodologies used by companies to quantify risks and opportunities, particularly within the oil and gas industry.
- Lack of resources to procure the needed data to develop the assessment of climate risks, increasing the costs associated with these processes, lack of regulatory mandate and shortage of in-house capabilities.

### Sustainable development goals

- **SDG 8 - Decent work and economic growth:** Understanding, disclosure and management of these risks and opportunities, would progressively improve global resource efficiency and decouple economic growth from environmental degradation (Target 8.4).
- **SDG 13 - Climate action:** Disclosure of climate-related financial risks through investors and corporate actors would contribute to the understanding on how to integrate climate change measures into national policies, strategies, and planning (Target 13.2).
- **SDG 16 - Peace, Justice and Strong Institutions:** Develop effective, accountable, and transparent institutions at all levels (Target 16.6).
- **SDG 17 - Partnerships for the Goals:** The more transparency related to financial risks associated with climate change, the easier it will be the creation of networks and relationships between the institutional and private sectors due to the identification of common climate threats. Therefore, the enabling conditions for strengthening domestic resource mobilization (Target 17.1) could emerge.

**Options for a GST Outcome:**

COP26 and COP27 have opened a door to provide general orientation to MDBs and IFIs in relation to their alignment to the Paris Agreement, however, there are several other stakeholders in the financial sector which need to be involved in its transformation. Parties could:

- Call on governments/regulators to adopt mandatory climate risk disclosure and to call on institutional investors & corporates to adopt and disclose net zero transition plans.