

Task Force 2: Well-Being, Environmental Sustainability, and Just Transition



Integrated Approach for Well-Being, Environmental Sustainability, and Just Transition

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Abstract

- The 2030 Agenda for Sustainable Development and the Paris Agreement established a strong foundation for the coherent implementation of climate action and sustainable development objectives across all levels and sectors. However, recent global crises, such as climate, energy, the Russian invasion of Ukraine, the coronavirus disease (COVID-19), and environmental crises, have hampered actions for achieving the Sustainable Development Goals (SDGs), carbon neutrality, and human well-being.

- The world has crossed several planetary boundaries undermining the Earth’s ability to support human life.
- Environmentally sustainable solutions are prerequisites to achieving other key Group of Seven (G7) priorities, such as economic prosperity, energy security, global health, and education. Environmental sustainability measures should be implemented to achieve a just transition while promoting human well-being, especially job creation. Integrated solutions are required to achieve these priorities simultaneously.
- The Russian invasion of Ukraine should be a turning point in seizing the opportunity to address the world’s unfolding climate crisis by rapidly reducing the reliance on fossil fuels. The Russian invasion of Ukraine does not change the nature of the needed solutions but increases the urgency of sustainability crises.
- The G7 leaders, in close collaboration with other Group of Twenty (G20) leaders, should reignite actions for the SDGs, carbon neutrality, and climate-resilient development through an integrated and holistic approach considering well-being, environmental sustainability, and a just transition to staying within planetary boundaries. These actions must include effective measures related to finance, science and technology, governance, capacity building, and education based on scientific evidence.
- To deliver such measures, the G7 countries should (i) decarbonize energy systems for carbon neutrality through accelerated investment in clean energy systems and electric public mobility, and strengthen regulatory frameworks to promote a circular economy, low-carbon built environment, and artificial intelligence-enabled human-positive world; (ii) foster sustainable food systems and biodiversity conservation to significantly reduce carbon footprints, strengthen natural carbon sequestration, and achieve greenhouse gas emission reduction targets; (iii) enhance resilience, social protection, and social security to mitigate the disruption caused by the transition; (iv) finance the promotion of a just transition; (v) create a consistent mechanism that annually measures just transition, environmental sustainability, and well-being; (vi) strengthen partnerships for climate and sustainable development; and (vii) promote capacity, education, and youth empowerment.
- Our recommendations in this issue paper thus require the G7 to substantially increase its support for developing countries to address climate change and other high priorities. The support could also significantly reduce the risk of climate insecurities.

Introduction

Sustainability crises are worsening. Our planet has capacity limits for pollution, biodiversity, and the extent of climate change. The ability of the Earth to sustain human civilization is being threatened as planetary boundaries are being crossed (Steffen et al. 2015), thereby increasing economic costs and infrastructure damage and undermining human well-being (Raworth 2012), national security, and political stability (Bateman and Bergin 2020; Femia and Werrell 2017; Gunn 2017). Human well-being cannot be considered separately from environmental sustainability. A healthy environment is both a prerequisite and a foundation for economic prosperity and human health and well-being (UNEP 2019). Thus, an integrated approach is needed to simultaneously address human well-being and environmental sustainability.

The adoption of the 2030 Agenda for Sustainable Development (the 2030 Agenda) and the Paris Agreement in 2015 established a strong foundation for the coherent implementation of climate action and sustainable development objectives across all levels and sectors. The multiple interlinkages between the 2030 Agenda and the Paris Agreement indicate that integrated and synergistic implementation will lead to many benefits. Furthermore, the recently adopted Kunming-Montreal Global Biodiversity Framework enshrines a whole-of-government and whole-of-society approach, highlighting the need for urgent and concerted efforts fostering transformative change to conserve and restore biodiversity, sustainably use natural resources, and simultaneously meet other global societal goals. At the UN Transforming Education Summit in 2022, convened by the UN Secretary-General, the importance of the whole-of-society approach was confirmed to promote climate action by engaging a diverse group of people. A synergistic approach would enhance the effectiveness and quality of outcomes, contribute to the efficient use of resources, promote coherence across sectors and among actors, and encourage the formation of novel partnerships.

However, progress needs to be improved, while the narrow definition of development focusing on gross domestic product (GDP) worsens the situation. Since the turn of the millennium, there have been several institutional attempts to create new statistical tools to measure well-being and the quality of growth. The current situation may be a strong window of opportunity to initiate a new measurement across Group of Seven (G7) members, with a more transformative impact.

In this context, to drive urgent, ambitious, and inclusive actions, this issue paper provides recommendations to the G7 on issues related to a just transition and post-coronavirus disease (COVID-19) economic, social, and environmental challenges to achieve the Sustainable Development Goals (SDGs) and the Paris Agreement (maximizing benefits and synergies and co-benefits while minimizing trade-offs). This issue paper suggests critical approaches and policy recommendations for re-igniting actions for the SDGs and carbon neutrality for the G7 leaders.

Challenges

Slow Progress Toward Achieving the SDGs and the Paris Agreement

- The G7 must recognize and address planetary boundaries, climate crisis, biodiversity loss, and pollution while strengthening human well-being. Measures, including those adopted by the G7, need to be strengthened. Neither the Paris Agreement, the SDGs, nor other multilateral environmental agreements are on track, planetary boundaries are being breached, and the related economic and social costs are mounting. A significant gap exists between countries' nationally determined contribution (NDC) targets and the expected outcome of implementing their existing policies (UNEP 2022).
- COVID-19 and the Russian invasion of Ukraine have worsened sustainability challenges (Elder et al. 2022; Matsushita 2023; Mori et al. 2021). These crises show the need and urgency to break away from dependence on fossil fuels. Implementing the Paris Agreement and SDG-aligned and nature-positive recovery measures that do not harm the environment is critical to countering the devastating impacts on all spheres of life.

- The G7 has already recognized the importance of environmental sustainability concepts and taken steps toward linking environmental, economic, and social sustainability, e.g., through the SDGs. Yet, some G7 countries have not implemented key recommendations, such as eliminating fossil fuel subsidies. Other recommendations, such as carbon pricing, have been partially but not sufficiently implemented, and some critical actions, such as green investments, are not effectively coordinated among G7 countries. The G7 should lead global energy markets toward net zero emissions by 2050. Even though clean energy transitions in the G7 are underway, progress must be accelerated to reach key milestones for net zero electricity by 2035. G7 energy decarbonization efforts must also guarantee that no one is left behind from the energy system transformation or excluded from clean energy access (Azhgaliyeva et al. 2023).
- G7 financial commitments for a climate-neutral and resilient world have not yet been fully delivered (Aleksandrova et al. 2023). These commitments could be effectively delivered through an open and inclusive “climate club,” promoted by Think 7 Germany, in which countries commit to the requisite climate action, and high-income countries provide resources to enable low-income countries to join, or under a similar format. Proactive measures are necessary to ensure the most vulnerable can access the loss and damage climate funds (Dahiya and Okitasari 2022). There is an urgent need to align G7 financial flows with the long-term goals as required in Article 2.1(c) of the Paris Agreement.
- Even though the impacts of climate mitigation on the SDGs have been well studied, research gaps remain. There is a need for future research collaboration within the global scientific community to enhance evidence regarding (1) the impacts of achieving the SDGs on climate action, (2) the interlinkages between climate adaptation and sustainable development, (3) the interlinkages between climate action and social welfare, (4) the indirect interlinkages compared to direct interlinkages, and (5) the interlinkages relevant for developing countries. Future research also needs to provide clear guidance on strengthening synergies in developing coherent and effective policies, which can inform discussions on how to strengthen policy instruments and governance structures.

Implementing Principles for a Just Transition to Mitigate Climate Change and Other Global Environmental Crises While Supporting Economic Prosperity and Human Well-Being

- A just transition is a complex process, which touches upon several dimensions affected by interrelated challenges, as follows.
- Rapid energy transition entails social transformation, which can increase vulnerabilities and entrench inequalities (Sovacool et al. 2021; Takemoto et al. 2022). The Intergovernmental Panel on Climate Change’s Special Report on Global Warming of 1.5°C (IPCC 2018) identified potential problems emerging from policy trade-offs (e.g., higher electricity prices) and unintended outcomes, including potential maladaptation. In both developed and developing countries, including those within the G7, the most vulnerable groups during the transition include lower- and middle-income households (Takemoto et al. 2022). The energy transition risks economic displacement, especially unemployment, in the fossil fuel industry and other unsustainable industries (Okitasari and Korwatanasakul 2023). Therefore, it is necessary to ensure that the energy transition is a just transition that does not leave anyone behind. Socially oriented climate actions can strengthen climate policy outcomes while bringing multiple social benefits (Zhou et al. 2023).

- The climate crisis disproportionately impacts women and girls (UNFCCC Secretariat 2022). There are still barriers to gender mainstreaming in the energy sector of the G7 members. Permanent and sustainable change should be facilitated, and inclusion, diversity and equality goals must be met, thereby turning the vision of the G7 Equal by 30 Campaign into reality.
- Globally, 23.7 million people were displaced in 2021 due to climate change-induced weather-related events (Internal Displacement Monitoring Centre 2022), and the number continues to grow yearly, contributing to political instability in the affected countries. Climate change-induced displacement occurs internally and externally. There is an urgent need to systematically integrate climate security into multilateral fora and institutions, strategies, policies, and programs to develop inclusive and intersectional strategies.
- Climate change, biodiversity loss, and other environmental crises threaten human and planetary health (land and soil, ocean, water, wildlife, and plant health) (IPCC 2022). The G7 Summit in 2022 recognized the urgency of working holistically to effectively mitigate the impact of threats across all sectors and addressing mental health concerning COVID-19 impacts. Even though the G7 2021 Summit recognized the One Health approach, a concept which understands human, animal, and environmental health as inextricably linked issues, a G7 One Health vision and related policies and programs still need to be developed, and resources need to be allocated. The COVID-19 pandemic has not only disrupted global supply chains but also highlighted the need for policy coordination to boost economic prosperity and well-being for all. Despite the inclusion of COVID-19 recovery and economic and social security in Group of Twenty (G20) action plans, significant developmental gaps remain, preventing equitable and affordable access to quality health for all (Fransen et al. 2021; Sirivunnabood and Korwatanasakul 2022; Korwatanasakul et al. 2023).
- In this context, the G7 Partnership for Global Infrastructure Investment (PGII), launched in 2022 to finance projects to close the infrastructure gap in developing countries, should be implemented in a way that does not harm natural ecosystems.
- More substantial and meaningful youth engagement is critical in achieving sustainability goals globally because young people are connected to each other like never before and have the potential to propose innovative solutions able to drive social progress.

Interrelated Challenges Require More Integrated Solutions to Sustainable Development

- Climate and biodiversity challenges are complex and driven by multiple causes. They are becoming more interrelated and cannot be solved using piecemeal, siloed approaches that only address one specific cause independently. Solutions need to take the form of integrated solutions to consider the linkages between the various issues, including those that have been illustrated by the Intersecting global editorial project since 2020 (IPCC 2022; IPBES 2019).
- Food production essentially supports human survival and well-being and serves as one of the largest drivers of global environmental crises, including the climate crisis, biodiversity loss, nitrogen cycles, and freshwater shortages, endangering the earth's functioning system (Webb et al. 2020). The challenges in the dynamic, complex, and amplifying nature of food systems interlinked with agriculture, food value chains, diets, health, and ecosystem functioning cannot be addressed without concerted and coordinated efforts across different sectors, communities, governance levels, and disciplinary areas.

- Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC) clearly emphasizes that the interrelated challenges we face cannot be resolved without enabling the whole of society to be part of the solutions. This can be only possible through education and public empowerment for a sustainable future. Equal and inclusive learning opportunities throughout one’s life are crucial for enabling people from all walks of life to be change agents. Technologies, such as information and communications technology and artificial intelligence (AI), are widely believed to facilitate the realization of the SDGs and “Society 5.0,” a sustainable human-centric society that utilizes cutting-edge technologies to enhance social value and human well-being (Corrado et al. 2022; Korwatanasakul and Takemoto 2021; Korwatanasakul and Takemoto 2022).
- The transition to net zero necessitates the use of critical minerals in various clean energy applications. An integrated approach is needed to ensure that G7 measures addressing supply challenges and geopolitical volatilities do not create new negative environmental and social impacts related to mining and processing or harm vulnerable populations (Janardhanan et al. 2023).
- These interrelated challenges require strengthening collective actions and multi-stakeholder dialogue, including through international partnerships.

Just Transition Requires Effective Measurement and a New Way to Measure Human Well-Being Holistically, Going Beyond GDP

- The world has had difficulty addressing urgent problems, including climate and environmental crises and economic and social issues. A central reason for this is that key components, such as quantities of greenhouse gas (GHG) emissions, are not included in the GDP of most countries in the Global South. Another reason is that the prosperity of nations and businesses is not measured appropriately at the global level.
- Overall, there is a shortage of human resources who understand the interlinkages between human well-being and environmental sustainability, the necessity of the whole-of-society approach, and the scientific methodology of measuring human well-being and environmental sustainability in both the Global South and the Global North.
- People today focus too much on GDP growth and shareholder value as economic yardsticks while giving unduly low priority to environmental sustainability, jobs, or well-being. We have not measured what counts for the environment and social performance. Climate change, biodiversity loss, financial instability, and inequalities of opportunity are not well addressed within the current framework of the market economy. GDP and shareholder value do not adequately account for environmental degradation and social fragmentation. For example, climate change and biodiversity loss endanger the present and future of humanity, but these phenomena are often not counted as detriments to GDP and shareholder value. Similarly, clean air does not count toward GDP, but medical treatment for health damage and equipment to remove air pollutants from industrial processes do. Finally, social fragmentation, which is not accounted for in GDP, prevents people from engaging in the collective action required to overcome such problems and adversely affects countries’ social performance.
- Measuring SDG attainment only through individual indicators is not enough. Monitoring must consider the interlinkages among the SDGs, including the synergies and trade-offs, which influence their achievement (Kandpal and Okitasari 2022). Such an approach would complement the findings of the 2019 Global Sustainable Development Report (GSDR) (the

2023 report is under preparation), which highlights key components of transformations toward sustainable development and identifies concrete areas where rapid, transformational change is possible.

Key Approaches

An Integrated and Holistic Approach to Sustainability, Prioritizing the Environment

- Environmental sustainability needs to be prioritized because it affects economic and social sustainability (UNEP 2021), such as well-being, health, and food security.
- Reports by the IPCC (2022), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 2019), UNEP (2019), and the United Nations (2019), as well as other international assessment reports, have recommended integrated solutions for sustainability. The SDGs are a good starting point for the G7 to ramp up integrated solutions. For example, the SDGs include various economic targets that can strengthen environmental sustainability while creating jobs and supporting sustainable consumption and production (Elder 2021).
- A holistic and system-based approach to decarbonization is needed, including transforming the energy and infrastructure systems that link climate and biodiversity in a way that also supports human well-being.

Just Transition: Advancing the Climate, Sustainable Development, and Human Well-Being Agenda

- As argued earlier in this paper, measures to safeguard planetary boundaries and promote environmental sustainability should be implemented in a way that promotes human well-being.
- In its Berlin Roadmap, the G7 adopted an ambitious 3-year work plan containing concrete measures to enhance resource efficiency (G7 Germany 2022). The G7 members should intensify cooperation in all relevant sectors with the goal of a true circular economy and transition to the environmental, social, and economic sustainability of supply chains. This will enable a transition to a climate-neutral, nature-positive, equitable, and resilient economy in a way that protects the environment, climate, and human rights and creates decent green jobs (Global Environment Facility 2022).
- The G7 must achieve sustainable food systems through sustainable agriculture and energy use, including protection, conservation, restoration, and sustainable use of biodiversity. It must also meet global health challenges through measures to promote human well-being and capabilities, including delivering on the G7 One Health vision, policies, programs, and resources.
- Considering the risk of climate insecurities, and in line with the Berlin Declaration on Education for Sustainable Development, G7 members must support the strengthening and transformation of quality education systems to be resilient against emergencies and crises, contributing to protecting the right to education of climate-displaced persons. Such resilient education systems should increase preparedness during normal times, implement early

systematic responses during disruptions, and recover after disruptions (King et al. 2022). It is also necessary for G7 countries to recognize diverse knowledge systems in climate science and policy processes, SDG implementation, and cultural diversity.

Financing and Multi-Stakeholder Partnerships

- There is an urgent need for the G7 to deliver on its commitments to increase finance for climate, the SDGs, and other initiatives. The G7 still needs to achieve the targets it committed to, especially for climate-related assistance for developing countries. The G7, as a group of leading industrialized economies, has a particular responsibility to not only deliver its fair share of the globally needed mitigation efforts but also support the necessary just transition and management of climate risks and impacts. The G7's scaled-up financial assistance should aim to balance mitigation and adaptation. The following items are important pre-conditions to achieve this financial objective.
- The G7 should mobilize finances from all sources to strengthen ambitious climate and biodiversity actions and ensure robust policies and systems are in place to facilitate private actors to align their financial flows with climate and other sustainability objectives.
- G7 countries should scale up their support to avert, minimize, and address loss and damage, particularly in vulnerable developing countries, including delivering on the G7's commitments on climate and disaster risk finance and insurance and working toward the Global Shield against Climate Risks.
- G7 countries need to synergize their finance for climate and biodiversity finance through nature-positive investments and climate finance with nature co-benefits.
- Multi-stakeholder dialogues at all levels are critical to synergizing SDGs and climate actions.
- Stronger support for education, science, and technology is necessary to strengthen youth participation in scaling up their efforts to accelerate climate action and the implementation of the SDGs.

New Internationally Agreed Measures of Well-Being (Beyond GDP): Interconnecting Ethical Measurement of Prosperity and a More Holistic Approach to Strengthening the Delivery of the SDGs

- Prosperity should be measured to enable solutions to collective action problems at all appropriate levels—local, state/provincial, national/federal, regional, and global. This requires measuring human well-being more profoundly and extensively than GDP and shareholder value. Such a move has been reflected in the evolution of the UNDP Human Development Indexes since 1990, but more transformative approaches are necessary.
- There has been considerable focus on measuring SDG progress using indicators and statistics (D'Errico et al. 2020). To enhance the effectiveness of the SDG follow-up and review process (D'Errico et al. 2020; Kandpal and Okitasari 2022), the G7 should also conduct rigorous, country-led evaluations that examine policy and program implementation and effectiveness and build well-reasoned and supported cases for claims of progress (Elder and Bartalini 2019; Sachs et al. 2022).
- SDG indicators measure progress in the economic, social, and environmental domains. For progress in these domains to be measured effectively, the G7 should agree on aggregate

indicators of economic, social, and environmental prosperity. The aggregate economic indicators should cover not only GDP but also inequalities; the aggregate social indicators should cover social cohesion and personal empowerment; the aggregate environmental indicators should cover metrics on climate and biodiversity. These aggregate indicators should be a tool to communicate national policy objectives easily and review progress.

- The aggregate indicators should be (i) consistent across G7 countries and through time, (ii) measured annually, and (iii) relevant for the evaluation of public policy.

Policy Recommendations for Reigniting Actions for the SDGs, Carbon Neutrality, and Climate-Resilient Development

The G7 leaders, in close collaboration with other G20 leaders, should enhance actions to promote the Paris Agreement and the SDGs through an integrated and holistic approach to staying within planetary boundaries by considering well-being, environmental sustainability, and a just transition. Such an integrated approach should guide the design and implementation of solutions, which should not be delivered independently. For instance, scaling up investments in renewable energy and the strategic selection of sources of energy are actions that should take into consideration existing food production processes to avoid threatening sustainable agricultural systems and to preserve biodiversity. In addition, a just transition requires increased institutional capacity and public policies to support the creation of green jobs, through which systematic vocational training programs and strengthened social safety nets will be critical to protecting those who are impacted. This process must engage various stakeholders throughout the entire decision-making process to ensure the long-term benefits of the transition.

Based on scientific evidence, these actions must include effective measures related to finance, governance, education, capacity building, and science and technology. The following subsections present policy recommendations that should be delivered in an integrated way. For ease of clarity, they are presented by area and type of action.

Overall, open science with and rapid sharing of knowledge, data, and tools and support research activities in various fields to enhance evidence-based solutions through collecting good practices and quantitative and qualitative assessment should be strongly supported. This will contribute to the initiatives of the Task Force on Climate-related Financial Disclosure (TCFD) and Task Force on Nature-related Financial Disclosure (TNFD) initiatives.

Universal Access to Carbon-Neutral Energy Systems

- Accelerate investments in renewable energy sources, upgrade electrical grids, and remove obstacles to grid access by renewable energy both in the G7 and G20 countries and beyond, to be aligned with the pathways for net-zero emissions by 2050, including net-zero electricity by 2035.
- Enhance legal frameworks, research and development of technologies, enhancement of standards and codes, promotion of labeling schemes, and awareness-raising across all sectors in G7 and G20 countries to decarbonize energy systems, improve energy efficiency, strengthen

energy security, and reduce energy costs, especially in the context of the Russian invasion of Ukraine.

- Phase out fossil fuels, especially coal, by accelerating clean energy systems, and call on G20 countries to do the same. In this particular context, the G7 should increase support for developing countries for realizing universal access to electricity by 2030, mainly through clean energy in a way that contributes to pollution reduction and gender equity.
- Strengthen regulatory frameworks and conduct awareness-raising campaigns to promote the circular economy and resource efficiency and reduce the negative impact of pollution and biodiversity loss from the increase in the extraction of critical minerals and unsustainable land development for renewable power infrastructure.
- Increase investment in electric public mobility and its infrastructure, and deliver G7 commitments to increase the sale, share, and uptake of zero-emission public transport, public vehicle fleets, and freight with electric power based on renewable energy.
- Enhance regulatory and nonregulatory policy tools for the application of AI and digital technologies to maximize their positive impact on society and contribute solutions to the climate crisis and implementation of SDGs.
- Improve regulatory systems for a safe, green, healthy, and inclusive built environment by enhancing building codes and energy efficiency standards. This will transition the building sector to cleaner technology and sustainable low-carbon material in the renovation and construction of buildings.
- Work with the scientific community to enhance evidence on integrated solutions between climate action and the SDGs by collecting good practices and research activities in various fields.

Promote Sustainable Food Systems and Biodiversity Conservation

- Deliver on the G7's commitment to implementing the Kunming-Montreal Global Biodiversity Framework by (i) expanding the designation of protected areas and other effective area-based conservation measures (OECMs) by at least 30% of terrestrial, inland water, and coastal and marine areas by 2030 (30 by 30) nationally and globally; (ii) strengthening the management of protected areas and OECMs; and (iii) placing under effective restoration by 2030 at least 30% of areas of degraded terrestrial, inland water, and coastal and marine areas.
- Significantly reduce carbon footprints and strengthen natural carbon sequestration and food security throughout the whole food supply chain by promoting sustainable agricultural productivity growth, organic farming, and the utilization of agroecological and other innovative approaches.
- Encourage local governments and the private sector to set up targets for GHG emission reductions, conservation of biodiversity, and avoidance of food loss through enhanced demand side management, including dietary shifts and reducing food waste, to reduce GHG emissions from food products.
- Realign food and agricultural policies to be consistent with climate change mitigation and biodiversity targets, including agricultural subsidies, land-use regulations, land tenure systems, food and environmental taxation, food product and service regulations, and consumer incentives.

- Increase investments in adaptation targeting climate and biodiversity objectives and sustainable infrastructure for public mobility and transportation, buildings, and energy systems.

Enhance Resilience, Social Protection, and Social Sustainability

- Strengthen policies to promote public transportation, renewable energy, sustainable buildings, and electric mobility. These policies will simultaneously enhance integrated social protection, create green jobs, and improve mobility for people “left behind.”
- Expand workforce training for energy-related industries and broader sustainability transitions in G7 countries and beyond, especially relating to engineering, managerial, and other technical skills.
- Promote the realization of decent work and labor rights within the G7 and other countries to mitigate disruptions caused by the transition. The impact of a transition to green jobs should be softened by strengthening social safety nets. Stronger social safety nets (SDGs 1, 13, 14, and 15) will increase public support for climate and other sustainability measures if people are confident they will not be “left behind.”
- Promote the One Health approach as a prerequisite for addressing climate change, pollution, and biodiversity loss, since these problems disproportionately affect women, girls, and people left behind. The G7 also should deliver on its commitments to develop collaborative data systems and surveillance for pandemic prevention.

Finance for Promoting a Just Transition

- The G7, as leading industrialized countries holding immense capacities for investment and innovation, should enhance climate financing for loss and damage to fill the gaps left by the existing climate finance mechanisms, including universal disaster risk insurance, delivering and increasing funding to the Global Shield against Climate Risks, and scaling up support for Global Environmental Facility funds targeting the immediate climate adaptation needs of vulnerable and low-income states.
- The G7 should (i) commit to increasing their national budget allocations for climate finance and implementing clear policies to align and mobilize public and private finance flows; (ii) strengthen the effective carbon market and carbon pricing systems to promote rapid GHG reductions and a just transition; (iii) intensify efforts to develop, align, and implement science-based sustainable finance taxonomies; (iv) make disclosures of climate-related risks and opportunities mandatory for all publicly traded companies, large private companies, and government-linked financial institutions and adjust prudential frameworks to account for climate-related and other environmental risks (Volz et al. 2022).
- The G7 should scale up financing for all international financial institutions in which they are shareholders, implement their existing commitments, and support reforms in multilateral development banks and other development finance institutions that facilitate an enabling environment for private finance mobilization.
- The G7 should phase out environmentally harmful subsidies and call on other countries to do the same. The funds saved from these subsidies and carbon market/pricing can be reallocated to fund just transition policies and programs.

Create an Annual, Consistent Mechanism to Measure Just Transition, Environmental Sustainability and Well-Being

- Develop consistent measures of economic, social, and environmental prosperity for all members of the G7, to be agreed upon at the international level, comprised of aggregate economic, social, and environmental impacts. The social impacts should cover social solidarity (social cohesion and embeddedness) and agency (empowerment to shape one’s life through one’s efforts). The proposed SAGE dashboard (Lima de Miranda and Snower 2020) provides a foundation for such an effort (where S stands for solidarity, A for agency, G for material gain, and E for environmental sustainability).
- Enhance the G7’s work to strengthen just transition measurement and reporting and pursue collaborative efforts with the Global South to improve their capacities further.
- Strengthen the SDG monitoring and evaluation system (Kandpal and Okitasari 2022), incorporating an integrated and holistic approach at the local and national levels. This includes integrating SDG Follow-up and Review Principles (UN 2015; Montero 2021) and criteria relevant to the Paris Agreement, such as consideration of ecosystems, in the G7 national and local SDG monitoring and evaluation systems, increasing parliamentary involvement in oversight of the SDG implementation, and reaffirming commitments to improve statistical capacity and the data ecosystem.

Strengthen Partnerships for Climate and Sustainable Development

- Enhance multi-stakeholder coalitions for scaling-up actions for just transition, which will contribute to the goals of the Paris Agreement and 2030 Agenda. The G7 Climate Club and the Universal Climate Alliance are valuable bases for such coalitions. These coalitions should be built on the aim of achieving common goals (such as carbon neutrality by agreed dates) through possibly different pathways that take into account the distinctive economic, social, and political conditions in different countries, encouraging negotiation between developed and developing countries to enable all to achieve the common goals and ensuring that countries do not suffer a competitive disadvantage from participating in the coalitions.
- Promote a just energy transition through the Just Energy Transition Partnerships, considering environmental sustainability and well-being in the global supply chains in collaboration with the G20 and other developing countries.
- Strengthen mutual learning between the G7 and G20 leaders and practitioners through greater inclusivity of countries facing similar challenges and more structured collaboration to promote more substantive and sustained learning and open and transparent channels.

Enhance Capacity and Promote Education and Youth Empowerment

- Promote institutional capacity building for implementing the Paris Agreement and the SDGs at the national, institutional, and individual levels, especially for the Global South, including practicum training for GHG emissions accounting mechanisms for the Paris Agreement under the United Nations University Postgraduate Degree Programmes.

- Promote global youth empowerment by supporting meaningful participation in policymaking processes, global climate change, and sustainable development debates.
- Develop teaching and learning continuity plans in response to the risk of another potential pandemic by developing digital tools for education.

References

- Aleksandrova, M., U. Khan, A. Muzenda, S. Bauer, and R. R. Bhandary. 2023. *The Role of the G7 in Strengthening the Global Landscape of Climate Finance for Adaptation and Loss and Damage*. Think7 Japan Policy Brief, Task Force 2: Well-Being, Environmental Sustainability, and Just Transition.
- Anbumozhi, A., E. A. Aprihans, D. Azhgaliyeva, A. Dutta, S. Jagannathan, and Z. Kapsalyamova. 2023. *Accelerating “Just” Energy Transition: Implementation and Financing Pathways for the G7*. Think 7 Japan Policy Brief, Task Force 2: Well-Being, Environmental Sustainability, and Just Transition.
- Bateman, S., and A. Bergin. 2020. Naval, National Security and Defence Issues from Climate Change. In *Research Handbook on Climate Change, Oceans and Coasts*, edited by J. McDonald, J. McGee, and R. Barnes: 409–424. Edward Elgar Publishing. <https://doi.org/10.4337/9781788112239.00030>
- Corrado, R., A. Liwan, and U. Korwatanasakul. 2022. *Information and Communications Technology Solutions for Environmental Issues in the Greater Mekong Subregion*. UNU-IAS Policy Brief Series, No. 33. <https://collections.unu.edu/eserv/UNU:8869/UNU-IAS-PB-No33-2022.pdf>
- Dahiya, B., and M. Okitasari. 2022. Accessing the Loss and Damage Climate Fund. *Science* 378 (6626): 1285–1285. <https://doi.org/10.1126/science.adf9670>
- D’Errico, S., T. Geoghegan, and I. Piergallini. 2020. *Evaluation to Connect National Priorities with the SDGs. A Guide for Evaluation Commissioners and Managers*. London: IIED. <https://iied.org/sites/default/files/pdfs/migrate/17739IIED.pdf>
- Elder, M. 2022. *Using the SDGs to Realize the G7’s “Green Revolution that Creates Jobs”*. Think7 Germany Policy Brief, Task Force Climate and Environment. <https://www.think7.org/publication/strengthening-the-g7s-green-revolution-that-creates-jobs-through-the-sdgs-and-expanded-monitoring/>
- Elder, M., and A. Bartalini. 2019. *Assessment of the G20 Countries’ Concrete SDG Implementation Efforts: Policies and Budgets Reported in Their 2016-2018 Voluntary National Reviews*. Hayama, Japan: Institute for Global Environmental Strategies. <https://iges.or.jp/en/pub/assessment-g20-countries-concrete-sdg>
- Elder, M., D. D. Sussman, S. V. R. K. Prabhakar, E. Zusman, and K. Tamura. 2022. *Environmental and Sustainability Implications of the Ukraine War for East and South Asia: Sustainability and Decarbonisation Should Be Accelerated Not Paused*. IGES Issue Brief. <https://www.iges.or.jp/en/pub/env-sust-implications-ukraine/en>
- Femia, F., and C. Werrell. 2017. The Climate and Security Imperative. In *Handbook of Transitions to Energy and Climate Security*, edited by R. Looney: 41–57. Taylor and Francis. <https://doi.org/10.4324/9781315723617-3/>
- Fransen, L., J. Nkengason, S. Srinivas, and S. Vella. 2021. *Boosting Equitable Access and Production of Diagnostics, Therapeutics and Vaccines to Confront Covid-19 on a Global Footing*. Think20 Italy Policy Brief. https://www.t20italy.org/wp-content/uploads/2021/09/TF1_PB09_LM02-1.pdf

- G7 Germany. 2022. *G7 Climate, Energy and Environment Ministers' Communiqué*. Berlin. https://www.bmwk.de/Redaktion/DE/Downloads/G/g7-konferenz-klima-energie-umweltminister-05-2022-abschlusskommunique.pdf?__blob=publicationFile&v=1
- Global Environment Facility. 2022. *GEF-8: Moving Toward an Equitable, Nature-Positive, Carbon-Neutral and Pollution-Free World*. Washington, DC: Global Environment Facility. https://www.thegef.org/sites/default/files/documents/2022-11/GEF_GEF8_Integrated_Programs_Briefs_2022_11.pdf
- Gunn, L. 2017. National Security and the Accelerating Risk of Climate Change. *Elementa* 5(30). <https://doi.org/10.1525/ELEMENTA.227/112434>
- Internal Displacement Monitoring Centre. 2022. *Global Report on Internal Displacement 2022*. Geneva.
- Independent Group of Scientists Appointed by the Secretary-General. 2019. *The Future Is Now: Science for Achieving Sustainable Development*. New York: United Nations. https://sdgs.un.org/sites/default/files/2020-07/24797GSDR_report_2019.pdf
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Bonn, Germany. <https://doi.org/https://doi.org/10.5281/zenodo.3831673>
- Intergovernmental Panel on Climate Change (IPCC). 2018. *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Cambridge, UK and New York.
- _____. 2022. *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK and New York.
- Janarhanan, N., M. Moinuddin, S. H. Olsen, T. Murun, S. Kojima, A. Takemoto, U. Korwatanasakul, M. Okitasari, S. Goel, T. Moerenhout, K. Narula, and R. Sedaoui. 2023. *Critical Minerals for Net-Zero Transition: How the G7 Can Address Supply Chain Challenges and Socioenvironmental Spillovers*. Think7 Japan Policy Brief, Task Force 2: Well-Being, Environmental Sustainability, and Just Transition.
- Kandpal, R., and M. Okitasari. 2022. *Advancing Follow-up and Review for the SDGs: Lessons from the 2021 Voluntary National Reviews*. Tokyo. <https://doi.org/10.53326/ACRT2498>
- King, E., D. Suryadarma, M. Kaffenberger, D. Dohmen, and T. Sonobe. 2022. *Building Resilient Education Systems to Mitigate the Adverse Effects of Covid-19 and Future Disruptions of Learning*. Think7 Germany Policy Brief. https://www.think7.org/wp-content/uploads/2022/05/Recovery_Building-resilient-education-systems-to-mitigate-the-adverse-effects-of-Covid-19-and-future-disruptions-of-learning_King_Suryadarma_Kaf.pdf
- Korwatanasakul, U., P. Sirivunnabood, A. Prem, A. Inamdar, K. Bhatt, S. Pattanshetty, and H. Brand. 2023. *Achieving Quality Health for All through Enhancing Healthcare Supply Chain Resilience and Trade Liberalisation*. Think20 India Policy Brief. https://t20ind.org/wp-content/uploads/2023/05/T20_Policy-Brief_TF-1_128.pdf

- Korwatanasakul, U., and A. Takemoto. 2021. *Leveraging Artificial Intelligence for Sustainable Development: Applying Social Principles for Human-Centric AI*. EU-Japan.AI. <https://www.eu-japan.ai/ja/leveraging-artificial-intelligence-for-sustainable-development-applying-social-principles-for-human-centric-ai/>
- _____. 2022. *Friends or Foes: A Trade-off Analysis of Artificial Intelligence (AI) and Sustainable Development*. EU-Japan.AI. <https://www.eu-japan.ai/friends-or-foes-a-trade-off-analysis-of-artificial-intelligence-ai-and-sustainable-development/>
- Lima de Miranda, K., and D. J. Snower. 2020. Recoupling Economic and Social Prosperity. *Global Perspectives* 1(1). <https://doi.org/10.1525/001c.11867>
- Matsushita, K. 2023. Overcoming the Climate Crisis and Achieving the SDGs: After COVID-19 and the Russian Invasion of Ukraine. In *A World in Crisis, A World in Progress: Growing Better Together*, edited by T. Sonobe, N. J. A. Buchoud, R. Akbar, R. Mariatul Qibthiyah, and B. Altansukh: 91–97. Tokyo: Asian Development Bank Institute. <https://doi.org/https://doi.org/10.56506/AZSW7008>
- Montero, A. G. 2021. *Connecting the Dots: The Still Elusive Synergies between Accountability Institutions and the Follow-up and Review of the Sustainable Development Goals*. Future of the World Policy Brief, No. 114. New York: UN DESA. https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/PB_114.pdf
- Mori, H., et al. 2021. *Implications of COVID-19 for the Environment and Sustainability*. Hayama, Japan: Institute for Global Environmental Strategies. <https://www.iges.or.jp/en/pub/covid19-e/en>
- Okitasari, M., and U. Korwatanasakul. 2023. *Leaving No One Behind in Carbon Neutrality Strategies: Insights from Developing Countries in Asia and the Pacific*. UNU-IAS Policy Brief Series, No. 39. <https://doi.org/10.53326/ZFHC4987>
- Raworth, K. 2012. A Safe and Just Space For Humanity: Can We Live Within the Doughnut? *Nature* 461: 1–26. <https://doi.org/10.5822/978-1-61091-458-1>
- Sachs, J.D., G. Lafortune, C. Kroll, G. Fuller, and F. Woelm. 2022. *Sustainable Development Report 2022: From Crisis to Sustainable Development - the SDGs as Roadmap to 2030 and Beyond*. Cambridge, UK: Cambridge University Press. <https://doi.org/doi.org/10.1017/9781009210058>
- Srivunnabood, P., and U. Korwatanasakul. 2022. *Achieving Resilient and Inclusive Social Welfare Systems for Aging Societies against the Pandemic*. Think20 Indonesia Policy Brief. https://www.t20indonesia.org/wp-content/uploads/2022/11/TF5_Achieving-Resilient-and-Inclusive-Social-Welfare-Systems-for-Aging-Societies-Against-The-Pandemic.pdf
- Sovacool, B. K., B. Turnheim, A. Hook, A. Brock, and M. Martiskainen. 2021. *Dispossessed by Decarbonisation: Reducing Vulnerability, Injustice, and Inequality in the Lived Experience of Low-Carbon Pathways*. *World Development* 137(January): 105116. <https://doi.org/10.1016/j.worlddev.2020.105116>
- Steffen, W. et al. 2015. Planetary Boundaries: Guiding Human Development on a Changing Planet. *Science* 347(6223): 1259855–1259855. <https://doi.org/10.1126/science.1259855>
- Takemoto, A., A. Cros, M. Suzuki, and U. Korwatanasakul. 2022. Supporting Vulnerable Populations in the Transition to Net Zero Emissions: Priorities for Developed Countries. UNU-IAS Policy Brief Series, No. 35. <https://collections.unu.edu/eserv/UNU:8921/UNU-IAS-PB-No35-2022.pdf>

- United Nations Environment Programme (UNEP). 2019. *Global Environment Outlook – GEO-6: Healthy Planet, Healthy People*. Cambridge, UK and New York: Cambridge University Press. <https://doi.org/10.1017/9781108627146>
- _____. 2021. *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity, and Pollution Emergencies*. UNEP. <https://www.unep.org/resources/making-peace-nature>
- _____. 2022. *Emissions Gap Report 2022: The Closing Window – Climate Crisis Calls for Rapid Transformation of Societies*. Nairobi: UNEP. <https://www.unep.org/emissions-gap-report-2022>
- UNFCCC Secretariat. 2022. *Dimensions and Examples of the Gender-Differentiated Impacts of Climate Change, the Role of Women as Agents of Change and Opportunities for Women. Synthesis Report by the Secretariat*. Bonn Climate Change Conference. Bonn, Germany: UNFCCC. <https://unfccc.int/documents/494455>
- United Nations. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. <https://sdgs.un.org/documents/ares701transforming-our-world-2030-agen-21254>
- _____. 2019. *Global Sustainable Development Report 2019*. https://sdgs.un.org/sites/default/files/2020-07/24797GSDR_report_2019.pdf
- Volz, U., K. Berensmann, S. Dikau, S. Griffith-Jones, A. Lacavaro, and I. Monaterolo. 2022. *Scaling Up Sustainable Finance to Enable Sustainable Economic Recovery*. Think7 Germany Policy Brief, Task Force Sustainable Economic Recovery. https://www.think7.org/wp-content/uploads/2022/05/Recovery_Scaling-up-Sustainable-Finance-to-enable-Sustainable-Economic-Recoveries_Volz_Berensmann_Dikau_Griffith-Jones_Lacavaro_Monasterolo.pdf
- Webb, P., T. G. Benton, J. Beddington, D. Flynn, N. M. Kelly, and S. M. Thomas. 2020. The Urgency of Food System Transformation Is Now Irrefutable. *Nature Food* 1(10): 584–585. <https://doi.org/10.1038/s43016-020-00161-0>
- Zhou, X., et al. 2023. *Putting Societal Well-Being at the Core of G7 Climate Strategies: Entry Points and Enabling Reforms*. Think7 Japan Policy Brief, Task Force 2: Well-Being, Environmental Sustainability, and Just Transition.

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