

**IGES Key Messages on
 “Sustainable and resilient recovery from the COVID-19 pandemic in Asia and the Pacific”
 Prepared for the Asia Pacific Forum for Sustainable Development (APFSD)
 March 23-26, 2021**

The Institute for Global Environmental Strategies (IGES) has developed the following key messages to share at the Asia Pacific Forum on Sustainable Development (APFSD 2021). The messages are organized around six APFSD 2021 agenda items, and outline how policymakers can preserve a harmonious relationship between nature and humanity in the COVID-19 era (Takeuchi, 2020).

1. Sustainable and Resilient Recovery from the COVID-19 Pandemic

- With the world nearing irreversible tipping points, addressing the climate crisis is as urgent as addressing the COVID-19 crisis. Economic recovery packages should support clean energy transitions and the redesign of unsustainable infrastructure and socioeconomic systems in the face of these crises (Mori *et al.*, 2020; Zusman *et al.*, 2020)
- Redesigning these systems is critical to avoid locking in fossil fuel production and energy-intensive infrastructure (Unruh, 2000, 2002). Long-term redesign will determine the sustainability of immediate COVID-19 responses and economic recovery policies (Mori *et al.*, 2020; Zusman *et al.*, 2020).
- Shifting planned investments from unsustainable to sustainable infrastructure can help in generating finance for this redesign. For example, fossil fuel subsidies should be redirected to clean energy (Elder, Shigemoto, and King, 2018).
- Interactive databases such as the *Energy Policy Tracker* and *Platform for Redesign* can help assess the sustainability of recoveries, encouraging policymakers to steer a more resilient course (*PLATFORM for REDESIGN 2020*, 2020; IISD *et al.*, 2020). Analyses of SDGs interlinkages in COVID-19 recovery packages can help prioritise resource allocations in ways that also boost resiliency (Zhou and Moinuddin, 2021).

2. COVID-19 and the Environment

- Although principally a health issue, COVID-19 has intensified many environmental problems, including those related to medical waste, plastic leakage, transport, wastewater, biodiversity, air pollution, and climate change. Environmental policies need to be strengthened in view of these linkages with COVID-19 (Mori *et al.*, 2020; Ramanathan *et al.*, 2021).
- COVID-19 has increased medical waste as well as contributed to related environmental and health risks. Integrated waste management principles, contingency plans, and evidence-based decision-making can improve medical waste management (UNEP, IETC and CCET, 2020).
- COVID-19 lockdowns have changed lifestyles and work arrangements, altering consumption and transport patterns. Interventions to maintain sustainable behaviors (e.g. extending cycling paths) while discouraging unsustainable ones (e.g. charges on single-use plastic bags) can transform crisis into opportunity (Mori *et al.*, 2020).
- Regular monitoring of wastewater treatment is a low-cost early warning tool for COVID-19. This approach should be widely promoted to supplement laborious and expensive traditional clinical surveillance (Bao and Canh, 2021).
- A better understanding of humanity’s relationship with nature, including interactions across different contexts, can help gauge the risk of spillover of zoonotic diseases, reducing the likelihood

of future pandemics (Brancaion *et al.*, 2020; Alexander *et al.*, 2012; Salkeld, Padgett and Jones, 2013).

- Air pollution can exacerbate COVID-19 infections and deepen other health risks. Stronger countermeasures are needed to reduce rebounds in air pollution following COVID-19 lockdowns and improve the well-being of more than 4 billion people breathing unhealthy air in Asia and the Pacific. These countermeasures should also mitigate climate change, delivering co-benefits in the process (UNEP APCAP and CCAC, 2019; Janardhanan *et al.*, 2021).

3. SDG 12: Responsible Consumption and Production

- As close to 80% of marine pollution originates on land, protecting marine ecosystems requires efforts to reduce land-based litter while transitioning to a circular economy (Onogawa, *et al.*, 2020; Premakumara, *et al.*, 2020; Liu *et al.* 2020). To address this issue, countries in Asia and the Pacific are recommended to adopt national extended producer responsibility policies and a regional mechanism to harmonise plastic waste policies (Akenji *et al.*, 2020).
- Strengthening food waste governance with improved interagency coordination and multi-stakeholder networks across supply chains can help reduce the 2.6 trillion USD in global food losses (Liu and Nguyen, 2020; Liu *et al.*, 2020; Reynolds *et al.*, 2020).
- Regional, national and city waste management strategies and action plans built on practical actions with strong political backing are hallmarks of resource-efficient development (Onogawa *et al.*, 2020; Premakumara *et al.*, 2020; Rajeev *et al.*, 2020). Simple guidelines on issues such as landfill rehabilitation can also assist developing countries in achieving sustainable waste management (Premakumara, 2021).
- A foresight approach can help individuals envision sustainable livelihoods (Mao *et al.*, 2020). Co-creation can empower communities to remove systemic barriers to lifestyle changes (Watabe *et al.*, 2020). Both individual and collective actions can reduce excess consumption and minimize ecological footprints.

4. SDG 13: Climate Action

- Several countries and many local governments have made net zero or similarly ambitious climate mitigation pledges. Effective implementation plans must follow, and long-term scenario analyses can help identify deep structural and social changes required to make them effective (Kawakami, Kuriyama and Arino, 2020; Kuriyama and Abe, 2021; Ota and Akagi, 2021).
- Cities should engage researchers with scenario planning expertise in co-designing decarbonisation plans (Kamei, Hanaki and Kurisu, 2016; Ota and Akagi, 2021). Scenarios focused on local consumption, healthy lifestyles, and nature-based solutions offer cities an alternative to scenarios centered on less flexible, capital-intensive technological and infrastructure changes (Kamei, Mastrucci and van Ruijven, 2021).
- The significant investments in decarbonisation could create substantial numbers of jobs. To achieve a just transition, decarbonisation plans need specific measures to compensate for job losses in fossil fuel-related sectors, including reskilling and retraining workers for new careers (Kuriyama and Abe, 2021).
- Building resilient cities involves enhancing complementary absorptive, adaptive, and transformative capacities. Evidence-based policy-making (e.g. socio-hydrological models), participatory planning, and multi-sector partnerships can reinforce these capacities at multiple levels (Premakumara *et al.* 2020; Kumar *et al.* 2020).

- Regional adaptation planning can prevent of the spread of local climate impacts across borders in increasingly integrated economies. In order to avert potential risk contagions, climate planning should draw on multi-dimensional climate fragility risk indices and risk communication (Prabhakar, 2020). Many businesses will need similar techniques for addressing risk spillovers (Prabhakar and Shaw, 2020).

5. **Other SDGs and Cross-Cutting Themes**

- The concept of regional circulating and ecological spheres (R-CES)—a development model premised on integrating low-carbon, resource sufficiency, and societies living in harmony with nature—is helping localise the SDGs in Japan (Takeuchi *et al.*, 2019). Recent context-appropriate adaptations of RCES in India suggest this model could help localise SDGs in other countries (Thapa *et al.*, 2020).
- Many companies have found working on the SDGs can build value (Onoda *et al.*, 2019). Establishing knowledge-sharing platforms that disseminate good practices can help motivate other companies to be proactive on the SDGs (Ueno *et al.*, 2018). Many companies will also need straightforward guidance on how to prioritise actions on the SDGs (Amanuma *et al.*, 2020). At the same time that the role of business is growing, governments still need to play an active role governing the SDGs (Olsen *et al.*, 2021).
- Policymakers should strengthen the integration between the SDGs and climate policies. Research on agriculture (Hengesbaugh, Zusman and King, 2020), air pollution (Akahoshi, et al, 2018; UNEP APCAP and CCAC, 2019), sustainable transport (Nugroho, et al, 2020), waste management (Premakumara et al., 2018), food water and energy (Bao, et al, 2018), gender (Lee & Zusman, 2019) make a strong case for deepening these connections in relevant policies and governance arrangements (Amanuma et al., 2018).
- Greater international cooperation is important to integrate key provisions in the Convention on Biological Diversity, Sendai Framework for Disaster Risk Reduction, Paris Agreement, and the SDGs. Aligning these processes would contribute to protecting human and environmental health while helping build resilience to the climate emergency.

6. **Follow-up and Review**

- ASEAN countries reported a wide range of policies in their Voluntary National Reviews (VNRs). Suggested improvements include: clarification of gaps between targets and levels of achievement; assessment of policy effectiveness; reporting budgets related to policies; distinguishing between new and ongoing policies; and listing more environment-related policies (Elder, 2020).
- A growing number of cities have prepared voluntary local reviews (VLRs), and these early movers should be commended for taking the initiative. Other local governments must be encouraged to prepare VLRs, while national governments should help to integrate VNR and VLR processes (Kataoka and Yoshida, 2019; Amanuma *et al.*, 2020; IGES, 2020).

Work Cited

- Akahoshi, K., Zusman, E., & Matsumoto, N. (2018). Integrating Short-Lived Climate Pollutants (SLCPs) into Nationally Determined Contributions (NDCs) in Asia: A Survey with Recommendations. Retrieved from <https://pub.iges.or.jp/pub/integrating-short-lived-climate-pollutants>
- Akenji, L. *et al.* (2020) 'Policy Responses to Plastic Pollution in Asia: Summary of a Regional Gap-analysis', in Letcher, M., T. (ed.) *Plastic Waste and Recycling Environmental Impact, Societal Issues, Prevention, and Solutions*. Elsevier B.V., pp. 531–567.
- Alexander, K. A. *et al.* (2012) 'Modelling of Wildlife-Associated Zoonoses: Applications and Caveats', *Vector-Borne and Zoonotic Diseases*, 12(12), pp. 1005–1018.
- Amanuma, N., *et al.* (2018). *Governance for Integrated Solutions to Sustainable Development and Climate Change: From Linking Issues to Aligning Interests* (E. Zusman & N. Amanuma, Eds.). Retrieved from <https://www.iges.or.jp/en/about/staff/zusman-eric?page=%2C2>
- Amanuma, N. *et al.* (2020) *SDGsの手法とツールがよくわかる本*. Tokyo: Shuwa System.
- Amanuma, N. *et al.* (2020) 'Assessing the HLPF Four Years On: Enhancing Integration, Linking Processes, and Strengthening Political Leadership'. Available at: <https://sdg.iisd.org/commentary/guest-articles/assessing-the-hlpf-four-years-on-enhancing-integration-linking-processes-and-strengthening-political-leadership/>.
- Bao, P. N., Mitra, Bijon Kumer Sharma, D., Islam, T. G., Thao, M. P. T., & Kuyama, T. (2018). *Governing the Water-Energy-Food Nexus Approach for Creating Synergies and Managing Trade-offs*. Retrieved from <https://www.apn-gcr.org/resources/files/original/2ddd451c4775e2e8604d29a82878fe28.pdf>
- Bao, P. N. and Canh, V. D. (2021) 'Addressing Associated Risks of COVID-19 Infections Across Water and Wastewater Service Chain in Asia', in Ramanathan, A. L. *et al.* (eds) *Environmental Resilience and Transformation in times of COVID-19 - Climate Change Effects on Environmental Functionality*. Elsevier.
- Brancalion, P. H. S. *et al.* (2020) 'Emerging threats linking tropical deforestation and the COVID-19 pandemic', *Perspectives in Ecology and Conservation*, 4, pp. 243–246.
- Elder, M. (2020) *Assessment of ASEAN Countries' Concrete SDG Implementation Efforts: Policies and Budgets Reported in Their 2016-2020 Voluntary National Reviews (VNRs)*. Hayama. Available at: <https://www.iges.or.jp/en/pub/asean-sdg-vnrs/en>.
- Elder, M., Shigemoto, A. and King, P. (2018) 'Transforming Finance and Investment for the SDGs', in Elder, M., and King, P. (eds) *Realising the Transformative Potential of the SDGs*, 127–50. Hayama, Japan: IGES. <https://pub.iges.or.jp/pub/transforming-finance-and-investment-sdgs>.
- IGES (2020) *Online Voluntary Local Review (VLR) Lab*. Available at: <https://www.iges.or.jp/en/projects/vlr>.
- IISD *et al.* (2020) *Energy policy tracker*. Available at: <https://www.energypolicytracker.org/> (Accessed: 18 December 2020).
- Hengesbaugh, M., Zusman, E. and King, P. (2020) Growing Support for Climate-Smart Agriculture by Scaling Up Farmer and Climate Field Schools: Recommended Policy and Institutional Reforms. Hayama. Available at: https://www.iges.or.jp/en/publication_documents/pub/policy/en/11007/PB_42_E_1005.pdf.
- Janardhanan, N. K. *et al.* (2021) *Integrating Clean Air, Climate, and Health Policies in the COVID-19 Era: The Role of Co-benefits and the Triple R Framework*. Hayama. Available at:

- <https://www.iges.or.jp/en/pub/covid-airpollution-triplerframework/en>.
- Kamei, M., Hanaki, K. and Kurisu, K. (2016) 'Tokyo's long-term Socioeconomic Pathways: Towards a sustainable future', *Sustainable Cities and Society*, 27.
- Kamei, M., Mastrucci, A. and van Ruijven, B. J. (2021) 'A Future Outlook of Narratives for the Built Environment in Japan', *Sustainability*, 13(4).
- Kataoka, Y. and Yoshida, T. (2019) '神奈川県中小企業によるSDGs活用事例集'. Kanagawa. Available at: <https://www.iges.or.jp/jp/projects/sme-case-studies>.
- Kawakami, T., Kuriyama, A. and Arino, Y. (2020) *A Net-Zero World -2050 Japan-: Insight into essential changes for a sustainable future*. Hayama.
- Kuriyama, A. and Abe, N. (2021) 'Decarbonisation of the power sector to engender a "Just transition" in Japan: Quantifying local employment impacts', *Renewable and Sustainable Energy Reviews*, 137. doi: 10.1016/j.rser.2020.110610.
- Lee, S.-Y., & Zusman, E. (2019). Participatory Climate Governance in Southeast Asia: Lessons learned from gender-responsive mitigation. In T. Jafry (Ed.), *Routledge Handbook of Climate Justice*. London: Routledge.
- Liu, C. et al. (2020) 'Resources, Conservation & Recycling Food Waste in Bangkok: Current situation, trends and key challenges', *Resources, Conservation & Recycling*. Elsevier, 157(January), p. 104779. doi: 10.1016/j.resconrec.2020.104779.
- Liu, C. and Nguyen, T. T. (2020) 'Evaluation of household food waste generation in Hanoi and policy implications towards SDGs target 12.3', *Sustainability (Switzerland)*, 12(16). doi: 10.3390/su12166565.
- Mao, C., Koide, R. and Akenji, L. (2020) 'Applying Foresight to Policy Design for a Long-Term Transition to Sustainable Lifestyles', *Sustainability*, 12 (15).
- Mori, H. et al. (2020) *Implications of COVID-19 for the Environment and Sustainability*. Hayama. Available at: <https://www.iges.or.jp/en/pub/covid19-e/en>.
- Olsen, S. H. et al. (2021) *Governing the Sustainable Development Goals in the COVID-19 Era: Bringing Back Hierarchic Styles of Governance?* Tokyo: ADBI.
- Onoda, S. et al. (2019) *Mainstreaming the SDGs in Business: Actions by Companies and Organisations in Japan*. Hayama.
- Onogawa, K. et al. (2020) *Enhancing Circular Economy Perspectives - Plastic Waste Management Strategy and Action Plan for Greater Hyderabad Municipal Corporation*.
- Ota, J. and Akagi, J. (2021) *Commitment to Net Zero Carbon Emissions by 2050 by Local Governments in the Kyushu Region of Japan - Background, Current Situation, and Challenges*. Hayama. Available at: <https://www.iges.or.jp/en/pub/kyushu-zero-carbon-en/en>.
- Nugroho, S. B., et al. (2020). Enabling Purposive Experimentation in the Transport Sector: The Case of BRT Improvement and CNG Conversion in Semarang, Indonesia. In A. Suwa & M. Iguchi (Eds.), *Sustainability and the Automobile Industry in Asia Policy and Governance*. London: Routledge.
- PLATFORM for REDESIGN 2020 (2020). Available at: <https://platform2020redesign.org/>.
- Premakumara, Gamaralalage, J. D. et al. (2018). Reduction of greenhouse gases (GHGs) and short-lived climate pollutants (SLCPs) from municipal solid waste management (MSWM) in the Philippines: Rapid review and assessment. *Waste Management*, 80(2018), pp. 397–405. <https://doi.org/10.1016/j.wasman.2018.09.036>
- Premakumara, Gamaralalage, J. D. et al. (2020) *Strategies to Reduce Marine Plastic Pollution from Land-based Sources in Low and Middle - Income Countries*.
- Ramanathan, A. L. et al. (2021) *Environmental Resilience and Transformation in Times of Covid-19*. Amsterdam: Elsevier.
- Reynolds, C. et al. (2020) 'Routledge Handbook of Food Waste', *Routledge Handbook of Food Waste*,

- (March), pp. 187–206. doi: 10.4324/9780429462795.
- Salkeld, D. J., Padgett, K. A. and Jones, J. H. (2013) 'A meta-analysis suggesting that the relationship between biodiversity and risk of zoonotic pathogen transmission is idiosyncratic', *Ecology Letters*, 16(5).
- Takeuchi, K. *et al.* (2019) *Circulating and Ecological Economy - Regional and Local CES: An IGES Proposal*. Hayama. Available at: <https://www.iges.or.jp/en/pub/circulating-and-ecological-economy-regional/en>.
- Takeuchi, K. (2020) 'Harmonious Coexistence between Nature and Humankind in the COVID-19 Era', *KOSMOS*, (7). Available at: <https://www.iges.or.jp/en/pub/kosmosmagazine/en>.
- Ueno, A. *et al.* (2018) *SDGs and Business for the Future: Actions by Private Companies in Japan*. Hayama. Available at: <https://www.iges.or.jp/en/pub/sdgs-and-business-future-actions-private/en>.
- UNEP APCAP and CCAC (2019) *Air pollution in Asia and the Pacific: science-based solutions. United Nations Environment Programme*. Nairobi. Available at: <http://www.ccacoalition.org/en/resources/air-pollution-asia-and-pacific-science-based-solutions>.
- UNEP, IETC, & CCET (2020) *Waste management during the COVID-19 pandemic: From response to recovery*. Bangkok. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/33416/WMC-19.pdf?sequence=1&isAllowed=y>.
- Unruh, G. C. (2000) 'Understanding carbon lock-in', *Energy Policy*, 28(March).
- Unruh, G. C. (2002) 'Escaping carbon lock-in', *Energy Policy*, 30, pp. 317–325.
- Zhou, X. and Moinuddin, M. (2021) 'Impacts and implications of the COVID-19 crisis and its recovery for achieving Sustainable Development Goals in Asia: A review from an SDG interlinkage perspective', in Ramanathan, A. L. *et al.* (eds) *Environmental Resilience and Transformation in times of COVID-19*. Amsterdam: Elsevier.
- Zusman, E. *et al.* (2020) *A Sustainable COVID-19 Response, Recovery, and Redesign: Principles and Applications of the Triple R Framework*. Hayama. Available at: <https://www.iges.or.jp/en/pub/tripler/en>.