### **Chapter 4**

# Green Recovery for Global Economic Growth: Embracing the Opportunity and Redefining Prosperity

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### A. Build Back Better

In recovering from COVID-19, it is not a choice between economic recovery and a green agenda but an opportunity to achieve one while also achieving the other. Some see the post-pandemic recovery as an opportunity to accelerate the energy transition and other initiatives, yet some countries are not showing the case in their recovery budget. For example, in Indonesia, the allocation of green economy initiatives was less than 2% of the total pandemic response budget (Bappenas, 2021). One of the reasons why the green agenda is not prioritized in Indonesia's national budgeting process and the National Economic Recovery (*Pemulihan Ekonomi Nasional*/PEN) is because green economy initiatives are typically considered as long-term policy. Thus, they are perceived as less urgent.

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To address the lack of urgency, we need to start with a vision recognizing our planet's finite nature and resources and humanity's pressures on the environment. Unexpectedly, the COVID-19 pandemic revealed the benefits of limiting production and consumption. Countries were forced to lock down their economies to save lives and prevent infections during the pandemic. The economic slowdown also led to a decline in greenhouse gas emissions. This opened the eyes of the world to work on a green recovery.

This chapter addresses how the global economy might recover without harming the environment by reviewing and reflecting on various literature and reports. The policy steps taken now are likely to have long-term consequences for the global economy and impact societies for decades. Therefore, the recovery period following a crisis is a critical time to enforce bold measures/policies and actions. In the current case, the aftermath of the pandemic can drive significant amounts of funding and support toward other green principles. This chapter first investigates the opportunities and necessity for collaboration to undertake green recovery. Second, I propose an idea of redefining prosperity and the three key things we must examine to achieve sustainable growth.

# B. COVID-19 Recovery for Economy and Sustainability

Climate change is one of our economy and communities' most significant concerns. Thus, policy action to limit global warming to 1.5°C or less remains critical (International Monetary Fund, 2019). An economic recovery that overlooks environmental deterioration endangers global ecosystems. As a result, if the global economy fails to change away from business-as-usual once it has recovered, it may be impossible to avert future global environmental and economic disasters (Barbier, 2010).

Efforts to revitalize the global economy should go beyond replicating the historical pattern of global economic development. In this section, we first view COVID-19 recovery as an opportunity to do things differently, to prioritize the process of tackling climate and related issues as an integral part of rebuilding our economies. Second, we highlight the importance of national activities as global coordination to achieve short-run economic recovery and other global challenges.

### 1. Green Recovery and Opportunity from the COVID-19 Crisis

A green recovery is an investment that drives economic growth and significant environmental and social benefits (UNEP, 2021). Countries can develop policies that boost the economy for recovery while addressing environmental and social concerns. The recovery focuses on policies that will stimulate the economy and accelerate the transition to sustainability, such as expanding the availability of sustainable bonds, promoting innovative technology, and transitioning to a circular economy (OECD, 2020b). Some current examples are Italy and Nigeria have increased subsidies and investment for solar home systems since the pandemic, then India and New Zealand allocate stimulus spending to nature-based jobs such as afforestation and control pests (Evans & Gabbatiss, 2021).

The green sector received over 16 % of the fiscal stimulus funds associated with the Global Financial Crisis (GFC), totaling over half a trillion dollars (Agrawala et al., 2020). Some green programs, such as the Korean Green New Deal of 2009, positively impacted the economy despite providing questionable environmental benefits. Others, such as the US Car Allowance Rebate System, decreased  $CO_2$  emissions while having little impact on economic development and costing substantially more per job than other stimulus programs. These are only a few challenges we face in seeking economic recovery and environmental advantages.

The COVID-19 crisis should be understood as an opportunity to achieve green economic recovery in return for the lessons learned during the previous crisis. The ex-post analysis of green stimulus measures implemented during the GFC demonstrated that good policy design is crucial for minimizing rebound effects, preventing market distortion, and ensuring that public funds are used correctly. Complementary policy tools that address underlying environmental externalities are also necessary to maximize the ecological advantages of green stimulus spending. Another major lesson from the GFC is the importance of consistently incorporating evaluation frameworks with defined criteria and robust methodology into green stimulus initiatives.

Many of the initiatives from the GFC are also being recommended as part of the COVID-19 recovery's greening. However, COVID-19 is taking place in a policy context vastly different from the year of GFC. Renewable energy, such as solar and wind, has shown the sharpest cost decline compared to conventional energy sources since 2010, making large-scale funding more economically feasible (International Renewable Energy Agency, 2020). Simultaneously, green public research and development assistance policies might now be directed toward technologies that can help solve the challenge of moving to renewables, such as energy storage (Rippy, 2021).

Since the GFC, there has been a greater focus on improving resource efficiency and transitioning to a more circular economy (European Environment Agency, 2019). Shifting away from unsustainable natural resource usage would not only lessen environmental consequences and supply problems but may also open new job possibilities. Repairability, reusability, remanufacturing, and recycling investments, which were notably omitted from the green parts of the GFC stimulus, can be included as they may aid value creation and economic resilience. These innovations provide additional motivation and opportunities for the COVID-19 recovery to be more environmentally friendly. Furthermore, due to the increasing awareness among the public about the importance of green initiatives and the international collaboration seen through Sustainable Development Goals, the green recovery from the current crisis should be proven more effective than the GFC recovery. However, the decision will be up to the policymakers and the willingness of the government and industry to make it happen.<sup>1</sup>

Indonesia can enact these green recovery opportunities in response to the COVID-19 pandemic. One way to do so is to provide substantial stimulus funds to green transportation such as electric cars and encourage walking and biking as healthier traveling alternatives. Another option would be to increase renewable energy infrastructure and decrease the dependence on fossil fuels to combat climate change. One of the lessons from the spread of COVID-19 is that buildings need to have good ventilation, heating, and cooling system and achieve a health and safety rating for the sake of human health. Promoting healthier buildings for sustainable cities is a possible way of enhancing green recovery opportunities. In addition, the government can also create green jobs that will help protect national habitats and resources from biodiversity loss and decrease the chances of future pandemics.

### 2. The Needs for Green Recovery Collaboration

COVID-19 crisis has contributed to significant loss of life. The number of casualties continues to grow, leading to an enormous burden on public health and social infrastructure. The remarkably high economic and social impacts also continue to unfold. The unique characteristics of the COVID-19 crisis emphasize that many specific factors need to be considered when planning both the timing and scope of the response. Comparing the current and previous financial crises may give us more insights into economic recovery—the shock associated with the financial crisis developed from widespread economic stress, mainly in high-income countries. Still, the pandemic crisis was borne outside of the global economic system and appeared to be affecting most countries, high and low-income countries, equally (Schmidhuber & Qiao, 2020). Both crises have led to uncertainties and similar impacts on economies worldwide. However, a study of COVID-19

<sup>&</sup>lt;sup>1</sup> For more discussion on the effectiveness of green elements in stimulus packages during the Great Financial Crisis that is applicable to the present situation and how variations between the current crisis and the GFC affect the measures to green COVID-19 recovery, see Agrawala et al. (2020).

impact on the macroeconomic variables of the US economy discovers that the current pandemic crisis severely impacts industrial production, consumer spending, and unemployment compared to Global Financial Crisis (Li et al., 2021).

The difference in the pace of economic recovery across countries may be affected by the strength of its COVID-19 policy response and the success of its vaccination program (Ozkan, 2021). Since many poorer countries lack adequate healthcare and cannot expand public spending, the pandemic crisis has hit developing countries harder than advanced economies. The divergence in recovery is also influenced by the progress of national vaccination programs—as the OECD put it: "more jabs, more jobs" (OECD, 2021).

According to the UN Environment Program's Emissions Gap Report (2021), a green recovery could cut 25% off 2030 emissions and positively impact health and food security. However, there is no one-size-fits-all solution for policy responses. Developing countries face specific challenges during this pandemic due to inferior healthcare systems and limited financial capabilities. In addition, not every country benefits from the international standards and instruments set in the past few decades.

Although policy response will vary across countries, policy coordination is key to an effective response. Global Financial Crisis (GFC) teaches us that policy action has positive and negative externalities across countries. In terms of economic recovery, too, national gains are unlikely to be long-lasting if a significant part of the world remains behind. Agrawala et al. (2020) also state the potential for trade-offs between economic, environmental, and social policy objectives, necessitating cross-government collaboration to detect and reduce divergences between these policy objectives.

The fact that no single country, on its own, can solve the challenges was the driving motivation for the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda. This is a clear roadmap for an inclusive and prosperous world for the planet. The post-COVID era necessitates innovation, collaboration, and integration even more. The SDGs can be a viable road map and become a long-term solution, a guideline for everyone from CEOs to governments to international organizations to civil society groups (Gomme & Jungermann, 2018). The international community has had a strategy in place since 2015—the 2030 Agenda for Sustainable Development—to prevent, address, and resolve the system failures, inequalities, and injustices that the worldwide COVID-19 epidemic has exposed. However, many organizations would benefit immensely from being better connected to all the SDGs' goals in terms of integration. If the goals are integrated and universal, so must the policies, programs, procedures, and governance structures used to attain them.



Source: OECD (2020a)



Figure 4.1 provides a framework for the phases of the COVID-19 crisis and the phases of policy response (OECD, 2020a). The immediate response and mitigation activities will dominate phases 1 and 2. In contrast, phase 3 addresses policy responses for economic recovery, where the country may need fiscal stimulus and recovery support to ensure investment and consumption. In addition, as economies have recovered from phase 3, governments will need to plan ways to

raise revenue to restore long-term fiscal sustainability. Finally, phase 4 will strengthen the resiliency of health systems and address other longer-term risks, including climate change.

The green agenda and sustainability cannot wait until phase 4 since we believe that bold action can slow global warming and prevent its most significant impacts, such as threats to health, livelihoods, water supply, and food security (New Climate Economy, 2018). While public health and social concerns will undoubtedly dominate phases 1 and 2, one environmental priority during the first two phases might not harm. In phase 3 (Recovery), opportunities for greening policy responses or green measures may become necessary as part of a stimulus package. Thus, it is not a choice between economic recovery and a green agenda in recovering from COVID-19 since catastrophic climate breakdown will be considerably more disruptive than COVID-19. Sustainable economic recovery includes supporting recovery measures that do no harm to the environment, ensure green, and are in line to limit global warming to 1.5°C. This agenda will require collaboration across sectors, economic systems, and a partnership with governments and civil society.

UN Research Roadmap for the COVID-19 recovery (2020) provides some ideas for executing economic recovery and a sustainable agenda. By progressing fiscal stimulus packages that best support natural infrastructure and green industry, the economic recovery can give a chance for transitions to greener and more sustainable economies. The recovery may also pave the way for new green economic prospects open to everybody. Governments and societies can encourage jobcreation initiatives that promote economic growth and innovation for environmental sustainability, such as encouraging land restoration, creating resource-smart food systems, transitioning the energy sector to low-carbon approaches, and reducing environmental degradation by promoting the use of green space and active transportation. Fostering environmentally sustainable policies can further ensure the well-being of ecosystems that support all humans. Creating these virtuous cycles will enable a sustainable recovery from COVID-19 and safeguard the planet for future generations.

# C. First Things First: Redefining Prosperity

In this section, I propose three steps to regain prosperity without sacrificing the environment. First, we must understand what we mean by human needs to determine how to provide those needs sustainably. Secondly, we consider the boundary of our planet, which highlights the importance of sustainable principles in conducting businesses. Finally, shifting the measurement of economic performance to include nature and sustainability.

# 1. Redefining Prosperity: Satisfying Human "Needs", not "Wants"

We should not fall into the same trap. Therefore, we need to dig deep to find the root of green economics, rather than just looking for a quick manifestation on the surface. This approach is more than just economical, and it requires an understanding of human psychology, social relationships, and political economy. Indeed, this has both moral and philosophical dimensions. We would like to ensure the proper foundation at the start. The first fundamental question we should consider is "human needs" and following to realizing satiable needs. We will then understand the difference between needs and wants: needs may be satisfied, unlike wants. Distinguishing between a need and a want is critical when considering sustainability in economic theory (Mansvelt, 2010). This understanding is, in fact, the opposite of conventional economic wants or desires, which are infinite and insatiable. The voice of the Chilean economist Manfred Max-Neef phrases this beautifully: "The economy is to serve the people, not people to serve the economy."

Max-Neef et al. (1992) introduced a matrix of needs and satisfiers, including defining individual basic human needs and how these are satisfied. The nine needs are subsistence, protection, participation, understanding, affection, leisure, creation, identity, and freedom. These needs come along with some ways in which these needs can be satisfied, called satisfiers. The satisfiers can contribute to the satisfaction of different needs, and more than one satisfier may be required to meet a need. Satisfiers can complete more than one need (synergistic), meeting one while detracting from another need (destroyers) or creating a misleading concept of meeting a need (pseudo-satisfiers).

Comparing Max-Neef's theory to the well-known Maslow hierarchy of needs: physiological, safety, love, esteem, and self-actualization (Maslow, 1943), Maslow's theory has predominance, meaning that only when the lower level is met does the following level become increasingly dominant. As a result, this theory implies that mankind continually strives to move upwards through the pyramid, with ongoing wants or desires rather than needs or necessities.

Needs are considered few, finite, classifiable, and universal across human history and society (Aamoucke, 2016). Max-Neef also believed that human needs are universal and constant throughout cultures and periods. What differs across countries or generations is not the needs but what is chosen to meet the demand. Culture determines which satisfiers are selected to fulfill the needs, not the needs themselves. Aamoucke (2016) studied that a failure to meet the needs is a source of poverty, with direct consequences for health and wellbeing. Here we understand that the concept of poverty moves beyond monetary measures, and countries should discover ways to satisfy human needs better.

### 2. Redefining Prosperity: Economy for a Finite Planet

In his influential book, Tim Jackson (2016) said, "People can flourish without endlessly accumulating more stuff. Another world is possible." However, it is not always true that more is better. When we recognize that we live in a world with natural and social limits, we must redefine "prosperity". We are pursuing long-term prosperity in which people have the potential and opportunity to grow as human beings while not further depleting the finite world we share with other species and on which we depend for a home.

It can go hand in hand with the World Commission on Environment and Development's 1987 Brundtland report 'Our Common Future', which defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). It aims to strike a balance between economic growth and the preservation of social and environmental harmony. This gives a long-term vision for sustainability in which economic growth is pursued while social cohesion and environmental conservation are mutually supported. This also aids in examining current strategies and identifying some unsustainable trends in numerous policies. Sustainable development requires the integration of the economic, social, and environmental dimensions. The recent agenda, the 2030 Agenda of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), has integrated those three factors in the global commitment to "achieving sustainable development in its three dimensions-economic, social, and environmental-in a balanced and integrated manner".

Sustainability principles should be incorporated into business models and government policies. Natural Step (thenaturalstep.org), a non-profit organization devote to attaining ecological, social, and economic sustainability, contributes to this endeavor. Max-Neef philosophy, they believe, may assist organizations or businesses in incorporating sustainability concepts into their business models and operational procedures. The way we value businesses will alter because of sustainability principles. The principles can assist in becoming a future-fit above and beyond financial gain.

#### 3. Redefining Prosperity: Beyond Short Term Performance

Gross Domestic Product (GDP) is a significant measure because it provides information on the size and performance of an economy. This can be estimated in three ways: production, expenditure, or income, which should give the same result. An increase in GDP indicates that the economy is performing well in general. While GDP is adequate for measuring economic activity in the short term, GDP overlooks natural capital and does not account for environmental damage caused by economic activities. Given the strong relationship between climate change and the environment, measuring economic performance through the lens of natural capital will be critical. Furthermore, economic growth should increase without damaging the environment, and therefore, extending beyond GDP growth is required to establish a more sustainable future and development.

Dasgupta (2021) states a strong argument in his review on the Economics of Biodiversity: "Government almost everywhere exacerbate the problem by paying people more to exploit nature than to protect it, and to prioritize unsustainable economic activities". He also argues that we need to change to "inclusive wealth" measurements, including natural capital and produced and human capital.

UN System of Environmental and Economic Accounting (SEEA) can be an option of a framework not solely based on GDP but also embeds sustainability. SEEA Ecosystem Accounting (SEEA EA) measures the ecosystem services, tracks changes in ecosystem assets, and connects this data to economic and other human activities (SEEA, n.d.). The framework incorporates concepts, definitions, and classifications congruent with the System of National Accounts (SNA) to integrate environmental and economic statistics. SEEA EA has already been used to support the agenda in a variety of policies and decision-making processes, for example (SEEA, n.d.):

- a. Carbon accounts have been used in Indonesia to analyze the effects of changes in peatland ecosystems.
- b. Ecosystem extent and condition accounts for rivers in South Africa have guided The National Water and Sanitation Master Plan
- c. Species accounts in Uganda have presented the economic value of the indigenous Shea tree.

# D. Conclusion

For a COVID-19 recovery, some principles, such as theories of universal human needs, need to be established to achieve long-term economic growth. A deeper understanding of human needs will make changes that improve people's lives in the long run. We should encourage a continuous examination of how serving human needs interacts with the environment and more discussions on meeting human needs sustainably, supporting responsible production and responsible consumption.

Social and environmental become the planetary boundaries that will help us redefine prosperity. Therefore, GDP that embeds nature and sustainability, which requires macroeconomic accounting models that integrate economic and environmental data in measuring economic performance, should be employed. The prosperity we would like to achieve is long-term human well-being ecologically safe and environmentally just, as proposed in the ten principles for a COVID-19 recovery by Wellbeing Economic Alliance (Büchs et al., 2020).

Fortunately, a framework that considers climate change prevention and more sustainable practices in using the earth's natural resources has been effectively defined through the Sustainable Development Goals (SDGs). Government should provide effective incentives that reward businesses that make sustainable decisions and prevent overexploitation of nature. New business opportunities will be unlocked, jobs will be generated, and a good ecosystem for all businesses will be established through this effort.

There are two options: one is to build back to pre-COVID-19 conditions, and the other is to seize the opportunity to make back better. Indonesia needs to choose the latter, meaning that the post-pandemic recovery is based on long-term economic, social, and environmental benefits for people's lives. Moreover, Indonesia can help drive innovation and investment in green recovery by accelerating large-scale hydropower development, green bonds, and other financial instruments to achieve a low-carbon economy.

# Reference

- Aamoucke, R. (2016). *Innovative start-ups and the distribution of human capital.* Springer International Publishing.
- Agrawala, S., Dussaux, D., & Monti, N. (2020). What policies for greening the crisis response and economic recovery?: Lessons learned from past green stimulus measures and implications for the COVID-19 crisis. *OECD Environment Working Papers*, No. 164. https://doi.org/10.1787/ c50f186f/-en
- Barbier, E. B. (2010). A global green new deal: Rethinking the economic recovery. Cambridge University Press.
- Bappenas. (2021). *Green recovery roadmap Indonesia 2021–2024*. https:// www.un-page.org/files/public/indonesia\_green\_recovery\_roadmap\_ oct21.pdf
- Brundtland, G. H. (1987). Report of the world commission on environment and development: Our common future. United Nations.
- Büchs, M., Baltruszewicz, M., Bohnenberger, K., & Busch, J. (2020). Wellbeing economics for the COVID-19 recovery. WEAll Briefing Papers. Wellbeing Economy Alliance.
- Dasgupta, P. (2021). The economics of biodiversity: The Dasgupta review. HM Treasury.
- European Environment Agency. (2019). *Resource efficiency and the circular* economy in Europe 2019: Even more from less (26/2019). https://www. eea.europa.eu/publications/even-more-from-less
- Evans, S., & Gabbatiss, J. (2021, April 7). *Coronavirus: Tracking how the world's 'green recovery' plans aim to cut emissions*. Carbon Brief. https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions
- Gomme, J., & Jungermann, U. (2018). SDG sector roadmaps: How to leverage the power of sectoral collaboration to maximize business impact on the sustainable development goals. World Business Council for Sustainable Development. https://docs.wbcsd.org/2018/04/SDG\_roadmap%20 Guidelines.pdf
- International Monetary Fund. (2019). *Fiscal monitor, October 2019: How to mitigate climate change.* IMF Fiscal Affairs. https://www.imf.org/en/Publications/FM/Issues/2019/10/16/Fiscal-Monitor-October-2019-How-to-Mitigate-Climate-Change-47027
- International Renewable Energy Agency. (2020, June 2). Renewables increasingly beat even cheapest coal competitors on cost. IRENA.

https://www.irena.org/newsroom/pressreleases/2020/Jun/Renewables-Increasingly-Beat-Even-Cheapest-Coal-Competitors-on-Cost

- Jackson, T. (2016). *Prosperity without growth: Foundations for the economy of tomorrow.* Taylor & Francis.
- Li, Z., Farmanesh, P., Kirikkaleli, D., & Itani, R. (2021). A comparative analysis of COVID-19 and global financial crises: Evidence from US economy. *Economic Research-Ekonomska Istraživanja*, 1–15. https:// doi.org/10.1080/1331677X.2021.1952640
- Mansvelt, J. (Ed.). (2011). Green consumerism: an A-to-Z guide (Vol. 6). Sage.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- Max-Neef's, M., Elizalde, A., & Hopenhayn, M. (1992). Development and human needs. Real-life economics: Understanding wealth creation. http://alastairmcintosh.com/general/resources/2007-Manfred-Max-Neef-Fundamental-Human-Needs.pdf
- New Climate Economy (2018). Unlocking the inclusive growth story of the 21st century: accelerating climate action in urgent times. https:// newclimateeconomy.report/2018/
- OECD. (2020a). Tax and fiscal policy in response to the Coronavirus crisis: Strengthening confidence and resilience. https://pesquisa.bvsalud. org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/ COVIDwho-1077280
- OECD. (2020b, October 6). Making the green recovery work for jobs, income, and growth. OECD. https://www.oecd.org/coronavirus/ policy-responses/making-the-green-recovery-work-for-jobs-incomeand-growth-a505f3e7/
- OECD. (2021, March 9). *More jabs, more jobs.* OECD. https://www.oecd. org/coronavirus/en/data-insights/ieo-2021-03-more-jabs-more-jobs
- Ozkan, G. (2021, June 7). COVID-19 recovery: some economies will take longer to rebound – this is bad for everyone. King's College London. https://www.kcl.ac.uk/news/covid-19-recovery-some-economieslonger-rebound-bad-everyone
- Rippy, K. (2021, August 26). *These three energy storage technologies can help solve the challenge of moving to 100% renewable electricity.* The Conversation. https://theconversation.com/these-3-energy-storagetechnologies-can-help-solve-the-challenge-of-moving-to-100renewable-electricity-161564.

- Schmidhuber, J., & Qiao, B. (2020). *Comparing crises: Great lockdown versus great recession*. Food and Agriculture Organization of the United Nations
- SEEA. (n.d.) System of Environmental Economic Accounting. Accessed June 20, 2022. https://seea.un.org.
- UNEP. (2021, March 30). *Green recovery.* UN Environment Programme. https://www.unep.org/resources/factsheet/green-recovery
- United Nations. (2021, May 27). Green pandemic recovery is essential to close the climate action gap. UNEP. https://www.unep.org/news-and-stories/press-release/green-pandemic-recovery-essential-close-climate-action-gap-un-report