



**China Council for International Cooperation on Environment and Development**

## **CCICED Issues Paper 2020**

# **Recovering Forward**

**May 2020**

In 2018, President Xi cautioned that if “mankind conquers nature with science and creativity, nature will take revenge on mankind.” In 2020, COVID-19 has reflected the extent of nature’s revenge on human and economic health. Plans for the “2020 super-year” of climate ambition and nature protection have, like all else, been postponed.

It is likely that COVID-19 impacts and recovery will last far longer than the event and aftermath of the 2008 Great Recession. The legacy of that economic shock included productivity and innovation lags that lingered for nearly a decade (Rodrik, 2018), while global supply chains as a percentage of GDP never recovered from their 2008 levels (World Bank, 2020b). The structural aftershocks of COVID-19 are very likely to endure throughout the entire period of the 14th Five-Year Plan.

This Note argues that the direction of the economic recovery should not point backward to previously rigid economic models characterized by unsustainability, inequality, and inequity, but rather forward, toward high-quality green development, the Sustainable Development Goals (SDGs), de-carbonization pathways, and an Ecological Civilization construction. The 14th Five-Year Plan represents a critical roadmap to enhance sustainable development, green innovation, and green technology within China, and advance renewed or new forms of international cooperation.

This Note examines four issues related to the recovery: (i) public health protection, (ii) a green economic recovery, (iii) trade policy and debt, and (iv) integrated policy.

### **I. Public Health**

The coronavirus underscores the importance of strengthening risk assessment, preparedness, prevention, surveillance, and monitoring to provide accurate and early warnings of threats to human health, as well as maintaining active disease epidemiology programs and technical and human resource capacity to respond to epidemiological investigations. Strong surveillance systems for communicable diseases, environmental hazards, and key health status data are central to assessing and minimizing health risks and strengthening emergency response activities, including emergency regulations and enforcement to support public health decisions.

Lessons from COVID-19 include the importance of international cooperation and integrated, holistic approaches that include public health, animal health, land-use change, animal husbandry, zoonotic risk

management, ecosystem change including climate change, and other factors. Public health education, reliance on good science and transparency have never been more important, not only in controlling acute communicable diseases, but also in lowering chronic public health as well as environmental challenges related to air, water, and food safety. New approaches to enhancing public health measures and environmental monitoring should be explored, including a greater role for public monitoring and reporting of pollution, freshwater quality, and nature protection. Examples of freshwater monitoring in Finland illustrate innovative new approaches to engaging the public, schools, and others in environmental stewardship (Finnish Environment Institute, 2020).

Trade protectionism affecting medicine, personal protective equipment, ventilators, and food have surged during the first three months of the pandemic, leaving developing countries most exposed now and creating insecurity about access to current supplies and a future vaccine. China's commitment to a rules-based, multilateral system of cooperation is ever more urgently needed.

## II. Green Economic Recovery

Previous economic slowdowns coincide with or have caused the weakening of environmental protection. Policy attention during economic turbulence tends to focus on GDP, unemployment, balance-of-payments, and export competitiveness. Environmental regulations have been viewed as incurring sunken costs and dampening economic recovery. Public support for environmental action has declined during past periods of economic downturn, as households focus on wages, job security, and savings (Dalton, 2015; Kenny, 2019).

Some of these previous patterns are being repeated today. Some governments have, for example, suspended environmental regulatory inspections, delayed new regulations, and stopped the surveillance of rainforests and other ecosystems. While air pollution and greenhouse gas emissions have declined in the short term and nature has been left relatively undisturbed during COVID-19, other pressures have been rising, from reports of increased wildlife poaching to a surge in medical waste and single-use plastic pollution to major projects being accelerated with potentially diminished oversight.

However, past conflicts pitting an economic recovery against environmental stewardship are diminishing, as new approaches emphasize stronger win-win results by strengthening the nexus between public health, pollution abatement, climate action, nature protection, social equity, and economic prosperity. Four related reasons why a green economic recovery will avoid past patterns are noted briefly below.

*First, Science:* A growing body of robust scientific research confirms accelerating rates of ecological degradation and destruction. In addition to more accurate modelling, the *empirical* evidence of ecological change and its consequences is expanding. In 2019, sea levels continued to rise due to warmer average surface ocean temperatures, resulting in melting Greenland ice and retreating glaciers (World Meteorological Organization [WMO], 2020). Ocean acidity is increasing more quickly than anticipated (University of Colorado, 2020). Heatwaves and prolonged drought increased in 2019, including unprecedented wildfires in Australia as well as in Siberia and other Arctic regions (WMO 2020). Global average temperatures in 2019 have risen by 1.1 °C above the preindustrial level, just 0.4°C short of the Paris Climate Agreement lower-bound objective (WMO, 2020). All of this and more have economic costs and must be managed to secure a sustained economic recovery.

*Second, People:* Before COVID-19, public support for ambitious climate action was increasing. During COVID-19, while climate demonstrations have been suspended, public support has not. Polls

conducted *during* COVID-19 suggest that support for climate action has increased, with young people as the strongest advocates for ambitious, transformative action (Poushter, 2020). Moreover, behavioural changes during the pandemic will lead to behavioural transformations ahead. While COVID-19 shows that governments can impose strict measures, it has been the actions of people that have made the difference. There is hope that this new sense of community and solidarity will create a new, more equitable world ahead. A century ago, the English author D.H. Lawrence wrote *Look! We Have Come Through!* to describe new personal wisdom following alienation, personal loss, and uncertainty. The Great Lockdown may lead to new practices, including working more from home, fewer face-to-face meetings, less air travel, additional savings, and less debt-driven overconsumption splurges. The end of the crisis may open a new, ethical understanding of the importance of public health, as well as the value of fair wage compensation for labour in general and a fair wage for women’s labour in particular.

*Third, Economics:* Three years after the Great Recession, Achim Steiner noted that a green economy “can catalyze economic activity of at least a comparable size to business as usual, but with a reduced risk of the crisis and shocks inherent in the existing model” (United National Environment Programme, 2011). Green development over the past decade has not only reinforced that view but also demonstrated that it can outperform business-as-usual economic practices. A recent empirical study that underscores the win-win benefits of green development is the May 2020 Oxford University report, *Building Back Better: A Net-Zero Emissions Recovery*, authored by Nobel Prize economist Joseph Stiglitz, climate economist Nicholas Stern and others (Hepburn et al., 2020; Smith School of Enterprise and the Environment, 2020). After reviewing 700 economic recovery plans and interviewing scores of financial, central bank, treasury and other officials and experts, the authors conclude that green, low-carbon, and climate-friendly economic projects produce “better results” for the economy and the environment compared to business-as-usual investments. Of critical importance, the research concludes that green, low-carbon projects create more jobs compared to brown or neutral projects. For every USD 1 million spent on clean energy infrastructures, such as renewable energy or green building construction and retrofitting, an average of 7.49 jobs were created in the early stages. This compares to 2.65 jobs for every USD 1 million spent on fossil fuel-based energy systems like coal. The report reinforces other work highlighting the immediate employment benefits, energy savings, avoided carbon emissions, and improved freshwater uses through green building retrofitting and refurbishment.

Such findings reinforce the benefits of ambitious and comprehensive green development approaches. The European Union Green Deal includes a strategic focus on green employment and green job retraining to compensate for the job impacts associated with closing some 230 coal plants, expanding investments in renewable energy and net-zero, circular-economy heavy industry approaches.<sup>1</sup> The European Commission’s Circular Economy Implementation Plan similarly highlights the net job benefits stemming from ambitious, comprehensive circular economy approaches (European Commission, 2019).

Perhaps one of the biggest short-term green job-creation opportunities is associated with green recovery investments in natural capital by government and industry. These include hiring non-skilled and semi-skilled workers for ambitious afforestation and reforestation projects, wetland restoration and remediation, cleaning waterways and beaches, and creating community collection sites for plastic and other recycling. Other examples of immediate green job creation include the remediation of

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<sup>1</sup> The European Union Green Deal adopted in early 2020 includes specific funding to ensure a green transition. These funds have been further strengthened as part of the European Commission post-crisis economic recovery measures proposal. The Just Transition Fund aiming to facilitate the transition towards climate neutrality has been beefed-up from € 7.5 billion to €40 billion. The investment window of Invest EU dedicated to sustainable infrastructures has been almost doubled to reach € 20 billion of guarantee.

contaminated soil and contaminated waste sites, which also reduce public liabilities.<sup>2</sup> In April 2020, Canada announced a job-creation program to restore abandoned oil and gas wells, leading to thousands of immediate jobs.

A green recovery has emerged as a central feature of economic policy prescriptions. In April 2020, the International Monetary Fund (IMF) recommended that countries implement a green economic recovery, with a focus on five strategic priorities:

- Climate-smart technologies such as renewable energy, green technologies (i.e., battery/hydrogen/carbon capture), and green infrastructure
- Climate adaptation, such as flood protection, resilient roads, and buildings
- Avoiding carbon-intensive investments such as fossil fuel power and high-emission vehicles
- Supporting public work programs that provide income support
- Extending debt guarantees and other support to green industries/activities in preference to brown industries/activities.<sup>3</sup>

The economic rationale for these investments is compelling. Since public spending on infrastructure, including buildings, will be a pillar of most countries' recovery plans, implementing green, low-carbon, and resilient infrastructure promises to create jobs and large-scale capital investments while lowering the combined carbon footprint of energy, transport, building and water infrastructure. Together, these account for 60% of global greenhouse gas emissions. Examples of successful sustainable infrastructure projects, supported by innovative green financing instruments, are growing. South Korea has deployed intelligent traffic management systems to decrease traffic congestion. The South East Water Authority (U.K.) provides free water-saving technologies, leading to improved freshwater management. The U.S. Corps of Engineers has supported successful natural infrastructure freshwater and coastal marine buffers.

The investment choices in energy systems made during the economic recovery are of critical importance. Prior to COVID-19, the absolute costs of renewable energy at scale continued to decline (International Renewable Energy Agency [IRENA], 2019), while comparative costs of renewables to coal continued to favour clean energy sources. In 2019, some 75% of all U.S. coal production was more expensive than renewable energy; that number is projected to reach 100% by 2025 (Gimon & O'Boyle, 2019). During the COVID-19 crisis, renewable energy has experienced a remarkable 5% demand growth, while overall fossil use has plummeted, and total global energy demand has dropped by 6% (IRENA, 2020). The post-COVID-19 energy landscape will undergo even swifter and deeper structural changes: the head of the International Energy Agency (2020) recently predicted a "significantly different" energy landscape in which renewable energy outperforms fossil fuels. In addition to large-scale energy systems, all countries should support new generations of efficient air conditioners and cooling systems that exclude climate-potent HFCs and other short-lived climate pollutants. The climate dividends from tackling short-lived climate pollutants alone entail avoiding up to 0.6°C warming.

*Fourth, Green Finance and Investment Trends:* Before the crisis, big investors and blue-chip companies had stepped up commitments to low-carbon and net-carbon investments. In January 2020, the European

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<sup>2</sup> The U.S. Department of Energy has estimated that its contaminated soil and hazardous waste liabilities are currently USD 494 billion, so the economic benefits of supporting workers would entail win-win effects.

<sup>3</sup> The IMF also notes that, in those cases where governments do provide recovery support to carbon-intensive activities like coal or airlines, industries and firms should be required to commit to binding emissions reduction targets.

Investment Bank announced that it was halting all financing of fossil fuels by 2021 and investing EUR 1 trillion in clean energy projects in the coming decade. (EIB, 2020) Goldman Sachs promised USD 750 billion in lending to low-carbon and sustainability ventures. The biggest renewable energy purchases in U.S. markets in 2019 included Amazon, Walmart, Apple, and Facebook. In early 2020, Microsoft went beyond net-zero carbon pledges by announcing not only negative carbon operations but actions to compensate for its “unpaid carbon debt” of the past. In January 2020, the head of Blackrock characterized climate as driving a “fundamental reshaping of finance.” (Blackrock, 2020) Also, in early 2020, the Bank for International Settlements (the Basel bank) cautioned that climate change could affect “every single agent in the economy and every single asset price” that could trigger the stranding of fossil fuel assets, especially thermal coal (Bolton et al., 2020). In late 2019, Australia’s Reserve Bank warned that climate change poses risks to Australia’s financial stability, and banking and corporate regulators have become proactive in managing carbon risks. (RBA, 2019)

### III. Trade and Debt

Prior to COVID-19, international trade was turbulent and uncertain. Structural changes included a decline in global supply chains and an increase in regional hubs concentrated in China, the United States, and Germany. Institutional conflicts at the World Trade Organization (WTO) regarding the mandate of its Appellate body have weakened the multilateral system, while protectionism has been increasing, with tariffs, trade remedies, anti-dumping measures, non-tariff barriers, and import bans rising.

During COVID-19, a pronounced spike has occurred in protectionism, as countries scrambled to procure medical equipment, personal protection equipment, and related supplies. Protectionism has widened to include trade in food, as concerns about food security have heightened. Both trends will hurt developing countries the most, and both trends pose serious questions about what will happen if and when a vaccine is discovered. The heads of the WTO and the IMF recently pleaded with governments to stop trade protectionism and support greater international cooperation (WTO & IMF, 2020).

Following the crisis, an important area of international cooperation should be trade. Reverting back to Great Depression-era practices of protectionism and mercantilism will stall overall growth and leave developing countries among the worst affected. Yet, like other systems, from energy to finance to development, the crisis is an opportunity to reshape a new rules-based trading order fit for the purpose of supporting a green recovery and the SDGs. Short-term options include:

- Build on China’s earlier waste import ban to ban trade in single-use plastics.
- Support greater linkages between trade and climate mitigation. The September 2019 Agreement on Climate Change, Trade and Sustainability advanced by New Zealand and others call for an accelerated tariff liberalization of climate-related goods and services, as well as the elimination of fossil fuel subsidies in accordance with G20 commitments and compatible with WTO provisions.
- Consider joining border carbon adjustment measures to accelerate a shift toward decarbonization, while adhering to WTO principles on non-discrimination.
- Complement new rules to stop illegal trade in wildlife with complementary policies, including enforcement, public education, monitoring, public education and development aid (Traffic, 2020).

Of all the issues facing the COVID-19 recovery, debt management will likely be the most challenging, complex, urgent, and in need of bold new approaches. Since the 2008 global recession, higher risk leveraged private debt markets have expanded rapidly, reaching USD 9 trillion globally. While cheap private credit increased, borrowers' credit quality, insurance and underwriting rules, and other safeguards weakened. This dramatic shift has rightly been dubbed the "privatization of Keynesian economics," in which the engine of global growth has been increasingly unstable private lending, in which record rates of leveraging coincide with weakening regulatory oversight and new rights protecting creditors (World Bank, 2020a).

In 2018, the Paris Club warned that the "landscape of public debt is undergoing profound change, characterized by growing vulnerabilities, increasingly more diverse creditors and more complex financial investment" (Paris Club, 2018). In 2019, the global debt-to-GDP ratio reached the highest level ever, peaking at over 322% of GDP in the third quarter of 2019, representing a total debt of almost USD 253 trillion (or over USD 32,000 for every person on the planet). For the past decade, developing country debt has more than doubled, reaching USD 72 trillion, of which non-financial corporate debt now exceeds USD 31 trillion (Institute of International Finance, 2020). While a limited number of countries were categorized as debt distressed in 2019 (Hurley et al., 2018), other countries face high-risk debt management challenges, prompting YI Gang, Governor of the People's Bank of China, in 2019 to note that China would need to "consider a country's complete debt-servicing capabilities" (Financial Times, 2019).

The economic crisis of 2020 suggests many or most developing countries are facing or will face debt distress. One indicator of this is the request by over 80 developing countries in March 2020 for emergency IMF financing. A month later, the *IMF Global Financial Stability Report (2020)* warned that emerging markets had experienced the sharpest portfolio flow reversal ever recorded, with cascading risks of bankruptcies, the freezing of credit markets, and a looming threat of banking failures.

One of the agreed carve-outs by the G20 regarding debt servicing is to allow sufficient fiscal space to advance the SDGs. This provision underscores the importance of integrating green provisions within meaningful, sustainable debt management strategies.

China should consider at least three options. First, it should examine how current and new green finance instruments, including scaled-up green, climate, and conservation bonds, can alleviate debt. Second, China should engage with a new generation of innovative, cooperative financing deals in which leading conservation groups, governments, and private sector actors advance representative, sustainably financed, and durable protected area systems around the world, a central pillar of the Convention on Biological Diversity 15th Conference of the Parties (CBD COP15). Third, given the inevitable discounting of sovereign debt in the coming months, China should work with other countries, leading investors, and conservation groups in structuring debt-for-climate adaptation and debt-for-conservation arrangements/swaps. China could co-convene a meeting with France and other countries before the CBD COP 15 to examine new, bold debt conservation arrangements that can be supported by international financial institutions to help alleviate debt-distressed and at-risk developing country debt.

#### **IV. Integrated Policies**

An important emphasis of CCICED's 2020 work is supporting policy coherence and integrated policy planning and implementation that moves beyond single-issue policy approaches, thereby reinforcing the foundation for Ecological Civilization objectives. There are renewed suggestions to enhance the

link between the three Rio Conventions to realize climate and nature objectives, and advance comprehensive approaches of three major zones - wilderness areas, cities and farms, and shared lands (Locke et al, 2019). Several CCICED Special Policy Studies have highlighted the importance of tools and platforms to support concrete, integrated approaches. Notable examples include large-scale spatial planning that traverses multiple jurisdictions, nature-based solutions linked to Ecological Redline approaches, jurisdictional sustainable commodity sourcing, and third-party certification systems to mainstream ecosystem stewardship within and beyond protected areas to include agriculture, oceans and fisheries, forestry, resource extraction and other sectors. Large-scale spatial planning and Ecological Redline approaches are being used effectively in the Yangtze River Economic Belt and can be extended to green the BRI.

Another important tool is using integrated or comprehensive wealth indices that go beyond GDP to help balance investments and genuine returns from natural capital, human capital, and produced capital investments (Dasgupta, 2020). Given the importance of enhancing human health and well-being and proactively advancing gender equality, composite indicators are important to measure progress and hold those responsible accountable.

COVID-19 magnifies the importance of integrated and interdisciplinary approaches. The One Health platform is a notable example by its emphasis on integrated risk prevention and emergency response capacities that include climate change and other risks. The platform stresses the importance of adaptive, holistic, and forward-looking approaches to detect, prevent, monitor, control, and mitigate communicable and non-communicable diseases—and improve health outcomes more broadly. Among the priorities in holistic approaches is assessing complex interconnections among species, the environment, and human society, including climate impacts (One Health, 2019). China may wish to lead a new forum to support integrated risk management to coordinate the full multilateral system moving forward.

Future risks that are unknown, non-linear, and cascading will also be present. COVID-19 and climate risk have these traits in common. In January 2020, the Bank for International Settlements (BIS, 2020) warned that its current menu of risk assessment quantitative economic models are ill-suited to anticipating climate change impacts, which they warn can have sudden whiplash characteristics (Bolton et al., 2020). They therefore recommend complementing standard quantitative economic modelling tools with scenarios and foresight analysis. Such tools, together with system dynamics tools, can help policymakers best navigate uncertainty and assist in minimizing potential risks and impacts and in maximizing investment returns.

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