



► Policy Brief

July 2020

COVID-19 and the world of work

Jump-starting a green recovery with more and better jobs, healthy and resilient societies

Key points

- ▶ The COVID-19 pandemic exposed the multiple links between public health and the environment and made it evident that a healthy life and workplace and productive economies depend on a healthy environment.
- ▶ One positive outcome from the pandemic has been a dramatic, but temporary reduction in air pollution and greenhouse gas emissions across the world.
- ▶ As economies restart, there is an opportunity to develop public and private policies to address the current climate change crisis gradually and foster the transition to a green economy. The reconstruction of the economic fabric should lay the foundations for environmentally sustainable and socially inclusive production and consumption as we move into the future.
- ▶ Through social dialogue, governments, workers' and employers' organizations have a key opportunity to forge a strong consensus and broad-based support for a sustainable recovery that promotes decent work, resilient enterprises and workplaces, and environmental sustainability.
- ▶ To support a sustainable and green recovery, policies and investment towards a greener and circular economy are required, such as fast-tracking low-carbon mobility, removing distortions such as fossil fuel subsidies while providing incentives to use renewable energies, and ensuring that public funds are provided to ensure business continuity, stimulate the economy, create decent jobs, and address risks to human health and the environment.
- ▶ Enterprises, supported by employers' organizations, can build on innovative business continuity measures to scale up green innovation and entrepreneurship, enhance resilience against future shocks by integrating environmental risks and technology into enterprise risk management (ERM) practices and into climate-related financial disclosure, and invest in sustainable supply chains.
- ▶ Enterprises can work with employers' and workers' organizations to identify and implement best environmental practices at workplace level. Consumers can further embrace sustainable consumption patterns that allow human well-being and the fulfilment of individual and collective aspirations, while reducing waste and paving a way to meet the needs of present and future generations.
- ▶ Build back better: the ILO offers a range of programmes, initiatives and tools to advance decent work, social justice and environmental sustainability simultaneously.

► The environment, human health and pandemics

As governments respond to the COVID-19 pandemic, the multiple links between public health and the environment have become evident. In some countries, both sectors suffered underinvestment in the past. For example, the WHO estimates that there is a shortage of 18 million health workers.¹ Failure to invest in global public goods such as the environment and health will keep human economies and societies vulnerable to crises that could become more frequent and more intense in the future.

The health–environment nexus stretches beyond the current discussion on the root causes of the pandemic. The number of infectious disease outbreaks has risen significantly over the past decades, since the 1980s.² More than two-thirds of these diseases originate in animals. Many of the familiar infectious diseases – Ebola, HIV, swine and avian flu – are zoonotic. By disrupting ecosystems, such as through massive deforestation, climate change and habitat encroachment, human activity created the conditions that increasingly allow animal viruses to cross over into human populations. Animals at the top of the food chain disappear and animals at the bottom of the food chain, like rats and mice that carry more pathogens, tend to fill that space leading to an ever-increasing number of infectious diseases. The “One Health” concept shows that health of animals, the ecosystem and humans are all interlinked, and when one is out of balance, others follow suit.³

Research has shown that when nature is conserved and multiple host species are in place, the overall risk of transmission of a pathogen is reduced through what scientists call the “dilution effect”. This is because in a mixed population of hosts, some would be “dead end” hosts, which do not allow an infection to occur; hence conserving nature is a way to mitigate disease transmission.⁴

In addition, the COVID-19 pandemic exposed the direct link between air pollution and health risk.⁵ A study of SARS-CoV-1 victims in 2003 found that patients were twice as likely to die in regions where air pollution was high.

However, the effects of air pollution on human health are much larger and costly. Air pollution poses a threat to human health linked to chronic respiratory diseases such as asthma, bronchitis, and other cardio-respiratory symptoms. The WHO estimates that globally, 4.2 million premature deaths are linked to ambient air pollution; unabated, this number is projected to double by 2050. The OECD estimates that air pollution is costing trillions of dollars per year due to health-care costs and lost productivity.⁶

The health–environment nexus also does not only relate to zoonotic diseases such as HIV, Ebola, coronavirus or to air pollution. The WHO estimates that 12.6 million people die each year as a result of living or working in an unhealthy environment – nearly 1 in 4 of total global deaths.⁷ For example, water pollution and diarrhea kills 2,195 children every day, more than 80,000 a year. The disability-adjusted life year (DALY) losses from water pollution are in the millions, exceeding by far those presently registered from the impacts of COVID-19. It is estimated that a one-dollar investment per child to provide clean drinking water could prevent such loss of young human lives.

The massive increase in the use of personal protective equipment during the pandemic exposed another major global crisis: plastic pollution. Around 13 million tons of plastic end up in the sea each year, costing the global economy US\$13 billion in lost revenue from ocean activities, notably threatening jobs in the fishing and tourism industry.⁸ If single-use plastics such as gloves, masks and gowns are not disposed of properly, not only will pressure increase on the ocean economy, but the risk to workers in the waste management industry will rise. A circular economy approach to the management of personal protective equipment, such as by disinfecting, washing and reusing, can reduce pollution and offer employment opportunities including in repurposing, waste management and recycling.

1 WHO: “Health workforce” web page, https://www.who.int/health-topics/health-workforce#tab=tab_1.a

2 K.F. Smith et al.: “Global rise in human infectious disease outbreaks” in *J. R. Soc. Interface* (2014, 11: 20140950), <http://dx.doi.org/10.1098/rsif.2014.0950>.

3 C.K. Johnson et al.: “Global shifts in mammalian population trends reveal key predictors of virus spillover risk”, in *Proceedings in the Royal Society B*, 2020, doi.org/10.1098/rspb.2019.2736.

4 UNEP: “How nature can protect us from pandemics”, 2020, www.unep.org/news-and-stories/video/how-nature-can-protect-us-pandemics.

5 Y. Cui et al.: “Air pollution and case fatality of SARS in the People’s Republic of China”, in *Environ Health*, 2003, 2(1):15. See also: K. Chen et al.: “Air Pollution Reduction and Mortality Benefit during the COVID-19 Outbreak in China”, in *Lancet Planet Health* (2020, Vol. 4).

6 OECD: *The Economic Consequences of Outdoor Air Pollution, Policy Highlights*, 2016, <https://www.oecd.org/env/the-economic-consequences-of-outdoor-air-pollution-9789264257474-en.htm>.

7 WHO: “An estimated 12.6 million deaths each year are attributable to unhealthy environments”, WHO news release, 15 March 2016, <https://www.who.int/news-room/detail/15-03-2016-an-estimated-12-6-million-deaths-each-year-are-attributable-to-unhealthy-environments>.

8 UNEP: “Plastic Waste Causes Financial Damage of US\$13 Billion to Marine Ecosystems Each Year as Concern Grows over Microplastics”, press release, 14 June 2014 <https://www.unenvironment.org/news-and-stories/press-release/plastic-waste-causes-financial-damage-us13-billion-marine-ecosystems>.

► Climate change, air pollution and its impact on the world of work

The last decade has witnessed a growing concern around the world over the significant changes to the Earth's climate. The planet's weather pattern is changing, increasingly characterised by a high frequency and intensity of events such as droughts, large storms, coastal flooding and extreme temperatures. Scientific research indicates that a warming of the Earth's temperature is inducing these changes in climate, evidenced by an approximated increase of 1° Celsius in average temperatures since the pre-industrial revolution times. The year 2019 was reported to be the warmest year, with eight of the ten warmest years recorded since 1998.

The inter-linkages of the effects of climate change pose significant challenges for the world of work. Research on the impact of climate change on the world of work estimates that 1.2 billion jobs – approximately 40 per cent of the global labour force – are at risk because of environmental degradation.⁹ If unabated, climate change is expected to have negative implications for economic growth, human health, employment and livelihoods.

Rising global temperatures increase the exposure to heat stress – the body's inability to cool down properly through sweating – which can cause mild to serious heat-related illnesses and even death.¹⁰ Conservative estimates based on projections of a 1.5°C global temperature rise, combined with current labour force trends, suggest that if current patterns of warming persist, 2.2 per cent of total working hours worldwide will be lost in 2030 to heat stress – a productivity loss equivalent to 80 million full-time jobs. The economic losses due to heat stress at work were estimated at \$280 billion in 1995 and are projected to increase to \$2,400 billion in 2030, with the most pronounced increases in lower-middle-income and low-income countries.¹¹

The environmental effects of climate change – extreme weather events – cause people to move from less liveable areas to more liveable areas in search of livelihoods, putting under strain already stressed public infrastructure and the labour market. Climate change can induce unsafe and unwanted internal displacements or international migratory movements when it becomes impossible for people to inhabit the affected areas.¹² The World Bank estimates that internal climate-induced migration will amount to 143 million people by 2050 in Sub-Saharan Africa, South Asia and Latin America if no climate action is taken.¹³ Moreover, unregulated migration can expose migrant workers to forced labour and other forms of exploitation.¹⁴

In the 2015 Paris agreement on climate change, world leaders resolved to implement mitigation measures to hold the increase in global average temperature to below 2° Celsius above pre-industrial revolution levels by 2100. The agreement further obligates countries to “pursue efforts to limit the temperature increase to 1.5° Celsius (C)”. Reducing emissions of CO² and other greenhouse gases will determine the ability to limit global warming and reaching the 1.5°C target. It will require far-reaching changes in all systems and at all levels.

9 ILO: World Employment and Social Outlook 2018 – Greening with jobs, 2018, https://www.ilo.org/global/publications/books/WCMS_628654/lang--en/index.htm.

10 Rutgers University: “Heat stress may affect more than 1.2 billion people annually by 2100: Rising global temperatures are increasing exposure to extreme heat and humidity”, in Science Daily, 2020.

11 ILO: *Working on a Warmer Planet: The Impact of Heat Stress on Labour Productivity and Decent Work*, 2019.

12 IOM: Climate Change and Migration in Vulnerable Countries, A Snapshot of Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, 2019.

13 K. Rigaud et al.: Groundswell: Preparing for Internal Climate Migration, 2018, The World Bank.

14 ILO: Policy Brief: The role of fair and effective labour migration governance in regional climate adaptation, 2017.

► The impact of response measures to COVID-19 on air quality and carbon emissions

A positive, but temporary impact on pollution levels and air quality...

Due to the coronavirus outbreak, the world has abruptly changed over the past few months to an extent we would not have thought possible: planes grounded, schools, factories and enterprises shut down, people quarantined, borders closed. While the virus continues to kill thousands and infect many more, the response measures taken by countries to prevent its spread also resulted in economies and whole countries grinding to an abrupt halt. A positive, though unintended, corollary of the coronavirus response measures came in the form of a striking impact on air pollution and greenhouse gas emissions in the affected areas.

After the Chinese government imposed a strict lockdown on the 11 million inhabitants of Wuhan in late January, it did not take long to observe the positive impact on air quality. Between January and March 2020, data reflects an 84.5 per cent increase in days with good air quality in 337 cities (China Ministry of Ecology and Environment¹⁵). NASA and ESA (European Space Agency) released striking satellite images showing the improvement of air quality in the region between January and February 2020. With the coal usage falling nearly 40 per cent because of six of the largest power plants in Wuhan operating at minimal levels, CO₂ levels were reduced by at least 25 per cent.^{16,17} Concentrations in nitrogen dioxide (which results from power plants, vehicles and factories) decreased rapidly over the area. A decrease of 20 to 30 per cent of fine particulate matter was observed in China in February 2020, compared to the previous three years.¹⁸ Such improvements in air quality in China during the lockdown of January and February 2020 may have saved more than 10,000 people from premature

death caused by air pollution (this compares to the close to 5,000 premature deaths from the coronavirus at the end of the lockdown April 2020).¹⁹

Over Europe, the same was soon observed: images provided by the ESA satellite Copernicus Sentinel 5P showed a sharp decrease of nitrogen dioxide over European cities, mainly Paris, Milan and Madrid, coinciding with the lockdown period.²⁰ The Italian lockdown started on 21 February in the northern Province of Lodi and was extended to the whole country on 9 March. From 13 March, ESA satellites showed a marked decline in emissions of nitrogen dioxide over Northern Italy. The impact in this region is particularly striking as smoke from a cluster of factories is trapped against the Alps at the end of the Po Valley, creating one of Western Europe's pollution hotspots.²¹

When the national lockdown started in France on 17 March, the halt in road and air traffic showed its first effects in the Paris region within a week, with air 20 to 30 per cent cleaner than before the confinement,²² thanks to a 60 per cent drop in levels of nitrogen dioxide. Emissions from cars and motorcycles saw the highest decline of nearly 90 per cent. In addition, the reduction in pollution also led to a 30 per cent decrease in CO₂ levels. In Spain, a study by the Universitat Politècnica de València²³ showed that the concentration levels of nitrogen dioxide in major Spanish cities have declined 64 per cent on average after the start of the confinement: Barcelona had the most spectacular reduction with an 83 per cent decline, followed by Madrid (-73 per cent), Alicante (-68 per cent) and València (-64 per cent).

In the United States, the decline in air pollution was characterized by clear skies in major metropolitan cities across the country. The states of California and New York were the first to implement the lockdown. Data from the US Environmental Protection Agency

15 R. Wright, "There's an unlikely beneficiary of coronavirus: The planet", CNN.com, 17 March 2020, <https://edition.cnn.com/2020/03/16/asia/china-pollution-coronavirus-hnk-intl/index.html>.

16 L. Myllyvirta, "Analysis: Coronavirus temporarily reduced China's CO₂ emissions by a quarter", CarbonBrief, <https://www.carbonbrief.org/analysis-coronavirus-has-temporarily-reduced-chinas-co2-emissions-by-a-quarter>.

17 R. Wright, op. cit.

18 European Space Agency: "COVID-19: nitrogen dioxide over China", 19 March 2020, https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/COVID-19_nitrogen_dioxide_over_China.

19 K. Chen et al.: "Air Pollution Reduction and Mortality Benefit during the COVID-19 Outbreak in China", in *Lancet Planet Health*, (2020, Vol. 4).

20 European Space Agency: "Coronavirus lockdown leading to drop in pollution across Europe", 27 March 2020, https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Coronavirus_lockdown_leading_to_drop_in_pollution_across_Europe.

21 European Space Agency: "Coronavirus: fall in nitrogen dioxide emissions over Italy", 13 March 2020, https://www.esa.int/Space_in_Member_States/France/Coronavirus_chute_des_emissions_de_dioxyde_d_azote_au-dessus_de_l'Italie.

22 AirParif: "Air quality in Ile-de-France", <http://www.airparif.asso.fr/en/>.

23 Universitat Politècnica de València: "Confinement and reduction of economic activity to fight COVID-19 reduce air pollution in Spain by 64% on average", 24 March 2020, <http://www.upv.es/noticias-upv/noticia-11938-castellon-alic-es.html>.

reported a better quality of air in Los Angeles than the city experienced in the past 40 years, while in New York, CO₂ emissions declined by 50 per cent.

India holds the unfortunate record of having 21 of the 30 most polluted cities in the world²⁴ and has been struggling for years with suffocating, polluted air in megacities.²⁵ The national lockdown late March again triggered dramatic improvement in air quality: in New Delhi, the average concentration of microscopic particulate matter known as PM 2.5 dropped by 71 per cent within a week of the lockdown – falling from 91 micrograms per cubic meter on 20 March, to 26 micrograms per cubic meter on 27 March. Nitrogen dioxide also declined 71 per cent. Mumbai, Chennai, Kolkata and Bangalore recorded similar drops in these air pollutants.²⁶

...which should not conceal the dramatic impact on the world of work (of the responses measures and the upcoming economic recession)

In the meantime, the impact of COVID-19 on employment has been disastrous. The preliminary assessment reports by the ILO²⁷ suggest that at the beginning of April 2020, 2.7 billion workers, corresponding to 81 per cent²⁸ of the world's workforce, were affected by the sudden stoppage of economic activity and temporary (in some cases permanent) closure of enterprises. In the first quarter of 2020, global working hours declined by an estimated 4.5 per cent (equivalent to approximately 130 million full-time jobs) compared to the pre-crisis level.²⁹ For the second quarter of 2020, working hours are expected to be 10.5 per cent lower than in the last pre-crisis quarter, which would correspond to 305 million full-time jobs.

As per the ILO estimates, around 436 million enterprises worldwide (47 million employers and 389 million own-account workers) face the risk of severe disruption in the hardest-hit sectors, namely manufacturing, wholesale and retail trade, accommodation and food services, real estate and

business activities.³⁰ The simultaneous supply and demand shock has led enterprises to face a sudden revenue loss that may cause severe financial distress and liquidity shortages that could forge a business bankruptcy crisis, which would translate into the permanent closure of enterprises and job losses. This would damage the productive capacity and could even lead to a contraction of income per capita.

Micro, small and medium enterprises, which account for two-thirds of jobs worldwide, are particularly in danger: they represent around 70 per cent of global employment in retail trade and almost 60 per cent in the accommodation and food services sector. The prolonged shutdown of activity and the difficulty to cover fixed operating costs create cash flow issues and put their solvency at jeopardy. For many small economic units, this will translate into unavoidable layoffs, and sometimes even challenge their own survival post crisis.

In all countries, some specific categories of people are more vulnerable. Older workers and workers with pre-existing health conditions are more at risk of developing health problems. Young workers, who already face higher unemployment and underemployment rates worldwide, are more exposed to a fall in labour demand. Women have less access to social protection,³¹ and their important role in the care economy means an additional burden for them when schools and care facilities close down. The travel restrictions strongly affect migrant workers and limit their ability to reach their place of work or to return to their families.

For the workers in the informal economy, the impact of the crisis is even more intense. They have less access to social protection, health insurance, sick pay and do not benefit from income-soothing mechanisms. At the end April 2020, 1.6 billion workers in the informal economy (67 per cent of informal employment worldwide) were affected by lockdown measures and find themselves working in the most affected sectors. It resulted in a massive decline in earnings for these workers (60 per cent globally). In this regard, women in the informal sector are more affected than men, as they are overrepresented in the sectors more at risk – wholesale and retail trade; accommodation and

24 IQAir: 2019 World Air Quality Report, <https://www.iqair.com/blog/report-over-90-percent-of-global-population-breathes-dangerously-polluted-air>.

25 CREA: "India's Coronavirus Curfew Resulted in the Lowest One-Day Traffic Pollution Levels on Record", 22 March 2020, <https://energyandcleanair.org/janata-curfew-pollution-levels/>.

26 R. Wright: "The world's largest coronavirus lockdown is having a dramatic impact on pollution in India", 1 April 2020, <https://edition.cnn.com/2020/03/31/asia/coronavirus-lockdown-impact-pollution-india-intl-hnk/index.html>.

27 ILO: ILO Policy Brief on COVID-19, 18 May 2020, https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_739047/lang-en/index.htm#5.

28 This proportion decreased to 68 per cent at the end of April 2020, as per the ILO COVID-19 Monitor, available at https://www.ilo.org/wcmsp5/groups/public/--dgreports/--dcomm/documents/briefingnote/wcms_743146.pdf.

29 Fourth quarter of 2019.

30 ILO: "ILO Monitor: COVID-19 and the world of work. Third edition Updated estimates and analysis", 29 April 2020, https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_743146.pdf.

31 ILO: ILO Policy Brief on COVID-19, 18 May 2020, https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_739047/lang-en/index.htm#5.

food services; manufacturing; real estate, business and administrative activities – (42 per cent of women workers, compared to 32 per cent of men)

The restarting of economies will bring an opportunity to develop public and private policies to address the

current climate change crisis and foster the transition to a green economy gradually. The reconstruction of the productive system should lay the foundations for environmentally sustainable and socially inclusive production and consumption as we move into the future.

► Sustaining environmental and health gains Preventing a rebound

Experts maintain that limiting the warming of the Earth to within 1.5°C above pre-industrial revolution times would require collective effort at individual, country, regional and global levels. This is what we are witnessing with the COVID-19 pandemic: radical decisions need to be taken to curb our usual way of life in order to beat the pandemic, which gives hope that more sustainable ways, of living, working and producing, are within reach. The effect of the current economic scale-down on atmospheric pollution offers a glimmer of hope on the potential that coordinated global efforts to limit carbon emissions will have on our environment.

The emissions reduction is only temporary...

The environment benefits from the lockdown, but as the economies recover, emissions will resume if, post crisis, consumption and production patterns do not change. In addition, the fear of the absence of physical distancing in public transport is likely to lead to more vehicles on the roads.

In fact, in China, the Ministry of Ecology and Environment has indicated that, since the end of the lockdown on 7 April, the emissions from vehicles have returned to normal levels despite a previous plummet.³² As many European countries consider plans to resume economic activity, the same is likely to be observed.

...more concerted efforts are needed to produce a lasting effect on emissions

The World Meteorological Organization recognizes the localized improvements of air quality, but warns it is too early to assess the long-term impact on greenhouse gas emissions. Climate change experts contend that the current emission declines could only be sustained over the long-term if matched by a corresponding post-coronavirus structural change.³³

Even before the end of the pandemic, countries will need to address economic and social challenges arising from the economic recession. As governments start putting together recovery strategies, they should keep in mind, as stated by Sir Michael Marmot, professor of epidemiology and public health at UCL and chair of WHO's Commission on Social Determinants of Health, the huge leap in air quality witnessed during this period, so we do "not go back to the *status quo*."³⁴ Recovery and stimulus packages that foster the use of renewable energies are required not only to mitigate the rebound of emissions but also to encourage the transition to a green economy. This way the ongoing crisis could contribute to the emergence of a climate-friendly trajectory.

As the world of work is readjusting its *modus operandi* and innovating to ensure business continuity, this opportunity must not be missed to undertake transformative change to develop environmentally sustainable economies and societies. The current crisis is proving that a shift towards greener ways of living, consuming and producing is possible.

32 Ministry of Ecology and the Environment, People's Republic of China: "China to phase out diesel vehicles in areas with most air pollution", 13 April 2020, http://english.mee.gov.cn/News_service/media_news/202004/t20200413_774001.shtml.

33 WMO: "Economic slowdown as a result of COVID is no substitute for Climate Action", 24 March 2020, <https://public.wmo.int/en/media/news/economic-slowdown-result-of-covid-no-substitute-climate-action>.

34 H. Cockburn, "Coronavirus: Greener, more equal economy must emerge after impact of Covid-19, experts say" in The Independent, 27 March 2020, <https://www.independent.co.uk/environment/coronavirus-economy-green-equality-climate-change-COVID-19-a9430616.html>.

▶ Stimulating the economy and employment

Measures taken by governments and public institutions for a green recovery

In their rapid and decisive response to the COVID-19 pandemic, governments demonstrated a capacity to take extraordinary measures to protect their people, even in the face of serious economic ramifications. In the context of the recovery from COVID-19, governments, enterprises, workers and citizens in several parts of the world have realized that a similar level of dedication, speed and engagement can be taken to address pressing environmental risks. As stimulus and recovery packages are adopted in the tune of trillions of dollars around the world, some governments, mostly in industrialized economies, are starting to consider opportunities to build back a better world. There is massive job creation potential in public health and green jobs, as shown in the ILO report *World Employment and Social Outlook 2018 – Greening with Jobs*.³⁵

Actions that simultaneously respond to the COVID-19 pandemic and confront the looming climate crisis will mitigate future crises. Actions that tackle climate challenges, biodiversity loss and environmental degradation will produce huge public welfare gains. It is encouraging to observe that governments, regions and local authorities around the world have started to discuss and enact climate-friendly and green recovery packages.

Initiatives and measures taken by public institutions for a green recovery

▶ **At the global level**, UN Secretary-General António Guterres called upon world leaders to support businesses working hard to reduce greenhouse gas emissions and create jobs that are better for the environment. He outlined six principles, which constitute a guide to recovering better together. “As we spend trillions to recover from Covid-19, we must deliver new jobs and businesses through a clean, green and just transition.” he said.

“Where taxpayers’ money is needed to rescue businesses, it must be creating green jobs and sustainable and inclusive growth. It must not be bailing out outdated, polluting, carbon-intensive industries.”³⁶

- ▶ **The International Monetary Fund (IMF)** called upon governments to play their part in the green recovery by stating that its \$1 trillion post-coronavirus stimulus must tackle the climate crisis. It is urging its 100 member governments who applied for financial assistance to invest emergency loans in green sectors and to scrap subsidies to fossil fuels and tax carbon. As it gears up to lend \$1 trillion to governments hit by the coronavirus pandemic, the IMF is giving guidance on using the cash to tackle climate change.³⁷
- ▶ **The European Commission** proposes a “roadmap for recovery”³⁸ in which the Green transition and the digital transformation will play a central and priority role in relaunching and modernizing the economy of EU member States. The roadmap proposes investments in clean and digital technologies and capacities, together with a circular economy, to create jobs and growth and allow Europe to take the first-mover advantage in the global race to recovery. It will also help the EU to be more resilient and less dependent by diversifying key supply chains. It also aims to forge an international agreement on ambitious carbon cuts.
- ▶ **Ministers from 30 countries**, including China, India, Indonesia, Japan, Germany, UK, Italy, France Spain and UAE as well as heads of the IMF, OECD, the UN, UNDP and major international organizations met online for the 11th Petersberg Climate Dialogue to discuss a green economic recovery after the acute phase of the COVID-19 pandemic is over.³⁹
- ▶ **Environment ministers of 17 EU member states** and the Green Recovery Alliance⁴⁰ of 79 Members of European Parliament committed to support

35 ILO: World Employment and Social Outlook 2018 – Greening with jobs, 2018, https://www.ilo.org/global/publications/books/WCMS_628654/lang--en/index.htm.

36 United Nations: “Secretary-General Says COVID-19 ‘Wake-Up Call’ Demands Recovery Built on Green Economy, Marking Earth Day 2020” 20 April 2020, <https://www.un.org/press/en/2020/sqsm20051.doc.htm>.

37 Climate Home News: “IMF chief: \$1 trillion post-coronavirus stimulus must tackle climate crisis”, 29 April 2020, <https://www.climatechangenews.com/2020/04/29/imf-chief-1-trillion-post-coronavirus-stimulus-must-tackle-climate-crisis/>.

38 European Commission: “A Roadmap for Recovery: Towards a more resilient, sustainable and fair Europe”, 21 April 2020, <https://www.consilium.europa.eu/media/43384/roadmap-for-recovery-final-21-04-2020.pdf>.

39 German Federal Ministry for the Environment (BMU): “Petersberg Climate Dialogue XI”, <https://www.bmu.de/en/petersberg-climate-dialogue-xi/>.

40 Euractiv: “‘Green recovery alliance’ launched in European Parliament”, 14 April 2020, <https://www.euractiv.com/section/energy-environment/news/green-recovery-alliance-launched-in-european-parliament/>.

post-pandemic “stimulus transformation plans” that put the fight against climate change and biodiversity loss at the centre of Europe’s economic policy. The signed letter presses for compliance with the European Green Deal despite the economic recession. Signatories also call for a “worldwide alliance” of politicians, decision-makers, business leaders, trade unions, and civil society groups to support a green transition after the pandemic.

- ▶ **Energy ministers from 13 countries**, including Canada, France, Germany, Italy, Indonesia, the United Kingdom and international organizations, discussed how to make clean energy a key part of the global economic recovery.⁴¹
- ▶ **The African Union Commission (AUC)** and the International Renewable Energy Agency (IRENA) have agreed to work closely to advance renewable energy across the continent to bolster Africa’s response to the COVID-19 pandemic. The two organizations will focus on innovative solutions to drive the development of renewable energy including decentralized systems, and to increase access to energy across the continent.⁴²

- ▶ **France’s High Council on Climate (HCC)**, an advisory board established by the President of France, laid out 18 recommendations on how to recover from the COVID-19 pandemic. Guiding principles are a green “stimulus plan” to be better prepared for future health and environmental crises.⁴³ The green “stimulus plan” considers the factors of the present situation and leads to profound transformations that respect climate issues. This “recovery” must be green, not grey, states the plan, maximize co-benefits for climate and ecosystems, and must not lock down on carbon-intensive trajectories. Synergies between climate, environment and health as well as the economy and employment are reinforced, such as the fight against pollution and imported deforestation, healthy diets, evolution of modes of transportation, job creation and economic recovery. In particular, the plan suggests favouring investment in electric or hydrogen technologies in the automobile and aviation sectors, bolstering air pollution regulations and providing incentives to invest in technological innovation that can accelerate the transition



©Chris Barbalis - Bosco verticale, Green in the city, Milan, Italy

41 IEA: “IEA and Denmark host ministerial roundtable discussion on making clean energy a key part of the global economic recovery”, 24 April 2020, <https://www.iea.org/news/iea-and-denmark-host-ministerial-roundtable-discussion-on-making-clean-energy-a-key-part-of-the-global-economic-recovery?>

42 IRENA: “African Union and IRENA to Advance Renewables in Response to COVID-19”, press release, 16 April 2020, <https://www.irena.org/newsroom/pressreleases/2020/Apr/African-Union-and-IRENA-to-Advance-Renewables-in-Response-to-Covid19>.

43 HCC President Corinne Le Quéré said: “Most of the structural causes of the pandemic are also at the origin of climate change, in particular the unsustainable pressure we put on natural spaces.” The pandemic has been “a brutal reminder of our fragility, the scant attention we pay to warnings, the lack of preparation and prevention”, she said, and “If we neglect the warning signs as we did for the pandemics, the impact will be fierce.” M. Woods: “Don’t repeat financial crisis recovery mistakes after Covid-19, French climate experts warn”, RFI, 22 April 2020, <https://www.rfi.fr/en/france/20200422-france-environment-coronavirus-covid-green-economy-recovery-macron>.

towards a green economy. The advisors also recommended infrastructure for walking and cycling as well as working remotely to avoid lengthy commutes, reducing investment in maintaining rail networks, creating jobs for renovating buildings for energy efficiency and preserving or building natural spaces to store carbon.⁴⁴

- ▶ **The President of the Republic of Korea** reiterated the promise of a Green New Deal after his re-election during the pandemic in April 2020. It includes substantial investments in renewable energy, the introduction of a carbon tax and the phasing out of domestic and overseas coal financing by public sector institutions. The Republic of Korea will also establish a Regional Energy Transition Centre to support workers as they transition to jobs in more sustainable sectors. It also became the first country in Asia to pledge that it will achieve net zero emissions by 2050. The announcement was followed by a move of the Export-Import Bank of Korea (KEXIM) to revive the primary market for Green, Social and Sustainability (GSS) bonds in Asia with a highly sought-after €700 million green bond. This could finance post COVID-19 Green New Deal investments in renewable energy, electric vehicles, energy storage, recycling plants and affordable, energy-efficient housing.
- ▶ **German Chancellor Angela Merkel**, during the Petersberg Dialogue, highlighted the importance of preventing climate change in the recovery. She urged richer countries to increase the financial support to poorer nations who are tackling both the coronavirus and the growing impact of climate change. Chancellor Merkel further proposed to increase the EU 2030 reduction target to 55 per cent and increase national investment in renewable energy and new technology to tackle climate change.
- ▶ **The United Kingdom's** Foreign Secretary, Dominic Raab, called for COVID-19 recovery plans to include the fight against climate change: "It will be the duty of every responsible government to see that our economies are revived and rebuilt in a way that will stand the test of time. That means investing in industries and infrastructure that can turn the tide on climate change."⁴⁵
- ▶ **Nigeria** addressed its fiscal revenue loss, caused by the COVID-19 induced oil price slump, by removing

its oil subsidy scheme, which had fixed fuel at N145 a litre (\$0.37). The Government announced the subsidy removal as it requested \$7 billion in emergency funding from the IMF.⁴⁶

- ▶ **At the local level, the Global Mayors COVID-19 Recovery Task Force** aims at an economic recovery that enables people to get back to work, while preventing climate breakdown from becoming an even bigger crisis that halts the global economy and threatens the lives and livelihoods of people everywhere. The mayors are discussing how to use huge public investment in the recovery to create a "new normal" for city economies, based on eliminating pollution and poverty, improving public health and increasing resilience to shocks. City governments strive to be in the "C40 cities climate leadership group" in the implementation of the Paris Agreement through aligned Climate Action Plans following just transition principles. Investments in cycle lanes, electric buses, retrofitting of municipal buildings are underway. For example, the city of Milan has announced that 35km (22 miles) of streets will be transformed over



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44 HCC: "Climate, health: better prevention, better healing", accessed 9 July 2020, <https://www.hautconseilclimat.fr/en/publications/climat-sante-mieux-prevenir-mieux-guerir/>.

45 BBC: "Petersberg Climate Dialogue: Governments discuss how coronavirus recovery 'must tackle climate change'", 29 April 2020, <https://www.bbc.co.uk/newsround/52467688>.

46 N. Munshi and D. Pilling: "Nigeria in 'crisis' as oil receipts plummet", in Financial Times, <https://www.ft.com/content/334cfaf6-e876-45b3-9a54-8f0c4cc5c0c4>.

the summer, with a rapid, experimental citywide expansion of cycling and walking space to protect residents as COVID-19 restrictions are lifted. The northern Italian city and surrounding Lombardy region are among Europe's most polluted and have been especially hard hit by the COVID-19 outbreak.⁴⁷

A recent survey conducted by Oxford University⁴⁸ surveyed central bank officials, finance ministry officials, and other economic experts from G20 countries on the relative performance of 25 major fiscal recovery archetypes across four dimensions: speed of implementation, economic multiplier, climate impact potential, and overall desirability. The research identifies five policies with high potential on both economic multiplier and climate benefits: clean physical infrastructure, building efficiency retrofits, investment in education and training, natural capital investment, and clean R&D. The study finds that in lower- and middle-income countries (LMICs) rural support spending is of particular value while clean R&D is less important.

Further measures that could support a sustainable and green recovery

National and local governments, international organizations, think tanks and research institutions have converged on the following recommendations:

- ▶ **Setting up social dialogue structures to guide the implementation of the green recovery measures.** Through social dialogue, governments, workers' and employers' organizations have a key opportunity to forge a strong consensus and broad-based support for a sustainable recovery that promotes decent work, resilient-enterprises and workplaces, and environmental sustainability. The ILO Guidelines for a just transition identifies the essential labour market policies and instruments required to support a just and inclusive ecological transition. The Guidelines can contribute to informing such dialogue processes and decisions on the type of measures having a potential to promote environmental sustainability while ensuring decent work and a just transition for all.
- ▶ **Removing fossil fuel subsidies while providing incentives to use renewable energies and reducing labour tax and social security contributions.** As fossil fuel prices are at a historic low, the time might be opportune for removing harmful fossil fuel subsidies and the related fiscal burden on public finances. In addition, the introducing a carbon tax could be considered. Once economies grow back, this will incentivize
- companies, and economies to become "clean", and more energy efficient.
- ▶ **Government support to enterprises.** Economic policies and incentives to support business continuity and to encourage enterprises' use of renewable energies and adoption of low-carbon production processes and clean technologies are required. In particular, micro and SMEs, which create the bulk of employment, require support to foster productivity recovery and business resilience and to improve management practices, including the efficient use of resources, as COVID-19-related restrictions are lifted and economies recover. Restoring a conducive business environment and reinvigorating productivity growth in the recovery phase will be essential to enable enterprises to build financial buffers to embark on the energy transition, re-skill or up-skill employees as required, and accelerate the transition towards green production of goods and services.
- ▶ **Invest public money into sectors with high employment creation potential and low carbon intensity (the care economy and education) and with high climate mitigation and adaptation potential (renewable energy, energy efficiency, green buildings and infrastructure, public and clean transport, sustainable agriculture), including relevant labour clauses.** The electrification of more areas of the economy – such as transport, buildings and industry – by plugging them directly into the power grid or switching to green hydrogen produced from renewables (indirect electrification) will also maximize economic, social and environmental gains. Green construction is particularly beneficial in terms of job creation, input cost-saving (energy savings through efficiency) and carbon reductions. In addition to environmental provisions, fiscal stimulus measures need to include relevant labour clauses, such as those contained in International Labour Standards such as the Convention C094 - Labour Clauses (Public Contracts) Convention, 1949 (No. 94).
- ▶ **Evaluate possible unintended negative environmental impacts of new fiscal and tax provisions.** A careful screening of the environmental impacts of stimulus measures will add coherence to policies and avoid creating perverse and unintended economic and environmental consequences that might damage the productive capacity and future resilience and environmental health of societies.

47 C40 Cities: 11 Mayors Unite to Lead Global Mayors COVID-19 Recovery Task Force, <https://www.c40.org/press-releases/11-mayors-unite-global-mayors-covid-19-task-force>

48 C. Hepburn et al.: "Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?", Smith School Working Paper, 20-02 (2020).

► **Communication campaigns on the links between environment and public health and the benefits of improving the overall environmental health of societies.**

Underscoring the link between economic growth, the environment and public health, as well as the benefits to well-being and prosperity from more resilient societies will strengthen public support for measures aimed at enhancing environmental health.⁴⁹

- **Fast-tracking low-carbon mobility.** With public transport limited, many cities are concerned about a large-scale shift to vehicle use once lockdown measures are eased. However, evidence shows that millions⁵⁰ of people are turning to cycling across the world as a resilient and reliable option to fill the public transport gap. In addition to its primary function of mobility, cycling offers a way to reduce local air pollution and to remain fit. Each kilometer cycled avoids 250 grams of CO₂ emissions,⁵¹ making bicycles a key option

for low-carbon transport. Developing new cycle paths will contribute to sustainable mobility in stimulating the economy and employment.

Push-back of environmental targets, efforts and regulations

As countries are enacting green and climate-friendly recovery plans, it should be noted that certain measures taken in the context of the COVID-19 pandemic and the recovery process present a risk of rolling back existing environmental standards, commitments and progress achieved to date. Some believe that climate action and green recovery would harm economic growth and slow down the pace of the recovery. It is critical to avoid steps back in the control of air quality and pollution and maintain goals to accelerate the deployment of affordable renewable energies.

► Supporting enterprises, jobs and incomes

Measures taken by enterprises for business continuity and a green recovery

The COVID-19 crisis poses existential challenges for many businesses. At the same time, it offers opportunities to change and pursue a future path of green growth. As economies are recovering, it is critical to integrate the protection of the environment into the economic recovery plans and long-term development strategies in order to seize the reconstruction of the productive system as an opportunity to accelerate the transition towards a green economy. The section below examines how enterprises have addressed the environmental dimension in the context of ensuring business continuity, and measures that enterprises can consider in the recovery from the COVID-19 pandemic.

Green measures in business continuity plans

One of the most important challenges the private sector is facing during and after the COVID-19 pandemic is how to ensure business continuity in a lockdown context while building a better response capacity for possible future unplanned events. In both policy and business communities, calls have been

made to address the COVID-19 pandemic and climate change crises in a single strategy. In Europe, a group of 180 personalities including 37 CEOs of Europe's biggest global companies, ministers from 11 countries and members of parliament, business associations and trade unions have called for a green recovery.⁵²

At the **corporate level**, different eco-friendly low-carbon initiatives have been introduced to cope with the crisis. It can be observed that the range of business continuity measures leading to positive environmental impacts vary depending on the context of industrialized countries and emerging economies or developing ones. Certain types of measures have been commonly used while others have been employed only in developed or developing economies. In developing countries, the measures taken seem to be more focused on the fight against the proliferation of the disease and financial assistance than on how to ensure day-to-day business continuity. However, companies in general and SMEs in particular, have been particularly innovative in terms of business resilience, adaptation and response to the pandemic. Some of these innovations have the double advantage of ensuring

49 OECD: "Tackling coronavirus (COVID-19), contributing to a global effort", <http://www.oecd.org/coronavirus/en/>.

50 N. Huet: "Chain reaction: commuters and cities embrace cycling in COVID-19 era", in Euronews, 12 May 2020, <https://www.euronews.com/2020/05/12/chain-reaction-commuters-and-cities-embrace-cycling-in-covid-19-era>.

51 European Cyclists Federation: "Shopping by Bike", <https://ecf.com/groups/shopping-bike-best-friend-your-city-centre>.

52 E. Krukowska, "European CEOs, Ministers Start Campaign for Green Recovery", in Bloomberg News, 14 April, 2020, <https://www.bloomberg.com/news/articles/2020-04-14/european-ceos-ministers-start-campaign-for-green-recovery>.

business continuity while contributing to reduce carbon emissions and protecting human health.

The following are business measures and processes that have been introduced in various countries:

- ▶ **E-learning:** Universities and learning centres across the world which are members of the Global University Leaders Forum (GULF)⁵³ have moved their academic teaching online. Coursera, which provided universities with free access to over 3,800 courses from leading companies and universities, contributed to the feasibility of such an initiative. E-Learning contributed to avoidance of travel, associated carbon emissions, and in many cases, cost-saving for learners.
 - ▶ **Teleworking:** Due to the COVID-19 pandemic, many companies have turned to teleworking. A research review⁵⁴ from the University of Sussex reveals that teleworking cuts energy use, largely through reduced commuting and lower office energy needs. Recent firms surveyed⁵⁵ confirm the large potential for maintaining the practice of teleworking post-pandemic, as many employers have been surprised at the positive results. Overall, it is estimated that 74 per cent of companies intend to formally implement telework post-COVID-19.⁵⁶
 - ▶ **Medical technological platforms and telemedicine:** Business-led digital solutions have played a crucial role in delivering urgent medical services. In **Norway**, Telenor, a telecommunication company, is gathering accurate and anonymous data on mobility patterns of people, which made it possible for health authorities to have the information they need to protect lives and limit the viral spread. This technology avoids using expensive and highly resource consuming field data collection and surveys. The REMA Medical technologies platform, based in **Benin**, allows more than 5,000 African medical doctors from more than 20 countries to exchange information and data in real time and to develop a community of practice.⁵⁷ In **Ghana**, a start-up is using drones to deliver medicines, blood and medical materials to health centres located in rural area, avoiding traditional road-based transportation. The same drones are also used to collect COVID-19 test samples in remote
- hospitals and send them to medical laboratories in large Cities like Accra and Kumasi in less than one hour. The growing interest of doctors in telemedicine and teleconsultations and the proven efficiency of medical platforms during the COVID-19 pandemic signal that in the long term, digital health services will settle into the health-care market, making access to healthcare easier for patients in remote locations and at the same time considerably decreasing greenhouse gas emissions.
- ▶ **Green innovations in a circular economy:** In several **African countries**, social entrepreneurs, universities and individuals have developed eco-friendly and cost-effective products as a contribution to the fight against the COVID-19 pandemic. For example, several prototypes of touch-less hand washing systems were produced using recycled and/or reused materials from carpenters and welders. For example, GVD-AFRIQUE, a multi-award winning socially oriented private enterprise working in 12 African countries, developed touch-less hand washing systems using recycled and reused materials for both individual and collective use (e.g. hospitals). With the tremendous growth in e-commerce activity and home delivery, leading packaging companies such as AMCOR, launched important research and development initiatives (around 1000 R&D specialists) to develop environmentally sustainable packaging. In February, Amcor launched the first 100 per cent post-consumer recycled PET containers in the multivitamin segment.⁵⁸
 - ▶ **Sustainable transport and domestic and global supply chains:** The COVID-19 pandemic has pushed companies into rethinking supply chain management with the integration of safety stocks (instead of practicing just-in-time inventory) and to develop alternate micro supply chains that rely on domestic suppliers closer to consumption markets to ensure business continuity during possible future crises. This sourcing pattern suggest that companies can diversify their access and minimize risk could while reducing emissions related to international transportation of goods,⁵⁹ while opening new opportunities for

53 World Economic Forum: "Global University Leaders Forum", accessed 10 July 2020, <https://www.weforum.org/communities/global-university-leaders-forum>.

54 For a systematic review of the energy and climate impacts of teleworking, see: A. Hook et al.: Environ. Res. Lett. 2020, <https://doi.org/10.1088/1748-9326/ab8a84>.

55 Colliers: "Pandemic could profoundly change the way we work", 27 March 2020, <https://www2.colliers.com/en-SG/News/OS-pandemic-could-profoundly-change-the-way-we-work>.

56 Gartner: "Gartner CFO Survey Reveals 74% Intend to Shift Some Employees to Remote Work Permanently", press release, 3 April 2020, <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2>.

57 REMA: "Share - Collaborate - Network between African doctors", accessed 10 July 2020, <https://www.remaapp.com/>.

58 Packaging Insights: "Chicken or the egg? Recyclable packaging and infrastructure must advance together, says Amcor VP", 20 April 2020, <https://www.packaginginsights.com/news/chicken-or-the-egg-recyclable-packaging-and-infrastructure-must-advance-together-says-amcor-vp-sustainability.html>.

59 Transportation is responsible for 24 per cent of direct CO2 emissions from fuel combustion. Emissions from aviation and shipping continue to rise faster compared to other transport-related emissions and need more international action. IEA: "Tracking Transport 2020", May 2020, <https://www.iea.org/reports/tracking-transport-2020>.

local manufacturers and local transport logistics operators.

- ▶ **Urban farming:** The disruptions caused in global food chains have triggered a return to, and expansion of the recent trend of urban farming. In cities such as Bangkok and Paris, lockdowns measures have pushed more city dwellers to grow fruit and vegetables in their homes, providing a potentially lasting boost to urban farming that can improve food security and environmental sustainability. Cities from Amsterdam to Singapore are exploring measures to support this trend with the objective to improve sustainability and food security during and beyond the pandemic. Singapore, which currently imports more than 90 per cent of its food, aims to produce 30 per cent of its nutritional needs locally by 2030,⁶⁰ and has encouraged communities and social enterprises into urban farming in the context of the COVID-19 pandemic.

Even if environmental sustainability is not the core objective of the measures taken by companies in response to the COVID-19 pandemic, it is apparent that most of them have a direct or indirect environmental benefit. The changes in the way enterprises are operating have reduced carbon emissions and air pollution. The reorganization of production and supply chains has allowed important reductions in transport-related emissions. The use of digital technologies has made business continuity possible during lockdown while reducing emissions drastically.

The solutions developed also revealed the high potential of SMEs to innovate in both developed and developing countries. Employers' organizations can assess the most promising initiatives in terms of productivity enhancement, employment creation and environmental sustainability and support their development into sustainable enterprises.

The strategies being implemented today primarily aim at offsetting the economic impact of months of lockdowns. To build back better while reducing emissions and building resilience, employers' organizations will need to support companies' resilience and productivity recovery, which is essential to accelerate the transition to a low carbon economy.

In the specific context of developing countries, low levels of productivity, the limited availability of ITC, credit rationing to micro and SMEs, and the still prevailing digital divide have proven to be barriers to the implementation of certain low-carbon solutions. An integral approach combining productivity enhancement, accessible technologies (like the mobile phone, TV, radio) and human-centred solutions

(training and equipping of focal points in remote areas in anticipation of lockdowns or quarantine) should be encouraged.

In addition, the shift to internet-based solutions raises questions about privacy and data protection and demands greater policy attention and guarantees of protection of personal information and data. Similarly, the widespread use of teleworking underscores the importance of ensuring decent working conditions, including protection in such a working environment, and the need to maintain a sound work-life balance. Finally, the full integration of labour rights in the emerging forms of supply chain management must remain a key consideration.

Green measures for a post-COVID-19 business resilience

Beyond the responses to the COVID-19 pandemic, enterprises will be navigating in a new environment of increased risks not only seen from the business environment, but also from the natural environment, health and pandemics. In addition, changing consumer patterns point to preferences for products with low environmental impact, risks to health and safety. Integrating such factors in business planning and operations is increasingly going to affect productivity, competitiveness and profitability. Below are several examples as to what can inform business choices:

- ▶ **Integrate environmental risks and technology into enterprise risk management (ERM) practices:**⁶¹ Consistently assessing risks in company investments and strategy will ensure that future decisions mitigate climate change, avoid stranded assets and prevent future risks. Understanding and measuring risks will help companies and economies in becoming more resilient. Employers' organizations can provide guidance to enterprises on the design of ERM practices to strengthen business resilience and companies' ability to cope with unexpected events. In addition, enterprises can integrate environmental risks into financial disclosure in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).⁶²
- ▶ **Business planning and disaster risk preparedness:** In addition to showing how unprepared the world is to face global catastrophic risks, the COVID-19 pandemic has provided an indication of how similar crises resulting from climate disruptions would cost enterprises, the economy and broader society. It is a call for business engagement towards

60 R. Chandran: "Urban farms to traffic bans: Cities prep for post-coronavirus future", Reuters, 21 April 2020, <https://www.reuters.com/article/us-health-coronavirus-cities-trfn/urban-farms-to-traffic-bans-cities-prep-for-post-coronavirus-future-idUSKBN22314M>.

61 RiskPulse: Integrating Environmental Risk and Technology into ERM Planning, accessed 10 July 2020, <http://riskpulse.com/media/risk-management-whitepaper.pdf>.

62 The Task Force on Climate-Related Financial Disclosures (TCFD) was set up in 2015 by the Financial Stability Board (FSB) to develop voluntary, consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders.

a just transition to environmental sustainability. Anticipating transitions with the active participation of employers and workers, rather than undertaking them in an unprepared manner, will yield outcomes that are more desirable. Employer's organizations could provide guidance to companies on how to successfully implement a viable and sustainable transition, which promotes long-term strategic planning on green productivity, sustainability, resilience and value for society.

- ▶ **Sustainable supply chain management:** The importance and fragility of supply chains have been made evident during this global pandemic. While the current disruption results from a health crisis, the likelihood of similar situations deriving from an environmental crisis should not be overruled, which is why it is essential to enhance business resilience to cope with future crises. Factoring environmental and natural resource management in supply chains can create more sustainable, stronger and more resilient value chain ecosystems for companies.

- ▶ **Circular economy:** Circular economies promote re-using, repairing, refurbishing and recycling of existing materials and products, as well as better eco-design of products that will allow their durability, reparability, recyclability and waste prevention and life-cycle thinking.⁶³ In 2015, McKinsey and the Ellen MacArthur Foundation⁶⁴ demonstrated in a study that such an approach could boost Europe's resource productivity by 3 per cent by 2030, generating cost savings of €600 billion a year and €1.8 trillion more in other economic benefits. Circular business models focus on switching from physical products to immaterial products, thereby generating environmental gains. For enterprises, the COVID-19 pandemic presents a unique opportunity to revise business models from selling more products to providing services, reselling previously owned products and creating new kinds of green jobs.
- ▶ Companies can work with employers' and workers' organizations to identify and implement best environmental practices at workplace level.

▶ Protecting workers in the workplace Initiatives by workers' organizations for greater safety and sustainability in the workplace

Workers have been particularly impacted by the COVID-19 pandemic through exposure to the health risks, loss of employment and income. Since the beginning of the pandemic, workers' organizations have engaged in social dialogue, mobilization, advocacy and analysis to respond to the health crisis and its socio-economic consequences, while laying the foundations of a safer, just and sustainable future.⁶⁵ Through their action at the workplace, or at sectoral and macro level, workers' organizations have been powerful forces in the pursuit of environmental sustainability.

The European Trade Union Institute (ETUI) has conducted a comparative analysis of the COVID-19 crisis and the climate crisis, with lessons that can be learned from the pandemic to face the climate crisis. The analysis suggests that "both the pandemic and the climate crisis are related to the exponential

growth of hazards against a limited capacity to cope". It notes that a key difference between the two is that while health-care capacities can be increased – e.g. with more workforce, equipment and infrastructure – to face pandemics, in the case of climate change, growing carbon emissions and the exponential use of resources cannot be extended beyond planetary limits.⁶⁶

Around the world, trade unions have mobilized to advocate for an integrated response to the crisis that does not lead to a return to the status quo. For example, Public Services International (PSI) has called for a **Just, Green, Feminist Covid-19 Response and Recovery**⁶⁷ making the point that beyond the pandemic, fundamental questions must be addressed with respect to key macro-economic indicators such as gross domestic product (GDP) as a measure of progress. In South Africa, the **Climate**

63 Life-cycle thinking expands the traditional focus on the production site and manufacturing processes and incorporates various aspects over a product's entire life cycle from cradle to cradle (i.e. from the extraction of resources, through the manufacture and use of the product, to the final processing of the disposed product).

64 Ellen MacArthur Foundation: Growth Within: a circular economy vision for a competitive Europe, 25 June 2015, <https://www.ellenmacarthurfoundation.org/publications/growth-within-a-circular-economy-vision-for-a-competitive-europe>.

65 ITUC: COVID-19 Pandemic: News from Unions, accessed 5 June 2020, <https://www.ituc-csi.org/covid-19-responses>.

66 ETUI: "How the COVID-19 crisis offers lessons for dealing with the climate crisis", 27 March 2020, https://medium.com/@ETUI_org/how-the-covid-19-crisis-offers-lessons-for-dealing-with-the-climate-crisis-8a4749ef1652.

67 PSI: "For a Just, Green, Feminist Covid-19 Response and Recovery", 6 May 2020, <https://publicservices.international/resources/news/for-a-just-green-feminist-covid-19-response-and-recovery?id=10779&lang=en>.

Justice Coalition,⁶⁸ a coalition of trade unions, civil society and community organizations working together on climate justice, has issued calls for a just recovery and a South African vision of a Green New Deal. The **Irish Congress of Trade Unions** has put forward proposals for a *New Deal towards a safe and secure future for all*⁶⁹ that include a 'green new deal' stimulus and inclusive plan; "green proofed" public procurement; and a "Just Transition" for workers and communities.

The **International Trade Union Confederation**⁷⁰ has stressed that the world cannot go back to the same consumption and production patterns, and that recovery plans must ensure a socially just future, along with plans to Climate- and Employment-Proof Our Work. ITUC has set the date of 24 June as a Global Day of Action to Climate- and Employment-Proof Our Work (#CEPOW), putting a focus on recovery and resilience plans.

In a more practical manner, several initiatives and proposals have emerged from the labour movement to drive a sustainable, just and inclusive recovery. Below are sets of actions that can be pursued by engaging in bipartite and tripartite social dialogue to transition to green economies.

- ▶ Workers' and employers' organizations can establish **environmental committees** at company or sectoral level, and engage in a dialogue on the environmental dimensions of the recovery, but also on economic and social aspects linked to the environmental dimensions, such as occupational safety and health, wages, working time, productivity, business resilience, and skills.
- ▶ Employers and workers' organizations can advise on a sustainable **mobility strategy** for the workplace that combines safety and environmental sustainability, following WHO recommendation, promoting cycling and walking. Workers' and employers' organizations working with local and city governments can promote safe parking areas for bicycles at the workplace, and in areas of special interest in the response to the COVID-19 pandemic, such as hospitals, create cycling roads to allow a larger number of workers to use them, and create or strengthen public rental cycling systems.
- ▶ Employers and workers can jointly develop **training activities** on energy efficiency, better water management, recycling and material reduction actions that could be applied in the workplace to reduce the environmental impact, improve productivity, and reduce health risks for workers.
- ▶ Promoting **formalization and productivity enhancement of micro and small firms and decent working conditions**, including occupational health and safety measures for recyclers and other waste management workers, who are among the most affected by the COVID-19 pandemic.

68 350Africa.org: "Climate Justice Coalition", accessed 10 July 2020, <https://350africa.org/the-climate-justice-coalition/>.

69 Irish Congress of Trade Unions: No Going Back: New Deal towards a safe and secure future for all, May 2020, <https://www.ictu.ie/download/pdf/no-going-back-final-document-may-2020.pdf>.

70 International Trade Union Confederation: Momentum on climate action must continue despite delay to COP26 climate talks, 2 June 2020, <https://www.ituc-csi.org/momentum-on-climate-action-must-continue>.

► Conclusions

Further measures recommended for a sustainable recovery

The COVID-19 pandemic has underscored the critical interface between human health, a healthy environment and decent work for all. As the world responds to the pandemic, governments, businesses, workers and other actors in society have begun to explore opportunities and options to address these remarkable challenges simultaneously. In this regard, a number of public policy measures can be considered to drive a green, sustainable recovery process – one that enables economies, societies and people to go back to a better world – rather than return to the same patterns of consumption and production. Central to the objective of a coherent response is to the urgent need to specifically address the looming crises of climate change and loss of biodiversity.

What the ILO can offer

The UN Secretary-General António Guterres has put forward six areas of action for a climate-positive recovery:

- Delivering new jobs and businesses through a green and just transition while accelerating the decarbonization of all aspects of the economy.
- Using taxpayers' money to create green jobs and inclusive growth when rescuing businesses.
- Shifting economies from grey to green, while using public financing that makes societies more resilient.
- Investing public funds in the future, to projects that help the environment and climate.
- Consider risks and opportunities for national economies, as the global financial system works to shape policy and infrastructure.
- Working together as an international community to combat COVID-19 and climate change.

Several of the areas for action suggested by the Secretary-General relate to the integration of sustainable production, employment creation, green jobs and tasks, social inclusion and to stimulating the green economy. A sustainable approach is needed to rebuild economies and societies to become more resilient to future shocks and environmentally friendly.

The COVID-19 pandemic has demonstrated the capacity of citizens and young female and male entrepreneurs to develop and deploy innovative solutions based on a circular economy approach and using digital applications. The pandemic has opened a wide door to rethinking local transport systems and human mobility towards more low-carbon options,

including cycling systems. In addition, the disruption in food systems that the pandemic generated has reinforced trends towards sustainable forms of farming, including the movement towards urban farming. Going forward, there is a unique opportunity to advance such employment-creating solutions that will equally contribute to a sustainable recovery.

►► The ILO must carry forward into its second century with unrelenting vigour its constitutional mandate for social justice by further developing its human-centred approach to the future of work, which puts workers' rights and the needs, aspirations and rights of all people at the heart of economic, social and environmental policies.

- [ILO Centenary Declaration for the Future of Work](#)

As the only tripartite organization within the UN system, the ILO can play a crucial role to foster social dialogue around a new narrative addressing economic resilience, human health and environmental sustainability. The engagement of governments, employers' and workers' organizations will be indispensable to collectively shape a sustainable future of work post-COVID-19.

At an operational level, several programmes and initiatives seeking to advance decent work, social justice and environmental sustainability in a coherent and coordinated manner can contribute to building back better.

- The [Partnership for Action on Green Economy \(PAGE\)](#), a joint UN programme involving UNEP, UNDP, UNIDO, UNITAR and the ILO, supports 20 countries around the world in shaping national

policies, strategies and investment towards a green economy transition. PAGE offers to its partner countries a range of services and tools including:

- 1) a rapid situational assessment of the impacts of COVID-19 on national economies and strategies to transition to a green economy;
 - 2) quantitative modelling of policy and investment scenarios for a green recovery addressing including growth, employment creation, poverty reduction and environmental sustainability; and
 - 3) a pool of the world's leading experts at the disposal of countries to provide targeted and on-demand policy advice.
- ▶ The **Climate Action for Jobs Initiative**, launched by the UN Secretary-General, the Director-General of the ILO, and leaders from governments, employers' and workers' organizations during the UN climate change conference of December 2019 in Madrid, aims to place jobs and livelihoods at the centre of ambitious climate action. The Climate Action for Jobs Initiative offers a roadmap for global engagement and tailored country support that addresses the areas of action mentioned above. The Initiative provides countries with tools for assessing investment and policy options for a job-rich recovery and transition to sustainability. It supports just transition planning and policymaking that enable and accelerate the transition through enterprise and skills development, social protection, and consensus building with social dialogue. Finally, Climate Action for Jobs provides a global platform for sharing country experiences, mutual learning and innovation to define impactful and scalable solutions for a green recovery and a sustainable future.
 - ▶ Employment intensive programmes can support employment creation and poverty reduction in the economic recovery from the COVID-19 pandemic. The **ILO Employment-Intensive Investment Programme (EIIP)** promotes a wider and improved use of employment-intensive investment policies and approaches for the planning, implementation and maintenance of infrastructure and environmental works. Recent practices indicate that 50 per cent of public works programmes now integrate objectives of environmental sustainability, such as the restoration of degraded ecosystems, reforestation, or watershed management and adaptation to climate change.
 - ▶ **Sustaining Competitive and Responsible Enterprises (SCORE)** is an ILO global programme

that helps SMEs improve productivity and working conditions. Through SCORE Training, which combines practical classroom training with in-factory consulting, SCORE offers a modular programme to develop cooperative relations at the workplace focusing on workplace cooperation, quality management, clean production, human resource management, and occupational health and safety. With the cleaner production module, support can be provided to companies in reducing their energy use and waste generation thereby coupling labour productivity with resource productivity.

- ▶ **The Enabling Environment for Sustainable Enterprises** comprises a set of conditions considered to be essential, interconnected and mutually reinforcing, to foster "investment, entrepreneurship, workers' rights and the creation, growth and maintenance of sustainable enterprises by balancing the needs and interests of enterprise with the aspiration of society for a path of development that respects the values and principles of decent work, human dignity and environmental sustainability."⁷¹
- ▶ **International labour standards:** A green recovery will not be sustainable without taking into account its economic and social dimensions. When referring to the greening of economies, enterprises and jobs, the ILO considers it in the context of sustainable enterprises, sustainable development and poverty eradication. This can only be ensured through an enabling environment for sustainable enterprise development and an enabling legal framework that promotes green investment and sustainable production. The International Labour Organization maintains a system of international labour standards (ILS) which sets rights, obligations and guidelines aimed at promoting opportunities for all to obtain decent and productive work, in conditions of freedom, equity, security and dignity. International Labour Standards are crucial to ensure decent work in the context of the crisis response to the COVID-19 outbreak. ILS contain specific guidance for safeguarding decent work in the context of crisis response, including guidance that can be of relevance to the green recovery. The Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205), emphasizes that crisis responses need to ensure respect for all human rights and the rule of law, including respect for fundamental principles and rights at work and for ILS. The Recommendation outlines guiding principles

71 ILO: Conclusions concerning the promotion of sustainable enterprises, International Labour Conference, June 2007, p.2, https://www.ilo.org/emment/Publications/WCMS_093970/lang-en/index.htm.

that includes taking into account “the need for a just transition towards an environmentally sustainable economy as a means for sustainable economic growth and social progress”. It also suggests strategic approaches to crisis response, consisting in the adoption of a phased multi-track approach implementing coherent and comprehensive strategies for enabling recovery and building resilience that includes promoting a just transition towards an environmentally sustainable economy. Furthermore, the section on employment and income generation opportunities makes reference to the fact that Governments should, in consultation with social partners, implement measures, based on the Nationally Determined Contributions to reduce national emissions and adapt to the impacts of climate change, to facilitate a just transition towards an environmentally sustainable economy as a means for sustainable economic growth and social progress, and for creating new jobs and income-generation opportunities.

- ▶ **Guidelines for a just transition:** In 2015, the tripartite Guidelines for a just transition towards environmentally sustainable economies and societies for all were adopted. The ILO Guidelines highlight the need to secure the livelihoods of those who might be negatively affected by the green transition and also stress the need for societies to be inclusive, provide opportunities for decent work for all, reduce inequalities and effectively eliminate poverty. The three dimensions of sustainable development – economic, social and environmental – are strongly interrelated and need to be addressed by the use of a comprehensive and coherent policy framework. The ILO Guidelines provide a set of practical tools for governments and social partners in managing this transformation process.
- ▶ Recommendation No. 205 (Employment and Decent Work for Peace and Resilience), together with the full body of ILS and the ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all, are fundamental for the successful implementation of programmes and initiatives towards a green recovery.

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