

## **Shaping the recovery from the Covid-19-induced worldwide crisis to build up resilience, maximize decarbonization and transform urban transport**

By Arnaud Koehl\*

*\* Arnaud Koehl is a Ph.D. researcher based at Imperial College London. He works at the Health Policy Evaluation Unit, School of Public Health, and at the Grantham Institute. He joined Imperial after completing his MSc in Economics and Policy of Energy and the Environment at University College London. Arnaud also holds an MA in International Relations and a Diploma in Latin American Studies from the Lyon Institute of Political Studies. Arnaud has work experience from the Council on Hemispheric Affairs (USA), Janaagraha Centre for Democracy and Citizenship (India) and the French government's Department for Energy and Climate. He worked for two years as an operations analyst at KiWi Power, the UK's leading demand response aggregator. In parallel with his Ph.D. he is a research assistant for the Grantham Institute at the London School of Economics, working on the Climate Change Laws of the World database and on litigation cases in partnership with Columbia University.*

### **Coronavirus spread catches the world off-guard**

November 2019. It had been a century since a virus managed to spread around the Earth and inflict comparable damage. The world was broadly unprepared. Fast forward five months, 1,400,000 people are now infected with Covid-19 while more than half of the world's population is under some form of confinement. While the health impact of the pandemic has stunned the planet, the non-sanitary consequences are threatening to further inflict untold damage. Meanwhile, an oil price war is raging between Saudi Arabia and Russia, which resulted in the commodity hitting rock bottom. This unprecedented combination of supply and demand shocks suddenly sent stock markets nose diving, private debt skyrocketing, and some sectors such as tourism, aviation and retail close to shutting down. But what does this all mean for our communities, and how should we rebuild a system that would be pandemic- and climate-proof?

### **The “suppression” strategy and political implications**

The public health strategy that proved the most efficient and was subsequently adopted by many countries, albeit with a time lag on occasion, is “suppression” over “mitigation”.<sup>1</sup> This led to lockdowns being adopted on top of social distancing. The case of the Chinese province of Hubei and communication from officials across Europe show that the strict rules would last between two to three months, before a gradual return to “normal life”. However, public health from the Imperial College London Covid-19 Response Team experts suggest that with insufficient time to reach herd immunity, find and produce stocks of vaccines, social distancing will be necessary for a period of up to 18 months. Even if we learn how to cope with the virus and make more basic protections available, this means that the crisis will drag for most of 2020 at least.

Questions abound on whether such recommendations to keep large swathes of the economy shut will be politically feasible everywhere. The precarious situation in the Italian region of Campania provides an alarming picture of what is at stake when a substantial share of the workforce is not registered, therefore not visible under the government's radar for emergency support. How will populous low- and middle-income countries exert long-term suppression policy without provoking unrest where daily wages are a

---

<sup>1</sup> <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>

matter of survival and the government is unable to bring adequate basic care? The crisis could even lead to regime change if the virus further extends its grip, toppling the weaker states.

## **The return of Keynesianism and welfare policies**

Western governments have started to bring a familiar response to the global economic collapse by hastily preparing stimulus plans of gigantic magnitude. The implementation of such plans has not been clearly set out yet, but one can expect central governments to seize the opportunity to reclaim some of their clout through capital investments and development of new rules. Besides, the consequences of social distancing measures on the population oblige governments to direct at least part of their stimulus towards the demand side; welfare policies seem to be back on the agenda. Recovery plans must also combat rising inequality in order to be socially acceptable.

A second debate that has mostly been eluded is the sudden piling of debt. Decided by current leaders, the recovery will be the financial burden of the next generation. Therefore, what societal commitments should the young be allowed to demand from such a massive enterprise?

## **Building resilience**

Recovery efforts could be exploited to combat the existential threats that we are facing in order to strengthen their long-term case. Bailing out high-emitting sectors such as the fossil fuel industry without conditions would otherwise signify that debt creation be piled into soon-to-be-stranded assets. As IEA director and GRF founding member Fatih Birol states, this crisis actually represents a historic opportunity to shift to green investments, at a time when technologies like solar PV demonstrated they are the cheapest energy solutions in growing parts of the world.

Subsidiary effects from these efforts would be to effectively redeploy workforce, rendered redundant because of the falling demand, towards secured positions to upgrade current systems, notably through energy efficiency, electricity infrastructure, big data, etc. Agroforestry programs could also revitalize rural areas; the World Resources Institute suggests that tree-planting now has the potential to generate much more jobs and revenue than logging.<sup>2</sup> A lesser reliance on fossil fuel imports would also enhance the security of supply, price stability and maintain expenditures into national accounts.

## **What does this mean for greenhouse gases (GHG) emissions?**

There are two main impacts on GHG emissions: 1) how low will they go due to the pandemic crisis and the subsequent economic downturn 2) what that will have to do with structural shifts to a low-carbon economy. Will emissions bounce back thanks to the stimulus and low prices, or as we propose, will governments seize the opportunity to demand commitments on emissions reductions? History suggests a boom in CO<sub>2</sub> emissions, but the future isn't written yet.

The reality is that even with a sharp drop of GHG emissions in 2020, the urgency to decarbonize will remain the same. To put the Covid-19 toll in context, the World Health Organization estimates that climate-related causes will inflict 250,000 deaths/year between 2030 and 2050.<sup>3</sup> As a foretaste of what to expect, let's remember the humongous wildfires that took place in 2019 in Siberia, the Amazon basin and Australia.

Unfortunately, the carbon price has taken a hit, down by around 30 percent in the last two months, in the wake of commodities. A low carbon price puts in doubt the ability for trading schemes to play an

---

<sup>2</sup> [https://www.wri.org/blog/2020/03/coronavirus-rebooting-US-economy?utm\\_campaign=wridigest&utm\\_source=wridigest-2020-4-2&utm\\_medium=email&utm\\_content=readmore](https://www.wri.org/blog/2020/03/coronavirus-rebooting-US-economy?utm_campaign=wridigest&utm_source=wridigest-2020-4-2&utm_medium=email&utm_content=readmore)

<sup>3</sup> <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

effective role in reducing emissions. Falling electricity demand adds another layer of uncertainty. Investments into new capacity of renewables will also be markedly down this year.

## **Behavioral change and implications on urban life and transport**

What do the present and future disturbances discussed above mean for cities, transport, and wellbeing? We are now able to visualize quite well what a low-carbon world would look like, but the social distancing parameter hasn't been thought through in most models. Three main aspects will define how we will roam in a post-Covid-19 city:

- Overall demand for transport could be lower if a substantial share of people decides to keep doing things (including working) remotely, at least partially. This could lower down the cost of reducing emissions and even obliterate the rush hour. Still, humans share an immense need to socialize and we will not switch to a fully digitized world in the foreseeable future.
- Mode choice could be altered to the detriment of public transport, due to fear of contamination in crowded spaces. This could either lead to a catastrophic outcome if commuters shift to cars *en masse*, or boost "micromobility" and active modes such as cycling. The latter scenario would help to maintain lower levels of air pollution and noise while cutting on costs even assuming a rise in demand for transport. It would also enhance levels of physical activity and reduce fatalities from road accidents.
- Infrastructure projects could be either scrapped or refinanced to spur growth. This will bear important implications for the upgrades of public transport networks and schemes dedicated to electrification, e.g. charging sites.

**This unparalleled crisis represents a tough but unique opportunity to reshape the future world we will live in.** The recovery will ultimately not only be shaped by the crisis itself, or its duration, but by political will. South Korea is already investing a sizeable part of its stimulus plan on green measures, as it did after the 2008-2009 crisis.<sup>4</sup> The good news is that the whole world needs to tackle the crisis, so we can help and learn from each other.

---

<sup>4</sup> [https://www.carbonbrief.org/the-carbon-brief-profile-south-korea?utm\\_campaign=RevueCBWeeklyBriefing&utm\\_medium=email&utm\\_source=Revue%20newsletter](https://www.carbonbrief.org/the-carbon-brief-profile-south-korea?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20newsletter)