

Editorial

Dear Recipient,

It is fair to say that the last year has been the most disruptive for Europe in post-war history. COVID-19 has severely restricted personal freedom, damaged economies and tested health services to their breaking points. Most sadly of all, huge numbers of people have lost their lives.



But what does this have to do with climate change? The answer is, quite a lot. Firstly, and most obviously, the huge reductions we have seen in economic activity and mobility has pushed down greenhouse gas emissions. Going forward, emissions may 'bounce back' or permanently reduce in some sectors, depending on decisions Governments, companies, organisations and individuals make as we emerge from the pandemic.

Secondly, economic recovery will be one of the key issues in the post-pandemic world. As we move beyond the immediate economic firefighting, Governments will need to make crucial decisions on which economic activities they support and stimulate. Making the wrong decisions risks entrenching carbonintensive technologies and activities; making the right ones could help accelerate the transition to net-zero economies.

Thirdly, the pandemic has raised our perception of systemic threats. For decades, most of Europe has enjoyed rising living standards and improving public health. We could be forgiven for thinking that the chances of a natural or human-made disaster affecting us personally were very low. The pandemic has highlighted several vulnerabilities in our socio-economic systems, and we are becoming far more aware of potential threats to our way of life, such as climate change.

Finally, the pandemic has also shown how we can fight back against huge systemic threats. We've seen communities pulling together to help the vulnerable, teams of health workers valiantly battling to save lives and scientists from across the globe working together to develop treatments and vaccines at a speed that would be unimaginable only a few years ago. The pandemic proves that we can tackle global threats, and improve our collective resilience if we have sufficient direction, financial resources and partnerships.

But what, you might ask, has this got to do with the European funded climate change research we cover on ClimateChangeMitigation.eu? Again, the answer is quite a lot. The European Commission has asked their funded projects to investigate connections between their work and COVID-19. Where possible, project teams have amended their plans, and some of the early fruits of this work are now featured in this special thematic newsletter:

- The <u>NAVIGATE</u> project describe their work on pandemic impacts on global emissions and inequality. They also examine past pandemics, analysing trends in GDP, public debt, employment and inequality after the pandemics abated.
- The <u>NAVIGATE</u> project also explore opportunities for a green recovery, examining the potential impact of green recovery packages on global GDP and employment.

- The <u>CONSTRAIN</u> project look at opportunities for recovery. By combining models and real-world data, they explore how a green recovery could accelerate global efforts to reduce greenhouse gas emissions.
- The <u>CASCADES</u> and RECEIPT projects explore risk management lessons from the pandemic, and specifically how adaptive risk management strategies could be used to manage the cascading impacts of climate change.

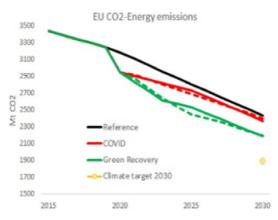
We hope that this newsletter provides some early 'food for thought for the COP26 summit that will take place at the end of this year in Scotland. Here world leaders will push forward coordinated global action on climate change, with the Paris rulebook, building resilience, climate finance and a forthcoming 'Decade of Ambition' on the agenda.

The impact of the pandemic will affect, and accelerate, all of these key areas of work. Action will need to be underpinned by a solid research base, which the work of European funded research projects is helping to provide. ClimateChangeMitigation.eu will continue to feature highlights of this research, so please sign up for our newsletter and check in regularly to see the latest updates.

Ed Dearnley,

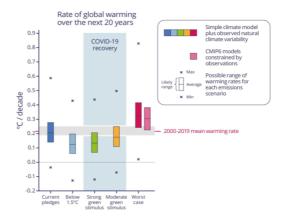
Sussex Energy Group Programme Manager, (SPRU - Science Policy Research Unit) Representative of <u>LANDMARC</u>

Related articles



Macro-economic impacts of the COVID-19 pandemic and green recovery packages

The COVID-19 pandemic has led to the worst economic downturn of the last decades with profound implications on employment, trade, investment and sectoral demand. The economic downturn is mostly caused by precautionary measures to contain the spread of the virus, which reduce aggregate demand for goods and services and – to a smaller degree – limit production possibilities, due to reduced working times, child-care and supply chain interruptions.



A strong green recovery could profoundly alter our climate trajectory over the next decades

Both climate change and COVID-19 are threat multipliers, exacerbating existing problems and hitting the most vulnerable the hardest. At the time of writing, several countries are battling a second wave of coronavirus, whilst 2020 has just been declared the joint warmest year on record. A new report highlights how COVID-19 economic recovery could slow down global warming by up to half if we make the right choices. By taking action that tackles both crises, we can ensure that a more resilient world emerges on the other side.

What can COVID-19 teach us about preparing for climate risks in Europe?

When a crisis hits, decision-makers need to react quickly and decisively. So, preparedness is key.

However, the ongoing COVID-19 pandemic has highlighted how challenging it can be to respond effectively to unprecedented high-impact disruptions. It was often only through trial and error that decision-makers found effective and cohesive approaches. Local and national authorities have come a long way since the early days of the pandemic though, and the COVID-19 response can serve as an exercise in adaptive risk management strategies. It can help decision-makers to be better prepared, not just for any future pandemic, but for other global disruptions as well, like the ongoing climate crisis

Long-term impacts of COVID-19 on energy demand

The IEA recently published energy demand data for transport, buildings and industrial sectors in 2020 with an analysis of COVID-19 impacts (IEA, 2020a). These impacts have been profound particularly in transport. Compared to 2019, overall activity has fallen sharply in aviation (down 60% in 2020) and public transport incl. rail (down 30%).

Impacts of COVID-19 on inequality

Past pandemics have led to substantial implications in many dimensions of economic and environmental sustainability. Even dating back 2000 years, researchers have found, besides the death toll, significant adverse and long-term impacts on poverty in the affected countries. With more recently available data on past pandemics in the second half of the 20th century, we estimate an increase in inequality by, on average, about 0.4 points of the Gini index (0-100), and being persistent even after five years.

About the portal for EU-funded mitigation research

EU-funded projects on climate change mitigation are invited to upload highlights of their work on the ClimateChangeMitigation.eu portal. The portal is managed under the Horizon 2020 project LANDMARC and has been developed by a group of EU-funded research and coordination projects for **a wider outreach** of their results

The portal contains short articles on a **range of topics**, such as technologies for mitigation, scenarios for low-emission transitions, policies, case studies and stakeholder engagement.



The portal has been launched by the EU-funded CARISMA project. More than 20 other (finalised and ongoing) EU-funded mitigation research and coordination projects have joined (see <u>Related EU projects</u>). Additional projects are invited to become involved as well.

Contribute to the portal

Uploading articles to the portal is easy. Project coordinators can request log-in codes which give access to a user-friendly online text editor for preparing and posting articles. For acquiring log-in codes and

further information about the portal, please contact (ccm@jin.ngo).

We also invite you to invite others to subscribe to the $\underline{\textbf{CCM newsletter}}.$ $\underline{\textbf{Subscribe here}}$

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