

The green lining of the COVID-19 crisis

CO2 emissions fall but a path to sustainable reductions is missing

The COVID-19 crisis consumes resources that could have been used to reposition the economy for a greener future. With limited fiscal space, support measures now need to turn green, as a profound investment shift is required to decouple CO₂ emissions from economic activity. A sharp drop in carbon emissions during lockdowns is welcome but it barely dents the curve.



Source: iStock

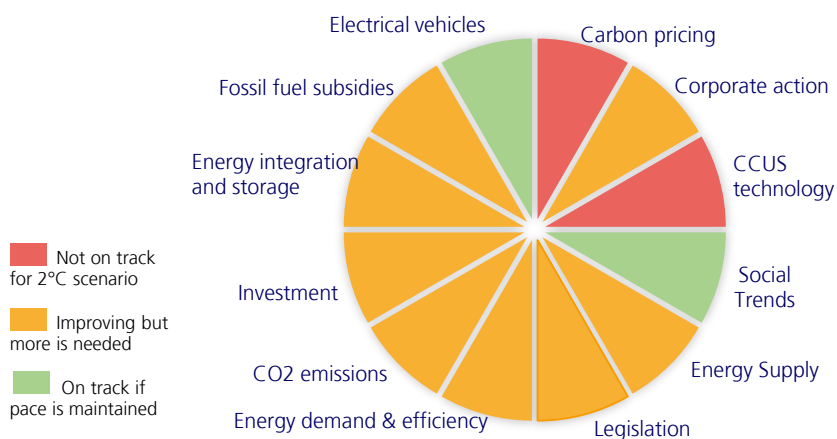
Zurich's climate change score card shows that climate measures are not on track

Zurich's score card on climate change has been updated and the message remains clear – changes in behaviours and technology are still insufficient for the global economy to transition towards a 2°C compliant world. What this means is that carbon dioxide (CO₂) and other greenhouse gas emissions have still not decoupled from economic activity, and policy measures that could break this tight

relationship are yet to be forthcoming. Carbon pricing, which is the most pressing issue, was only applied to 15% of global CO₂ emissions in 2019, a modest increase of 5 percentage points over the prior five years. At this pace, it will take another 85 years before all carbon emissions are covered. And the average price in existing schemes is still only USD 20 per ton of carbon dioxide equivalent emissions, compared to the World Bank Group's indication that a price of USD 80-120 will be required to tackle climate change. In

the absence of a price of carbon, which would incentivise a move towards a low-carbon economy, stronger regulation will be needed to trigger changes in behaviour. Our score card tracks new legislation on climate change related topics and shows that the largest share of it is coming from Europe, while other regions are lagging behind. All 197 countries that have signed the Paris Agreement made pledges to reduce emissions but this was done on a voluntary basis with no mechanisms to enforce the pledges. Action is therefore required, in all regions.

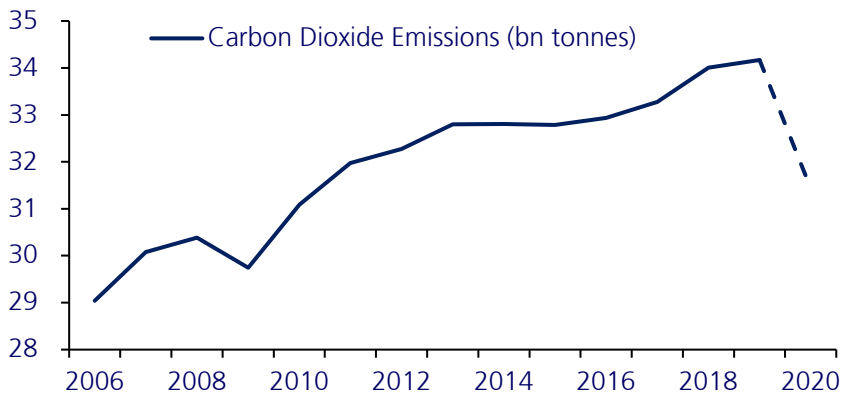
Improving but not on track for a 2°C compliant world



While the overall message of insufficient progress is clear, the latest score card update, which mainly draws on data from 2019, nonetheless shows some improvements (prior score cards are covered in [Zurich Climate Change Whitepaper](#)). The pace of increase in CO₂ emissions, for example, fell back towards its longer-term trend after having picked up sharply in 2018. While encouraging, the problem is that this trend still implies rising carbon emissions by over 1% annually, which is not consistent with reducing net emissions towards zero over time. Another positive development is that social trends around climate change have continued to firm, with a notable increase in the attention paid to climate change in social and mainstream media and by corporates – even in the midst of the COVID-19 crisis.

Source: Zurich Insurance Group, data from Datamaran, World Bank Group, IEA, BP, MSCI

Emissions slump due to COVID-19, but a V shaped recovery is likely



Source: BP, IEA

CO₂ emissions collapse during lockdowns, but improvements are unlikely to last

Looking forward, the economic landscape has changed dramatically since the outbreak of the COVID-19 pandemic. As societies locked down, CO₂ emissions collapsed in line with economic activity. At the deepest point, daily emissions are estimated to have fallen by 17% compared to the 2019 average, and the IEA (International Energy Agency) projects that global carbon dioxide emissions will fall by 8% in 2020. This is the largest annual decline during the 120 years for which we have data, but a more disconcerting fact is that it will only bring CO₂ emissions back a decade – to a level last seen in 2010. A sharp rebound in emissions is also likely as the global economy recovers.

Alongside falling emissions, the COVID-19 crisis triggered an increase in the share of renewable energy (RE) in the energy mix, both due to low operating costs and as RE often receives priority in the grid when demand is low. By contrast, coal, which is one of the worst culprits of CO₂ emissions (relative to the amount of energy produced) has been hard hit, bearing the brunt of the collapse in energy demand. In the US, more energy is now consumed from renewables such as solar, wind and hydro than from coal for the first time ever. More broadly, the collapse in oil prices is putting pressure on fossil fuel producers with higher cost operators priced out of the market. Global investment in oil and gas slumped and is projected to fall by one-third in 2020, with investment in shale oil expected to come down by 50%. Finally, aviation has been badly hit by the crisis, with a 75% reduction in activity in the midst of lockdowns and with only a very sluggish recovery expected. While the contribution of aviation to global CO₂ emissions is limited, the sector is difficult to decarbonise.

The COVID-19 crisis steals the attention, delaying action on climate

Looking across the score card, however, progress is likely to move in the opposite direction in many other areas. Momentum around climate change regulation, green investment, corporate actions and even progress on new technology will suffer, as

priorities have shifted towards more pressing issues while funding and the capacity to deal with climate change have been crowded out. The number of new legislative measures on climate change, for example, fell during the first half of 2020 compared to the same period last year (already active or expected, introduced or commenced). Investment in renewables has been relatively resilient but is still on track to contract during 2020, leaving it at a level which is essentially unchanged since 2015. Moreover, support for new carbon pricing schemes that could trigger a large-scale capital reallocation towards the low-carbon economy, will likely dwindle at a time when livelihoods are at stake, with little tangible progress this year. Indeed, given the extent to which COVID-19 has demanded attention and resources, many of the score card data are likely to show a deterioration for 2020 – with the main exceptions being CO₂ emissions and the relative resilience of renewable energy during the crisis.

The only way forward is to decouple economic activity from carbon emissions

The expected 8% decline in CO₂ emissions in 2020 moreover matches the decline that needs to happen *every year until 2050* to keep the door open for limiting the rise in global temperature to 1.5°C (which would be

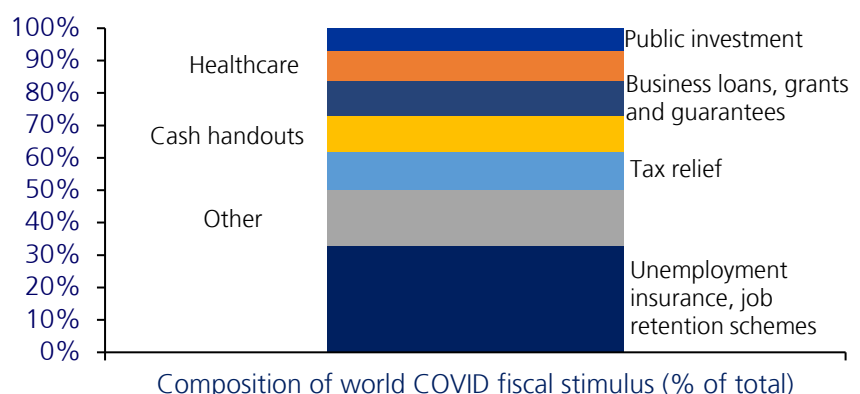
consistent with the aims of the Paris Agreement). The COVID-19 crisis has been an effective disruptor and illustrates what such a decline looks like if it is achieved solely by curtailing activity. Unfortunately, the social and economic costs of having a COVID-like crisis every year are likely to be too high to be politically and socially feasible. The only way to realistically tackle the climate crisis is therefore to decouple CO₂ emissions from economic activity. But without investment – in new technology, in the electricity grid, in energy storage capacity, and in large-scale energy efficiency measures – this is not achievable. This is one area in which the COVID-19 crisis could act as a trigger, as unprecedented economic support measures could be used to launch investment for a greener economy.

COVID-19 emergency measures have been profound, but not green

Most fiscal and monetary stimulus since the beginning of the pandemic have been emergency measures with little or no climate change or sustainability focus. These include extended unemployment insurance, job retention schemes and cash handouts, along with fiscal measures to ensure the survivability of businesses. So far, COVID-19 related fiscal stimulus is estimated at over 5% of global GDP – a bit less than USD 5tn – but only a minor part of this (around 7% of total) is made up of public investment as the rest supports current spending. On top of this, central banks have expanded their balance sheets by more than USD 6tn, providing liquidity to the world's financial markets and funding for businesses. These numbers compare with estimates that cumulative investment needs of more than USD 90tn will be required over the next 15 years – USD 6tn annually – to reposition the global economy and global energy systems to a 1.5°C scenario, with roughly half of this for the energy sector alone (see IPCC special report on global warming of 1.5°C). Not all of this can be publicly financed – but governments will need to be part of the solution and lead the way.

So while COVID-19 stimulus has been truly unprecedented, dwarfing the measures that were put in place during the Great Financial Crisis in 2007-2008, the climate change crisis

Little investment, and even less green investment



Source: UBS, IMF, ZIG

will require a similar effort *every year for the next 15 years*. This is why it is so important that COVID-19 support measures also target climate change. The two crises are not independent. The current crisis will raise global debt levels and have a lasting impact on public finances. This will inevitably reduce the capacity to mitigate and deal with climate change, potentially worsening the trajectory for CO₂ emissions and rising temperatures for decades to come.

A green recovery fund is needed everywhere, not just in Europe

The recovery from the Great Financial Crisis was a missed opportunity to reposition the global economy, with little attention paid to the environment in efforts to save the economy and financial markets. Back then, efforts to kick-start the global economy triggered a steep increase in CO₂ emissions, which rose by a remarkable 7% between 2009 and 2011, fuelled by a rapid expansion in the global economy. This came alongside a commodity price boom and a surge in oil prices that triggered strong expansion in fossil fuel related investment. These emissions will be locked into the atmosphere for thousands of years, raising the burden for future generations to tackle climate change.

Since then, actions and positioning on climate change have changed, and there is a recognition that a more sustainable recovery needs to be built this time around.

While emergency measures have not been green, there are still hopes for the next round of stimulus. The EU's recovery plan, which amounts to close to EUR 1.8tn (consisting of the EUR 750bn Next Generation EU recovery fund and the EUR 1.1tn EU budget for 2021-2027), is set up to support the recovery and kick-start a multi-decade green investment wave. One third of funds have been earmarked for climate action, making it possibly the greenest fiscal stimulus plan so far. The idea is that this will help to close the green investment gap to meet the EU's net zero emission target by 2050, by also pulling in private investment initiatives.

We applaud this initiative. While it still needs to be agreed to by the European and national parliaments and the details are yet to be laid out, it is an important step forward and raises prospects for generating a more sustainable recovery from the deepest recession since the global depression. Other countries need do more to catch up with the EU in this regard.

The COVID-19 crisis has bought us precious time, now is the moment to act

The COVID-19 crisis has bought us precious time to tackle the climate change crisis. It is still possible, through a combination of harvesting low hanging fruits and making transformative changes to energy systems and the global economy, to make that transition. COVID-19 support measures need to target climate change, as the fiscal cost of dealing with the two crises separately is insurmountable. Now, is therefore the time to act.

Disclaimer and cautionary statement

This publication has been prepared by Zurich Insurance Group Ltd and the opinions expressed therein are those of Zurich Insurance Group Ltd as of the date of writing and are subject to change without notice.

This publication has been produced solely for informational purposes. The analysis contained and opinions expressed herein are based on numerous assumptions concerning anticipated results that are inherently subject to significant economic, competitive, and other uncertainties and contingencies. Different assumptions could result in materially different conclusions. All information contained in this publication have been compiled and obtained from sources believed to be reliable and credible but no representation or warranty, express or implied, is made by Zurich Insurance Group Ltd or any of its subsidiaries (the 'Group') as to their accuracy or completeness.

Opinions expressed and analyses contained herein might differ from or be contrary to those expressed by other Group functions or contained in other documents of the Group, as a result of using different assumptions and/or criteria.

The Group may buy, sell, cover or otherwise change the nature, form or amount of its investments, including any investments identified in this publication, without further notice for any reason.

This publication is not intended to be legal, underwriting, financial investment or any other type of professional advice. No content in this publication constitutes a recommendation that any particular investment, security, transaction or investment strategy is suitable for any specific person. The content in this publication is not designed to meet any one's personal situation. The Group hereby disclaims any duty to update any information in this publication.

Persons requiring advice should consult an independent adviser (the Group does not provide investment or personalized advice).

The Group disclaims any and all liability whatsoever resulting from the use of or reliance upon publication. Certain statements in this publication are forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans, developments or objectives. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results, developments and plans and objectives to differ materially from those expressed or implied in the forward-looking statements.

The subject matter of this publication is also not tied to any specific insurance product nor will it ensure coverage under any insurance policy.

This publication may not be reproduced either in whole, or in part, without prior written permission of Zurich Insurance Group Ltd, Mythenquai 2, 8002 Zurich, Switzerland. Neither Zurich Insurance Group Ltd nor any of its subsidiaries accept liability for any loss arising from the use or distribution of publication. This publication is for distribution only under such circumstances as may be permitted by applicable law and regulations. This publication does not constitute an offer or an invitation for the sale or purchase of securities in any jurisdiction.

Zurich Insurance Company Ltd
Investment Management
Mythenquai 2
8002 Zurich

173001631 (01/16) TCL

