

# New Horizons Hub: A tipping point on climate change

The world is approaching a tipping point on climate change, when protecting the future of civilization will require dramatic interventions, writes Mariana Mazzucato for Project Syndicate. We pick up on this in our top selection of stories from trusted third-party providers

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## Project Syndicate: Avoiding a Climate Lockdown

The world is approaching a tipping point on climate change, when protecting the future of civilization will require dramatic interventions. Avoiding this scenario will require a green economic transformation – and thus a radical overhaul of corporate governance, finance, policy, and energy systems, writes Mariana Mazzucato for Project Syndicate



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## The climate crisis and the Covid-19 pandemic are interconnected

As Covid-19 spread earlier this year, governments introduced lockdowns in order to prevent a public-health emergency from spinning out of control. In the near future, the world may need to resort to lockdowns again – this time to tackle a climate emergency.

Shifting Arctic ice, raging wildfires in western US states and elsewhere, and methane leaks in the North Sea are all warning signs that we are approaching a tipping point on climate change, when protecting the future of civilization will require dramatic interventions.

Under a "climate lockdown," governments would limit private-vehicle use, ban consumption of red meat, and impose extreme energy-saving measures, while fossil-fuel companies would have to

stop drilling. To avoid such a scenario, we must overhaul our economic structures and do capitalism differently.

Many think of the climate crisis as distinct from the health and economic crises caused by the pandemic. But the three crises – and their solutions – are interconnected.

Covid-19 is itself a consequence of environmental degradation: one recent study dubbed it "the disease of the Anthropocene." Moreover, climate change will exacerbate the social and economic problems highlighted by the pandemic. These include governments' diminishing capacity to address public-health crises, the private sector's limited ability to withstand sustained economic disruption, and pervasive social inequality.

These shortcomings reflect the distorted values underlying our priorities. For example, we demand the most from "essential workers" (including nurses, supermarket workers, and delivery drivers) while paying them the least. Without fundamental change, climate change will worsen such problems.

The climate crisis is also a public-health crisis. Global warming will cause drinking water to degrade and enable pollution-linked respiratory diseases to thrive. According to some projections, 3.5 billion people globally will live in unbearable heat by 2070.

Addressing this triple crisis requires reorienting corporate governance, finance, policy, and energy systems toward a green economic transformation. To achieve this, three obstacles must be removed: business that is shareholder-driven instead of stakeholder-driven, finance that is used in inadequate and inappropriate ways, and government that is based on outdated economic thinking and faulty assumptions.

## The current crisis is an opportunity to drive sustainable growth

Corporate governance must now reflect stakeholders' needs instead of shareholders' whims. Building an inclusive, sustainable economy depends on productive cooperation among the public and private sectors and civil society. This means firms need to listen to trade unions and workers' collectives, community groups, consumer advocates, and others.

Likewise, government assistance to business must be less about subsidies, guarantees, and bailouts, and more about building partnerships. This means attaching strict conditions to any corporate bailouts to ensure that taxpayer money is put to productive use and generates long-term public value, not short-term private profits.

In the current crisis, for example, the French government conditioned its bailouts for Renault and Air France-KLM on emission-reduction commitments. France, Belgium, Denmark, and Poland denied state aid to any company domiciled in a European Union-designated tax haven, and barred large recipients from paying dividends or buying back their own shares until 2021. Likewise, US corporations receiving government loans through the Coronavirus Aid, Relief, and Economic Security (CARES) Act were prohibited from using the funds for share buybacks.

These conditions are a start, but are not ambitious enough, either from a climate perspective or in economic terms. The magnitude of government assistance packages does not match firms' requirements, and the conditions are not always legally binding: for example, the Air France emissions policy applies only to short domestic flights.

Far more is needed to achieve a green and sustainable recovery. For example, governments might use the tax code to discourage firms from using certain materials. They might also introduce job guarantees at company or national level so that human capital is not wasted or eroded. This would help the youngest and oldest workers, who have disproportionately suffered job losses owing to the pandemic, and reduce the likely economic shocks in disadvantaged regions already suffering industrial decline.

Finance needs fixing, too. During the 2008 global financial crisis, governments flooded markets with liquidity. But, because they did not direct it toward good investment opportunities, much of that funding ended up back in a financial sector unfit for purpose.

The current crisis presents an opportunity to harness finance in productive ways to drive long-term growth. Patient long-term finance is key, because a 3-5-year investment cycle doesn't match the long lifespan of a wind turbine (more than 25 years), or encourage the innovation needed in e-mobility, natural capital development (such as rewilding programs), and green infrastructure.

### Markets alone will not lead the green revolution

Some governments have already launched sustainable growth initiatives. New Zealand has developed a budget based on "wellbeing" metrics, rather than GDP, to align public spending with broader objectives, while Scotland has established the mission-oriented Scottish National Investment Bank.

Along with steering finance toward a green transition, we need to hold the financial sector accountable for its often-destructive environmental impact. The Dutch central bank estimates that Dutch financial institutions' biodiversity footprint represents a loss of over 58,000 square kilometers (22,394 square miles) of pristine nature – an area 1.4 times larger than the Netherlands.

Because markets will not lead a green revolution on their own, government policy must steer them in that direction. This will require an entrepreneurial state that innovates, takes risks, and invests alongside the private sector. Policymakers should therefore redesign procurement contracts in order to move away from low-cost investments by incumbent suppliers, and create mechanisms that "crowd in" innovation from multiple actors to achieve public green goals.

Governments should also take a portfolio approach to innovation and investment. In the United Kingdom and the United States, wider industrial policy continues to support the information-technology revolution. Similarly, the EU's recently launched European Green Deal, Industrial Strategy, and Just Transition Mechanism are acting as the motor and compass for the €750 billion (\$888 billion) "Next Generation EU" recovery fund.

Finally, we need to reorient our energy system around renewable energy – the antidote to climate change and the key to making our economies energy-secure. We must therefore evict fossil-fuel interests and short-termism from business, finance, and politics. Financially powerful institutions such as banks and universities must divest from fossil-fuel companies. Until they do, a carbon-based economy will prevail.

The window for launching a climate revolution – and achieving an inclusive recovery from Covid-19 in the process – is rapidly closing. We need to move quickly if we want to transform the future of work, transit, and energy use, and make the concept of a "green good life" a reality for generations to come. One way or the other, radical change is inevitable; our task is to ensure that we achieve

the change we want - while we still have the choice.

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## Project Syndicate: Europe's Green Dirigisme

In pursuing its grand environmental ambitions, the European Commission has ignored a common sense solution in favor of an approach based on central planning and pervasive state intervention in the economy. The further the Commission goes on this path, the more reason there will be to question its motives, writes Hans-Werner Sinn for Project Syndicate



## Economists believe an emissions trading system would be best for the job

In her first annual "state of the union" address this month, European Commission President Ursula von der Leyen confirmed that the European Union, with its Green Deal, has committed itself to a new and pervasive form of government intervention in the economy. Apparently, the bureaucrats in Brussels think that they – and only they – know which technological pathways are best for building a sustainable future.

As such, they have devised wide-ranging plans to direct the economy accordingly. The enforcement mechanisms will include tighter regulations on carbon dioxide emissions from cars (thereby dealing a death blow to the traditional automobile industry); targeted grants; and a taxonomy for the "greenness" of private investment projects that, together with complementary actions by the European Central Bank, will effectively differentiate the interest rates at which companies in Europe can borrow in the capital market.

In adopting this approach, EU politicians are purporting to know things about the costs of avoiding CO2 emissions that they in fact do not know. But because they will be spending other people's money rather than their own, they have no incentive to seek out potentially less expensive methods of avoiding or reducing emissions. A naive faith in the wisdom and honesty of central planners – a fatal attraction we thought we had overcome in 1989 – is rearing its ugly head in Europe once again.

By contrast, almost all economists believe that it would be far better to establish a comprehensive emissions trading system for all sectors, in order to bring about a uniform CO2 price. The EU already oversees a formalized trading platform for emission certificates within the energy sector, and it would be a straightforward process to expand this system to encompass all others. In fact, complemented by a border-adjustment regime, it need only tax the fossil fuels (based on their carbon content) that are imported into or produced on EU territory.

The CO2 price emerging from a comprehensive emissions trading system would prompt all companies to look for the greenest options for investing in emission reductions. Green innovations would sprout up everywhere, and Brussels bureaucrats would marvel at the environmental benefits conferred by new technologies that they themselves had never considered feasible.

For example, hydrogen fuel cells might prevail over battery-powered electric vehicles (EVs). Green electricity from Extremadura might triumph over green electricity from the North Sea. The possibility of nuclear fusion would remain on the table. And, who knows, there might emerge entirely new types of housing, workspaces, and means of transportation.

## A market solution is preferable to dirigiste intervention

Any predefined CO2 emissions target would be achieved with minimal impositions on Europeans' standards of living. And given the sacrifices in material living standards that Europeans are willing to bear for the sake of the environment, the resulting emissions reductions would be maximal.

A comprehensive emissions trading system is simply the only option that would be compatible with the basic principles of the market economy. With the market unbiased and open to all entrants, European start-ups and young engineers would find new and improved methods of reducing emissions on their own; there would be no need for input from central planners.

Of course, because this solution would eliminate the need for all dirigiste interventions, it would likely result in many of the Green Deal bureaucrats losing their jobs – or at least their newfound administrative power. The lobbyists for particular types of green industries, as well as the nuclear and electricity sectors, would no longer have anyone whom they could directly pressure to shape regulations in their favor.

Moreover, the impending demolition of the automobile industry could probably be avoided, sparing millions of jobs across the EU. According to the European Commission's latest regulatory proposals, by 2030, all passenger vehicles must effectively use no more than 1.8 liters of diesel equivalent per 100 kilometers (62.1 miles) traveled. This represents a substantial increase of the 2030 emissions-reduction goal (relative to the already ambitious goal for 2021) from 37.5% to 50%.

But not even the most talented engineers could achieve such a target unless they manipulated

reported CO2 emissions downward with the authorities' blessing. The idea that targets can be met by converting large shares of conventional cars into EVs because the latter have zero emissions runs up against the fact that coal contributes to power production in all European countries. Moreover, the production of EV batteries has a carbon footprint of its own.

The EU Commission so far has shown no indication that it is willing to abandon central planning in favor of a comprehensive emissions trading system. By turning its back on the market, it exposes itself to the suspicion that its main concern is not with combating climate protection, but rather with crafting an industrial policy whose true motives and aims can only be a matter of speculation.

#### The full original article first appeared on Project Syndicate on 24th Sep 2020 here.

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## The Financial Climate Has Reached a Tipping Point

Having witnessed the turmoil of the Covid-19 crisis, markets are focusing on the risks posed by climate change. In fact, governments are now lagging behind in facilitating the financial industry's longawaited shift toward more environmentally attuned standards and investment decisions, writes Huw Van Steenis for Project Syndicate here



## Disruption is a powerful incentive to reallocate capital

The Covid-19 pandemic is sharpening financial markets' understanding of the need to address looming threats like climate change. This will likely be the year when investors and financiers decide to mainstream climate-transition analysis in their portfolios. Policymakers must recognize that markets are moving far faster than they are on this critical front.

This year, we have witnessed the biggest shock to the oil and gas market in 70 years. By the end of July, traditional oil and gas shares in the S&P 500 had fallen by 45%, Royal Dutch Shell had cut its dividend for the first time since World War II, and BP had written off \$17.5 billion from the value of its assets. At the same time, clean-energy stocks had risen by just over 20%, roughly the same as the tech sector.

Disruption is a powerful incentive for investors and companies to reallocate capital. The sharp decline in energy prices has accelerated concerns about worthless "stranded assets" on companies' books. A theoretical possibility has become a plausible scenario. Financiers are re-appraising their portfolios and weighing up the risks associated with a climate transition. So far, the key concern has been that green policies will work only if investors re-price the cost of capital for different firms.

## If you can't measure it, you can't risk-manage it

There has also been significant progress on data and measurement, which is necessary for turning corporate climate talk into action and mobilizing capital at scale. Investors, lenders, and insurers have hitherto lacked a clear view of how companies will fare as the planet warms, regulations evolve, new technologies emerge, and consumer behavior shifts. Without this information, financial markets cannot price climate-related risks and opportunities effectively. Simply put, if you can't measure it, you can't risk-manage it.

The Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), which was spearheaded in 2015 by Mark Carney, then the governor of the Bank of England (BoE), has been producing workable standards. Today, TCFD standards have been adopted voluntarily by more than 1,000 companies – including most global financial institutions – and thus are becoming the default norm.

In fact, we have probably reached the tipping point beyond which TCFD standards will win the day. Even though there has yet to be any regulatory push, a growing number of asset owners and their managers are pressing companies to report on these standards. The \$400 billion Canada Pension Plan Investment Board is merely the latest giant institution to tie its investments to both TCFD and Sustainability Accounting Standards Board standards. And the activist investor Chris Hohn has declared that his fund will press asset owners to fire fund managers who do not insist on climate transparency.

## But data alone is no panacea

Another encouraging development is that competing standard-setting bodies, anxious that they will miss out on becoming the source of industry benchmarks, are starting to collaborate. As more jurisdictions move to codify new standards, those that do not risk becoming irrelevant. Similarly, the top data-analytics firms and index providers are buying or building capabilities to help investors fashion more climate-aware portfolios along the same general standards. As the cacophony of competing standards subsides, more financial-market participants will follow.

But data alone is no panacea. Measuring and assessing long-term trends and the interactions between climate science, public policy, economics, and financial markets is a complex undertaking. In a world of interconnected global supply chains and intersecting legal, regulatory, and operating environments, it is not easy for market participants to make sense of the potential impact of climate change and the strategic responses to it.

That is why central banks are introducing stress tests, a crucial tool for ensuring proper risk management, resilience, and transparency in the financial system. Already, 15 central banks have rolled out climate stress tests not just for banks, but also for insurers and, in some jurisdictions, pension funds. To create a solid foundation for this process, the Central Banks and Supervisors Network for Greening the Financial System has worked with climate scientists and investors to devise three probable climate-policy scenarios. The idea is to determine whether firms are "transition ready" for a lower-carbon economy. Such tests should help to bring climate risks closer to the center of financial decision-making. But it is important to remember that central banks' remit is limited to economic and financial resilience. They will only ever be able to offer a partial response to the broader climate challenge.

## The European Green Deal is a great opportunity

Policymakers and regulators must catch up to where markets are heading by supporting the effort to develop common "decision useful" standards. As I argued last year in the BoE's Future of Finance report, the best solution would be to apply the TCFD framework across all financial accounts. That said, policymakers must maintain flexibility and humility to avoid hard-coding obsolete standards or creating a mountain of red tape.

Equally important will be public policies that drive a smooth climate transition, such as those proposed in the European Green Deal. So far, few governments have been willing to stick their necks out by implementing a carbon tax. Yet behind the scenes, most investors and financiers already acknowledge that such a tax would accelerate the shift to a low-carbon economy. According to Refinitiv, a carbon price of \$75 per ton would cost global business around \$4 trillion. As my colleague, UBS chair Axel Weber, points out, that would profoundly change incentives, possibly giving rise to a large tradable-emissions market.

Finally, to move not billions but trillions of dollars in the right direction, we need what Carney has called "50 shades of green." No single financing model or investment position will suffice. Portfolio exclusion, engagement, and impact investing all have their uses as well as their own challenges. The most important objective is to mobilize capital, which means avoiding a set of purist rules that would overly limit the possibilities for proper portfolio diversification.

Warren Buffett's hypothetical advice to an investor seeking to profit from the nascent car industry in 1900 – "short the horse" – is worth considering today, argues investor Ewen Cameron Watt. Successful investment is often as much about avoiding losers as picking winners. Markets are pivoting, and policymakers should take note.

#### The full and original article first appeared on Project Syndicate <u>here</u> on 23 September 2020.

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New Horizons Hub

## VoxEU: a tale of three depressions

The Covid-19 pandemic caused a catastrophic collapse in the world economy. This column analyses the path of this decline and compares it to two other major global crises: the Great Depression in the 1930s and the Great Recession following the banking crisis of 2007-2008, writes Paul De Grauwe and Yuemei Ji for VoxEU here.



## Different shocks with different policy responses

During the Great Depression, both the monetary and fiscal authorities conducted restrictive policies (Friedman and Schwartz 1963, Eichengreen and O'Rourke 2010).

These ill-conceived policies had the effect of intensifying and prolonging the downturn in production and transforming this into a Great Depression. By 2008 policymakers had learned their lessons from history and reacted by monetary and fiscal stimuli. As a result, the economic downturn that initially had all the ingredients of becoming a Great Depression was cut short. How different is the economic shock produced by the Covid-19 pandemic that shook the world at the start of 2020?

It was very different compared to the shock caused by the financial crisis of 2007-2008 and the Great Depression in the 1930s.

## A key chart from the article:

The contrast between the aftermath of the Covid-19 shock and those of the two banking crises is strong, in two ways.

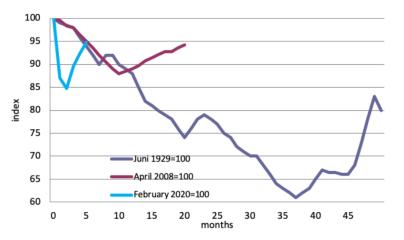


Figure 2 Index of world industrial production: Great Depression, Great Recession, and COVID-19

Source: Eichengreen and O'Rourke (2010); Eurostat for EU 2020, Federal Reserve for US 2020, and OECD for China 2020. The February 2020 line relates to the aggregate industrial production of China, the US, and EU. Note that for in the case of China the starting po

First, the intensity of the downward movement after the eruption of the coronavirus pandemic is much greater and faster than that of the Great Depression and of the banking crisis of 2008. The reason is that the pandemic produced both a supply and a demand shock. The supply shock arose from interruptions of supply chains that forced many companies to halt production (Inoue and Todo 2019). This supply shock, in turn, produced major demand shocks: consumers could not get to the shops, workers saw their revenues decline, and animal spirits set in that induced consumers and firms to postpone consumption and investment (Baldwin and Weder di Mauro 2020).

These supply and demand shocks interacted and amplified each other, leading to a swift deflationary spiral that was much faster than the downward spirals after the banking crises of 1929 and 2008. The latter triggered negative demand shocks but did not lead to supply disruptions.

A second difference has to do with the revival observed after the coronavirus shock. We see that once the lockdowns were eased, industrial production rebounded strongly. This revival was made possible by the fact that most governments responded in the right way. They made sure that companies were given financial support and that workers who were at risk of losing their jobs were not dismissed. In Europe, governments simply took over (part of) their wages. This ensured that those employees retained their purchasing power and could therefore continue to buy goods and services and that firms were not driven into bankruptcy. In the US, government spending – including unemployment benefits – expanded massively.

Governments supported their economies so that these were kept alive, making it possible to rebound relatively easily when the lockdowns were lifted.

The full and original article first appeared on VoxEU <u>here</u> on 24th Sep 2020.

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