

# How to rebuild the US Environmental Protection Agency

**Joe Biden must repair the EPA – and safeguard it in perpetuity.**

**W**hen former US president Richard Nixon proposed establishing the Environmental Protection Agency (EPA) in 1970, he spoke of the need to preserve Earth as a place that is both habitable by – and hospitable to – people. Nixon, a Republican, acknowledged his own fear of creating a new federal bureaucracy. But the task of rescuing the natural environment, he argued, required a strong, independent agency that would be able to marshal “a coordinated attack on the pollutants which debase the air we breathe, the water we drink, and the land that grows our food”.

The EPA’s successes are undeniable. Over the past 4 decades, US emissions of the most common pollutants, as measured by weight, have fallen by 71%, even as the country’s population grew by some 105 million people and the size of its economy nearly tripled. Most emissions from the average automobile have fallen by 98–99% over the same period, to take just one industrial sector. Petrol is cleaner – and free of toxic lead. City sewage and industrial waste no longer flow unchecked into waterways, and rivers no longer catch fire as a result of discharged oil waste. And, internationally, the EPA’s science and regulatory standards have helped other countries to protect their environments, too.

But on President Donald Trump’s watch, regulatory standards have been weakened, research teams slashed and independent scientific advice relentlessly assaulted. Four years on, the outgoing administration has not just dismantled environmental and public-health protections, but also systematically undermined the EPA’s scientific and regulatory foundations – invariably in favour of the industries that the agency regulates. Incoming president Joe Biden and his vice-president, Kamala Harris, have a considerable restoration task ahead of them.

Although Trump swung the axe, the EPA’s destruction was a long time in the making. Its fiercest critics have sought to cut the agency back for years, arguing that the nation’s air and water are already cleaner than they have been in decades and that stronger regulations come at the expense of jobs and economic growth.

Biden’s campaign pledges suggest that he and his team have every intention of working to restore and strengthen rules and regulations, and to rebuild the EPA’s in-house science teams. But the incoming administration must think seriously about structural reforms. In addition to the need for past damage to be repaired, the agency must

be strengthened in a way that makes it harder for any future administration to even think about strangling the structures of evidence that are essential to good policy. This will not be easy, but the following actions will help.

An EPA administrator will soon be nominated. Once in the post, they must make it an urgent priority to nominate an assistant administrator for the EPA’s research division, the Office of Research and Development (ORD). This position has not been filled for eight years. Senate Republicans refused to confirm former president Barack Obama’s last nominee, and the EPA leadership appointed by Trump never nominated anybody.

Scientists at ORD conduct the core scientific assessments and research that feed into the agency’s regulatory decisions. It’s important that the ORD chief sits at the top table so that the division – and science more broadly – has a voice alongside the regulatory and political interests that the EPA administrator has to work with. The new EPA administrator should also consider bringing in a separate chief scientist who can represent science across the entire agency.

Another notable EPA role is that of the scientific-integrity official, whose job is to ensure that the agency’s career scientists and political appointees alike abide by the agency’s scientific code of conduct. This role needs to be upgraded to a more senior position that reports directly to the administrator and is situated alongside the EPA’s inspector-general, who has broad authority to investigate malfeasance, such as allegations of corruption or conflicts of interest, at the agency.

Staff incentive structures should also be reviewed. The aim of such structures must always be to prioritize independence and honesty over efficiency or obedience. At an agency whose primary purpose is to protect human life, the leadership must be told the truth, not what it wants to hear.

Under the incoming administration, the White House Office of Science and Technology Policy is expected to reprise its former role as coordinator and connector of science across federal agencies. As part of that mission, it should explore the idea of appointing someone to oversee scientific-integrity rules across federal agencies, and to provide relevant support when needed.

There are also things that Congress can do to better insulate the EPA from political interference, including codifying scientific-integrity policies at the EPA and other agencies through legislation. Democrats have already introduced a bill with this aim. Giving scientific-integrity policies the force of law would raise the stakes for future administrations, and make it illegal for leaders to disobey such policies.

But Biden’s first step must be to appoint an EPA administrator who understands how government works and has the vision and steel to carry out his aggressive environmental agenda. They must lead with the purpose of securing the EPA’s mission and independence in perpetuity, not just over the next four years.

Success here will also require a role for the incoming president. One of the greatest challenges all presidents face is choosing which actions to delegate, to whom, and to what extent. Biden will need to take personal charge of the pandemic response, but he must also make strengthening

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the EPA a priority, not least because the viability – and durability – of his commitments to protect public health and the environment depend on it.

The need to take these steps, aimed at strengthening science and scientific integrity at the EPA, was brought into sharp focus by the actions of the Trump administration, which exposed a deep flaw in the agency's current system: policies relating to integrity were designed with the assumption that the EPA leadership would guard and enforce them. Under Trump, leaders used the power of their offices to turn the clock back on important environmental and public-health regulations. The EPA has lived through the most dangerous period of its 50-year history – Biden's administration has the chance to ensure that the agency is never put in the same position again.

## The EU must learn from the narrative that drove Brexit

**The anti-expert sentiment that underpinned the Brexit referendum's success is not limited to the United Kingdom.**

**T**he United Kingdom's departure from the European Union is not only a tragedy for its people, but also an existential shock for the EU. The EU is as much an idea as an economic and political union. It has been a global symbol of how enemies can become friends and partners in prosperity. It is also remarkable for the value it places on science and expertise, which are at the heart of its commitment to the rule of law, representative democracy, free trade and free movement of people.

Researchers are integrated into EU decision-making to help to ensure that policy is informed by a consensus of evidence, a system sometimes called technocratic governance. The EU itself also supports the world's largest regional research fund – the €85-billion (US\$100-billion) Horizon Europe programme. That the United Kingdom, formerly one of the EU's biggest economies, has chosen to reject an institution that values evidence and science so highly is of huge significance.

As the clock ticks towards 31 December, after which the United Kingdom will no longer be required to align itself with EU rules, the EU's researchers must study the anti-expert narrative that contributed to Brexit, and its potential to be used in the union's 27 remaining member countries to undermine evidence and the rule of law.

EU policymakers contend that the United Kingdom is an outlier, and that Brexit will not affect the remaining 27 member states. The United Kingdom, according to



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this view, was never a fully aligned EU country. It was not among the founding nations. It chose to stay out of the Eurozone. Had UK governments been more committed to the EU, why would they have chosen to give citizens the option of leaving – first in 1975, and again in 2016? Such arguments are not incorrect, but, at the same time, some of the forces that shaped Brexit do not apply only to the United Kingdom.

For example, Johan Schot, a historian of science and technology policy at Utrecht University in the Netherlands and co-author of *Writing the Rules for Europe* (2018), a history of how expert knowledge helped to create the EU, says some EU citizens have become dissatisfied with technocratic governance. There's also a perception that when decisions are made only on the basis of expert evidence, people aren't in control of their own choices, adds Kalypso Nicolaidis, an international-relations researcher at the University of Oxford, UK. Both Nicolaidis – author of *Exodus, Reckoning, Sacrifice* (2019), a book on the lessons that the United Kingdom and the EU can learn from Brexit – and Schot say that EU leaders must find more participatory methods of governance, so that citizens are reassured that they have more of a voice in the decisions made on their behalf.

This advice should be heeded. Brexit's architects implicitly targeted the research community when they categorized researchers as 'experts' and separate from 'the people'. So, whereas in 2016 the United Kingdom's researchers – who were among the leaders and supporters of the Remain campaign – argued, among other things, that Brexit's uncertainty would harm the country, the Leave campaign responded by seeking to divide researchers from the rest of society. Pro-Brexit minister Michael Gove famously remarked that the British people "have had enough of experts", which included research organizations. It was an extraordinary thing to say, but it spoke to the campaign's overall narrative that 'the people' would be better off if the United Kingdom left the EU – in contrast to those who benefit from the free movement of people and from EU funding.

As populist parties prepare for elections in Germany next year and in France in 2022, they might decide to adopt this narrative, given its apparent success in the United Kingdom. Even in countries where such parties do not fare well, they have been able to influence mainstream parties to adopt some of their ideas and policies. And it will not be lost on some mainstream parties that dividing experts from the broader population could be a part of a winning formula.

Researchers will always be essential to the EU. Horizon Europe, too, will be central to the global challenges that the world faces – from COVID-19 to climate change. And the projects it funds might yet benefit from the involvement of UK researchers, albeit as associate members.

But although Brexit itself is likely to be an isolated event, the tactics used to achieve it aren't. There are lessons here not only for the EU's leaders, but also for researchers, who should seek to understand how their work was used in an anti-expert narrative. And the EU must beware the risks of such narratives spreading, because, should they do so, that could have far-reaching consequences.