

## COMMENT

EU R&amp;D policy



## Bolder, deeper, more united

Shaping Horizon Europe's successor means being honest about past setbacks

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With the closing of the European Commission's public consultation on the past, present and future of the European Research and Innovation Framework Programmes earlier this year, discussions about the future of EU R&D policy have started in earnest. As 2024 will largely be consumed by European elections, some important trajectories for the next R&D funding programme will already be in place by the end of this year.

As we lift our gaze towards the next horizon, it is helpful to take stock of past lessons, to challenge our current thinking towards shaping the future. Each Framework Programme emerges in a kind of cascade: the political level sets the direction, the policy level lays down the framework, and the design of the programme sets the course for its implementation.

At the political level, the envelope is set by the EU's long-term budget. The lead-up to the last cycle of negotiations began in earnest with the 2017 report, Investing in the European Future We Want. This report's first recommendation was to double the budget of the successor to Horizon 2020—the 2014-20 Framework Programme—to around €160 billion. A range of research and innovation organisations developed this into a broad advocacy effort that stabilised around a plea for €120bn. After several rounds of cuts, December 2020 saw political agreement on a disappointing budget of €95bn for the 2021-27 programme Horizon Europe, just 60 per cent of the level originally recommended.

Equally disappointing, less than a year later the Council of the EU adopted a pact for research and innovation in Europe that focused on a voluntary approach to boosting national funding commitments. Despite the strong legal backing provided by the Treaty on the Functioning of the EU for action to promote research and strengthen science and technology, the pact contained no new financial commitments, instead relying on the decades-old but never-realised target of

spending 3 per cent of GDP on R&D, ignoring a proposal from the Commission for a new target of public R&D spending equivalent to 1.25 per cent of GDP.

Rather than dwelling on past disappointments, we can move forward by seeing what can be learned from this process.

### Strengthening connections

First, as a community, research advocates did not engage sufficiently with key political players such as finance ministers and prime ministers. Instead, we tended to engage with our friends in research and innovation ministries and departments. Changing this means homework for myself and people in similar positions, in Brussels and beyond.

The umbrella and advocacy associations active in EU research policy are comfortable in and around Brussels, but they were typically not designed to engage with political leaders in other capitals of Europe, especially finance ministers and prime ministers. These are the connections that need strengthening, through well-connected partners based in the EU's 27 capital cities.

Second, the links between research and key political dossiers were too weak. Our sector is vital to delivering on political promises such as addressing climate change, and the energy and digital transitions. But too often we were perceived as just a nice-to-have, or worse, as somehow in conflict with political goals by being a vested interest diverting resources from 'real' problems.

This lesson connects to something fundamental. Universities are autonomous institutions at the heart of knowledge societies, shaped by their heritage and their missions to produce, examine, appraise and hand down knowledge through research and teaching. For universities to assume the unique societal roles and responsibilities that come with this status, they must have institutional autonomy and academic freedom. Aligning their activities with political dossiers can therefore appear fraught,

as the fundamental purpose of universities is not to serve political interests.

But for universities to serve society, as they must, means engaging with politics—not as its servants, but at eye-level. Put simply, while academics and universities should be careful to not be swept up in political currents, they must work with and even shape them.

Third, as Horizon Europe took shape, as research advocates we were too quick to fight among ourselves. Instead of reinforcing the case around the value of science—all of Horizon, in EU terms—we fell to discussing the relative value of different types of science, such as support for excellent research versus innovation.

### Societal role of science

At a surface level, the remedy to such divisions is to stay united. More fundamentally, though, this is about the role of science in society. As a community, we have too often acquiesced to a political framing where research and innovation serves (economic) competitiveness. This has coloured the research world's self-perception and bred a scarcity mindset, in which each part feels it needs to fight for itself instead of asserting the value of the whole.

As well as leading to a poor overall outcome, this feeds misunderstandings about the societal role of science. Understandings of how science, research and innovation can best serve society have moved well beyond a linear, lab-to-market model, towards a picture of interdependent networks of individuals inside and outside universities taking on various and evolving roles in research and innovation processes. Again, this shift underlines the inadequacy of a fragmented approach and the need for an interconnected approach.

Emphasising competitiveness can be helpful in conventional economic 'win-lose' situations such as R&D by a company developing a product line for the open market. But it falls short in broader contexts such



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as delivering the societal transformations demanded by the digital and green transitions, which are win-win situations. A broader and more accurate way of thinking about research and innovation may help escape the pitfalls of a narrowly transactional view of research, especially in the early stages of the Framework Programme's planning.

This broader alternative paradigm could focus on the leadership role of R&I in society. A research sector that is engaged with politics and has embraced a leadership role will bring economic competitiveness but will also go much further, positioning research and innovation as a means of helping achieve the transformations our societies require and reaping the benefits.

EU policymakers should know that keeping the promises they have made, such as the 'fit-for-55' pledge to reduce emissions by 55 per cent by 2030, depends on continued progress in research and innovation—it cannot be achieved with the technology we have today.

A focus on providing leadership towards these goals will highlight the importance and urgency of integrating research and innovation into every sector of the economy and across all of society—from agriculture and food, to energy, environment, transportation, space, culture, communication, infrastructure and more.

Beyond advocating for well-funded R&D programmes, this opens the door to a bold funding target for spending on research and innovation in every area of the EU's next long-term budget, in all funding programmes, such as 3 per cent of total spending.

Combining a focus on leadership with an all-of-society view connects to the global and

geopolitical level. Sustainability in general and net-zero in particular are overarching drivers across policy areas. But too often in recent years, the EU and its partner countries have seen the global landscape in terms of competition, including with each other. They must turn their efforts instead towards joining forces and contributing global leadership.

### Open and closed

How should research advocates navigate a policy landscape shaped by geopolitical tensions and focused on win-lose narratives, such as strategic autonomy and technological sovereignty, often built on an underlying assumption that recent collaborative approaches were naive?

The answer is about judiciously balancing openness and closedness. On one hand, as the open science movement has argued for decades, openness accelerates progress in research and innovation and increases the societal relevance and impact of science and technology. On the other hand, closedness is required in some contexts, such as to protect patient privacy or commercial confidentiality.

For universities, this balance is not new; it is handled through well-established mechanisms such as institutional review boards to address privacy considerations and negotiations with industrial partners around what can be disclosed and when. The growing importance of security and safety in research policy adds new considerations, but universities are central for making well-informed decisions around balancing openness and closedness in this context also, particularly around providing

specialist knowledge at the forefront of science and technology.

There are other risks to engaging with controversial actors and in 'grey-zone' areas such as the fossil fuel, defence and military industries. The stakes are high: if universities and their communities handle such risks well, they can help guide these areas towards sustainability and peace; if poorly, they may contribute to increasing pollution and conflict.

This does not mean shying away from difficult contexts—if universities do not try to be constructive players in complex areas at the forefront of science and technology, then who will? Instead, it means institutions working with their communities in a reflective and evolving way, to explore how to be a force for good in all areas of society, including the controversial ones. This means pushing back against simplistic, win-lose narratives. It is not naive to join forces with like-minded global partners to increase cooperation in science and technology; it is naive to believe nations or institutions can lead in isolation.

Taken together—moving back from the political level, through the policy level, towards shaping the next Framework Programme—the ideas put forward here are aimed at encouraging those trying to give Europe the Framework Programme it needs to work more effectively beyond our comfort zone and to join forces, particularly in these early stages.

At later stages, different actors may wish to have their own strategies related to allocations and the shaping of individual programmes. But for now, let's focus on what unites us, to shape the future of research and innovation in Europe towards contributing leadership globally. 🌐

