

What is the Role of Science in the Government's Plan to 'Build Back Better'?

The pandemic over the past year has resulted in a once in a generation economic challenge for the UK. However there are major opportunities available as we navigate our way through this hurdle. In this meeting, we heard from an expert panel about science's roll in the government's plan to 'Build Back Better' as our economy recovers.

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Professor David Paterson, the President of The Physiological Society and Head of the Department of Physiology, Anatomy and Genetics at the University of Oxford spoke about the ecosystem of research and how this has to be used to face the future challenges of the UK. Steve Rees, Vice President for Discovery Biology, AstraZeneca explained to us how AstraZeneca carries out its R&D and how world leading universities are crucial to this model. Naomi Weir is Head of innovation at CBI, and she explained to us how the pandemic has changed the context in which R&D is carried out and how we can capitalise on this. Lastly, Paul Drabwell, the Deputy Director of Science and Research Innovation at BEIS, discussed how we can ensure that R&D leads to successful commercialisation of new technologies. The Q&A section at the end focused mostly on how we can balance productivity with the government's vision of spreading funding throughout the UK, as well as how we can use the public's new awareness of science to push forward innovation.

The last year has significantly changed the societal context in which R&D operates. There is a new found interest in science within the general public and this presents a real opportunity to level up UK science. In order to use this interest, we must encourage young people to go into science and must make it an inviting prospect for them.

Naomi Weir discussed how science investment is a policy which is broadly agreed upon across the political spectrum, and its crucial that science also builds back better, encouraging collaboration, and building the infrastructure to rapidly deploy new technologies. The Government must understand that science is mix of quick return and long-term investment; whilst new discoveries often require a lengthy process, commercialising these and rolling them out can be quick and highly economically beneficial, if the right infrastructure is there.

The Covid-19 pandemic will not be the last challenge the UK faces. Prof. Paterson sited both the climate crisis and the UK's aging population as two major obstacles on the horizon, but the UK has learnt a lot during the pandemic. It's been shown that the UK can respond to a crisis when the political will is there, but R&D must be properly funded as well as distribution chains in order to make rollout effective. We must also encourage interdisciplinary work, since this has been crucial during the pandemic.

Government funding will be crucial, and all of the panel welcomed the government's commitment to increase spending. However, improvements to the investment model are needed if the UK wishes to be a science superpower. The charity sector has been a massive source of investment, accounting for half of medical research funding, but has been very hard hit by the pandemic and so this has the potential to weaken R&D in the UK. Steve Rees explained that AstraZeneca only establishes R&D centres in areas with expertise and talent pools, such as world renowned universities. The UK has many areas like this, but keeping these talent pools

full will be crucial to the future of UK science. Paul Drabwell discussed how much of the funding is focused in the South East and London area. The government wishes to spread this more evenly across the UK, but Mr Drabwell did warn that this plan must take into account the results of R&D when deciding which areas get funding, otherwise we risk reducing the UK's productivity by spreading resources too thin.

It's clear that science is key to the government's plan to Build Back Better, and whilst the pandemic has posed many challenges we now have a major opportunity to level up UK science. The benefits are within the UK's reach if we invest carefully and thoughtfully.

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