



**COUNCIL FOR  
SCIENCE AND  
TECHNOLOGY**

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Rt Hon Grant Shapps MP  
Secretary of State for Energy Security and Net Zero  
By email only

14 February 2023

Dear Secretary of State,

**Prime Minister's Council for Science and Technology – Net Zero advice**

As co-chairs of the Prime Minister's Council for Science and Technology (CST), we are writing to you following your appointment as Secretary of State for Energy Security and Net Zero, and to offer the Council's support for delivering the Net Zero ambitions of your department.

In January 2020, the Council for Science and Technology drew on systems engineering principles to provide advice to the Prime Minister on 'Achieving net zero carbon emissions through a whole systems approach'. We have shared the advice alongside this letter.

**The Council's advice provided recommendations on how the Government can:** 1) strengthen the institutions, governance frameworks and leadership structures of central government to galvanise action towards achieving Net Zero, including the functioning of regulation; 2) develop the analytical capability, flow of information, and reporting needed to inform decisions and 3) maximise the contribution of technology, mobilise financial systems and galvanise international collaboration.

The advice highlights the importance of ensuring departments draw on world-class expertise to understand the available technologies relevant to decarbonisation, prospects for deployment and the obstacles to diffusion and deployment. As system-wide transformation is required to achieve Net Zero ambitions, it will be crucial that the Department for Energy Security and Net Zero can draw on scientists, economists and engineers to support the development of technology roadmaps and monitor progress on key technologies.

Involving an **operational group of system experts and engineers in government at the heart of net zero policy and implementation** is essential to realising the transition's full benefits.

The Net Zero transition is the 21<sup>st</sup> century's growth story, offering the opportunity to maximise productivity, economic growth and create jobs while driving down costs. The growth opportunities have become ever more clear since we wrote to the Prime Minister three years ago; costs of clean technologies have continued to fall, and promising opportunities continue to be created and discovered. Further, we must recognise growing competition across the world and must not be left behind.

We would welcome the opportunity to work with you and your team on our above proposal to support this transition and discuss the Council's recommendations further.

Yours sincerely,

**Sir Patrick Vallance  
(co-Chair)**

**Lord Browne of Madingley  
(co-Chair)**