## NATIONAL **ENGINEERING POLICY CENTRE**



# **Beyond COVID-19: laying the** foundations for a net-zero recovery

## Ensure recovery packages work together as a whole to pivot the UK towards a net zero economy

#### In summary: key actions for a net zero recovery

#### For government:

- a. Ensure that recovery packages stimulate immediate, low-regrets actions that help set the UK on a confident path to achieve the 2050 net zero target.
- b. Step up the level of investment in clean growth to a scale that is comparable with other ambitious nations, and build upon the UK's strengths and capabilities in clean technologies.
- c. Make stimulus funds for carbon-intensive industries contingent on long-term, ambitious and achievable emissions reduction commitments.
- d. Set progressive targets and incentives to maintain progress on decarbonisation beyond the short-term economic stimulus package.
- e. Ensure policymaking encourages and leverages a shift in investor behaviour towards lowclimate-risk investments.
- f. A combination of progressive targets and incentives for decarbonisation is urgently needed on a sector-by-sector basis incorporating a whole systems approach to maintain progress beyond the short-term economic stimulus package.



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## Apply outcomes-based procurement processes for all public-sector infrastructure and building projects with a focus on low carbon

#### In summary: key actions for a net-zero recovery

#### For government:

- a. Use outcomes-based procurement processes for all public-sector infrastructure and building projects drawing on international best practice in low-carbon procurement.
- b. Identify opportunities to embed improved procurement processes into HM Treasury's Green Book.
- For industry and the engineering profession:
  - c. Identify practical and usable carbon assessment tools to enable consistent assessment across different projects and inform good decision-making.
- d. Ensure that individual new build and retrofit projects draw on national and international best practices in design and engineering to deliver regenerative and net-zero results.
- e. Use industry cohesion and momentum resulting from the COVID-19 crisis to drive change, building on recently developed networks and relationships.
- f. Maintain momentum on developing secure and resilient digital technologies to support the transition to the future energy system.





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## rioritise diversity and inclusion for jobs and skills to reverse COVID-19 impacts and help build net-zero capacity and strengthen long-term capability

#### In summary: key actions for a net-zero recovery

#### For government, industry and the engineering profession:

- a. Make diversity and inclusion for jobs and skills an immediate priority to reverse COVID-19 impacts and help build net-zero capacity.
- b. Plan for the engineering skills requirements needed to deliver net zero over the longer term.
- c. Prioritise a pipeline of transferrable STEM skills to provide the basis for adaptable engineering skills that can deliver the net-zero agenda.
- d. Ensure greater public understanding of the role of STEM subjects in providing the basic skills for addressing crucial societal challenges to attract people to STEM jobs that will help deliver net zero.

#### For government:

- e. In the short-term, focus job creation on immediate actions for net zero and a just transition.
- f. Demonstrate to the public that a net-zero recovery represents an opportunity to create jobs and stimulate the economy.







### Drive digital transformation as an essential enabler of net zero and resilience

#### In summary: key actions for a net-zero recovery

#### For government:

- a. Support the development and adoption of digital technologies as enablers of decarbonisation and to boost productivity across all sectors, while addressing interdependent social and technical factors that affect their adoption.
- b. Strengthen the UK's digital infrastructure through support for broadband and 5G to improve equitable access to the internet, ensure resilience and enable a data-driven economy.
- c. Put in place policies that will ensure that digitally enabled systems are safe, resilient and secure.

#### For industry, government, research funders and the engineering profession:

- d. Improve access to data by developing frameworks for trusted data sharing between sectors and organisations and build capacity to adopt frameworks.
- e. Maintain momentum on developing secure and resilient digital technologies to support the transition to the future energy system.



## Deploy cross-sectoral systems approaches to policymaking that underline the interconnectedness of different policy areas and economic sectors

#### In summary: key actions for a net-zero recovery

#### For government:

- a. Reinforce mechanisms that facilitate genuine cross-sectoral working, to enable all stakeholders to act together at scale and in a coordinated way.
- b. Strengthen central, devolved and local government capability and capacity to provide systems leadership and operationalise cross-sectoral systems approaches.
- c. In the near term, apply systems approaches to inform decision-making on multiple, urgent lowregrets options across different sectors, setting the UK on the right path to net zero.

#### For government, industry and academia:

- d. Address resilience and decarbonisation challenges together, so that resilience is delivered on the path to net zero.
- e. Ensure that infrastructure interdependencies are considered to help identify decarbonisation opportunities and risks while improving the resilience of the UK's infrastructure systems.



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