



Engineering and  
Physical Sciences  
Research Council

# Sustainable Composites : the future 3<sup>rd</sup> July 2020

Jane Nicholson



# Current EPSRC Support for Composites Research

- **Composites Portfolio** - 73 grants with total investment value of £149M – £49M of which directly identified as relevant to composites research
  - Covers a wide range of research areas and composite types.
  - Application areas cover aerospace, construction, automotive, advanced textiles, manufacturing, healthcare.
  - As with materials research in general seeing greater consideration of how materials can provide both structural and functional properties.
- But how much focused on **Sustainability** ?

# Opportunity Space : What can composites do for a future sustainable society ?

- Where can sustainable composites contribute to
  - Building Back Better ?
  - Decarbonisation targets – Net zero by 2050 ?
- Opportunities and challenges
  - Light weighting materials – for transport, other application areas
  - Resource savings – materials and component made in one go, structure and function delivered together
  - Circular economy – sustainable raw materials, self healing/repair, recycle, end of life disposal
  - Others ??

# A Big Idea – a route for proposing what are the next major research opportunities to EPSRC

## Objectives

To identify and prioritise new “Big Ideas” in a way that is flexible, responsive and links to new opportunities

To support the development of these ideas from conception to business case.

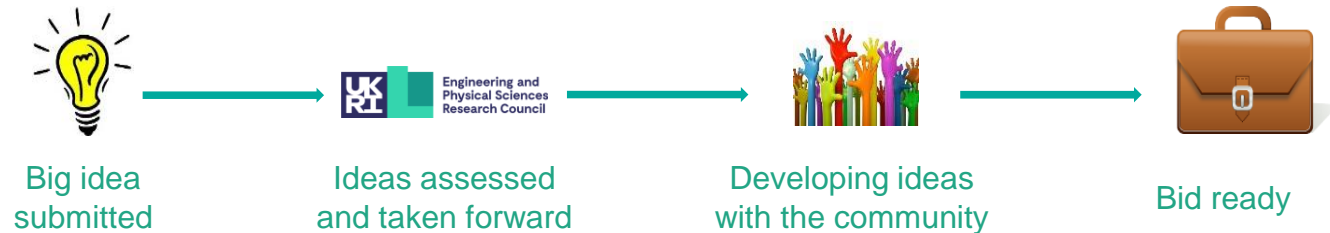
## Drivers

Responding to a changing environment - fiscal events and emerging priorities.

Ensuring that our community are ready to respond and articulate their ideas in a manner that presents new opportunities to meet economic and society needs.

Allowing ideas to be generated, assessed and developed in a transparent manner.

**BIG  
IDEAS**





Engineering and  
Physical Sciences  
Research Council

Thank you for your  
attention