Visionary

Why is this challenge visionary? Will it require a novel solution?

Inspirational

How is this challenge idea going to inspire those involved and others to become involved? How will this challenge support engagement between the public/private sectors? How will it capture the imagination of the general public?

Achievable

How is this challenge idea ambitious yet achievable? Can it be addressed in the timeframe of 3-5 years? What resources are needed to address this challenge? What is the opportunity and why now? Would an interdisciplinary, STEM-led approach enhance achievability?

Impact

What social and economic impact will addressing this challenge give rise to? How will its outputs and outcomes deliver impact? Who will benefit from solutions to this challenge? How will they benefit?

Barriers

What are the current barriers to addressing this challenge? How can they be addressed? What are the opportunities from addressing these barriers?
<table>
<thead>
<tr>
<th><strong>Inputs</strong></th>
<th><strong>Actions</strong></th>
<th><strong>Outputs</strong></th>
<th><strong>Impact</strong></th>
<th><strong>Success</strong></th>
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<tbody>
<tr>
<td>People, equipment, infrastructure, funding, services, partners, stakeholders.</td>
<td>What actions/tasks/work need(s) to be undertaken to achieve successful outcomes?</td>
<td>What are the key outputs? Research projects, prototypes, software, pilot line, partnership established, funding available.</td>
<td>What are the outcomes? Increase/decrease in, enhancement in performance etc.; Ultimately what Impact will be realised for the economy and society?</td>
<td>What will be achieved? What will be measured? What is the timeframe?</td>
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<td>What Inputs are needed to address barriers? E.g. Expertise from industry, regulator, VC company, national funding agency.</td>
<td>What Actions are needed to address barriers? E.g. An industry partner to translate academic research to market quickly. or A regulatory process needs to be changed to accelerate innovation. or A VC fund needs to be setup in advance to ensure commercial success. or A new national funding programme needs to be developed.</td>
<td>E.g. Regulation changed, policy changed, investment fund created, software completed, prototype developed.</td>
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