COP26 Hackathon: Climate risk in future energy system reliability and uncertainty
Sarah Sparrow, David Wallom, David Brayshaw, Tim Woollings

This work is licensed under the Creative Commons CC-BY-4.0 License.
COP26 Hackathon series (Feb-May 2021)

Collaborative problem solving with a goal of producing outputs that may feed into COP26 in November 2021.

<table>
<thead>
<tr>
<th>COP26 Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation and Resilience Concept Note</td>
</tr>
<tr>
<td>Energy Transition Campaign Overview</td>
</tr>
<tr>
<td>Nature</td>
</tr>
<tr>
<td>Zero Emission Vehicles</td>
</tr>
<tr>
<td>Finance</td>
</tr>
</tbody>
</table>

**Met Office COP26 Hackathons**
- Nature Based Solutions
- Sustainable Development
- Coastal

**Met Office Academic Partner COP26 Hackathons**
- Oxford
- Reading
- Bristol
- Exeter

**Energy Hackathon**
- Oxford and Reading Partnership
- Climate risk in future energy system reliability and uncertainty.
Motivation

Challenge:

• Energy system decarbonisation.

Problem:

• Many solutions increase the exposure of the energy system to climate risk.

Hackathon:

• Identify ‘gaps’ and ‘barriers’ at the energy-climate boundary.
• Develop solutions to improve data exchange, risk quantification, model development and end-user solutions.
Format of the event

25 Feb: Challenge Brainstorm

- Community generation of ideas/topics.
- Refinement and selection of ideas to develop in the hackathon.

22-26 Mar: Hackathon

- Teams work on the proposed topics with mentor support.
- Cross-team discussion to capitalise on all available expertise.
- Presentation to expert panel.

Looking for:

Participants

- Interested in the intersection of climate and energy.
- People with ideas of topics/areas to be tackled
- Some software skills

Looking for:

Leaders and Mentors

- Able and willing to support or lead development of a software project.
- Experts in climate risk, energy risk, mathematical and physical modelling of energy/climate.
Hackathon Event (22-25 March 2021)

Energy System + Climate Hazard = Future Risks

Participants will report back on progress to the wider group throughout the week.

Monday
- Lectures
- Practical

Tuesday
- Practical

Wednesday
- Practical

Thursday
- Practical

Friday
- Practical
- Presentations
If you’re interested but looking for some ideas and inspiration...
Expected outcomes

- Development of new collaborations.
- Greater understanding of the ‘gaps’ and ‘barriers’ between energy and climate.
- Feasibility assessment of novel ideas.
- Community developed ideas to take forward into collaborative proposals.
- Outputs to potentially feed into COP26.

Interested in getting involved?
Fill out the form or contact: sarah.sparrow@oerc.ox.ac.uk

https://forms.office.com/Pages/ResponsePage.aspx?id=xDv6T_zswEiQgPXkP_kOX2zZMzMnADhBuWwC6tQxnvhUNVIxWUoySEIwUTY0SFIRUU9INTE1UzlHOC4u