Solar Energy Policy Forum

Transcript summary

The meeting discussed the environmental and social impacts of large-scale solar farms, highlighting concerns over land use, food security, and biodiversity. Speaker 1 emphasized the need for factual and respectful discussions, noting the proposed 2000-acre solar farm in their constituency. Prof David Rogers criticized solar's low efficiency and high carbon footprint, advocating for wind energy instead. Catherine Judkins warned of battery storage risks, citing recent fires and environmental contamination. The discussion also covered the lack of community benefits and the need for better planning and regulation to protect agricultural land and wildlife.

Action Items

- [] Advocate for a moratorium on large-scale solar projects until a full assessment of food security risks is conducted.
- [] Push for mandatory community benefit schemes with clear guidelines and administration through county councils.
- [] Explore policy options to ensure solar energy generated from large-scale projects benefits UK consumers rather than being exported.
- [] Advocate for banning imports of renewable infrastructure materials that cannot be verified as ethically sourced.
- [] Ensure solar developments are designed to minimize biodiversity loss, and certain areas are off-limits for solar farms.
- [] Leverage the UK's influence to pressure larger emitters like China and the US to contribute more to global emissions reduction efforts.
- [] Identify effective ways for local campaign groups to have their concerns heard in Parliament, such as through future engagement sessions.

Outline

Introduction and Acknowledgements

- Speaker 1 acknowledges the emotional nature of the topic and requests factual and respectful discussions.
- Speaker 1 emphasizes the event is not anti-solar but focuses on the nature of renewables.
- Speaker 1 mentions a proposed 2000-acre solar farm in their constituency, owned by foreign investors, and expresses a preference for rooftop and ground-level solar installations.
- Speaker 1 outlines the agenda, including presentations from David Rogers and Catherine Judkins, and a Q&A session with MPs.

David Rogers' Presentation on Solar Farms

 David Rogers thanks the organizers and introduces the topic of large-scale solar farms and their impact on constituencies.

- David highlights the rapid spread of large solar installations and the concerns of local citizens.
- David discusses the lack of a clear roadmap for renewable energy deployment, citing Chris Skidmore's review.
- David argues that solar is not the most efficient or environmentally friendly renewable energy source, comparing it unfavorably to onshore and offshore wind.

Efficiency and Environmental Impact of Solar Energy

- David presents statistics on the load factors of different renewable energy sources, showing solar's low efficiency.
- David explains that solar panels only produce energy for a few hours a day, while offshore wind turbines produce energy for much longer periods.
- David criticizes the high carbon footprint of solar panels, citing the World Bank's findings on solar photovoltaic potential.
- David discusses the environmental and ethical issues associated with solar panels, including forced labor in China.

Land Use and Agricultural Impact

- David presents maps showing the disproportionate impact of solar farms on agricultural land, particularly high-quality land.
- David argues that solar farms are targeting the best agricultural land, which is detrimental to food production.
- David discusses the potential impact of solar farms on food security and the need for a strategic spatial plan.
- David highlights the lack of planning and the approval process for solar farms, which often overrides local opposition.

Catherine Judkins' Presentation on Battery Storage

- Catherine introduces the topic of battery energy storage systems and their role in smoothing grid fluctuations.
- Catherine explains the risks and hazards associated with lithium-ion batteries, including thermal runaway and environmental contamination.
- Catherine presents examples of recent battery storage failures and their severe consequences, including evacuations and widespread contamination.
- Catherine calls for adequate safety regulations and better planning to prevent such incidents.

Discussion on Land Use and Community Benefits

- Speaker 1 introduces a series of questions from campaign groups, starting with land use and food security.
- Speaker 4 argues for a moratorium on large-scale solar projects until a full assessment of food security risks is conducted.
- Speaker 9 suggests prioritizing solar installations on rooftops, car parks, and ground-field sites to avoid using agricultural land.

• Speaker 7 emphasizes the need for clearer structures and guidance for community benefits from large solar developments.

Economic and Environmental Justifications

- Speaker 2 discusses the economic justification for large-scale solar projects, comparing them to other renewable energy sources.
- Speaker 1 highlights the need for a strategic spatial plan and better integration with the grid to address energy security and net zero targets.
- Speaker 3 raises concerns about the ethical supply chains of solar panels and battery storage materials.
- Speaker 9 argues for a focus on nuclear, wind, and hydrogen energy sources, given the UK's low solar potential.

Impact on Biodiversity and Local Communities

- Speaker 7 discusses the impact of solar farms on wildlife corridors and specific species, such as skylarks and stone curlews.
- Speaker 9 argues that solar farms can be beneficial for soil health but emphasizes the need for careful planning to avoid negative impacts.
- Speaker 10 highlights the importance of considering biodiversity gain and minimizing biodiversity loss in solar development.
- Speaker 1 suggests that landowners should share some of the wealth generated by solar farms with local communities.

Policy Recommendations and Future Engagements

- Speaker 1 suggests that MPs can leverage their influence to put pressure on the government to address global emissions.
- Speaker 2 emphasizes the need for a strategic spatial plan and better integration with the grid to address energy security and net zero targets.
- Speaker 3 calls for adequate safety regulations and better planning to prevent environmental contamination from battery storage facilities.
- Speaker 1 invites participants to mingle and discuss their concerns with experts and MPs, emphasizing the need for continued engagement and advocacy.