

**Community-led energy solutions as the future of just and clean energy transitions** by Dr Giuseppina Siciliano, Lecturer in Sustainable Development, SOAS (26 October 2021)

As the hosts of COP26, the UK Government must ensure that states cooperate towards **achieving just renewable energy transitions** and **rethink the definition of hydropower** as a “clean” energy source. Under certain conditions, hydropower plants can produce severe social and environmental impacts. Instead, **states should use a practical, implementable energy justice approach and redirect problematic hydropower investments towards energy-just projects.**

It is widely recognised that the **transition to a post-carbon economy needs to be green, sustainable and socially inclusive.** The Paris Agreement refers to the ‘**imperatives of a just transition**’ ([UNFCCC, 2015](#)), the Agenda 2030 for Sustainable Development declares access to **clean and modern energy for all by 2030** ([United Nations, 2018](#)) and the EU has vowed to ‘**leave no one behind**’ in its proposed Green New Deal ([European Commission, 2019](#)).

Despite these commitments, **energy transitions are focused mainly on technological changes**, top-down energy decisions and large energy infrastructures. Hydropower plays a key role in contemporary renewable energy transition policies in the EU and globally ([SAPEA, 2021](#)). However, **hydropower projects can also be an important contributor of greenhouse gas emissions, especially in tropical regions**, and mitigation measures are highly dependent on local circumstances ([Fearnside, 2016](#); [Ocko and Hamburg, 2019](#); [Almeida et al., 2019](#)). Hydropower has also resulted in a series of **environmental and social concerns**. According to [EU Guidance](#) it is a threat to Europe’s freshwater ecosystems. **In Europe 21% of all existing, planned, and under construction hydropower plants** (including small and run-of-the-river plants, where the normal course of the river is not materially affected) **are in protected areas**; with negative impacts on biodiversity ([WWF report](#)). Also set to one side are the needs of **local communities and energy justice concerns**, such as fairness of the distribution of costs and benefits between different segments of society and fairness of the decision-making process ([Siciliano et al., 2018](#)). In response to the negative effects of hydropower on nature and humans, 150 NGOs have signed a [Manifesto](#) asserting that **EU Governments must stop the construction of new hydropower plants in Europe.**

**An energy justice approach must be based on inclusiveness and participation of those affected by energy projects.** This can ensure fair energy access and distribution, high quality assessments of the impacts and mitigation strategies, and often provide more sustainable solutions than top-down development of large projects ([UK Gov Community Energy](#); [Community Energy England](#)). The UK should champion equity-centred renewable energy decisions, using an energy justice framework, and avoid projects with severe social and environmental implications ([Siciliano et al., 2018](#)). Furthermore, the UK should lead on giving greater consideration to community-based renewable energy solutions in international debates at COP26. The UK government and COP26 must:

- **Challenge the definition of hydropower as a “clean” energy source** in national and international debates, energy policies and strategies.
- Ensure that renewable **energy transitions are just, sustainable and pro-poor**, and that greater consideration is given to community-based renewable energy solutions.
- Adopt an energy justice approach for a **collaborative definition of environmentally sustainable and socially-just energy solutions.**