

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.**