

Pathways to a resilient energy future

Towards Cooperative Commonwealth: Energy democracy



Julie MacArthur. Introduction to Module 6: Energy democracy: Pathways to a resilient energy future.

<https://www.youtube.com/watch?v=hDLNAyBhA2U> (<https://www.youtube.com/watch?v=hDLNAyBhA2U>)



Module 6 synopsis

Community energy projects are strategically important in transitioning to a sustainable energy future. Not only can they produce less greenhouse gas emissions but they also engage people where they live, demonstrating immediacy and strengthening community resilience. Transition scholars and practitioners point out the potential of small-scale, decentralized, and community-owned renewable energy systems to accelerate energy transformation. Such systems allow local citizens, co-operatives, local governments, and enterprises to participate in the energy system so that citizens become more informed and involved, which in turn supports equitable, democratically governed systems. Community-based approaches are also more “effective at reaching the vulnerable” and “better placed to maximize the benefits of certain renewable technologies” (UK DECC 2014, 3).

Energy is vital. We use it to grow food, run household functions, clean and distribute drinking water, and flush wastes. We need energy for transportation, communications, industry and economics, the health care system, and more. The energy revolutions of the 19th and 20th centuries demanded huge amounts of capital and continuous raw material flows of coal, natural gas, oil, and nuclear power. Energy generation became centralized whether electricity, oil, or other fuel sources, and owned by a handful of state and corporate monopolies. Today, however, energy from the sun, wind, tides, biofuels, and geothermal resources is contributing to decentralized forms of clean energy generation. Emerging renewable energy systems allow for relocalization of power generation, local ownership of powerplants and micro-grids, and greater household, community, and regional self-reliance.

Transition from fossil fuels to renewables, while possible, is far from assured. The concentrated power of petrostates and fossil fuel corporations means they are not going to give up their interests gracefully. Corporate cash flows and profits, government royalties and taxes, and considerable employment are part

of a complex global web of fossil fuel exploration, extraction, refining, sales, and intricate pipeline and shipping distribution networks. Rich and powerful corporate and political interests continue to block rapid decarbonizing. Still others are embracing renewables as a means to maintain control of their economic self-interest. These new corporate-owned renewables can make it hard for smaller community-based energy projects because they

- propose a few large centralized corporate renewable energy projects, instead of many small dispersed community ones, to quickly meet international renewables targets by 2030.
- oppose government incentives and price guarantees for community solar electricity.
- use formal and informal rules to block bonuses for transmission efficiencies or carbon savings by community electricity generators.
- resist government financial support for community energy, such as start-up capital.

Change is coming, but whether recent trends in government policy commitments will open up real possibilities for grassroots democratic community renewable energy systems is less clear. Criticism and resistance to the status quo is growing across the globe, but every step to decarbonize is being resisted, leading to policy stasis and policy reversals.

In this module we will study the promise of alternatives and the obstacles community energy actors are facing. Alternatives, as suggested by groups like the Solutions Project and Greenpeace, include strategies for transition to 100% renewables via massive infrastructural upgrades, greater energy efficiency, widespread distributed renewable generation and a shift to electrified transport and building systems. Such solutions are feasible because costs for wind and solar technologies are plummeting. Geothermal, tidal, heat-recovery, and waste-fed energy systems are advancing. And policy supports for energy efficiency and alternatives have spurred clean energy innovation, particularly in Europe, enabling community and municipal actors to play a central ownership role.

Yet, while many renewable energy technologies are amenable to ownership that is distributed, localized, and democratic, this is not the only path that clean technologies can take. As we noted, many large and small energy corporations are trying to dominate the renewables field as well, in ways that undermine grassroots democracy. Energy democracy is a choice that must often be fought for, with efforts to resist, reclaim, and restructure energy systems. Indeed, the energy transition challenge is as much or more socio-political than technological.

In Module 1, we learned that it took eleven months before most people were reconnected to the grid in Puerto Rico following Hurricane Maria. In these months, the only electricity available to many rural and remote area households and businesses was generated by renewable energy. Such disasters and storms underscore a dangerous weakness in centralized long distance energy distribution systems. While experts build some resilience of supply in large centralized systems, our concern is to refocus resilience in the electrical system to meet basic needs in a crisis, because communities rely on electricity for life's essentials. Concerned with community resilience, the people we meet in this module are exploring decentralized, distributed, and democratic control of renewable energy and energy conservation efforts.

This module introduces a number of examples of community and regional-level actors creating clean energy projects and conserving energy. Local governments, for example, have become advocates and partners with community associations and non-profits. Combining co-operative and public ownership they are establishing local/regional renewable energy generation and distribution projects. Likewise, grassroots innovations (niche-scale advances) in renewable energy generation and local investment, together with supportive state policies, are engaging new actors, advancing energy literacy, fostering jobs

and economic development, reducing fuel poverty, encouraging self-reliance and contributing to energy democracy; that is, local ownership of energy generation and benefits.

Objectives for this module

1. To identify the central trends driving energy transition, including technological changes, national and municipal policy incentives, and social movements confronting the dominance of the fossil fuel industry and explore how each is making opportunities for transition to 100% renewables.
2. To examine models of energy democracy in community and regional contexts and critically analyze policies accelerating energy transition and strengthening community resilience.

Suggested time allocation: 5 hours total

Review of commentary, required video and reading materials, note-taking	168 minutes
Weekly exercise	100 minutes
Weekly whole group discussions (https://learn.canvas.net/courses/2527/discussion_topics/43837)	32 minutes
Total	300 minutes

Module 6 discussion forum

As you work your way through this module, be sure to post your ideas and reflections in the [Module 6 discussion forum \(https://learn.canvas.net/courses/2527/discussion_topics/43837\)](https://learn.canvas.net/courses/2527/discussion_topics/43837) and read and reply to the posts of others.