



An energy co-operative based in Greater Manchester, Carbon Coop provides tools, knowledge and expertise for people and communities seeking to make big reductions in their carbon emissions. At core, Carbon Coop seek to enable radical reduction of domestic emissions to avoid runaway climate change.

So what did Carbon Coop do with Jam & Justice?

Building on an existing campaign to introduce democracy to Greater Manchester's energy supply, Carbon Coop became the key delivery partners in a cross-sector action research project, provocatively entitled *The People's Republic of Energy*. Participants came from local government, unions, electricity suppliers, as well as campaign organisations, thinktanks, universities, and social enterprise. With creative guidance from theatrical artist Britt Jurgensen, the action researchers mapped Greater Manchester's energy system, visited an electricity substation, and prepared a series of exploratory walks—taking stakeholders on a tour of Greater Manchester's energy history. Examples of best practice in energy governance from around the world were compiled to form *GM Energy Futures*, the imagined prospectus of a democratically-managed municipal energy company from 2020 to 2035—distributed at the city-region's first Green Summit. *Power in the City* walks re-ran in 2019, responding to repeated requests.

Power in the City: narrating an immersive experience

We stand at dusk in the quiet of a late Victorian reading room. Lamps in the vaulted ceiling take the shape of flowers. Powered from the beginning by an in-house generator, the library Enriqueta Rylands erected in her husband's memory was an electrified public resource. A sophisticated air-filtering system kept the city's grime out. Yet what powered nature-shaped lamps and clean air circulation was the same substance that had yielded the Rylands' great wealth: coal.

Presented through a dozen short chapters, *Power in the City* offers a journey through municipal energy supply, grounded in the real history of Manchester. The innovations of past generations lead us alternatively between hope and despair, navigating the tension between 'progress' and power-down. The experience is richly immersive, engaging body and mind.

Power in the City: narrating an immersive experience (*continued*)

A rebellious lamp outside Manchester's police station advertising the potential for gas-lighting, helps the entrepreneurial Police and Improvement Commissioners develop the earliest municipal power supply-- a profitable initiative.

Decades later, this Manchester Corporation will gain the first contract to electrify the city, dazzling customers in the better class of department store, with the network expanding from half-a-square-mile to cover 45 in barely four years.

Stepping into an alleyway, we consider the unequal distribution of resources, fuel poverty in the early 1800s as the city's population expanded 35 per cent per decade.

By a statue of Emmeline Pankhurst, we hear testimony from Manchester's earliest woman engineer Gertrude Entwistle--whose excitors helped stabilise voltage output at large power stations including Battersea and Croydon.

Travelling a short distance on the city's tram network, we review a bewilderment of twentieth-century electric transport options and other abortive experiments with alternative vehicles.

"This dwarfs our emerald country by its trek": lyrics from poet Stephen Spender, paired with footage of pylon-construction, capture the roll-out of Britain's National Grid, initiated by a conservative government and occupying 100,000 workers over a six-year period, and completed ahead of schedule (and below budget) in 1933.

Stills from a candle-lit cabinet meeting amidst rolling black-outs illustrate the immediate pressures that stimulated nationalisation in the late '40s.

A former National Grid worker explains his decision to decline share options a day ahead of privatisation, offering a particular perspective on Thatcher's "power to the people".

Carbon Coop's co-founder narrates the history of energy in his own lifetime, from the birth of "global warming" science, via the landmarks of Thatcher, Rio, the Kyoto protocol, Paris 2016, and the persistent rise of atmospheric CO2 levels; each phase evoking new personal commitments to do energy differently.

As our collective journey draws to a close, we consider the evidence of change at hand:

- Counting small scale and domestic renewables, the energy system has gone from around 80 power stations in 2004, to nearly 1 million today.
- In 2013, coal was the UK's biggest source of electricity, providing 37% of the overall mix. By Quarter 2 of 2018, coal had fallen to 1.3%.
- The market share of the Big 6 energy companies has fallen, from 99% in 2013 to 75% in 2018.
- Since residents of a Danish town set about building their own large wind turbine 40 years ago, another 200 community-based energy organisations have emerged.

So what?

Warming ourselves in a nearby public house, we ponder the roles of energy as commodity, energy as 'right or freedom', energy as 'luxury or utility' and we discuss:

- What new ownership models and mechanisms do we need to face the demands of the 21st Century energy system?
- Can energy be used to address societal inequalities and unfairness, and if so how?
- In the course of our journey, as a society, what have we forgotten about Power in the City that we need to remember?

Together we are challenged to "think about the pledge that Andy Burnham made in August 2018, to make Greater Manchester a Zero Carbon city by 2038 – a date that is just 18 years away."

Jam & Justice Impact Officer Iona Hine caught up with Carbon Coop founder Jonathan Atkinson to ask what the impact had been one year on. Jonathan said:

GM Energy Futures is part of a wider debate taking place around the UK, and around the world, about the role of municipal authorities in facilitating the energy transition.

Annual spend



£250 000



200
members

Since launching the report Carbon Coop has had discussions with and invitations to speak to groups from around the UK, many associated with the Labour Party and unions but also more general interest groups. The impact of the report has been radiating out—how the project influences "events on the ground" is harder to quantify, but we are sensing a shift from councils in assessing what is possible.

One element that is harder to convince people around is the need to involve citizens at the heart of these new municipal energy projects. It's still a concept that scares councils and makes them worry about the loss of control, they also don't understand how this process might take place. Hopefully, that is beginning to change.

<< Policy debate on the environment has been stimulated or informed by research and research evidence.