

BLOG :

How the remunicipalisation of energy can help to tackle Climate Change?

The scale of the challenge

Summer floods, heatwaves and record-breaking temperatures, dire warnings of ecological catastrophe and societal breakdown. We all understand the impact of the climate changing on our daily lives and our future prospects, but what can we do about it?

According to Chris Stark, the Chief Executive of the Committee on Climate Change the Government's advisory watchdog, we are on course to breach the 1.5c threshold on global temperatures agreed at the Paris Climate Summit in 2015 within the next 20 years unless we take drastic action

"That's the period over which the global economy will double in size – global infrastructure too – driven principally by the growth of our cities".¹

The report, *"Hot Cities: battle-ground for climate change"*² from the United Nations Human Settlement Program, shows that while the world's cities only cover 2 percent of global land area, they account for a staggering 70 percent of greenhouse-gas emissions. If we fail to decarbonise the places where most of us live and work and travel, then we fail to address the urgent existential crisis that is Climate Change.

Since the turn of the year some 293 local authorities covering over 70% of the population of the U.K. from large cities like London to small community councils like Pennard in Wales (population 2688), have declared climate emergencies³ and passed resolutions setting targets for reducing net emissions to zero. Many of these local authorities have stated their intention to get to net zero within 10 years a hugely challenging agenda even if local government had one hundred times the resources it currently possesses.

How are our councils, still reeling from 9 years of austerity with Government funding reduced by nearly half since 2010 and massive pressures on services not least in adult social care, going to eliminate CO2 over the next decade?

Its about politics and democracy!

Here's the problem. Whilst councillors can pat each other on the back for passing resolutions on Climate Change, it will take much more than a statement of intent to get to net zero carbon by 2030.

¹ Chris Stark, Towards Net Zero, 19 March 2019

² <https://new.unhabitat.org/>

³ <https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/>

The good news is that the tools for achieving this are already at our disposal and all we really have to do is get organised and dip into the toolbox to start to make rapid and steady progress on matching our ambitions with action.

We know that we have the technological and technical capability; we know that there is now a massive awareness of the climate crisis amongst our citizens and a willingness in our communities to act; we know that industry and the private sector are gearing up for the change. So, why don't we just get on with it?

This is not just a technical process that can be left to the energy sector alone to deliver. It is a political, community led and owned approach which establishes a new archetype for distributed and municipal energy.

In his landmark book *"the politics of Climate Change"*⁴ Anthony Giddens argues for concerted political action to tackle Climate Change, not a return to centralised planning, but a call for cross-party political consensus and greater state capacity to reduce carbon dependence both nationally and internationally. This 'ensuring' role is the very stuff and purpose of local government. 'Political action' a role for democratically elected local representatives. A real opportunity for our local leaders to make a difference, make a name for themselves and help to save the planet in the process.

Scaling up for municipal energy

To get organised we need to understand what works and emulate the best practice from across the U.K. and in Europe. Local authorities need to become more than just enablers of change and become 'operational actors' in the energy sector themselves.

In the book *Reclaiming Public Services*⁵ Sören Becker writes compellingly about how German cities and towns are remunicipalising the energy sector. There are some 284 examples across Germany of municipalities establishing energy companies and taking back control of the grid and energy supply. He writes:

"Remunicipalisations require the political will of local decision-makers. Therefore, they are the result of local politics, which in turn is defined by local constellations of actors, local traditions in service provision, the financial situation of the municipality..."

You can't 'leave it to the market' or just expect communities to get on with it themselves, you must be the catalyst for the change you want to see. You must have 'skin in the game'.

⁴ Professor Anthony Giddens, the Politics of Climate Change, Polity Press, Cambridge 2009

⁵ Reclaiming Public Services: How cities and citizens are turning back privatisation (June 2017) edited by Satoko Kishimoto and Oliver Petitjean

A recent Energy Cities workshop on the remunicipalisation of energy⁶ identified the key success factors for remunicipalisation which include:

1. *Seizing the favourable opportunities*

All localities are different and have different needs and priorities so there is no 'one size fits all' solution. But an approach which identifies opportunities that are core to local purpose works best. Nottingham City Council set up Robin Hood Energy as a wholly owned 'not for profit' supply company in 2015. It was an intervention driven by political objectives to address issues of 'fuel poverty' in many communities. A local priority recognised a potential gap in the market for an ethical local authority owned supply business. Robin Hood Energy is now a recognised national energy supply company with 130,000 domestic customers, 'white label' partnerships with 10 local authorities, it employs over 200 people in Nottingham, it has had a positive impact on the energy market particularly for vulnerable energy customers and has a turnover of £70m and an asset value to the council of some £48m way above the original council investment in the business.

2. *Investing in the local community*

The main advantage of a local owned public energy utility is its proximity to customers and its focus on the common good and public interest. As such, a key factor for the municipal energy company is to be known within the community and recognised for its positive impact. Ettlingen is a small municipality in Germany with around 40,000 inhabitants. Its Stadtwerke (municipal energy company) is member of a local energy cooperative, and 90% of the employees live in the area. The company offers free advice for energy efficiency, for example during thermography walks with citizens and via an Info-Bus which circulates in Ettlingen.

3. *Building an integrated energy business*

You can start from a modest base which exploits opportunities within the local area, but this should be used as a platform to develop an integrated business model, reduce costs and provide a wider range of services. So, moving from energy supply to local generation and investing in a range of low carbon energy projects can help to drive the energy business. Stadtwerke Müllheim-Staufen (SWMS) was set up in 2009 to supply heat, water, gas and electricity. Then it gradually started to produce energy (heat and electricity). In 2019 electricity production covers around 20% of the electricity sales. The goal is to achieve 100% in 2050.

4. *Becoming a multiple-energy supplier*

Supplying different kinds of energy (electricity, heat, gas) is an advantage to attract customers, who usually prefer one single supplier instead of several. It also allows reduced costs through synergies for management and operations (relations with customers, internal sales department). Some local utility companies also propose water supply or telecommunication services in addition to energy. In Kalundborg, Denmark an

⁶ Energy Cities, Remunicipalisation of energy workshop, Ettlingen 28 February - 1 March 2019

industrial symbiosis concept has been deployed for many years, based on circularity. For example, the wastewater of the area, managed by the municipal utility company, is provided to an industrial company which extracts organic matter to produce biogas. Then the local company recovers heat from wastewater to supply the district heating network.

5. *Developing innovative financing solutions*

The energy sector is usually a highly capital-intensive sector which requires huge investments with a long payback period. This can be a potential barrier for local government although borrowing costs and anticipated returns in the public sector are much less than for private businesses. Financing solutions can be the through issuing **green bonds** from the municipality which can be invested in green projects conducted by the municipal company. Another option is to have partnership with **pension funds** which can lend money on a long-term period and do not require to be reimbursed during the first operation years, which gives time to become profitable. Mijwater BV, originally a company owned by the municipality of Heerlen in the Netherlands, is developing and operating district heating and cooling networks. In this kind of project almost 90% of the investment is for infrastructure, with a payback period around 25 years. Kalundborg municipality issued green bonds for an amount of 500 million kroner. Investors were even willing to buy bonds for 1,500 million kroner in total, showing that there is high interest in the implementation of green projects by the municipality.

6. *Ensuring that the benefits of the energy transition are shared equitably*

One of the potential consequences of the energy transition is that poorer communities are likely to bear the higher costs of the residual fossil fuel system. These are families and individuals on low incomes, living in poorly insulated homes with higher energy bills and much more reliant on public transport. Without support for energy efficient homes, microgeneration of renewables and energy storage and greener public transport, many poorer communities could be left behind with the gap between 'the haves and have nots' growing even wider. Local municipally owned energy companies can ensure that the transition to a net zero carbon energy system tackles fundamental inequalities within our local areas by ensuring that the benefits of the energy transition are shared equitably. In Cadiz, Spain the city has trained more than 1,200 citizens about energy efficiency. They also created a social tariff for 'fuel poor' people which will benefit around 2,000 families. This social tariff was designed in a collaborative way with citizens and stakeholders. The energy company Eléctrica de Cádiz which is 50% owned by the local authority and the municipality each pay half of the costs of this tariff. In case families can't pay their energy bills, the city will advance them the money.

We can do this!

In 2012 the German city of Heidelberg launched its **master plan 100% climate protection** with its municipal energy company Stadtwerke Heidelberg as an active partner. It set a target for 2050 of 95 % reduction in CO2 emissions; energy savings of at least 50 %; and a switch to renewable energies. Stadtwerke Heidelberg is now one of the largest 100% owned municipal enterprises in Germany with a turnover of € 270.1 million and a workforce of around 750. Its profits are allocated to support local public services including public transport and swimming pools. It is a multi-functional public utility involved in energy production, storage and conversion, energy supply and deployment.

It is raising its share of local energy production to 30% with investment in a 'state of the art' energy storage facility and co-generation plants and an expansion of district heat networks. It has created a masterplan for green heat and renewable energy deployment and is supporting investment in the construction of passivhaus districts.

These are just some of the tangible benefits of municipal energy and a real focus on matching the ambition to become net zero carbon with a determination to deliver real change in the energy system. Creating a **delivery vehicle** for the energy transition is critical and there are a number of steps which are integral to success:

- identifying where the local opportunities are to deliver the greatest carbon reduction benefits to your communities;
- developing a business model that can drive forward your net zero carbon ambitions;
- ensuring that you have both strategic oversight and operational delivery input into the chosen business model;
- building capacity so that you can broaden out the role of the municipal energy company into a multi-purpose delivery vehicle;
- reinvesting revenue surpluses into local energy projects and initiatives; and
- sharing the benefits of the energy transition with your communities and reconnecting local government with people as citizens and not just taxpayers.

In the grand scheme of things, 10 years is a very short time if we want to get to net zero carbon. That is why we have to reinvent local government with a purpose, and we have to start now!

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August 2019