Local Authorities and Democratised Energy

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Introduction

- •What is "The Democratisation of Energy"?
- •Examples from Overseas
- •Democratised Energy in the UK



What Is "The Democratisation of Energy"?: 1

Energy democracy is a political, economic, social and cultural concept that merges the technological energy transition with a strengthening of democracy and public participation. The concept is connected with an ongoing decentralization of energy systems with energy efficiency and renewable energy being used also for a strengthened local energy ownership. With new green technologies available, such a transition is possibly involving new actors: prosumers, renewable energy co-operatives and municipal, community-owned power stations which replace centralised, power corporations (Wikipedia 2016)



What Is "The Democratisation of Energy"?: 2

"Energy Democracy means ensuring that everyone has access to enough energy. However, the energy must be produced in a way that it neither harms nor endangers the environment or people. Concretely, this means leaving fossil fuels in the ground, socializing and democratizing the means of production and changing our attitude towards energy consumption." (Büro für eine demokratische Energiewende 2012 - Lausitzcamp)

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What Is "The Democratisation of Energy"?: 3



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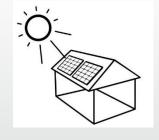








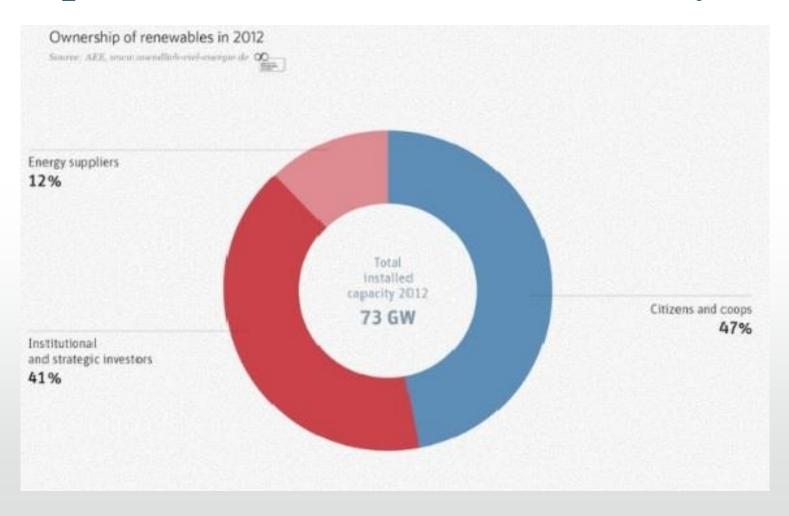
ownership / partnership / shareholding







Examples from Overseas :1 Germany





Examples from Overseas: 2 Germany

•Large scale local energy generation scheme re-using landfill sites — Hamburg City Council's (Stadtwerke Hamburg)
"Energieberg"

•Allows spatial planning and regeneration to be delivered using the Low Carbon Agenda

Wind power

Solar power

Biomass

Geothermal power

Methane gas





Examples from Overseas :3 Germany

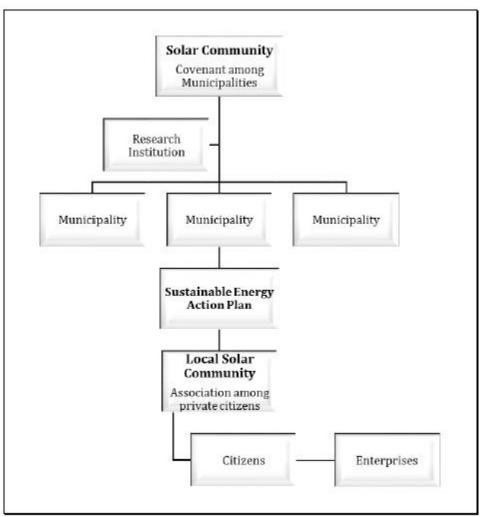




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Examples from Overseas : 4 Italy

- •European Solar Communities exist based in policy terms on municipal leadership
- •Governed by a Sustainable Energy Action Plan (SEAP)
- •Citizens and enterprises engage as partners in the initiative
- •Case study area Casalecchio di Reno, Emilia Romana, Italy – one of the wealthiest and most developed regions in Europe, with the third highest GDP per capita in Italy





Examples from Overseas : 5 Italy

- Municipalisation of energy in Europe is quite commonplace
- "Solar Communities" in Italy are an example of local authorities providing local energy to local communities
- Collaboration across municipalities is accepted practice







Examples from Overseas :6 USA

Shared Solar

 Projects are owned by the electric utility or third parties, with participants purchasing a "subscription" for a share of the electricity output for a limited time (e.g. 15-20 years)

Virtual Net Metering

 Virtual (or group or neighbourhood) net metering (now also called "shared renewables") allows utility customers to share the electricity output from a single power project, typically in proportion to their ownership of the shared system

Community Solar and Virtual Net Metering

 E.g. Clean Energy Collective of Colorado who have a shared solar model across eight states and even more utilities. 50-year ownership shares in community solar projects are sold arranged in partnership with the hosting electric utility.

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Examples from Overseas: 7 USA

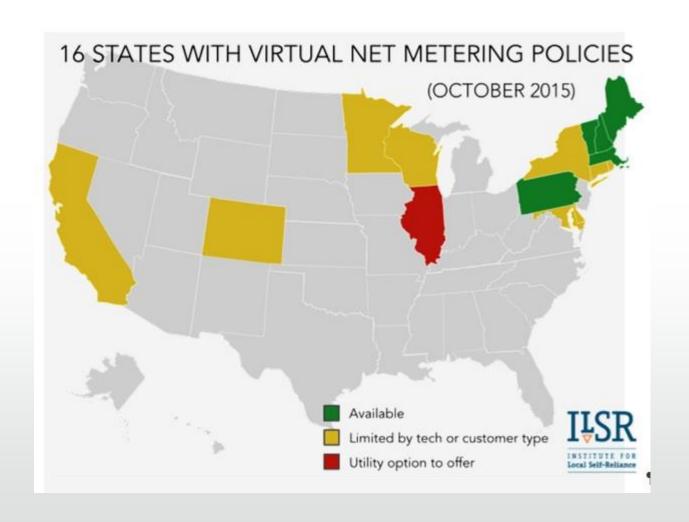
- Subscription (rather than ownership) limits exposure to risk and simplifies raising capital.
- Subscribers don't have to process or manage filing for tax incentives, and shares can be purchased for as little as \$250.
- The subscriber model insulates projects from securities law limitations because instead of being investors, subscribers are essentially pre-paying for electricity that will be credited to their bill





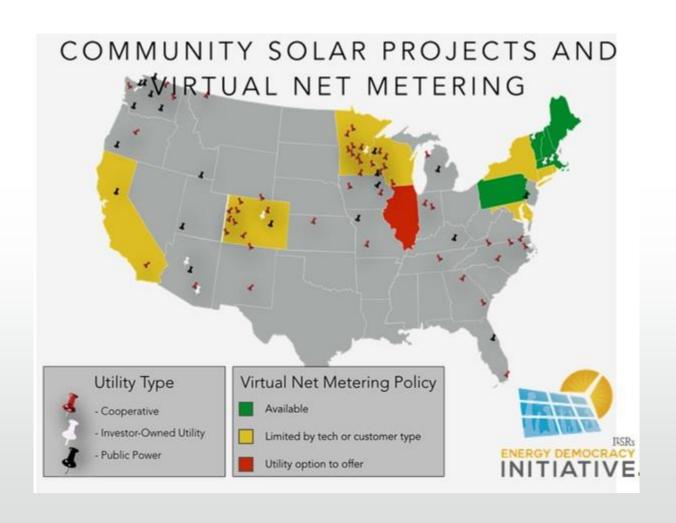


Examples from Overseas :8 USA





Examples from Overseas :9 USA





Democratised Energy In The UK

- Democratizing Energy in the UK
- •A Democratized Energy Framework?
- •The Role of Local Authorities / Public Bodies



Democratizing Energy In The UK: 1

"We face an energy security crisis. This winter British energy reserves will be at such low levels we could be forced to buy in emergency supplies. Once again families and businesses ripped off because of energy decisions beyond their control. Well we want to put people back in charge.

But Jeremy and I don't want to nationalise energy.

We want to do something far more radical. We want to democratise it.

There should be nothing to stop every community in this country owning its own clean energy power station. Across the country schools are already taking the initiative and going solar. Generating power and heat for their own use. With the right support, community-based energy companies and cooperatives could be a new powerhouse, and a path to a more secure energy future."

Lisa Nandy MP September 2015

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Democratizing Energy In The UK: 2

"Labour in local government is already leading the way, effectively bypassing the big six entirely. Labour leaders in Nottingham have created their own city energy company to cut bills and go green. Oldham is spearheading collective switching schemes. Cardiff is rolling out cutting-edge smart technologies to cut demand because the cheapest power is the power that isn't used.

To work with our local government leaders to push for a clean energy boom in our great cities. Because our city and county regions can lead the world. They can point the way towards a safer, brighter, more secure future. To be the light on the hill for all of us who care about the cost of our energy - to our family budgets, our businesses and our environment."

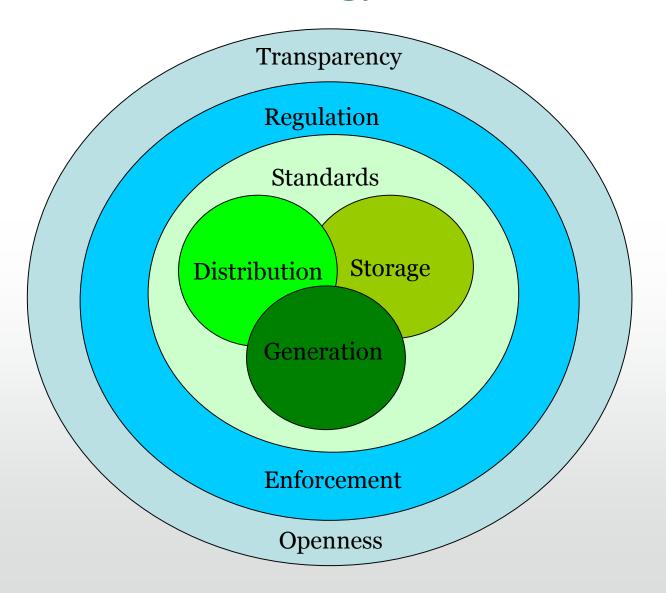
Lisa Nandy MP September 2015



A Democratised Energy Framework?:1

- •Distribution, Storage and Generation must be co-ordinated through the management of supply and demand
- •Coordinated modelling of growth and requirements should be the remit of an accountable body (DECC/ OFGEM ??)
- •Energy Security driven by growth forecasts and policy
- •As much operational management should be devolved to the lowest level of accountability (local bodies / Councils / LEPs / City Regions / co-operatives etc.)

Southampton A Democratised Energy Framework?: 2



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A Democratised Energy Framework?: 3

Clean Energy Success

"Renewable power supplied almost all of Germany's electricity needs on Sunday for the first time. Electricity from solar panels, wind turbines, biomass-fired power plants and hydroelectricity stations generated about 45.5 gigawatts of power in Germany at about 2pm, more than 99 per cent of the total demand.

It has been hailed as an achievement for the policy of *Energiewende*, or increasing reliance on clean energy sources."

The Times Wed May 18th 2016 p46



The Role of Local Authorities / Public Bodies

- •Nottingham, Plymouth and Bristol are already starting out on this journey, how best could others follow?
- •What powers / legislation are required?
 - General Competence / Bond Issuance / Devolution / City Deals
- •What Barriers need to be broken down?
 - Planning / Borrowing / Risk Aversion
- •What scope should the energy democratisation have?
 - Electricity / Bio-Gas / Heat / Tidal / Wave / All of the them
- •Have your say by filling in the questionnaire under you seats!