# energy communities

Leo Murray, Director of strategy

#### "It's change - or die in a ditch"

- private conversation with senior executive at one of Germany's Big Four suppliers



DONATE

# We've handed in the local power petition. What's next?

This is a big first step towards a fairer deal for local energy groups - and their neighbours

A petition we ran in 2015 which apparently annoyed lots of people at DECC and Ofgem by massively oversimplifying the issues for a general audience.

smart power + decentralised renewables +communities local energy!



### Why buy local?



- Facilitate subsidy-free renewables
- Reward communities for hosting renewables with lower energy bills
- Relocalise the economic benefits of energy generation and supply
- Enable new energy company business models
- Integrate storage, low carbon heat and transport solutions
- Secure better outcomes for domestic consumers in general



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One of these sorts of slides.

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"Wadebridge generated its own electricity until 1928, when the local company was sold into successively bigger organisations, culminating in the Big 6 today. Wadebridge **Energy Company will reverse that. It will** generate green energy locally and create income to benefit people in the Wadebridge area, not the overseas shareholders of energy multinationals." R

- Jerry Clark, WREN technical director

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#### **PEOPLE DON'T SWITCH**





#### **Switching the switchers**



One of Robert Buckley's slides from Cornwall Energy, compiled from Energy UK switching data and Cornwall's domestic supply market share survey.

#### The active market vs passive market



Source: Competition and Markets Authority.

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# **Switching situation is not improving**

Number of electricity and gas switches, monthly, 1999-2016



Sources: Department for Business, Energy & Industrial Strategy, Transfer statistics in the domestic gas and electricity markets in Great Britain. Pre-2003 estimates from the National Audit Office.

#### The more you save, the more you switch?



#### Imperial College London

🔁 zipcar

#### Introducing the business models

'Disengaged', engaged consumer

#### 3<sup>rd</sup> Party control Shared

saveewatt

The new business 'Lifeback' took the market by storm in 2017 with the slogan "Our mission is to make your life better". Its simple model was to remove hassle from switching utilities by doing on its customers behalf. It rapidly established a dominant market share. Over time, informed by user data (including smart meters), it and competitor companies added new services, such as smart products, home energy efficiency improvements, micro-generation, energy storage and own brand entertainment. The company then moved into mobility, rolling out a shared autonomous vehicle service, reducing car ownership. Combining these unlocked automated domestic demand side flexibility. In time, 80% of domestic consumers moved to a 3<sup>rd</sup> party control business.

The Discount Club

#### trol Shared economy

Wadebridge

Renewable

Energy

alt

Taking back control became the mantra of 2017. One community took this to an extreme and took control of their local energy system. They developed a local energy company based on sharing economy principles. The whole community invested for the long-term in energy infrastructure (electricity generation, heat networks, energy storage and eventually shared autonomous vehicles). Underpinned by smart data, monitoring and control, each resident was allocated an energy allowance which they could use or trade for energy, money or something else, like time or skills. Benefits were shared locally, and often reinvested in projects such as home energy efficiency measures or local amenities. The model worked and gained national interest. It was also replicable. Seeing the benefits other communities followed suit. Local inter-community trading soon followed. Soon this became the dominant route to building new energy infrastructure and supplying energy. In time, 50% of domestic consumers moved to a local energy model.

> Grantham Institute Climate Change and the Environment

This study examined two new energy businesses that could address these issues

on and specific drivers for these new energy business

Engaged

consumer



Back to this slide. Everyone loves this sort of slide.

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#### REGULATORY BARRIERS

- Designed for the old centralised, inflexible energy system - few players, set biz models
- Governance framework privileges incumbents' interests
- Intransigence is built in but regs need to support rapid change
- Regulator taking a piecemeal approach to intervention (embedded benefits review "like the Empire Strikes Back")
- Very limited space for diversity and innovation in biz models
  Climate change not adequately reflected in
- Climate change not adequately reflected in decision making

#### Imperial College London

#### **Energy business models**





#### So what do we need instead?

1. Principles based network charging

#### PROPOSED CHARGING PRINCIPLES

- In addition to the primary functions of being cost reflective and ensuring fair competition, the charging regime should:
- Drive decarbonisation
- Enable innovation
- Reduce long term network costs
- Encourage local network balancing
- Be transparent and inclusive
- Take a holistic approach



#### So what do we need instead?

2. Representation for climate change, communities and emerging business models in the governance framework for energy regulation

Who would do it?

Need legitimacy AND wherewithal

Idea:

A 'Futures Ombudsman', properly resourced, empowered to propose code changes, enter into dialogue with market entrants about their needs, ensure decisions are aligned with climate policy etc?



#### So what do we need instead?

3. Regulatory space to experiment with novel business models and alternative charging methodologies

Can't discover the optimal network charging protocols without experimentation in the real world, which is almost impossible currently Domestic electricity consumers are most protected class of consumer in UK law, yet still being ripped off - need Ofgem to recognise need to try alternative approaches

Idea:

Relax regulatory compliance for scale innovation trials with non-profits?



# thank you

Leo Murray, Director of strategy