



Resolving the Challenge of Net ZERO Carbon workshop – Gloucestershire County Council 6 February 2020

Notes of the Challenge and Solutions discussions

The following notes set out the main points emerging at the workshop group discussions and round table discussions on the challenges facing local authorities and the potential solutions.

1. Challenges

The main challenges for local authorities identified at the workshop were as follows:

(a) Grid and network

- Developing innovative solutions to grid and network capacity constraints and flexibility.
- Renewable energy generation with battery storage to avoid grid constraints.
- Oldham MBC involved in Interreg North West Europe project – RED Wolf (Rethinking Electricity Distribution without Load Following).

(b) Communities and people

- Effective methods/means of engagement and communication with people/citizens.
- Innovative IT based solutions to encourage behaviour change.

(c) Domestic and commercial retrofit

- New business models for domestic and commercial retrofit (funding).
 - Bonds
 - Pension funds (LGPS)
- Decarbonising heat – gas decommissioned in new developments by 2025 (Bristol City Council's ambitious targets to decarbonise heat and ban petrol and diesel vehicles by 2030).
- Working with private householders.
- What are the best technologies/mix – optimum solutions.

(d) Planning, policy and regulation

- Complexity of the whole agenda.
- Planning for ambitious targets with no clear pathways ahead.
- The planning system and building regulations (not as large a problem as retrofit).



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- Inconsistency in local plans – particularly 2-tier local authorities.
- Prohibitive policy and regulatory environment (BEIS/Ofgem/National Grid/DNO/DSOs).

(e) Social inclusion

- Climate Change Strategies – Dealing with fuel poverty targets at a household level (what are the most effective interventions?).
- Fairness and social inclusion – impact of energy transition on those least able to afford (fuel poverty/legacy costs of the fossil fuel energy system).

(f) Transport

- Modal shift in transport (e.g. public transport use, car sharing, behaviour change).

(g) Risk/fiduciary duty

- Risk to public funds/lack of resources and pressures on capital and revenue budgets – the costs of failure (financial/reputation).
- Should local government be involved in projects/activities that are essentially research and development exercises?
- Learning from mistakes/failures – knowledge transfer. How do we do this better and share resources and expertise?

2. Solutions

Following the group discussion on challenges facing local authorities, the workshop participants broke into three round table groups to discuss potential solutions to a number of predetermined problem statements as follows:

Problem statement 1: *“How do you make the retrofitting of residential properties to minimise carbon emissions financially viable?”*

Problem statement 2: *“As 36% of all carbon emission are created by transport, how do you reduce this to zero?”*

Problem statement 3: *“What needs to happen to ensure all new residential and commercial properties are built to a zero-carbon emission standard?”*

The notes below summarise the key points emerging from the group discussions.



(a) Problem 1 - Retrofitting Residential properties – Groups 1 & 2

- 'New' Green Deal – Previous Government model too expensive for householders but the principle was correct.
- Using social housing providers (local authorities and housing associations) to upscale domestic retrofit.
- Develop models to test optimum solutions which can be rolled out at scale.
- How do we develop business models which are effective without adding unnecessary costs to household bills?
- New Energy Company Obligation (ECO) – CESP and CERT were effective but need to be much more targeted towards local authority area base schemes.
- Need for transparency.
- Lobbying Government.
- Soft Loans to match gap funding to achieve net zero.
- Different types of properties and developments with many tenures – needs effective solutions i.e. flats and blocks of properties with rented and homeowners.
- Carbon gap – the costs of savings. Where will this be funded from? E.g. look at the last 10 years of Government programmes/initiatives.
- What will costs' and payment profile look like projected forward 10 years?
- Can costs be recouped through energy bills/service charges?
- Importance of developing local supply chains to deliver (timescales, skills and training, mobilisation, procurement, certainty for planning and delivery, economic development).

(b) Problem 2: Transport to net zero – Groups 1 & 3

- Develop more park and ride schemes and innovative approaches to local transport e.g. e-bikes.
- Integrating different modes of transport.
- Increasing car parking costs – e.g. workplace parking/on street parking charges.
- Differential charging for types of vehicles e.g. diesel/old cars (what about electric vehicles. Should they have beneficial treatment? Is this an issue of social inclusion?)
- Converting car parks to solar energy – car park solar canopies.
- Bespoke electric vehicle charging and bus connectivity areas/hubs.



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- Electric mini-buses for community/individual use – developing transport apps as per Oxford and Sittingbourne (Kent) to determine bus routes and journeys.
- Private sector encouraged to develop EV charging points.
- Providing more funding for EV infrastructure.
- 50:50 requirement on EV charging for residential developments.
- Freight and commercial transport – Develop ‘last mile’ delivery hubs. Final deliveries are smaller and don’t require large freight so they can be made by e-bike/local transport.
- Worcestershire CC have developed care for electric cars.
- Local authority electric fleet (i.e. cars) made available for community hire/use in evenings and at weekends.
- The need for all solutions to be effectively linked into the local transport plan and local plans.
- Need to develop effective solutions for rural communities where car use is still essential and public transport less available. Think about transport hubs and integration to reduce the need for car journeys overall.

(c) Problem 3: New Residential and Commercial development to get to net zero – Groups 2 & 3

- National Planning Policy Framework needs to be more ambitious.
- Local plans need to be effective and have teeth otherwise developers will not comply.
- Building Regulations need to be tightened up (current review by Government does not look promising) and needs to be more proactive with effective enforcement.
- Fabric and technology solutions need to be defined and rolled out.
- Develop ‘Allowable Solutions’ so that more resources can be put towards zero carbon projects/initiatives and offsetting.
- What about the market cost of properties? Will this be seen as unaffordable?
- Can central Government meet the additional costs of making developments net zero i.e. additional building regs costs to developers.
- Cost/benefits to homeowners of higher prices versus savings on energy and utility bills.
- Think about financing solutions. Lenders/mortgage companies to offer preferential lending over longer timescales for zero carbon/low carbon homes with higher EPC ratings.
- Importance of certainty and consistency in central Government policy to send the right signals to the market.



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- Introduce a Climate Levy on new developments to fund net zero.
- Make Distribution Network Operators (DNOs)/Distribution System Operators (DSOs) responsible for costs and solutions (infrastructure, storage etc.).

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