

APPROACHES TO LOCAL AUTHORITY DECARBONISATION PLANNING

MILLER
Research Evaluation Consulting

NETHERWOOD
SUSTAINABLE FUTURES
Sustainability Governance Policy Practice



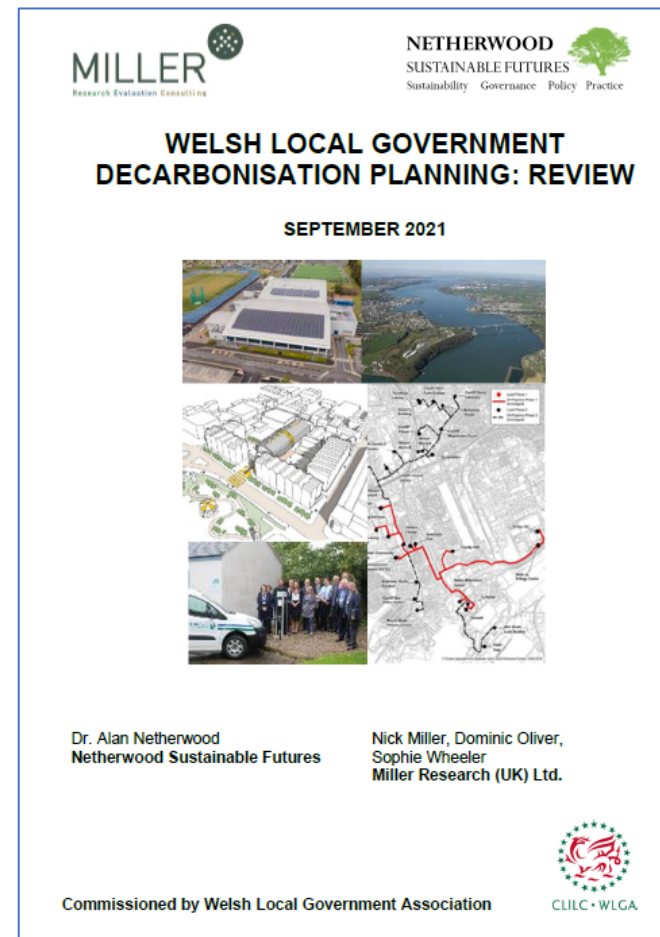
OVERVIEW OF THE RESEARCH

- Approach
- Scope & Ambition
- Decarbonisation Dimensions Model
- Governance
- Interventions in Plans
- Measurement & Progress
- Support Needs & Case Studies
- Recommendations

DISCUSSION

Aims of the session

- to provide an overview of the research
- to discuss support needs and recommendations(still draft)



THE RESEARCH

Research Team

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Schedule

Research
conducted July
–Sept 2021
Workshop 9th
Sept
Draft Report
15th Sept

Research Methods

For 22 local authorities

Documentary Analysis:
Plans*; Progress Reports
Internal Reports;
Web-based material.

22 one to one
discussions.
(Diolch/ Thankyou!)

Follow up email

& smartsurvey for
workshop

*Note: of 22 authorities 8 plans were still under development and of the remaining 14, 3 are being refreshed as a result of climate emergency declarations – therefore broad observations are made from the plans and associated reports available. This is a snapshot in time.

Research Themes

- Scope & Ambition
- Interventions
- (specific actions)
- Governance
- Measurement
- Progress
- Partnerships
- Gaps & Needs
- Emergent Practice

Engagement

Expert opinion (leads) with
some senior officers

22 authorities were engaged

50 individuals in 1-1, group
and workshop discussions.

SCOPE & AMBITION of Decarbonisation Planning

WIDE RANGE OF DEPTH AND SOPHISTICATION

- some have a **very narrow focus on small number of operational actions** on emissions reduction with targets in areas of traditional practice and influence.
- many have **20-50+ interventions** for operations, organisation, and partnerships – but focused on organisational, not territorial emissions
- others provide a **costed business case for organisation -wide decarbonisation** programme with associated actions
- a small number have **strategic pathways** to decarbonisation with scenarios and action plan, including some **territorial level activity**

OBSERVATIONS

- **baseline measurements dominate** some plans and breadth of contributory decarb activity by the Council is not reflected in some plans
- most plans are strong on ‘operational activity’ of local government as a **service provider, manager of estate, procurer of goods and services**
- the **baseline and emissions report is only a small part** of decarbonisation planning for some – but the main focus for others.
- many plans include references to **existing projects, initiatives** which contribute to decarbonisation in the community, highlighting the Council's **positive performance** on this agenda.
- less evidence of activity planned on ‘territorial decarbonisation’ through local government’s role as a **place shaper; provider of infrastructure; shaper of societal behaviour; influencer of partners and Government;**
- Desire from some local authorities to move into ‘**territorial**’ **space** and address both 2030 and 2050

GOVERNANCE to deliver Decarbonisation Planning

OPERATIONS DRIVEN

- **7 have limited or no corporate working on climate change**, with progress predominantly officer led on reducing operational emissions, with some member involvement.
- Reporting of progress is to **senior leadership and corporate management teams** or similar.
- Many recognise the need to establish more robust organisation-wide approaches and are working towards this. **emissions reporting** is a key driver for many – but this may limit ambition to operational response?

WORKING GROUP DRIVEN

- **6 of 22 have corporate working groups that are predominantly officer led**
- with **Head of Service or Director reporting progress to Cabinet/Executive/ Council**. Lead Members are involved.
- In many the focus is reporting on progress of projects which contribute to decarbonisation as well as reducing organisational emissions.
- Some are developing programmes of work and aspire to develop Programme Boards.

PROGRAMME DRIVEN

- **9 of 22 have established corporate working on decarbonisation**, including **cross-party working groups and committees**.
- Council's **identifying additional resources (staff and finance)** to address the challenge
- **leadership (political and executive) getting stronger** in many (this is a big change from previous arrangements)
- 6 of these have **established programme boards including CEOs, MDs, Cabinet Members and Leaders of the Council**.
- There are strong links to **performance management, financial management and business planning** – as well as key policy areas including development planning and economic development.
- **Scrutiny** are involved in monitoring progress.

CITIZEN INVOLVEMENT

- citizen involvement in consultation and engagement on priorities for decarbonisation. Limited number of commitments for ongoing more **formal citizen involvement** in Plan delivery.

PARTNERSHIP ACTIVITIES

Broad range of actions with multiple partners in the following areas of delivery:

- housing re-fit
- technological advice
- energy procurement
- food & carbon
- recruiting regional staff resource
- strategic large scale low carbon energy projects
- research on baseline data and technology
- pension funds
- sequestration
- **Partner 'lists'** feature as part of the strategic context for decarbonisation. (City Region; RSLs; private sector; Wales Energy Service cross border partnerships etc.)
- Plans need to a lot clearer on **potential partner contributions** to reaching net zero – uncertainty on the role of **regional PSBs or Coordinating Joint Committees**
- PSBs need to progress from talk and mapping to **specific collaborative interventions** on the ground
- Most planning is still focused on **the Council role**, rather than a collaborative strategy for the territory.

Decarbonisation Dimensions Model

(a work in progress)

Dimension	Scope and scale of decarbonisation activity in the organisation and authority area
Compliance	The authority is focusing on responding to reporting guidelines and focusing on cost efficiencies for decarbonisation on a case by case basis where the opportunities arise. A Plan has been brought together to meet reporting requirements.
Operational	The authority is building on its existing activity to deliver decarbonisation through reduction of carbon and other GHGs across operations driven by expert internal advice. A Plan already exists with an internal focus and is being refreshed to meet 2030 guidelines – and report on a Climate Emergency Response
Organisational	Cross-organisation working groups are being refreshed/established to co-ordinate and report on the organisation's performance in this area. A new Plan has been/is being developed to report on organisation-wide activity- to meet 2030 guidelines – and report on a Climate Emergency Response. Communities and staff are engaged by the authority to understand decarbonisation and how they can contribute
Corporate	New approaches to corporate working are being established ensuring decarbonisation is part of business planning, financial planning, impact assessment and decision making. Senior members and officers are driving corporate change to improve performance on decarbonisation and measure impacts and reductions across portfolios.
Project	The authority is driving and implementing projects in the community to reduce its own, and the authority areas' carbon footprint. It is using its capital programme, external funding and partnerships to deliver decarbonisation through infrastructure, landscape, townscape and community projects.
Partnership	The authority is seeking to use its influence outside the organisation to create the conditions for other bodies, and communities to decarbonise. It is playing a community leadership role through its funding, influence and expertise to build capacity in its partnerships to decarbonise.
Place	The authority is working on place – based plans in individual towns, communities and landscapes to identify opportunities for decarbonisation, ways to deliver these to benefit the community and reduce the carbon footprint of the authority area.
Territorial	The authority is bringing partners together to understand the carbon footprint of whole authority area (the territory), identify ways to decarbonise at this scale and working with partners on territory-wide measurement and projects to achieve this.
Strategic	The authority has adopted a strategic approach to working with UK and Welsh Government, the private sector, utilities, transport partners, neighbouring authorities on developing the strategic and financial structures for societal decarbonisation within its boundaries and region.

Energy

- internal GHG emissions focus
- in areas specified in WG guidance on reporting (do what you are measured on?)
- areas of strong existing activity on re:fit and estate management
- some local area energy planning and projects within the local community
- limited reference to wider strategic work on energy planning.

Transport

- development of EV fleets and charging within Council assets, with commitments to develop evidence and a business case for EV charging network infrastructure
- interventions and targets to tackle staff travel and delivery on the wider policy aims of active travel and public transport
- a small number of plans have specific interventions focused on research and evidence for hydrogen vehicles
- only limited reference is made to wider strategic work of regional and local transport planning. The focus is firmly on internal transport emissions

Land Use

- role of trees in sequestration, - numbers of trees – to authority wide strategy.
- little focus on role of vegetation and soils.
- large scale renewables large role in using land for decarbonisation, but this needs to contribute to carbon baseline
- reference to green infrastructure plans and strategies provide no details of specific interventions
- the role of land holdings, tenant farms, schools, asset transfer features in very limited number of plans
- this an undeveloped and new area for many Councils related to Decarbonisation Planning?

Procurement

- commitments to measure Scope 1, 2 and 3 emissions which include emissions from procured goods and services
- small numbers of authorities have listed specific interventions related to procurement in their plans (even though this is the most significant contributor to emissions.)
- limited actions and commitments to re-organise approaches to procurement strategy, contract management, processes and supplier network feature in a small number of plans

*Note: this reflects the specific interventions listed in the Decarbonisation Plans and is not an audit of activity; this data shows how Councils are 'framing' their work on energy and decarbonisation in their Plans

MEASUREMENT of the Carbon Baseline and Progress on Scopes 1,2,3

MEASURING THE BASELINE

Focus of most plans is on measurement and baselining activity around scopes 1 / 2

Scope 3 is a major measurement challenge – hard to measure procurement, investment, commuting/business travel, grey fleet and land use

Concern that baseline may become a distraction, diverting attention away from action and wider decarbonisation planning

Use of external bodies to measure baseline may build capacity problems for future monitoring – need for an accountability framework?

Potential regional role for measurement of some variables – but needs co-ordination.

PROGRESS: GENERAL

Spiky profile of progress: Half have adequate plans in place, 3 need work on scope 3 and 8 need finalising. Baseline profile similar.

No common vision of NZ or clear route to getting there.

Corporate-driven plans slower to start, but may bear fruit as process develops

CE declaration associated with higher levels of activity

Information sharing on an informal basis at present – although CLAW helpful. Need for mechanism to formalise

focus on organisational emissions rather than territorial/sectoral carbon which may impact on WG NZ plans

PROGRESS: SCOPES 1 AND 2

Good progress generally around buildings and fleet – especially where supported by WGES / Re:fit e.g. Street lighting and energy efficiency

Many focused on energy generation:

- barriers of grid capacity and cost
- Dissatisfaction that generation ineligible for baseline

Some best practice around 21st Century schools design and roof-mounted solar.

Emerging progress on housing and social services

Low carbon heat is a wicked problem – especially for rural

Good progress on light commercial EVs and charging networks on public estate

Heavy vehicle choices more challenging re technology choices (EVs hydrogen) and investment timings

PROGRESS: SCOPE 3

Scope 3 presents some major challenges to authorities

Procurement – accounts for 60% of emissions, but major challenges.

- capacity and capability constraints in process
- contract management and monitoring
- Competition for skills

Inconsistencies and unintended effects – e.g. spending on local food

NPS Contracts require national / regional action; potential use of TOMS?

Active travel underway – aided to some extent by Covid-19

Grey fleet is a front of mind challenge for most authorities: potential for shared solutions

Land for sequestration being explored, but may need catchment/ landscape level approach

SOPHISTICATED SET OF SUPPORT NEEDS FROM DECARBONISATION PLANNING COMMUNITY

STRATEGIC NEEDS

NATIONAL

- clarity on **what is meant by Net Zero** for
- supply chain co-ordination
- regional low carbon infrastructure;
- developing markets - tech and skills
- regional energy hubs
- leadership skills
- pensions investment

LOCAL

- a wider territorial emissions focus
- place- based approaches to climate change
- regional approaches to infrastructure
- climate risk and adaptation
- democracy - assemblies, commissions and citizens assemblies

EVIDENCE AND MEASUREMENT NEEDS

- toolkits for **Scope 2 and 3 emissions**
- area –wide review of **land use for sequestration** potential
- monitoring **carbon impact of procurement policy** decisions

OPERATIONAL ADVICE NEEDS

- **hydrogen infrastructure**
- **grid connection** to support large scale renewables
- **electric vehicle infrastructure**
- **due diligence on emerging technology** at a national level

OPERATIONAL SKILLS NEEDS

- **regional skill sets** to address supply chain emissions
- **technological expertise** and input EV, Hydrogen with implications for procurement
- **technical project management skills** with experience to deliver low carbon projects

BUSINESS CASE DEVELOPMENT

- methods successful **financial business cases** for decarbonisation interventions
- **carbon sequestration approach** to achieve both decarbonisation and nature recovery

SKILLS TO SUPPORT CROSS-ORGANISATION DECARBONISATION

- **training in lobbying skills** to challenge norm and pursue decarb approach
- training in effective **methods of screening; assessment; options appraisal; challenge; business case; decision making** (not just literacy)

WHAT WORKS?

- **effective models of corporate working** and governance including corporate coordination with clear lines of responsibility
- effective ways of **monitoring progress across multiple projects** and portfolios of work
- **observatory/ website** to support decarb action through sharing data/practice and outcomes

PROVIDING RESOURCES

- **dedicated staff resources** to address multiple strategic, organisational, community and operational aspects of decarb
- **core funding** (capital and revenue) for decarb initiatives

EXAMPLES OF INNOVATIVE PRACTICE

from Decarbonisation Planning – 40 examples

Engagement

Blaenau Gwent **Climate Assembly** with Housing Associations identified county wide priorities with 50 residents.

Merthyr Tydfil **carbon literacy training** to spread awareness in LA. Are sharing training with Monmouthshire.

Monmouthshire **Community Climate Champions**. Addressing wider community emissions.

Carmarthenshire **Walk the Global Walk** initiative to engage young people in discussion about meeting UN SD Goals.

Transport

Pembrokeshire **Hydrogen Fuel Cell Electric Vehicle** (HFCEV) research and pilot.

Anglesey **purchase of second-hand vehicles** to retain flexibility between EV/HVs.

Monmouthshire County Council running test of **Riversimple Hydrogen Vehicles**.

Blaenau Gwent **Council depot** for trucks and vehicles: business case factored in EV charging, skills training for maintenance.

Asset Management

Torfaen engaging with housing associations on **greening retirement housing schemes**

Conwy **Future of Office Working Project** - informing rationalisation of office space and staff commute, involving HR and asset management.

Wrexham's **Community Health and Wellbeing Facility** 1970s Crown Building Office Block converted into energy efficient health and well-being centre. Due to open in 2022.

Carmarthenshire carbon emissions across estate. partnership with **Ameresco** to identify range of measures to reduce.

Vale of Glamorgan worked with industry to ensure new school design as part of **21st century schools** was low and net-zero carbon design.

Heat Networks

Bridgend Town Heat Network formation of a subsidiary company with a budget of £3.4m in the capital programme for phase one of the network.

Cardiff Bay Heat Network (£15m) new network piping heat from Cardiff Bay's incinerator to public buildings across Cardiff

Gwynedd Feasibility study Tanygrisiau, Blaenau Ffestiniog **Low Carbon Heat Network** multi-sector pilot project.

RCT Taffs Well Thermal Spring to heat rooms in **Ffynnon Taf Primary School** with costings estimated to be £3m.

EXAMPLES OF INNOVATIVE PRACTICE?

from Decarbonisation Planning (2)

Ecosystem Services

Cardiff **Coed Cardydd** a city-wide tree planting scheme with a 839 ha target - focused on carbon, flooding, water management and resilience.

Levers and tools

Denbighshire **constitutional changes** as a result of the Climate and Ecological Emergency Declaration.

Rhondda Cynon Taff working with Cardiff University to develop a **dashboard for an emissions baseline**.

Procurement

Denbighshire **social care micro-business approach** - decarbonisation part of business case for social care grants in neighbourhood schemes

Conwy **Net Zero Supply Chain Project** with CLES to inform Scope 3 baseline.

Town development

Powys **Place Planning through SPG** focusing on carbon, climate adaptation and biodiversity. Newtown approach to be repeated in 9 other towns across Powys

Denbighshire **Rhyl Town Centre Gateway Scheme**. c.644 sq. m of new green space through the purchase and demolition of redundant property - carbon as part of business case.

Use of theory of change to frame case studies

- a description of the **activity** itself
- the **inputs** that were required to develop it
- the **outputs** that resulted from the activity
- the short, medium and long term **outcomes** of the activity
- the **impact** that the activity has/will have both internally and externally

Energy Generation

Carmarthenshire **Ynni Sir Gar** a social enterprise developing community renewables.

Pembrokeshire Fusion Energy Production (STEP) nominating site for **fusion power station** (UKAEA)

Pembrokeshire Milford Haven : **Energy Kingdom (MH:EK)** £4.5 million project exploring the role hydrogen could play in a decarbonised energy future.

Pembrokeshire **Smart Local Energy System** project to integrate hydrogen and other renewable technologies in a smart energy system

Solar Farms: Cardiff Council : Lamby Way Solar Farm 9MW ; Carmarthenshire Hywel Dda UHB Solar Farm. Caerphilly: 20MW solar farm on previously private land taken on by council. Monmouthshire Oak Grove Solar Farm. . £4.5 million

Pembrokeshire **Celtic Sea offshore project** 10 -80 GW capacity

Flintshire Landfill Gas Engines at Standard Industrial Estate and Brookhill in Buckley.

RECOMMENDATIONS TO SUPPORT DECARBONISATION PLANNING

WLGA co-ordinated Activity

climate change policy forum /officer group-
strategic focus to
complement the work of
existing groups and Panel.

joint bespoke member and officer training e.g. citizens assemblies, climate commissions, or leadership training.

national online workshops
e.g. coordinating support for low carbon infrastructure

Decarbonisation Panel Activity

policy advice – e.g.
decarbonisation in
regeneration planning and
place planning

regional integration workshops –e.g. delivery
system analysis for
infrastructure, transport, land
use or procurement.

- stakeholder mapping for Net Zero 2030 & Net Zero 2050
- territorial emissions reduction
- grid capacity and local energy networks;
- low carbon heat in rural areas;
- technical guidance on fuels and vehicles
- smart metering technologies;
- divestment for zero carbon investment;
- skills development
- home-based working
- integrated renewables finance

subject specific online learning sessions –e.g.
measurement of supply
chain emissions

development of tools and toolkits –e.g.
carbon sequestration
baseline

peer to peer learning –
e.g corporate
programmes; financing
2030

individual authority support – e.g. supporting
scrutiny enquiry on
territorial decarbonisation

case study development – e.g.
theory of change
demonstration visits to
webinars , peer to peer
learning