



CITY SCIENCE
delivering decarbonisation

**RHAGLEN LEAP
RHANBARTH DE
ORLLEWIN CYMRU**

**SW WALES REGION
LAEP PROGRAMME**

Diweddariad
Update
10/2023

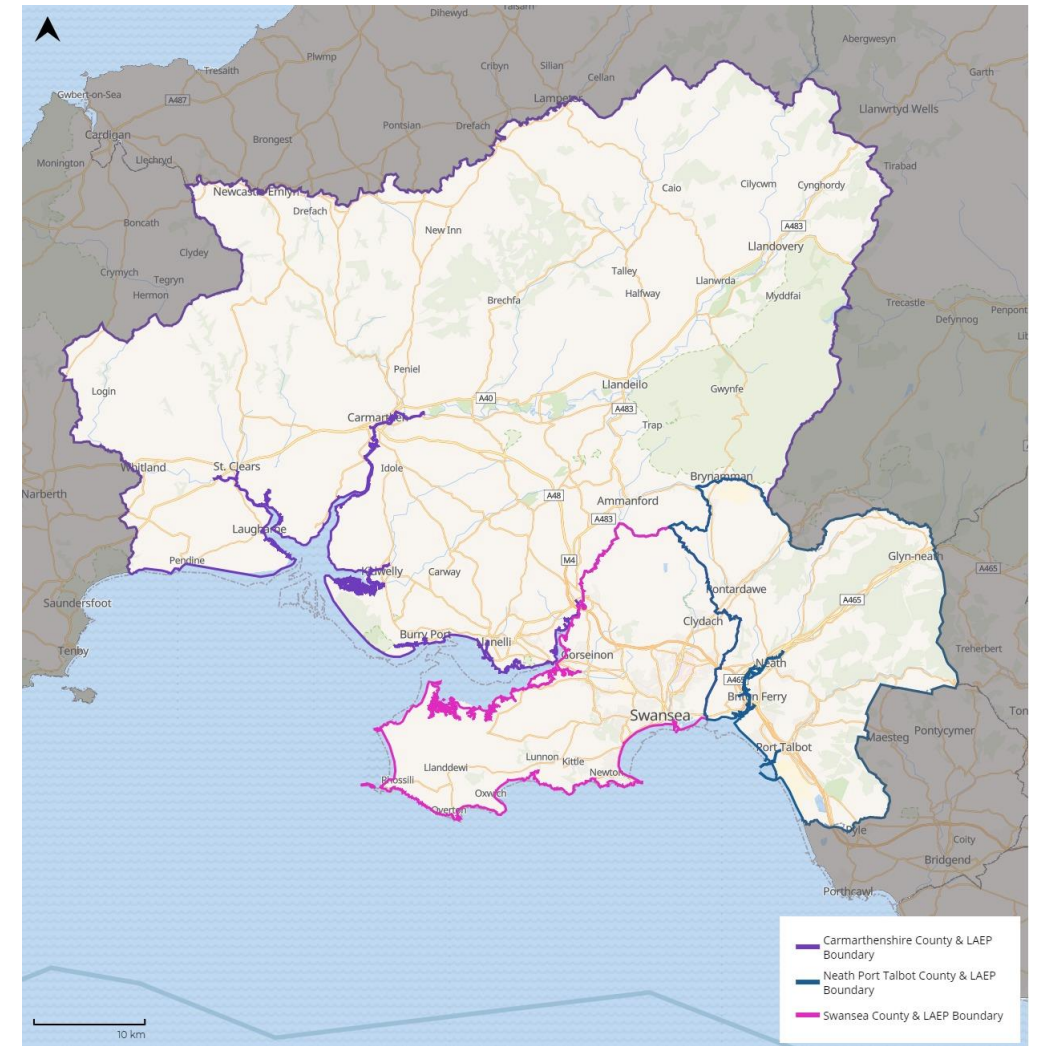
TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

SW WALES LAEP PROGRAMME

City Science are producing three LAEPs for SW Wales – Carmarthenshire, Neath Port Talbot and Swansea. Although produced separately and tailored to the local landscape, we will ensure that the three LAEPs are aligned and consistent.

Local Area Energy Planning is a detailed, comprehensive process designed to identify the most effective pathway(s) to decarbonising the local energy system, and set out and agree a Local Area Energy Plan (LAEP) suitable for implementation. Local Area Energy Planning is a whole-system, evidence-based process, led by Local Government and developed collaboratively with defined stakeholders.

The LAEP projects started in February 2023 and run until February 2024.

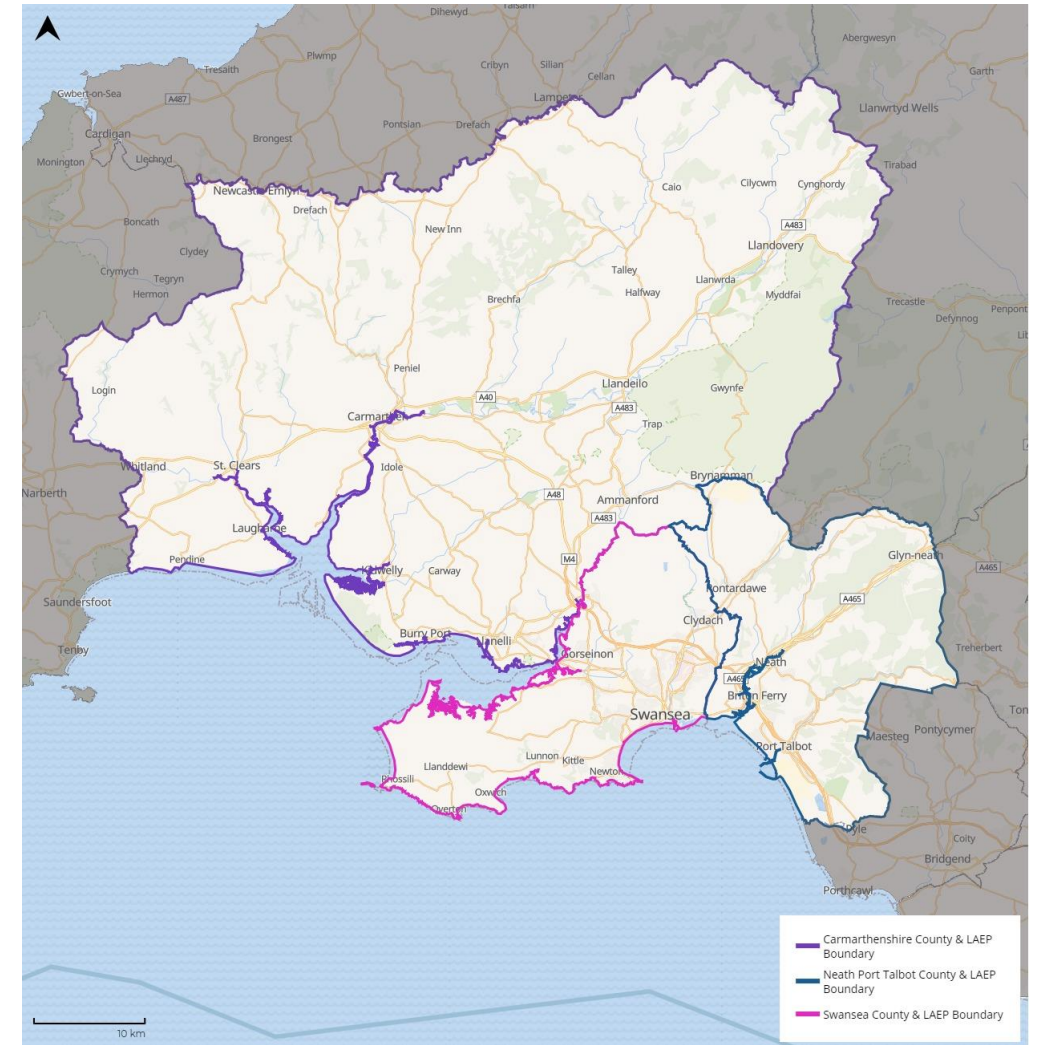


TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

REGIONAL ALIGNMENT

CJC/LAEP Interaction

- Regional Directors' Group (which reports into CJC) is the regional steering group for LAEP, ensuring alignment with regional plans.
- Whilst plans are local, they have been developed using regional collaboration and themes aligned with regional energy work and so critical that CJC remains aware and involved of the development.
- CJC is key stakeholder and individual local councils/cabinets will soon be seeing first draft LAEPs for sign off and this is part of early engagement for that process.
- Whilst many of the scenarios and levers are local, a large number are regional (skills, transport, housing, infrastructure) and so ensuring the LAEP remain connected and transparent with regional governance structures is also vital.
- Whilst CJC is not a governing body for LAEP process it is prudent given the stage in the process to include a very brief update on the progress to date and key next steps.
- There will also be a regional and national "roll up" of all the LAEPs to create for WG a national LAEP, but with a regional view, to help grid/infrastructure/investment evidence base.



TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

PROGRESS THROUGH THE STAGES OF THE LAEP

Stage 1: Held regional and local inception meetings and produced regional and local inception report.

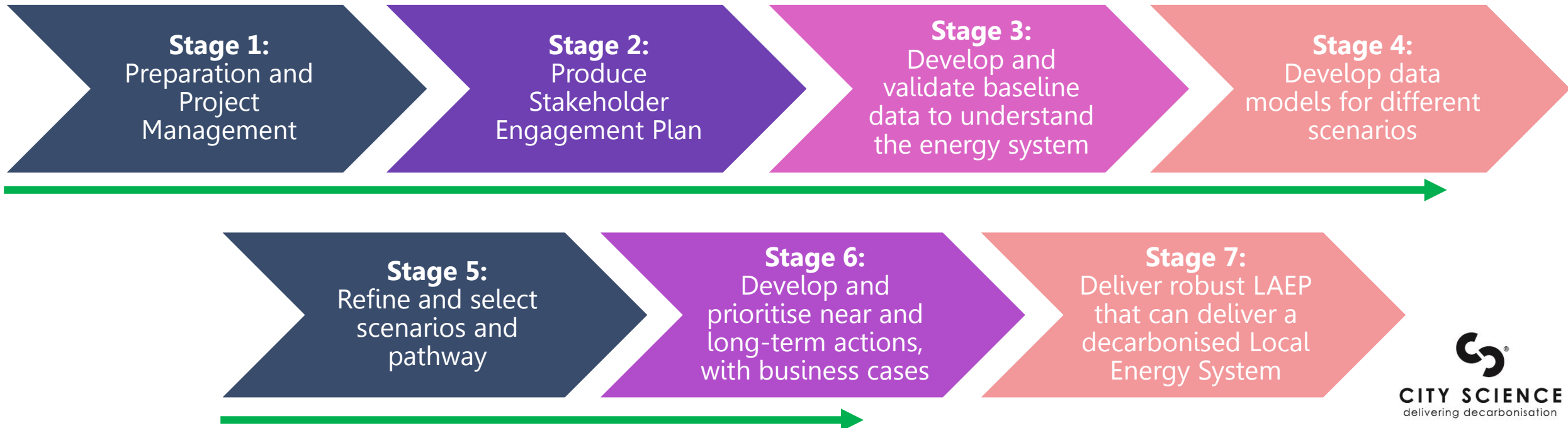
Stage 2: We held Stakeholder Engagement Planning Workshops and produced the resulting Stakeholder Engagement Plans.

Stage 3: We completed a policy review, conducted all the local area interviews, consolidated and analysed baseline data, and produced, presented, revised and finalised the Baseline Reports.

Stage 4: Held Scenarios and Modelling Approach Workshops, tailored the modelling and produced and presented the outputs of the modelling.

Stage 5: Held regional Wider Factors Workshops and refined the pathways.

Stage 6: Held Actions Workshops, Prioritisation Workshops and are currently running Focus Groups and finalising the actions.



TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

STAKEHOLDER ENGAGEMENTS

The LAEP process will include up to 30 stakeholder engagements. This page and the next details the 26 stakeholder engagements chosen at each LAEP project stage, with 4 sessions held back as contingency.

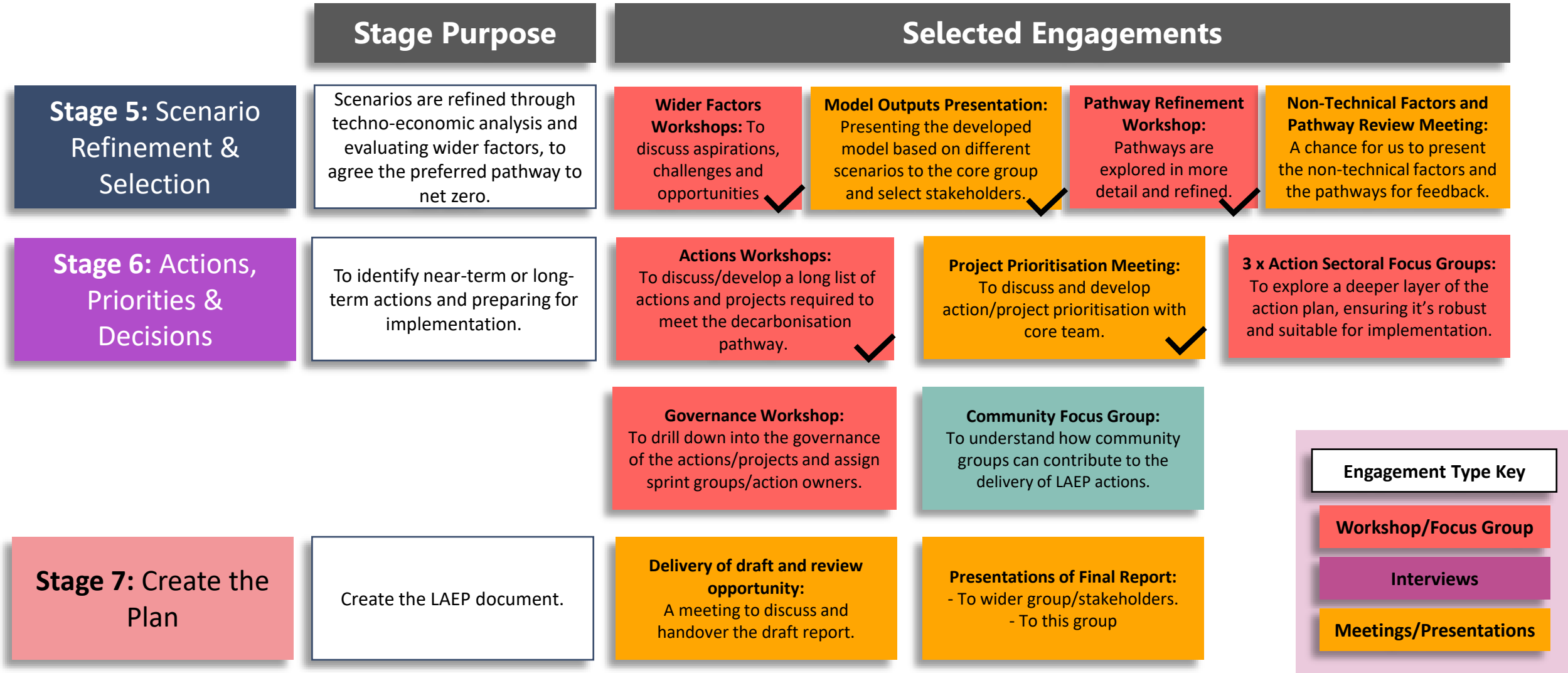
	Stage Purpose	Selected Engagements	
Stage 2: Stakeholder Engagement	Mapping of stakeholders and defining engagement activities.	Stakeholder Planning Workshop: A workshop to conduct stakeholder mapping and develop the Stakeholder Engagement Plan. ✓	
Stage 3: Representing the Local Area	Consolidate relevant data sources to develop a robust baseline model of the local energy system, validating outputs with stakeholders.	10 x 1:1 interviews with priority external stakeholders: To provide baseline information on available datasets and policy gaps. ✓	Stakeholder Baseline Review: A workshop to share the developed baseline with the core project team and key stakeholders. ✓
Stage 4: Modelling Options for the Future	Pull together data models for different scenarios that decarbonise the local areas.	Scenarios Workshop: To explore different potential futures scenarios and agree on the chosen scenarios. ✓	Modelling Approach Meeting: To refine and agree the modelling approach. ✓

Engagement Type Key

- Workshop/Focus Group
- Interviews
- Meetings/Presentations

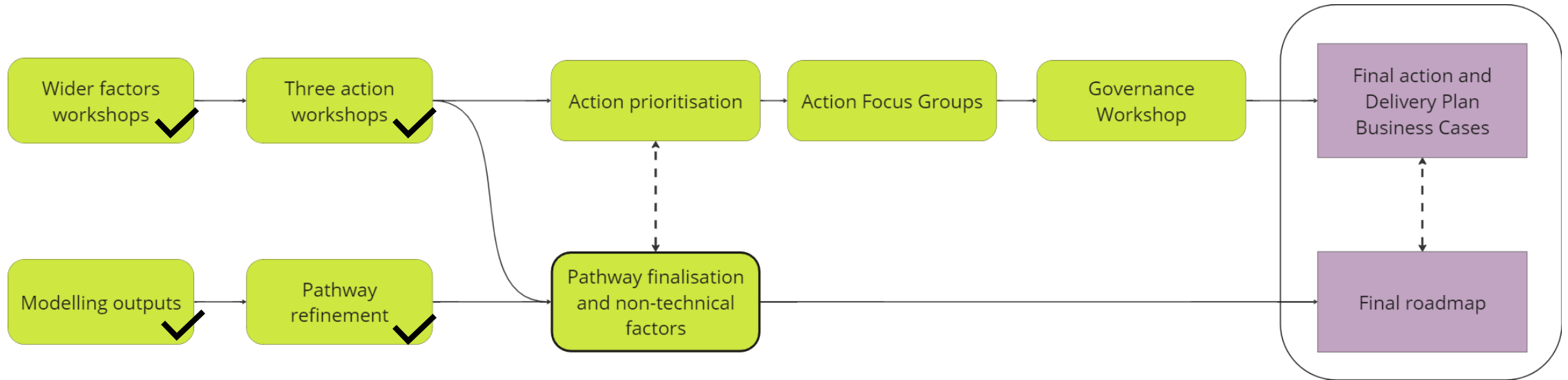
TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

STAKEHOLDER ENGAGEMENTS



TROSOLWG O'R RHAGLEN / PROGRAMME OVERVIEW

HOW ENGAGEMENTS FEED INTO FINAL LAEP



CYNLLUNIO GWEITHREDU / ACTION PLANNING

EXAMPLE ACTIONS OUTPUTS

Five-year propositions: Actions up to 2027/2028



Whole building retrofit

Retrofitting properties is crucial to both tackle fuel poverty and reduces strain on the network. This will be prioritised in areas with high levels of poor quality housing and where there is expected to be little electrical network reinforcement.

Capex: £45 million by 2028

Capacity: 6,000 properties retrofitted to EPC C by 2028



Develop onshore renewables

Deployment of onshore renewables will be crucial to reduce fuel poverty and strain on the electrical grid. Rooftop PV will be prioritised on social housing and new builds while ground PV and community onshore wind will be prioritised in identified unconstrained areas.

Capex: £150 million by 2028

Capacity: 30MW ground PV, 100MW rooftop PV



Decarbonise transport

We will prioritise transitioning council-owned vehicle fleet to ULEVs by 2030, with the target to reach 45% transitioned to electric or hydrogen vehicles by 2025.

Capex: £580,000 excluding installation

Capacity: Up to 10 MW EV charging capacity

Deploy heat pumps

Heat pumps will be prioritised in those places where there are low electrical grid upgrades required and where properties are not currently connected to the gas grid.

Capex: £31.5 million by 2028

Capacity: 5,000 heat pump installations

Electric grid reinforcement

The electrical grid will be reinforced in alignment with WPD's projected expenditure 2023-2028. This reinforcement is essential for the grid to be resilient to increased demand loads and to increased variability of supply from renewables uptake.

Capex: Up to £15.4 million by 2028

Capacity: Up to 600 MW by 2028

Industry decarbonisation and hydrogen

Working with industry to pilot hydrogen projects within Pembrokeshire.

Capex: £2 million on local electrolysers by 2028

Capacity: 12 MW of local electrolyser capacity by 2028

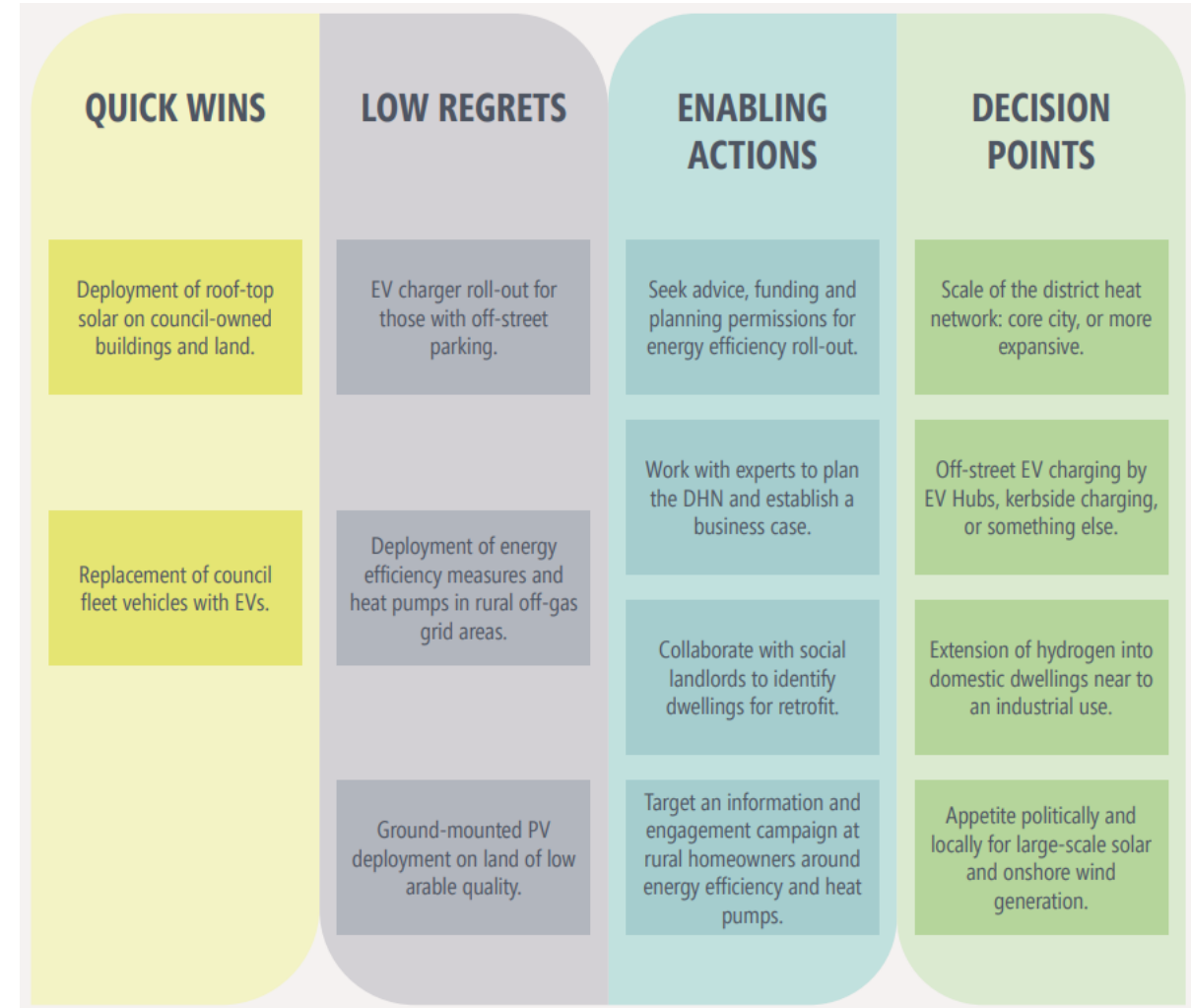


June 2022



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Pembrokeshire LAEP



Peterborough LAEP

CYNLLUNIO GWEITHREDU / ACTION PLANNING

EXAMPLE NUMBER OF ACTIONS PER CATEGORY

Transport
x 3

Retrofit &
Heat
x 4

Industry
x 2

Generation
x 3

Enabling
Factors
x 3

15 Actions per LA



CYNLLUNIO GWEITHREDU / ACTION PLANNING

EXAMPLE ACTION DETAIL

Timescale: Long Term Action		Theme: Demand Reduction
Action 1: Develop a strategic active travel network		
Overview	Identify and develop new greenways across the county to make active travel more accessible and attractive. The team will work with live sprint group to identify collaborative projects that are aligned with LTCP targets.	
Route Map Alignment	By 2030 the Route Map ambition is for a 10% mode shift of personal trips (from private vehicles to sustainable modes).	
Governance	Owner: local authorities Champions: Cycling Network, Lead Members, Councillors & the Universities' active travel champions	
Implementation Steps	<ol style="list-style-type: none"> 1. Use data to identify key opportunities/places that require active travel links, including any existing routes with gaps. Consider opportunities along canal routes (e.g. Wiltshire & Berkshire canal) 2. Identify any supporting mechanisms required e.g. traffic management. 3. Develop and agree key activities, milestones and develop a resource plan to provide clarity on action ownership. 4. Identify funding. 5. Initial design. 6. Stakeholder engagement/consultation/marketing campaign to gain feedback and support e.g. Slow Ways. 7. Detailed design. 8. Scheme delivery. 	

Funding Requirements	Explore existing funding pots (e.g. from developers, maintenance schemes). Identify new funding opportunities (e.g. via Active Travel England or the DfT). Additional opportunities include funding from local businesses (e.g. sponsorship or Corporate Social Responsibility budgets), crowdfunding, Sustrans and Workplace Parking Levies (WPLs).
Cost Benefit	Revenue Cost (Year 1): £50,000 Capital Cost: £100m-£125m Co-benefits: <ul style="list-style-type: none"> • Public health benefits of a shift to active travel. • Improving air quality. • Support more connected communities.
Risks & Dependencies	Ensuring joined up thinking (e.g. across geographic boundaries – both District, City and County). Ability to access funding and securing political and public support. This action also needs to be supported by complimentary mechanisms for instance cycle training (to address confidence and safety) and safe bike storage options.



CHAMAU NESAF / NEXT STEPS

Next Steps





DIOLCH
THANK YOU



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