



Llywodraeth Cymru  
Welsh Government

# Net zero carbon status by 2030

A route map for decarbonisation  
across the Welsh public sector

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.  
This document is also available in Welsh.

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## Purpose of the routemap

**This document provides a strategic overview of the key priority areas for action and milestones needed for the Welsh public sector to reach net zero greenhouse gas emissions by 2030.**

- › It does not set out the ‘how’, ‘who’ or the actions needed to achieve the milestones, it is a strategic framework to help assess what is in place and what is needed to get to where we collectively need to be, and to monitor progress over time.
- › The focus is the Public Sector’s own footprint, though acknowledging there is an important wider influence and leadership role. Organisations own action plans are likely to include other priority areas but the four areas set out here are the key ones to achieve the collective net carbon ambition.
- › It will guide the development of Public Sector’s contribution to future all Wales Low Carbon Delivery Plans.
- › It is not intended to reflect all the differences between sub-sectors and does not replace organisational action plans, but can support their development.



# Vision

By 2030, choosing zero carbon will be routine, culturally embedded and self regulating across the Welsh public sector.



# The Journey to net zero

## Moving up a gear 2021–2022

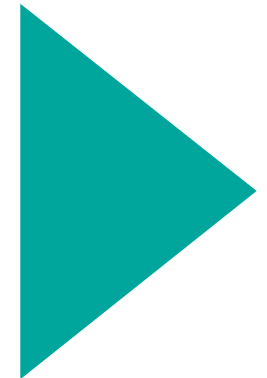
Where understanding the context and what needs to be done is vital, and where action needs to accelerate.

## Well on our way 2022–2026

Where there is an expectation that low carbon is becoming the norm and we are definitely on the way to a net zero Welsh public sector.

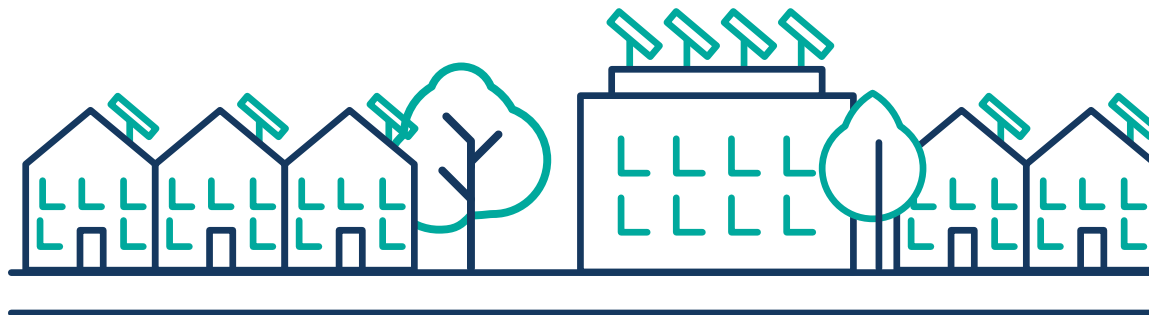
## Achieving our goal 2026–2030

Where choosing zero carbon has become routine, culturally embedded, and self regulating.



# A Thematic approach

Behaviours		Standards		Innovation	
Society	Individual	System governance	Use of resources	Models of service delivery	Technology
A compassionate society living in a high quality environment with reduced inequalities.	Values are redefined to encompass well-being linked to an acceptance of finite resources.	Well-being goals drive policy which supports individuals, society and organisations to behave in a sustainable, fair and health conscious way.	We live with the resources that the environment can support, instead of the 2.5 planets that we are currently using.	Models of zero carbon service delivery where citizens have control over their well-being.	Technology is an enabler of positive societal and environmental change.





# The Routemap: a strategic framework for change

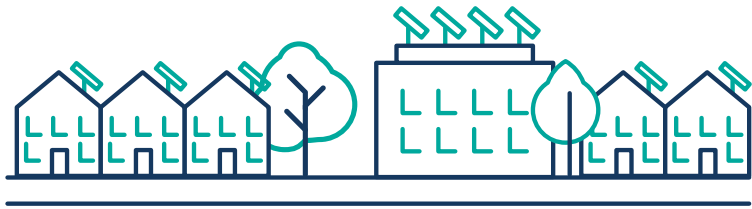
**Achieving our goal 2026–2030**

**Well on our way 2022–2026**

**Moving up a gear 2021–2022**

<p><b>We embed</b> value over cost. By doing so, society understands, accepts and expects that sustainability and climate action is integral to public services.</p>	<p><b>Staff and citizens demand</b> zero tolerance of unsustainable behaviour as it is socially unacceptable.</p>	<p><b>Self regulate</b> and feedback processes across the public sector. Sustainability is part of life.</p>	<p><b>Value</b> all resources including people’s time and the natural environment. Account and profile all resources for a no waste approach.</p>	<p><b>Tailor</b> citizen-centred, low carbon services. The public sector, society and the individual work together to reduce inequalities &amp; improve well-being.</p>	<p><b>Require and expect</b> low carbon technologies to be incorporated in all public sector services and products.</p>
<p><b>We integrate</b> action on climate change into our public facing engagement. We show how we appreciate the value of low carbon products, services and places.</p>	<p><b>Staff and citizens expect</b> to be able to make choices based on sustainability and well-being criteria when considering services and products.</p>	<p><b>Account</b> for climate change future impacts in all decision making processes. Life cycle costing is the norm in the public sector.</p>	<p><b>Model</b> business decisions so entire resource impact is accounted for. All resources need to include full life cycle carbon costings.</p>	<p><b>Collaborate</b> with cross sector partners to prevent disadvantage, promote well-being and develop sustainable joint service plans.</p>	<p><b>Enable and support</b> technology to allow the empowerment, equality and well-being of individuals.</p>
<p><b>We engage</b> with the climate change debate. The public sector explains its case for taking sustainability seriously and considers how it can impact on the wider society.</p>	<p><b>Staff and citizens understand</b> what you can do. You know you should act. You know you can make a difference.</p>	<p><b>Agree</b> on responsibilities, mechanisms and measures including legislation, regulation and public reporting of progress.</p>	<p><b>Research</b> how to use all types of resources better to enhance health and minimise waste. Identify, prioritise and address gaps in knowledge.</p>	<p><b>Explore</b> sustainable models. Increase investment to prevent disadvantage and improve well-being. Optimise benefit from nature.</p>	<p><b>Adopt and invest</b> in sustainable technologies. Reduce the risk of investment in new technology. Welcome innovation.</p>
<b>Society</b>	<b>Individual</b>	<b>System governance</b>	<b>Use of resources</b>	<b>Models of service delivery</b>	<b>Technology</b>
<b>Behaviours</b>		<b>Standards</b>		<b>Innovation</b>	

# Priority areas for action: emissions footprint



Buildings



Mobility and transport



Procurement



Land use



# The journey to net zero: Buildings



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## Achieving our goal 2026–2030

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All new public sector buildings are built to net zero standard, including supply chain impacts.

All public buildings are supplied with low carbon heat by 2030 and generate their own electricity where feasible.

The focus is no longer on buildings but healthy environments to live, work and visit.

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## Well on our way 2022–2026

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Firm proposals & business cases are in place for hard to decarbonise building types (e.g. complex hospitals) & shared spaces.

Transition to all new schools, colleges and offices built to net zero (and associated reduction in supply chain impacts). All remaining existing buildings will be highly energy efficient OR scheduled for replacement & renewable heat schemes will be rolled out.

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## Moving up a gear 2021–2022

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The climate impacts of our built estates are well understood.

Our construction programmes include mandatory net zero objectives.

Develop plan for hard to decarbonise building types (e.g. complex hospitals) and campuses (e.g. universities)

Scoping for Low Carbon Heat pilot projects and significant progress on remaining energy efficiency opportunities.





# The journey to net zero: Mobility and transport



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## Achieving our goal 2026–2030

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Citizen-centred models of service delivery reduces the need for travel by staff, visitors and service users.

Commuting and business travel takes place using Wales’ integrated public transport system is ultra-low emission, including our rail services. This is assisted by our aim to reduce the carbon footprint of buses, taxis and private hire vehicles to zero by 2028.

Where practicably possible, all new heavy goods vehicles in the public fleet are ultra low emission by 2030.

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## Well on our way 2022–2026

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Continued flexible working, use of local hubs and shared facilities, active travel and greater use of public transport significantly reduces car commutes and business travel in our working lives post-Covid pandemic.

All new cars and light goods vehicles in the public sector fleet are ultra low emission by 2025.

We will continue to work flexibly and make greater use of active travel.

We will understand the nature and use of our fleet, future patterns of usage, and a feasible technological pathway for an ultra-low emission transformation.

We will accelerate the roll-out of EV charging infrastructure and our staff will be offered the opportunity to test ultra-low emission vehicles.

We commit to fleet transformation plans and there is a considerable upscaling of ULEV uptake.

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## Moving up a gear 2021–2022

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# The journey to net zero: Procurement



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## Achieving our goal 2026–2030

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The public sector has nurtured a productive, near zero carbon Welsh supply chain.

Suppliers are incentivised through proportionate evaluation criteria to proactively seek further opportunities to reduce climate impacts.

Staff are empowered to challenge the status quo – requesting zero carbon alternatives is routine and use of alternative business models is fully supported.

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## Well on our way 2022–2026

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By applying the tools developed in the Getting Started phase, and the principles of a Circular Economy, we are rapidly reducing the carbon impact of our goods and services in line with our interim targets.

Targeted support and skills development within the supply chain to increase the proportion of Welsh suppliers who can deliver the required goods and services and are, therefore, eligible for contracts.

All purchasing activities have a robust carbon reduction phase built in at the earliest stage and throughout.

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## Moving up a gear 2021–2022

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We gain a good understanding of our estimated £6bn / 3 million tonnes CO<sub>2</sub>e per annum procured goods and services, and its emissions profile and supplier base.

Development of guidance, tools and training that will be targeted at procurement professionals to support the reduction of carbon throughout the procurement lifecycle.

Suppliers are sent a strong signal regarding future low carbon requirements and staff are trained.



## The journey to net zero: Land use



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### Achieving our goal 2026–2030

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Carbon sequestered in our land assets more than offsets any remaining emissions and, where possible, will go further to maximise sequestration potential.

Initiatives to ensure communities are connected to green space have matured, and it is routine to integrate beneficial use of natural resources into our public services.

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### Well on our way 2022–2026

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Use of natural habitats for carbon sequestration and citizen well-being is integrated into planning public spaces and service delivery.

Acquisition of additional land to connect existing habitats, create woodland and manage natural regeneration and roll-out of woodland creation and habitat restoration projects at scale.

All purchasing activities have a robust carbon reduction phase built in at the earliest stage and throughout.

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### Moving up a gear 2021–2022

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We develop a common understand of the current status and sequestration potential of land under public ownership and set out an agreed level of expectation and ambition.

We will connect people with nature by delivering pilot projects on public land around woodland creation and habitat restoration.

Carbon sequestration is seen by Ministers and Public Sector leaders as a valid core purpose for use of public land.



## Supporting the journey to net zero: Governance and energy planning



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### Achieving our goal 2026–2030

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The public sector are now delivering a range of projects across heat, power and transport to decarbonise regions. These projects are delivered both independently and in partnership, but all are working to a single vision and plan for the energy system of the region.

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### Well on our way 2022–2026

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We deliver the first phase of local area energy plans, which indicate priority energy interventions to meet our power, heat and transport needs and how they can contribute to making places people want to live and work.

Renewable deployment is now part of a wider energy and decarbonisation strategy.

The public sector is delivering its first tranche of emissions reduction based on the emissions baseline.

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### Moving up a gear 2021–2022

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Our energy activities are aligned to the priorities of the regional energy strategies, managed by cross sector governance arrangements. We develop local area energy plans which identify the changes needed to the local energy system, to decarbonise heat and local transport and realise opportunities for local renewable energy production.

Accelerate renewable deployment on public land with priority to where the development can deliver wider benefit, such as local ownership and reduced bills for Welsh business or communities.

The public sector baselines emissions and creates a plan for eliminating.

## Public sector's wider influence



The Public Sector has a wider role in shaping our society-wide low carbon transition.

A few examples include:

- › **Local Government** – supporting low carbon places through planning, regeneration & partnership with the private sector to deliver regional energy systems, managing municipal waste.
- › **Health & Social Care** – models of care which reduce patient & visitor transport
- › **Welsh Government** – grants and business loans predicated on lowering emissions
- › **Higher Education** – leading the debate by interacting with students and the local community
- › **Tourism, Culture & Natural Resources** – low carbon catering, accommodation & travel

We must challenge ourselves and each other to use all the levers available to us, and work together in partnerships to affect change – the route map provides a framework for that change.



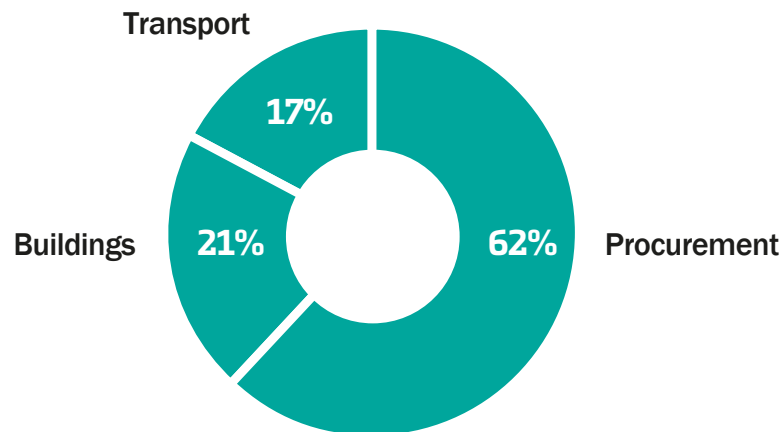
## Annex A: Building the evidence on emissions sources

The following slides provide summary data on the emissions footprints carried out to date.

We will add further data as it becomes available.

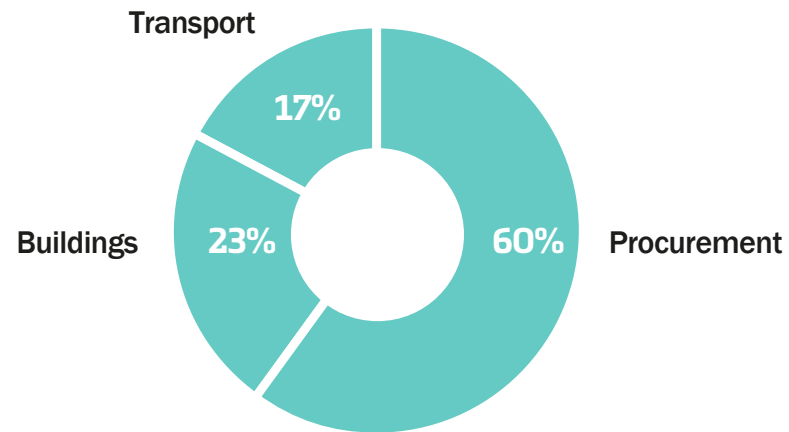
### NHS Wales carbon footprint 2018-19 and 2016-17

2018-19



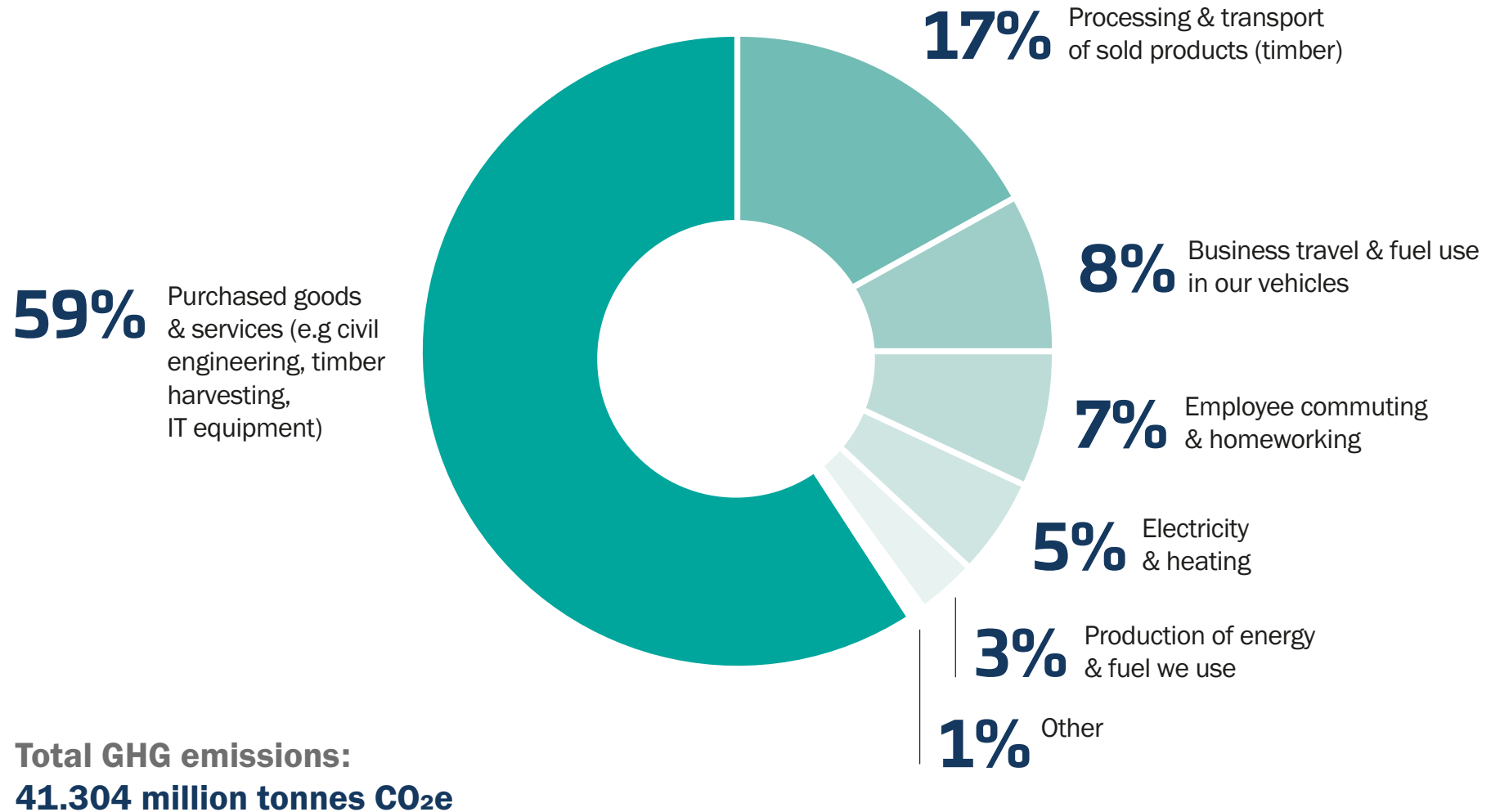
Total GHG emissions:  
**1.00 million tonnes CO<sub>2</sub>e**

2016-17



Total GHG emissions:  
**1.03 million tonnes CO<sub>2</sub>e**

## By Source: Natural Resources Wales



## Carbon positive project: Natural Resources Wales

### Our sequestration

