

Cyngor Sir CEREDIGION County Council

REPORT TO:	Thriving Communities Overview and Scrutiny Committee
DATE:	19 October 2022?
LOCATION:	Hybrid
TITLE:	Net-Zero Action Plan – Progress Update
PURPOSE OF REPORT:	To provide a progress update as to the actions set out within the Net Zero Action Plan
REASON SCRUTINY HAVE REQUESTED THE INFORMATION:	It was agreed that a periodic progress update would be provided to the Overview and Scrutiny Committee

BACKGROUND:

The meeting of Ceredigion County Council on 20 June 2019 (Full Council 20 June 2019) agreed to:

- Commit to making Ceredigion a net zero carbon Local Authority by 2030
- Develop a clear plan for a route towards being net zero carbon within 12 months
- Call on Welsh and UK Governments to provide the necessary support and resources to enable effective carbon reductions

Further to this, on the 5th March 2020, Ceredigion County Council declared a global climate emergency, committing to meeting the most significant challenge facing our county and our planet.

The Net Zero Action Plan was approved by Scrutiny (May), Cabinet (May) and Full Council (June) in 2021 and as part of this it was agreed that periodic updates would be provided on progress to date.

The focus of the Plan is currently upon operational energy usage and emissions (Scope 1 and 2 emissions), as these are routinely recorded and calculated annually as part of the annual review of the Carbon Management Plan.

A progress update was submitted to Scrutiny on 4th November 2021, this is a further progress update, detailing what is currently being done to reduce our emissions, and also report on the 2021/22 emissions calculations.

CURRENT SITUATION:

Operational Carbon Footprint – Carbon Management Plan

Operational emission figures for 2021/22 financial year have now been calculated and are as follows:-

Carbon Management Plan 3							
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	PLAN TOTAL
	t/CO₂	t/CO₂	t/CO₂	t/CO₂	t/CO₂	t/CO₂	
Buildings	5,557	5,177	4,909	4,125	4,613		-16.99%
Streetlighting	518	436	326	255	217		-58.11%
Fleet	1,867	1,802	1,762	1,602	1,748		-6.37%
Business Mileage	761	735	642	180	300		-60.58%
TOTAL	8,649	8,150	7,639	6,161	6,878		-20.48%
		-5.77%	-6.27%	-19.35%	11.64%		

The above equates to a cumulative 20.48% reduction against a 15% target (2017/18 to 2021/22)

All service areas, with the exception of streetlighting, saw emission increases during 2021/22, when compared to the previous financial year. This was the expected trend, as buildings re-opened during 2021/22 and Services began operating at nearer the pre-pandemic levels.

The table below notes emissions & cost by category/service area:

Category		2019/20		2020/21		2021/22	
		tCO ₂	Cost £	tCO ₂	Cost £	tCO ₂	Cost £
Buildings and Street Lights	Civic buildings	502	£289,722	373	£171,490	422	£198,448
	Education	2,689	£915,166	2,391	£782,179	2,840	£1,112,639
	Leisure	523	£191,275	389	£135,156	374	£125,602
	Social Care	565	£187,067	510	£164,633	531	£188,155
	Libraries & Community	236	£84,074	173	£60,034	173	£69,281
	Other buildings	232	£90,014	198	£73,793	166	£72,363
	Other miscellaneous	162	£99,224	91	£37,085	107	£47,805
	Streetlights	326	£188,917	255	£163,362	217	£163,887
Transport	Fleet	1,762	£660,763	1,602	£530,142	1,748	£686,026
	Business Mileage	642	£1,032,307	180	£297,738	300	£487,102
Total		7,639	£3,738,529	6,161	£2,415,610	6,878	£3,151,309

The above table notes three years emissions, to demonstrate the trend compared to the pre-pandemic level. As can be seen above, despite an emission increase in 2021/22, when compared to the previous financial year, emissions are still overall on a downward trajectory and are 9.96% lower than they were in 2019/20 (pre-pandemic) and 20.48% lower than the baseline year of 2017/18.

In 2021/22 total cost of energy and fuel reported within the scope of the Carbon Management Plan was £3,151,309. Ceredigion County Council spent £735,699 more on energy in 2021/22 than they did in the previous financial year (2020/21) – this equates to a 30.46% spend increase. The reason for the spend increase being a higher percentage than the emission increase, is due to contract price increases during the period.

Carbon Management and Climate Change Group – following the elections in May Cllr Keith Henson has become Chair of the Carbon Management and Climate Change Group. The Group has been well attended, following a further update to the attendance list, which sees

representatives from all political parties, as well as an expanded Officer participation. This Group is responsible for overseeing the development and delivery of the Net-Zero Action Plan and ensures that these ambitions are integrated throughout the Authority.

Decarbonisation of Transport (incl EV charging) – Following successful application for funding in 2021, we were awarded the sum of £420k from the “Ultra Low Emissions Vehicle Transformation Fund” (ULEVTF) which has been used for the development of a Ceredigion ULEV Strategy in alignment with the Growing Mid Wales Energy Strategy for the development of ULEV work programmes. This is the first phase of work, which will see EV charging infrastructure installed in 9no car parks across Ceredigion, work is underway and chargepoints should be operational by the end of October.

Grant application for further EV infrastructure, at an additional 8 sites has been submitted to OZEV, the Project value is anticipated to be approximately £280,000 – currently waiting for confirmation of match-funding from WG, with funds to be spent by end of February 2023.

WG/ WLGA EV charging grant in the sum of £300,000. This is specifically for installation of EV charging in Council Depots, to support the decarbonisation of fleet. Work has started to look at the required infrastructure at the Council’s main depot sites.

Fleet Review undertaken by Welsh Government Energy Services (WGES) in 2020/21, has been received in Draft format and will help inform the work around decarbonisation of the fleet.

ULEV Strategy – has now been through Scrutiny and Cabinet and following some minor amendments, will be made available on the Council’s website.

Purchase of Green Energy – CCC continues to procure ‘green’ electricity via the corporate electricity contract. There is further scope to look at procurement of ‘green’ gas, as well as liquid fuels (e.g. LPG or biodiesel), although there is little benefit in regard to the carbon accounting figures, it could be considered best practise to ensure that the utilities we do use come from ‘green’ sustainable sources.

Renewables – Welsh Government Energy Service (WGES) undertook a land asset review of Ceredigion sites, looking at the potential for renewable energy generation. Many of the sites highlighted are subject to significant grid constraints, however there are a few smaller opportunities to come out of the process, which include:

- Additional 300kW PV at Bro Teifi
- 200kW of PV over the Car Park at Canolfan Rheidol Offices
- 130kW PV at the future Dyffryn Aeron School site

Renewables are also now routinely being introduced as part of building refurbishment works and also 21st Century Schools programme.

Given the increasing cost of electricity, the payback period on these sorts of schemes, is far more favourable where we can consume any generated electricity on site, rather than export it to the grid - need to ensure that installations are adequately sized and that locations are chosen dependant on their ability to use the energy generated on site.

Net Zero Buildings – New extension at Llwyn yr Eos School, has become the Council’s first net-zero building in operation. Ground source heating and solar panels were installed as part of the scheme and it is hoped that this will set a benchmark for future building works undertaken by the authority in future.

21st Century Schools Programme - As part of the programme, when looking to build new schools, Ceredigion County Council will work towards decarbonisation and net-zero buildings.

Growing Mid-Wales – The Mid-Wales Energy Strategy has been finalised and following on from this a Strategic Energy Action Plan has been drafted and is currently being circulated across the region for comment. Energy Systems Catapult has been employed by WGES to undertake Local Area Energy Plans (LAEPs) for both Ceredigion and Powys (one per Authority) – work will be starting shortly to engage with the various stakeholders across the region.

WG Emission Reporting – Unfortunately the initial reporting methodology wasn’t released in time to include in our Net-Zero Plan, which is why our Plan incorporates only operational emissions. However, we have now produced overall emissions figures for 2019/20, 2020/21 and recently the 2021/22 figures. These figures, go beyond just the scope 1 and 2 emissions noted within the Carbon Management Plan. They also look at emissions from Transport, waste and the procurement of goods and services.

These emissions are summarised as follows:-

	kg/CO ₂	
Buildings, fleet & other assets	7,678,887	16.79%
Business travel, commuting & homeworking	3,678,573	8.05%
Waste (accounted for in supply chain emissions)	0	0.00%
Total land based emissions	-432,205	-0.95%
Supply chain - Tier 1	34,798,039	76.11%
Total emissions	45,723,294	100.00%

Additional emission sources have been added in 2021/22, which includes an emission for homeworking. We’ve also included energy usage from the corporate estate, vacant property and STW’s in the latest calculations, which mean that the scope of reporting has been enhanced.

As can be seen above, our supply chain emissions (which currently include waste), account for 76% of our overall footprint a significant % of the total. It must be noted though that there is a fundamental flaw in the way that these supply chain emissions are calculated, as they are done so based on spend alone. No consideration is currently given to local procurement, or procurement of low emission goods/materials.

In addition, it is hoped that in future years we can get more detailed information for some of the emissions sources, to ensure that reporting is a more accurate reflection of our current

position. This will also assist in making informed decisions around any future emission reduction measures

As we now have a clearer picture of our overall carbon footprint, it would be advantageous to review our Plan to incorporate these additional emission sources. If we are to achieve our net zero ambition, we will also need to consider carbon off-setting measures such as: carbon capture, sequestration, or tree planting. This will need to be introduced alongside the things that we are already doing: introduction of efficiency measures, renewables, rationalisation, decarbonisation of fleet, review of procurement practices, EV infrastructure installation etc.

Has an Integrated Impact Assessment been completed? If not, please state why

Summary:

Long term: The Zero Action Plan will support the

Council's 2030 net zero carbon ambition

Integration: Will help integrate and embed emission reduction across the Authority

Collaboration: The Council is already working in collaboration with a number of public bodies in relation to carbon reduction and delivery of emission reduction.

WELLBEING OF FUTURE GENERATIONS:

Involvement: The Climate Change and Carbon Management Group is well established and attended by both Members and officers, this provides a good initial forum for stakeholder engagement, but scope for wider involvement following publication of the net-Zero Action Plan

Prevention: The Action Plan supports implementation of actions and measures to reduce carbon emissions that contribute to reducing the effects of climate change

RECOMMENDATION (S): **To note the progress in relation to actions set out within the Net-Zero Action Plan**