

Sustainability: Annual Report 2020-21

June 2021



The Welsh Parliament is the democratically elected body that represents the interests of Wales and its people. Commonly known as the Senedd, it makes laws for Wales, agrees Welsh taxes and holds the Welsh Government to account.

An electronic copy of this document can be found on the Senedd website:
www.senedd.wales

Copies of this document can also be obtained in accessible formats including Braille, large print, audio or hard copy from:

Welsh Parliament
Cardiff Bay
CF99 1NS

Tel: **0300 200 6565**

© **Senedd Commission Copyright 2021**

The text of this document may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not used in a misleading or derogatory context. The material must be acknowledged as copyright of the Senedd Commission and the title of the document specified.

Sustainability: Annual Report 2020 – 2021

June 2021



Contents

Introduction	7
Summary of Performance	9
Progress Against Targets	10
Energy	13
Waste & Resources	15
Travel.....	17
Other Impacts.....	18
The Future - Goodbye Carbon	21
Environmental Management	22
Appendix A - Data Tables	25



Introduction



The extraordinary events of this past year profoundly changed the way the estate was used, resulting in significant changes to our environmental impacts.

Our staff have not travelled for business and have mostly worked from home. Our official business has been conducted in a mixture of hybrid and fully virtual formats. This has meant savings for some impacts, and an opportunity to see where greater flexibility in our buildings is needed to maximise savings in other areas.

But it has also allowed us to realise a change that is possible- where staff can work more flexibly, a greater work-life balance can be achieved, and we can adapt our buildings to accommodate what will likely result in permanent changes to the way they are used.

We look back on the successes of our most recent carbon reduction strategy, and look ahead to our new goal of becoming a *net carbon neutral* organisation.

Manon Antoniazzi

Chief Executive and Clerk



Summary of Performance

In an extraordinary year, the likes of which we hope to never see repeated, the way our staff work and our buildings are used has changed dramatically, in some ways permanently. The pandemic has meant people worked from home, on-site events did not take place, and most of the business of the Senedd took place virtually online.

This has of course meant significant changes to our environmental impact, with noticeable drops in utilities use, and huge reductions in travel across all modes. Our primary target of *energy emissions* has fallen again this year, although we'd like to highlight the fact that it was halved during the life of our most recent Carbon Strategy by the end of last financial year- our last *normal* year.

We have continued to maintain the estate with a consideration of environmental efficiency, whilst focusing on the health of our staff, contractors and visitors. We have also worked hard to produce a new Carbon Neutral Strategy, which will pave the way for our organisation to be net carbon neutral by 2030. Many of the adaptations contained within the Strategy will build on previous work to reduce our energy and travel footprints, whilst including changes to continue making flexible working as easy and effective as possible into the future.

Our environmental work has continued under the banner of a formally-certified management system which includes an annual audit by a UKAS-accredited body against the requirements of ISO14001.

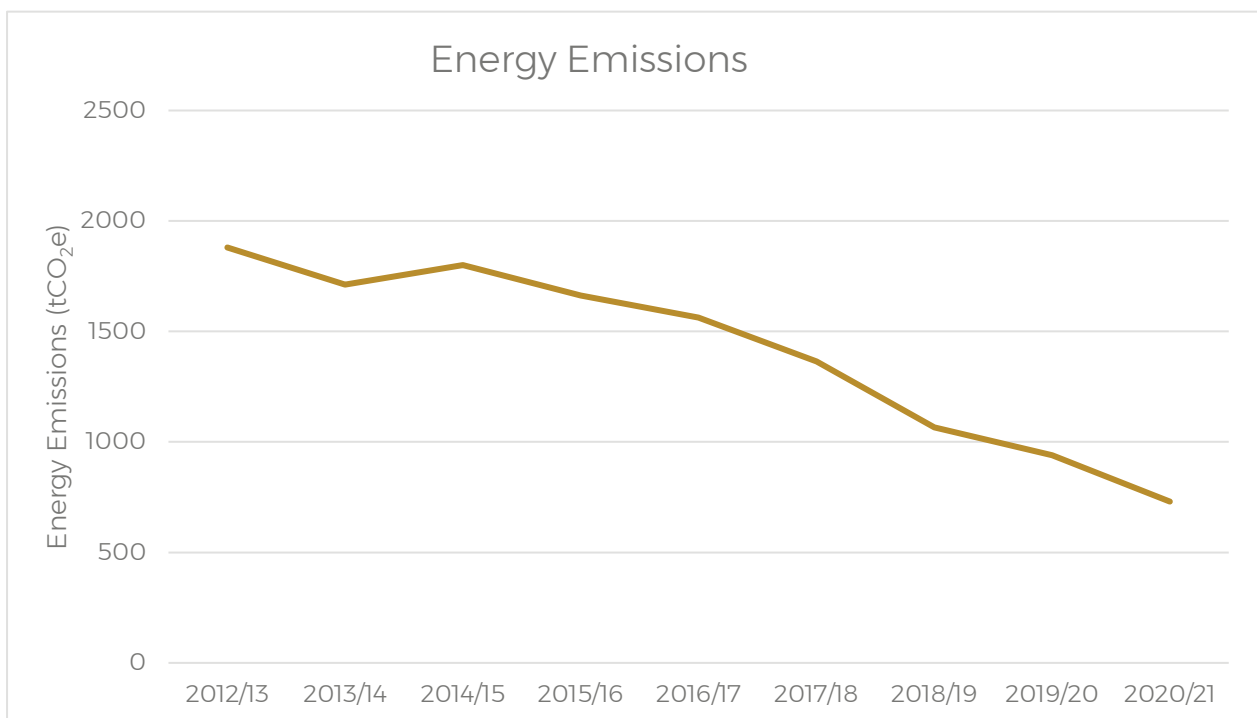


Progress Against Targets

Given the extraordinary nature of the past year, and the move to most staff working from home, there has been a noticeable reduction in our environmental impacts, particularly noticeable when reviewing our performance against key targets.

As we have said previously, we do not wish to celebrate this 'achievement' given the circumstances through which it has come about. Instead we will concentrate on our last normal year of full occupancy of the estate- 2019/20, and the successes we were able to demonstrate up until that point.

Our primary target of reducing energy emissions by 30% over the course of the strategy has been comfortably achieved- down 49%. This included the beneficial effects of the lowering of the carbon content of UK grid electricity over time, as well as numerous efficiency measures we made to our buildings. They included more visible aspects like LED lights and sensors to switch lights off, as well as more hidden equipment like pumps and fans which have been replaced with more efficient alternatives.



Our energy emissions figure dropped by half, even excluding the past year

The efficiency of business-related car travel had improved by three times our original target of 10% by the end of last year, thanks in part to the Senedd's small fleet being reduced to a single electric car during the past few years. Our staff have continued to choose more fuel efficient alternatives for their commutes too, and we have actively encouraged this by adding charging points and reserve bays for electric vehicles.

We have phased out the landfill element of our waste streams over the course of this most recent strategy- now diverting it all to recycling and energy recovery options. We have made significant progress with removing plastics from the estate too, a popular topic in the public realm during this period. We had planned additional works, some driven by the work of the Welsh Youth Parliament, which have been delayed due to the pandemic, but we will continue to eradicate sources of single-use plastic where possible in the future.

Our water use has fluctuated over the course of the strategy, as we've managed issues including leaks, rising and falling visitor numbers, and meter issues. We have now adopted a more consistent practice of reporting- using internal meter readings, shown to be more consistent over time, as well as a *per occupant* figure in order to baseline water use and better gauge the effectiveness of reduction methods. Water use was down significantly this past year, but had risen slightly by the end of the 2019/20 year. We will continue to make water-saving measures where possible, tackling the fixtures in the Pierhead building as a first priority.

Objectives	Targets	Progress
Reduction of carbon footprint	Reduce energy emissions by further 30% by 2020/21 (based on 2012/13 baseline)	Achieved. 49% down on baseline year. 10% reduction on last year's figure.
	Improve the efficiency of business-related car travel by 10% by 2020/21 (on 2013/14 baseline)	Achieved. Efficiency has improved 32% since the baseline year.
Reduce the impact of waste	Achieve zero waste-to-landfill by 2020/21	Achieved. Now operating at zero waste-to-landfill
	Transition from waste management to sustainable resource management by 2020/21	In progress. Work on plastic packaging continuing.
Reduce water use	Reduce the consumption of potable water across the estate by 5% by 2020/21 (based on 2014/15 baseline)	Consumption is influenced largely by public demand and this year we experienced some maintenance issues. As a result we have seen an increase of 1.6% over the baseline year.,

Energy

Analysis of degree days data shows the year as a whole was slightly colder than last year, but also that the last three months (during the winter heating period) were significantly colder than those at the start of 2020.

Whilst staff numbers were much reduced overall, a comfortable working environment was still required for those present in the buildings, so gas use did not drop very much compared to last year.

The flexibility of our infrastructure to respond to reduced staff numbers is something our forthcoming Carbon Neutral Strategy will look to address and is especially relevant given that long-term changes to working patterns are likely to be experienced. We will be looking to update our office areas to make better use of space and reduce their energy consumption on days when occupancy is low.

Electricity use is down 25% for the past year. Whereas some facilities in the building such as security measures, data servers and heating pumps have remained active throughout, forced cooling equipment has been switched off to reduce infection risk and lighting and small power demand has dropped significantly. Whereas last year we reported a considerable increase in the cost of electricity, this year we've seen a more modest 3% rise in unit rates.

We have taken the opportunity afforded by a quieter estate to progress with several facilities projects, some of which will demonstrate reduced electricity demand in the forthcoming year. More LED lighting, for example, has been committed-to in the new Carbon Strategy, but much of this work was able to be completed in the current financial year. We have also updated the controls for the ground-source heat pump in the Senedd, again something we hope to notice associated savings against next year. Our focus for project work in the short term will be building efficiency- making equipment like the BMS (building management system) more effective in reducing energy use in line with reduced building occupancy.



Waste & Resources

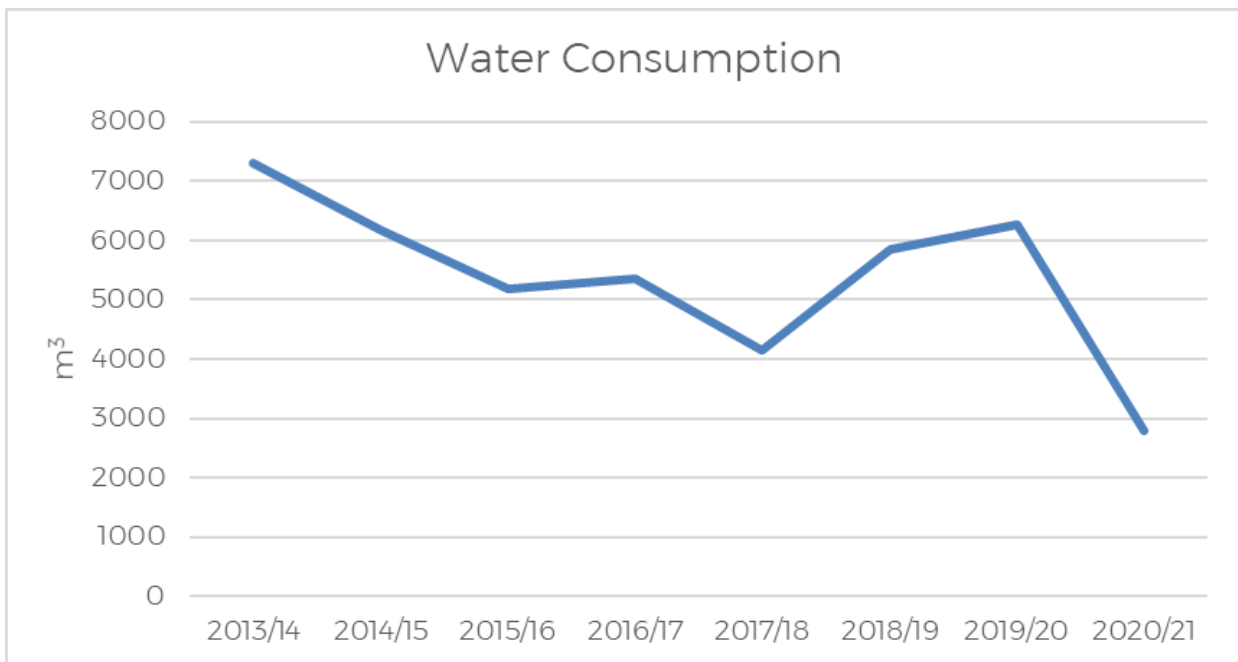
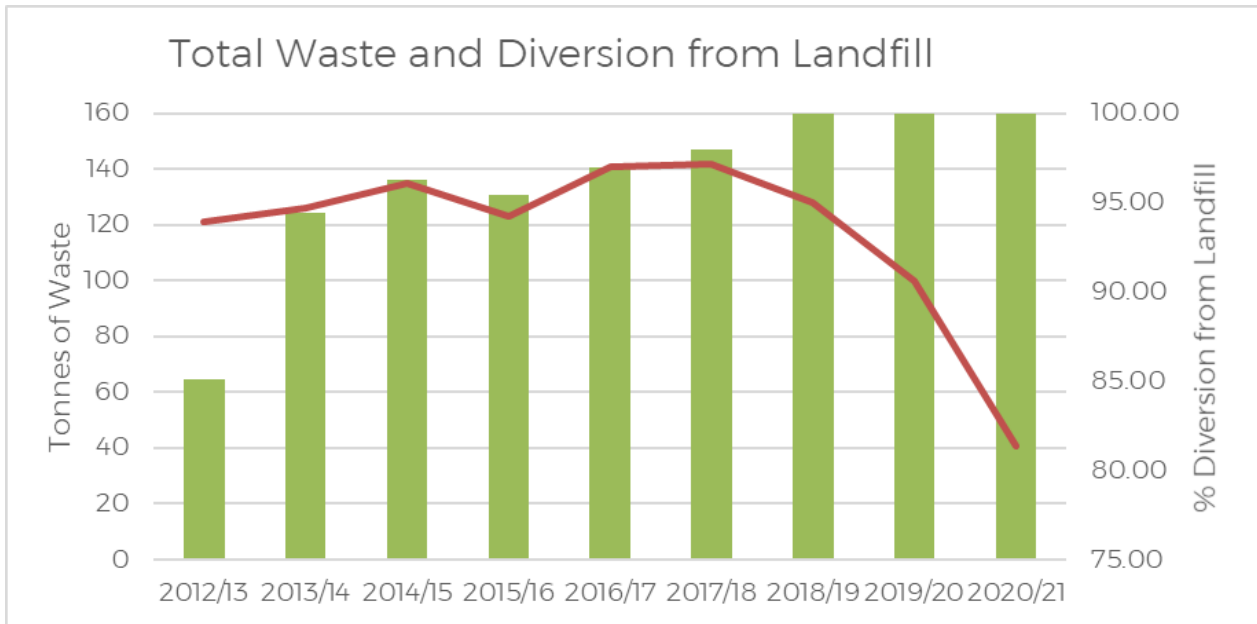
Waste production was down significantly this year; again a direct result of the reduction in building users. Total waste tonnage was almost a half of last year's, with the reduction in on-site personnel being offset to some extent by an increase in project work taking place on the estate, as well as the production of waste PPE.

The need to ensure the appropriate disposal of items such as PPE during this past year has meant that, whilst none of our waste has been sent to landfill, a higher percentage of the waste that was produced has been sent to an energy recovery facility.

Minimal use of the Senedd building was reflected in its significantly-reduced water figures. The amount of harvested rainwater we've used in the building (mainly used in the toilets) was down around 70%- a reduction reflected in our water bill for the estate as a whole. Costs for water supply and disposal fell slightly less as billing from consumption in the previous financial year fell into this one.

Paper use is another metric demonstrating a dramatic reduction- also down more than 70%. With a high number of statutory instruments passed and reports needing printing, as well as demand for new Covid-related signage around the estate, there has been demand on our Copy Unit services, but on-site staff numbers being so low has simply meant paper wasn't used in our normal office printers.

We continue to procure goods like stationery and our utilities through centrally-coordinated NPS frameworks, and we specify FSC-sourced timber in any furniture purchases. Our major contracts are assessed for their sustainability credentials, with associated criteria often added to tender specifications.



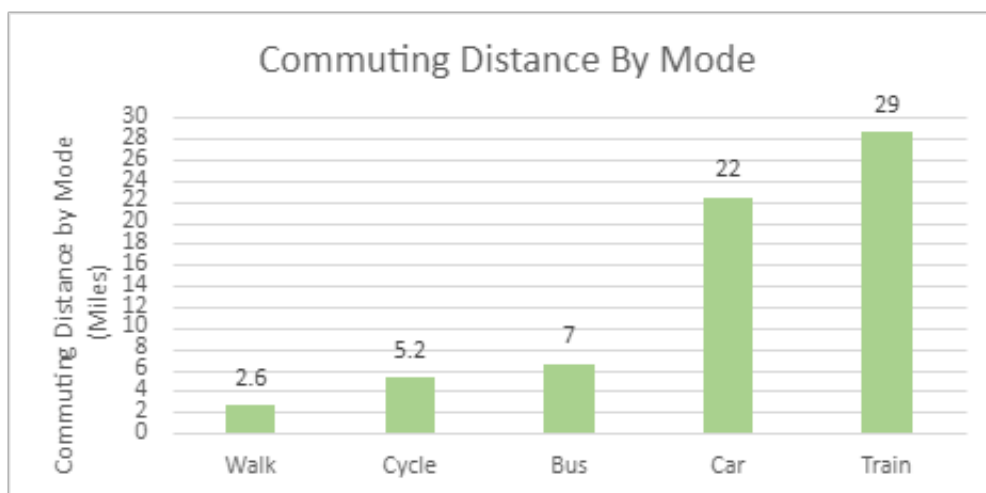
Travel

In this extraordinary year, travel claims have reduced by around 90%. During the two main periods of national lockdown, travel has been legislated against, and advised against for much of the rest of the year.

Our Members and staff have not travelled for work purposes in response to the pandemic, instead turning to more technology-based modes of communication and engagement. Meetings with constituents have been held virtually over video calls, along with team meetings and even training courses.

Away from business travel, the wider impacts of the pandemic have meant far fewer staff and visitors commuting to the estate. Supporting the business of our Members has been possible remotely for most Commission staff, with a core of personnel still attending the estate to support with its security, IT, and maintenance.

Our most recent travel survey, conducted just before the impact of Covid was felt, showed staff are using more efficient vehicles than ever and that more and more are choosing sustainable modes to travel. To support this further, and in response to some of the suggestions in the survey, we have taken to opportunity to increase storage facilities for cyclists- something which also supports social-distancing in the bike shelters. Given their rise in popularity, we have also introduced facilities for electric bike users.



A lot of our staff are already using sustainable travel modes for shorter commutes



Some of the plants and wildlife flourishing around the Cardiff Bay estate this year.



Other Impacts

Whilst the sphere of influence of our Members covers every part of the lives of people in Wales, our own operations are relatively confined, primarily to our buildings in Cardiff Bay and a small office in North Wales.

These sites are not deemed to be at risk from climate change impacts such as flooding (the Bay being protected by the Cardiff Bay Barrage), but our forthcoming Carbon Neutral Strategy will include measures which provide further protection against an uncertain future. Investing in renewables, for example, will ensure at least some of our energy supply is secure and shielded from any volatility in the markets.

Our estate is in an urban location, and our activities in maintaining it do not directly impact on rural areas. One small, positive impact which could be construed as affecting rural life is that we purchase as much of the foodstuff supplies for our catering service from within Wales.

Our support for the biodiversity of the site has continued throughout this past year. We have kept up the minimal cutting operations of the wildflower strip, and maintained the garden areas in the car park; all of which are showing more insect life than ever before. On the Pierhead we have this year introduced a third beehive, whilst the original two had their most productive year ever- producing double the honey crop they did in 2019.

Our Carbon Strategy will continue to build on the work we've done to improve the biodiversity of the site in recent years; it contains a commitment to doubling the overall area of green space on the estate through its life.



The Future – Goodbye Carbon

As our current carbon strategy ends, we have already prepared the new one. We hope it will be our last.

There, we've said it, and we're excited by it. Excited to build on the previous work we've done and set out our end-game. We had two successful strategies prior to this one, and are operating at half of the carbon footprint we had when we started, but we can't go on forever. Seeing us through to 2030, we are pleased to announce our plans to be *net carbon neutral* by this date.

Yes we may update the Strategy throughout its life as new technologies and priorities arise, and we'll certainly set sustainability goals after it's finished, but we can't keep reducing carbon forever.

Our new Carbon Neutral Strategy, available in full on our website, contains a range of improvement measures designed to minimise our footprint to be as low as possible, before finally seeking offsetting options in order to reach net neutrality. The roadmap of measures is shown overleaf.

Goodbye Carbon

Below is a summary of the key milestones in our Carbon Neutral Strategy 2021-2030. The full Strategy is available on our website www.senedd.wales



SHORT TERM TARGET: (2021-2023)

- Behavioural change and good housekeeping **100**
- BMS improvements (three buildings) **59**
- Monitoring- additional meters and software **52**
- LED lighting: continued replacement and review of controls **30**

= 241 TONNES OF CARBON SAVED PER YEAR

MEDIUM TERM TARGET: (2023-2026)

- Refurbishment of AHUs (air-handling units) **42**
- Connect to district heating network **132**
- Revert Ty Hywel to passive ventilation **97**
- Install solar PV (Senedd and Ty Hywel) **60**

= 331 TONNES OF CARBON SAVED PER YEAR

LONG TERM TARGET: (BY 2030)

- Air-source heat pumps for hot water supply **10**
- Modify T&S system to pay for EV travel only by Members of the Senedd ¹ **82**

= 10 TO 92 TONNES OF CARBON SAVED PER YEAR

¹ based on current level of private car claims and adoption of RFID cards, carbon figure for medium-sized car mileage.

Environmental Management

The Senedd Commission has maintained a formal environmental management system (EMS) for more than a decade.

We believe in transparency as well as setting the highest standards for ourselves, which is why we maintain an EMS which is externally-audited against the requirements of ISO14001. This management standard requires a range of measures to be demonstrated, including controls on key environmental impacts, compliance with legislation, and a programme of internal audits. We have a team of trained internal auditors checking the physical site and our operational controls to ensure continued compliance throughout the year. The auditors also check for pollution risk and look for efficiency savings where possible.

We continue to work with other public sector bodies in Wales, as well as the other UK parliaments, in order to share best practice in continual environmental improvement.



Appendix A – Data Tables

Key Performance Indicators	2012/13	2014/15	2016/17	2017/18	2018/19	2019/20	2020/21
Total net greenhouse gas emissions (scopes, 1, 2, 3), tCO ₂ e	2,314	2,252	1,841	1,654	1,296	1150	746
Total energy emissions, tCO ₂ e (baseline)	1880	1,800	1,563	1,364	1,066	962	730
Waste to landfill in tonnes	17.2	4.7	5	4	0	0	0
Recycle, reuse and recovery rate, percentage of total	83%	95%	96%	97%	100%	100%	100%
Total water consumption, m ³	10,069	6,177 (baseline)	5,347	4,158	6,064	6,281	1,783
Total business travel emissions, tCO ₂ e	222	252	206	207	174	180	22*
Paper Use (million sheets)	2.24	2.09	1.99	2.92	2.73	2.33	0.86

* Excludes MS and MSSS travel February & March 2021 due to delayed reporting requirements. Previous years have been adjusted as final claims for those years have been processed.