Pecyn Dogfen Gyhoeddus

Gareth Owens LL.B Barrister/Bargyfreithiwr
Chief Officer (Governance)
Prif Swyddog (Llywodraethu)

Swyddog Cyswllt:
Jan Kelly / 01352 702301
janet.kelly@flintshire.gov.uk

At: Cllr Alasdair Ibbotson (Cadeirydd)

Y Cynghorwyr: Gillian Brockley, Steve Copple, Mared Eastwood, Chrissy Gee,
Ian Hodge, Roz Mansell, Allan Marshall, Carolyn Preece, Dan Rose,
Jason Shallcross, Sam Swash a David Healey

Date Not Specified

Annwyl Gynghorydd,

RHYBUDD O GYFARFOD RHITHIOL
PWYLLGOR NEWID YN YR HINSAWDD
DYDD MERCHER, 25AIN IONAWR, 2023 2.00 PM

Yn gywir

Steven Goodrum
Rheolwr Gwasanaethau Democrataidd

Bydd y cyfarfod yn cael ei ffrydio'n fyw ar wefan y Cyngor. Bydd y ffrydio byw yn dod i ben pan fydd unrhyw eitemau cyfrinachol yn cael eu hystyried. Bydd recordiad o'r cyfarfod ar gael yn fuan ar ôl y cyfarfod ar https://flintshire.publici.tv/core/portal/home

Os oes gennych unrhyw ymholiadau, cysylltwch ag aelod o'r Tîm Gwasanaethau Democrataidd ar 01352 702345.

R H A G L E N

1   YMDDIHEURIADAU

Pwrpas: I dderbyn unrhyw ymddiheuriadau.

2   DATGAN CYSYLLTIAD (GAN GYNNWYS DATGANIADAU CHWIPIO)

Pwrpas: I dderbyn unrhyw ddatganiad o gysylltiad a chynghori'r Aelodau yn unol a hynny

3   COFNODION (Tudalennau 5 - 12)

Pwrpas: Cadarnhau cofnodion y cyfarfod a gynhaliwyd ar 22 Tachwedd 2022.

4   TROSOLWG O'R RHAGLEN NEWID HINSAWDD A CHYNNYDD

Pwrpas: Derbyn y wybodaeth ddiweddaraf gan Reolwr y Rhaglen – Newid Hinsawdd a Lleihau Carbon.

CYFLWYNIAD A DOGFENNAU YCHWANEGOL

5   CYNNIG - ÔL TROED CARBON GWEITHIO GARTREF (Tudalennau 63 - 64)

Pwrpas: Derbyn cynnig ynglŷn â Ôl Troed Carbon Gweithio Gartref

6   CYNNIG - CYNGOR NAD YW'N ARGRAFFU (Tudalennau 65 - 66)

Pwrpas: Derbyn cynnig ynglŷn â Cyngor nad yw'n Argraffu.

7   CYNNIG - COLUMBARIA YM MYNWENTYDD CYNGOR SIR Y FFLINT - GWASANAETHAU PROFEDIGAETH ECOGYFEILLGAR (Tudalennau 67 - 68)

Pwrpas: Derbyn cynnig ynglŷn â Columbaria ym mynwentydd Cyngor Sir y Fflint – gwasanaethau profedigaeth ecogyfeillgar.

8   CYNNIG - ADDASIAD GWRTHSEFYLL LLIFOGYDD (Tudalennau 69 - 70)

Pwrpas: Derbyn cynnig ynglŷn â Addasiad Gwrthsefyll Llifogydd.

9   CYNNIG - CRONFA BENSIWN CLWYD D-INVESTMENT 1. (Tudalennau 71 - 72)

Pwrpas: Derbyn cynnig ynglŷn â Cronfa Bensiwn Clwyd D-investment 1.

10 MEYSYDD YR ADOLYGIAD O'R RHAGLEN NEWID HINSAWDD

Pwrpas: Cytuno ar feysydd y Rhaglen Newid Hinsawdd i'w hadolygu.

11 RHAGLEN GWAITH I'R DYFODOL (Tudalennau 73 - 74)

Pwrpas: Ystyried y Rhaglen Gwaith i'r Dyfodol a rhoi gwybod i'r Pwyllgor am y cynnydd yn erbyn camau gweithredu o gyfarfodydd blaenorol.

12 DYDDIAD AC AMSER Y CYFARFOD NESAF

Cynhelir cyfarfodydd o Climate Change Committee yn y dyfodol am 2.00 pm ar:-

Dydd Mawrth 28 Mawrth 2023
Dydd Mawrth 23 Mai 2023
Dydd Mawrth 18 Gorffennaf 2023

Sylwch, efallai y bydd egwyl o 10 munud os yw'r cyfarfod yn para'n hirach na dwy awr.

Mae'r dudalen hon yn wag yn bwrpasol

<u>**CLIMATE CHANGE COMMITTEE**</u>
<u>**22 NOVEMBER 2022**</u>

Minutes of the meeting of the Climate Change Committee of Flintshire County Council held as a remote meeting on Tuesday 22 November 2022.

<u>**PRESENT**</u>: **Councillor Alasdair Ibbotson (Chairman)**

Councillors: Gillian Brockley, Steve Copple, Mared Eastwood, Chrissy Gee, Ian Hodge, Roz Mansell, Allan Marshall, Carolyn Preece, Dan Rose, Jason Shallcross and Sam Swash

<u>**IN ATTENDANCE**</u>:

Cabinet Member for Climate Change and Economy,
Chief Executive, Chief Officer (Governance), Chief Officer (Planning Environment & Economy), Programme Manager - Climate Change and Carbon Reduction, Democratic Services Manager, Overview & Scrutiny Facilitator and Democratic Services Officer

Prior to the start of the meeting, the Chairman welcomed all Members of the Committee and officers to the meeting and made the following statement: -

With climate change so far up the political agenda now to warrant a Committee being formed was testament to the efforts of everyone who had battled to get this issue on the future of humanity taken seriously. From school children, scientists, global campaign groups and individual climate activists whose commitment and sacrifices had got us to the point where we had a fighting chance to beat the greatest threat we faced. Around the world the impacts of climate change were being felt from wildfires in California to flooding in Pakistan, as islands in the pacific drown and forests in the artic circle burn, while droughts cripple entire nations and extreme weather destroys homes. We will never know which person was the first climate change death in Flintshire, but we can say with certainty that that sad milestone had already been passed.

The work of this committee was twofold, firstly prevention, with Flintshire having a large carbon footprint with steps not being taken fast enough to reduce it, for various reasons which undoubtedly came down to funding. Laudable Welsh Government (WG) goals for public sector decarbonisation by 2030 must come with a financial package which enabled the necessary steps to be undertaken. However, we must not shy away from looking long and hard at the Council's own failures. Secondly if the world's carbon emissions were to stop tomorrow the impacts of climate change would continue to be felt for at least a generation. More extreme weather, more flooding, more serious fires and sadly more loss of life, in our county even in the best-case scenario. With science prevention this committee must maintain an interest in adapting in whatever way we could towards the causes of climate change, protecting residents as much as possible but in the full knowledge that no steps we take would come close to mitigating the full effects.

The Chair then asked for a minute silence in memory of those Flintshire victims of climate change. He asked for quiet reflection of all those in Flintshire, Wales, the UK and around the world who had acted at any level to defend our planet and who too often faced violence, imprisonment or murder while doing so. Their bravery and selflessness inspired us.

1.   APPOINTMENT OF VICE CHAIR

The Chair sought nominations from Members of the committee for the role of Vice Chair. Councillor Mared Eastwood nominated Councillor Allan Marshall, and this was seconded by Councillor Ian Hodge. Upon putting to the vote this was carried.

Councillor Allan Marshall thanked Members for the nomination and the appointment, and said he hoped to combine the Chair's youth and enthusiasm with his enthusiasm and experience to make a good team.

RESOLVED:

That Councillor Allan Marshall be appointed as Vice Chair for the Committee.

2.   DECLARATIONS OF INTEREST (INCLUDING WHIPPING DECLARATIONS)

In response to a question from the Chair on agenda item 6, the Chief Officer (Governance) advised that this related to the setting up of terms of reference for the de-investment from carbon industries by the Pension Fund. He said the focus was on the Inquiry rather than the issues, but Members may feel that they wanted to declare a personal interest, if they felt it necessary.

Councillor Steve Copple declared a personal interest as a previous employee of Shell who he continued to receive a pension contribution from.

Councillor Dan Rose declared a personal interest as a member of several environmental charities as noted on his register of interests.

Councillor Ian Hodge declared a personal interest as a previous employee of BP who he continued to receive a pension contribution from.

Councillors Mared Eastwood, Dave Healey, Alan Marshall and Carolyn Preece declared a personal interest as members of the Clwyd Pension Fund.

Councillor Roz Mansell declared a personal interest as she received a pension through the NHS.

RESOLVED:

That the declarations of interest be noted

4.   TERMS OF REFERENCE

The Chair introduced the Terms of Reference for the Committee which had been circulated to Members and had been previously approved by Council.

Councillor Steve Copple referred to the production of emission models and asked how this would be approached. In response, the Programme Manager - Climate Change and Carbon Reduction confirmed that the models had been developed by Officers and would be overseen by the Committee.

The Chief Officer (Governance) advised that the terms of reference of the Committee were intentionally broad to enable the Committee to address all areas within the Council where a carbon footprint was generated because of the Council's activities. This would enable steps to be taken within the carbon reduction plan with the role of Officers to advise and provide Members with a policy steer. There was a very small team supporting this with wide ranging work within their time and resources. The Committee's principal role was advisory, and he explained how this would work to ensure issues were properly addressed.

The Chief Officer (Planning Environment & Economy) commented that the production of emission models was a good example of ongoing work which could be brought to the earlier meetings of the Committee. This would highlight what had been achieved so far, what the footprint looked like and where the greatest values and impacts came from in terms of greenhouse gas emissions. He confirmed that literacy training would be provided to enable a better understanding of what had been achieved so far and the impacts on the Council's carbon footprint. The commitment that the Council had made was for the Council to be carbon neutral by 2030.

The Cabinet Member for Climate Change and Economy said how pleased he had been to see the development of this Committee to consider such important issues. The Council was on track to build the first carbon neutral care home and school and was phasing in EV charging points in public car parks. There was concern regarding the 62 % emissions from the supply chain and work was ongoing with the social care sector regarding decarbonisation. The cost implications for decarbonisation were being considered together with the financial implications.

RESOLVED:

That the Terms of Reference be noted.

4.   FORWARD WORK PROGRAMME

The Chair confirmed that the Forward Work Programme was not set in stone and enabled items and suggestions to be considered for inclusion which would help formulate the programme moving forward.

The following items were suggested by Members of the Committee: -

Councillor Dan Rose

- Solar Panels on Council Owned Car Parks - and review of SV types
- Review of alternative energy generation opportunities. There is a vast array of wind options coming up which could be used on public buildings and within areas where full wind turbines would not be appropriate (e.g. AONB)
- Planning Changes to include requirements for All Passive house standards (inc. elect charging points)
- Review of land use, new mapping system for FCC, can we protect 30% of land by 2030?
- School Recycling program review to look for improvements and extensions
- Possibility of Bioreactors being installed into schools or public buildings for FCC to utilise for grass cutting arisings of our meadows.
- Building's efficiencies - motion lights, pcs left on and overall heated space
- Print free council?
- Zero Email standards (carbon cost of storing emails) can we review the worst offenders
- Review of data storage, cloud facilities and digital providers efficiencies
- review of carbon of home working?
- Review of catering facilities - plant based treaty

Councillor Roz Mansell

- School food recycling in hospitals and Hotels. This could be investigated to help regenerate more electricity.
- More trees to be planted.
- All new homes to have solar panelling as this will prevent much needed land being covered with solar panelling which also need maintaining.
- Potholes can also be refilled using recyclable tarmac saving money and our climate, car tyres and preventing accidents. I will send all the information on this asap.

 Councillor Steve Copple

- Progress within the programme so far. This would provide a solid basis for the Committee when prioritising items for the Forward Work Programme.

Councillor Carolyn Preece

- Procurement – the use of local trades and local products for carbon footprint
- Looking at making it mandatory that plan-based products are used at least one day a week where that is the only choice in schools

Councillor Dave Healey

- Reaching out to the wider Flintshire community with regard to Climate Change
- Exploring how Welsh Government can further assist Councils in achieving Net Zero.

Councillor Alastair Ibbotson – Chair

- Flood resilience – coastal erosion / sea level rises.
- Installation of electric charging points

Councillor Mared Eastwood

- The possibility of tidal energy and whether it was possible to get Grant Funding for it.
- Hydrogen utilisation
- The use of Hydrogen when considering the use/installation of electric charging points

Councillor Sam Swash

- Bereavement services – environmentally friendly options

Councillor Allan Marshall suggested that a working group be set up to discuss items on the Forward Work Programme and consider different ideas.

The Chair suggested that a review of the Council's Carbon Reduction Strategy be included on the Agenda for the March 2023 meeting. Preparation could be undertaking for this at the January meeting.

It was suggested that the Programme Manager - Climate Change & Carbon Reduction liaised with the Chair and Vice-Chair following the meeting to discuss identifying dates for items suggested for inclusion on the Forward Work Programme. It was also agreed that a copy of the action sheet, to show all items suggested by Members of the Committee be circulated following the meeting.

RESOLVED:

(a)   That the items suggested by Members of the Committee be noted; and

(b)   That the Programme Manager - Climate Change & Carbon Reduction liaise with the Chair and Vice-Chair following the meeting to discuss the Forward Work Programme.

5.   **MOTION FOR PENSION FUND INQUIRY**

The Chair introduced the item and advised that he had met with the Chief Officer (Governance) prior to the meeting to discuss the proposed Motion. He said that following the advice of the Chief Officer, he was proposing to withdraw the Motion at this time to allow for the advice he received to be circulated to all Members of the Committee. Councillor Dan Rose, who had seconded the Motion supported the Chairman's suggested to its withdrawal.

The Chief Officer (Governance) advised that the discussion with the Chairman has been around the role of Members and Officers which was for Officers to prepare reports to advise Members and it was not possible to delegate this function to Members. He explained the Programme Manager - Climate Change and Carbon Reduction and Chief Officer (Planning Environment & Economy) would draft reports on the views that Members had put forward. If Members wanted to put forward views and actions on carbon neutrality either within the Council or Clwyd Pension Fund, then the Officers would draft a form of words for the Committee upon which comments could be made.

The Chairman informed the Committee that he would take questions around points of order on this item.

Councillor Ian Hodge asked, as the Clwyd Pension Fund was across a number of Council's in North Wales, were they aware of the fact that Flintshire were going to investigate or discuss the pension fund on their behalf. The Chair responded that this committee did not have decision making powers but could provide advice on procedural issues.

The Chief Officer (Governance) clarified that the Committee's role was to advise other Committees of the Council but that it could not dictate to other Councils or organisation in North-East Wales. This committee could set the council's stance and communicate this to its Members and ask them to communicate it at the Clwyd Pension Fund meetings.

The Cabinet Member for Climate Change and Economy asked what the next steps would be in moving forward.

The Chair commented that the Chief Officer (Governance) has agreed to circulate his views and advice on this to Members which could be discussed at the next meeting.

6. **FUTURE MEETINGS**

In response to a question on the frequency of meetings, the Democratic Services Manager agreed to review the schedule of meetings based on the number of items planned for the Forward Work Programme. The Chief Officer (Planning Environment & Economy) suggested that once the proposed items had been included in the Forward Work Programme, the Committee would then be able to request further details and consider setting up a task and finish group to consider specific items in greater detail.

RESOLVED:

That the Committee note the future meeting dates.

Future meeting dates of the Climate Change Committee had been scheduled to take place at 2.00 pm on:

Wednesday 25 January 2023
Tuesday 28 March 2023
Tuesday 23 May 2023
Tuesday 18 July 2023

7. **<u>ATTENDANCE BY MEMBERS OF THE PRESS AND PUBLIC</u>**

There were no Members of the press or public in attendance.

The meeting started at 2.00 pm and finished at 15.02 pm

…………………………………..
Chairman

Mae'r dudalen hon yn wag yn bwrpasol

Climate Change Programme

Alex Ellis – Programme Manager Climate Change & Carbon Reduction

Atodiad i'r Rhaglen

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Context

» Welsh Government declared a climate emergency in 2019 and called for the public sector to become carbon neutral by 2030.

» FCC Cabinet, in December 2019, committed to resource a Programme Manager to develop a Climate Change Strategy which would set key aims and actions for creating a carbon neutral Council by 2030.

Achievements so far…

Carbon Reduction Strategy in 2009 set target of 60% reduction of energy related GHG emissions by 2021. 'Green Society & Environment' is a key theme within the Council Plan. This has led to investment in many initiatives such as:

✓ LED street lighting programme
✓ Reduced offices
✓ Increase in renewable energy generation across assets
✓ Solar farm energy generation
✓ Methane capture at former landfill sites
✓ 21st Century schools
✓ Energy rated homes
✓ Excellent recycling rates
✓ Parc Adfer waste to energy facility
✓ Promotion of biodiversity
✓ Centralised procurement

…… And many more……
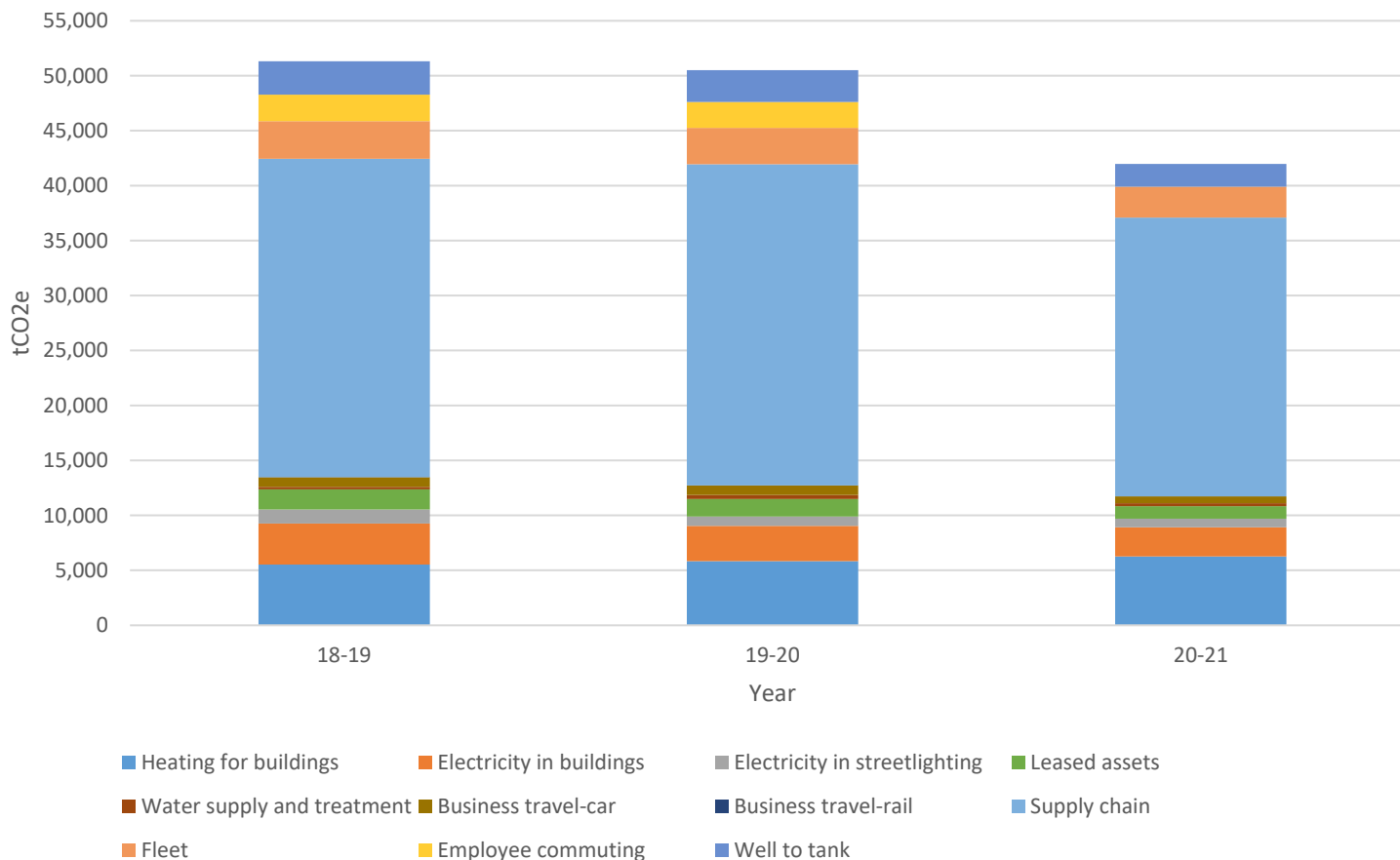
Council Plan
2021-23

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Development of the Strategy – Baseline

Greenhouse gas emissions for Flintshire County Council by emission source

Impacts from Covid-19 pandemic…

	Buildings	Fleet	Business Travel	Employee Commute	Supply Chain
Potential impacts of Covid-19 on our carbon emissions for 2020/21	Reduction	Reduction	Reduction	Reduction	Reduction

- Reduction of Council services / public buildings closed

- Embraced remote working to maintain services - virtual meetings both internal and external

- Expectation that emissions may increase in these areas for 2021/22

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Development of the Strategy - Engagement

- ✓ Academi and Member workshops 2019 / 20 – identified work carried out to date and potential future projects

- ✓ Appointment of Programme Manager. Establishment of Climate Change Programme Board & Officer Group – June – August 2021

- ✓ Public engagement period Oct / Nov 2021 – online survey with proposed strategic themes and actions

- ✓ Young person's engagement Nov 2021 – letter to future self striking climate change conversation

- ✓ Internal Portfolio workshops Nov / Dec 2021 – Feedback from public engagement explored and developed

- ✓ Climate Change Programme Board & Officer Group – scenario planning, developing aims and actions

- ✓ Climate Change Strategy has been to Environment & Economy Overview & Scrutiny Committee, and has been endorsed by Cabinet with the recommendation of adoption by Council.

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The Strategy sets out to achieve net zero carbon…

Carbon emitted from Council's in scope sources − Carbon absorbed by trees and habitats on Council owned land = Zero (or less)

Net zero

Reduce | **Absorb** | **Inspire**
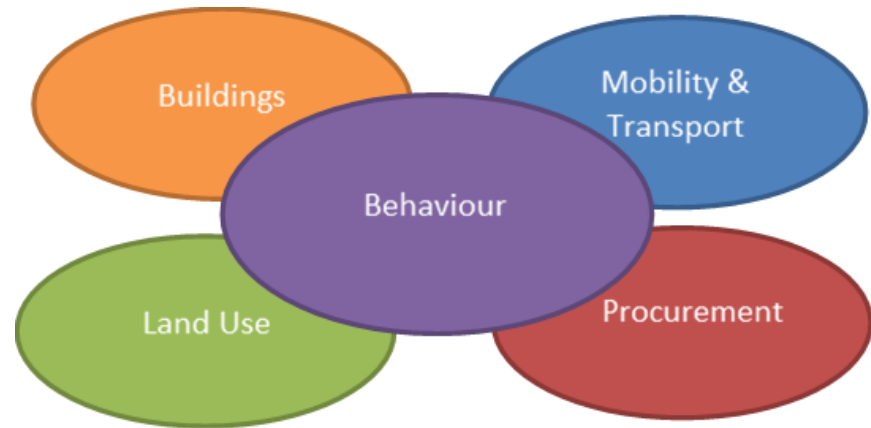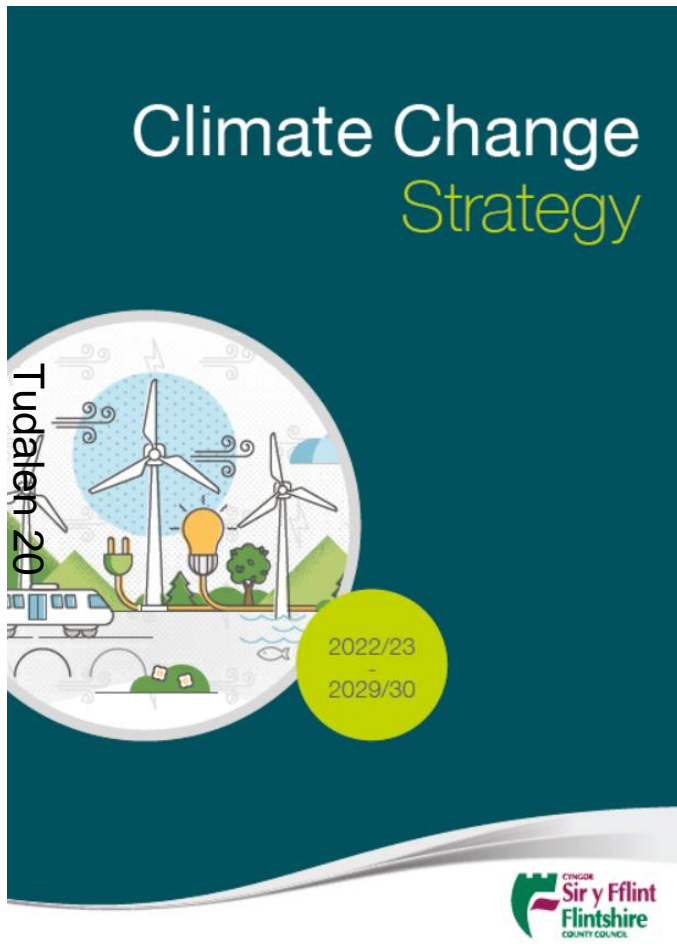
Cut emissions from:
Buildings
Fleet
Business travel
Staff commuting
Waste
Procurement

Sequester carbon through:
New plantings

Better management of
Woodlands
Peatlands
Parklands

Influence others to bring about change across the county of Flintshire

Following Welsh Government's 'Public Sector Route Map to Decarbonisation', with the added theme of Behaviour

Action Plan to Net Zero Carbon – actions under each theme

Appendix 2 Action Plan to Net Zero Carbon

Climate Change Programme Action Plan

Ref.	Theme	Action	Measures of success	Action Owner	Target start date	Expected duration
CCBe1	Behaviour	Ensure climate change and biodiversity is considered a priority in decision making across all Council services	No. of key policies and processes reviewed which consider carbon reduction	Council-wide	2022-23	2 years
CCBe2		Ensure Councillors and employees complete carbon literacy / introduction to climate change/ Naturewise training. Inclusion of climate change within induction process.	% of Councillors and employees received training	HR, Council-wide	2022-23	Ongoing programme
CCBe3		Engage employees and Trade Unions to renew job descriptions to include climate change and biodiversity responsibilities where applicable, e.g. managers, budget holders, planning.	% of job descriptions renewed	HR	2023-24	Ongoing programme
CCBe4		Facilitate transition towards a 'paperless Council' through, for example, digitisation of wage slips, report packs, contracts, applications.	Reduction in volume of paper used for printing Services	HR, Committee	2022	Ongoing programme
CCBe5		Facilitate corporate volunteering for climate and biodiversity action	No. of corporate volunteer hours	HR, Natural Environment	2023-24	Ongoing programme
CCBe6		Investigate the possibility of divesting pensions and other investment portfolios away from fossil fuels in support of green energy.	Carbon reduction targets in place	Governance	2022	Ongoing programme
CCBe7		Facilitate community events and activities to raise awareness of climate change and how to reduce carbon footprints.	No. of events/activities	Climate Change	2023	Ongoing programme

Cyngor Sir y Fflint Flintshire COUNTY COUNCIL

Focus Actions for Councillor Support

CCP7	Increase local participation and stakeholder involvement by working with local businesses to ensure decarbonisation and social value outcomes are achieved

CCBu10	Support schools and Town & Community Councils to reduce operation's emissions and engage with our building users to encourage positive behaviour change

CCBu12	Continue to deliver programmes with private households and local businesses to reduce fuel poverty and provide access to wider energy efficiency and renewable energy schemes.

CCM13	Work with partners to enable greener fleet in the public transport sector (buses, rail, taxis) including Council contracted services such as school transport

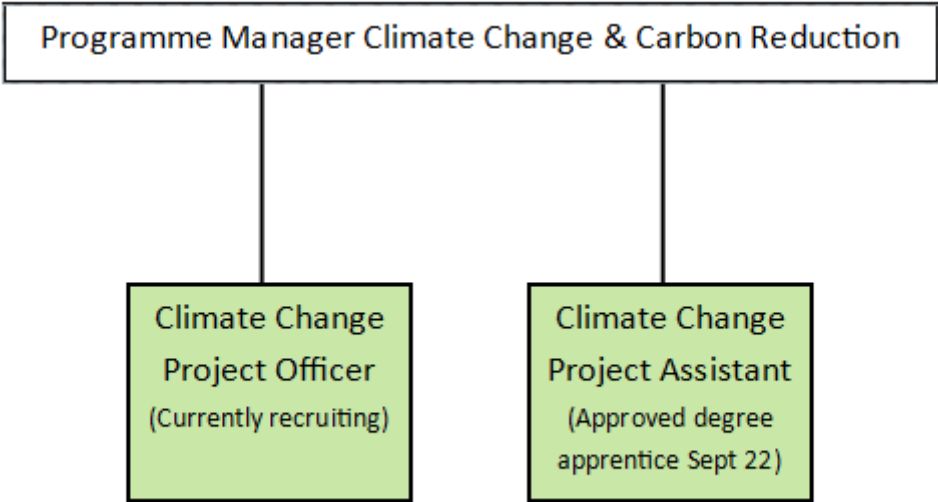| CCL8	Increase area with reduced mowing regimes to enhance biodiversity and increase carbon storage

CCBe1	Ensure climate change and biodiversity is considered a priority in decision making across all Council services

CCBe2	Ensure Councillors and employees complete carbon literacy / introduction to climate change / Naturewise training. Inclusion of climate change within induction process.

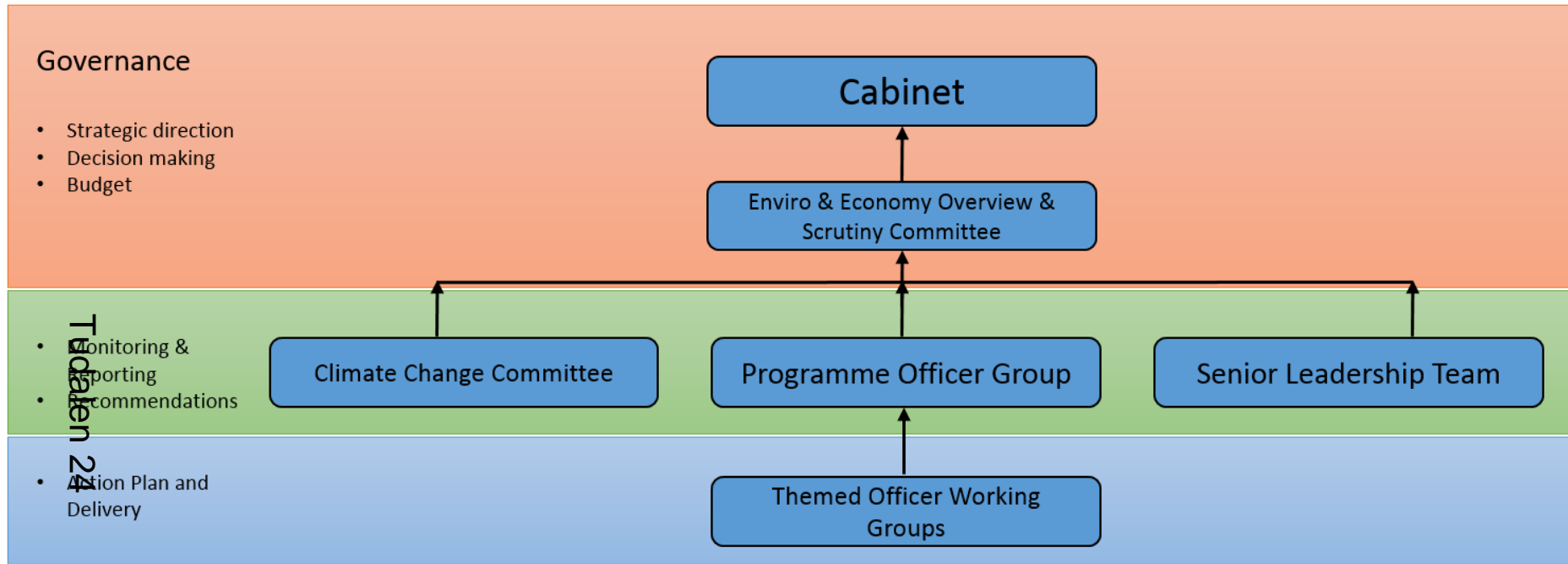| CCBe4	Facilitate transition towards a 'paperless Council' through, for example, digitisation of wage slips, report packs, contracts, applications.

Tudalen 22

Current Staff Resource for Programme

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┌─────────────────────────────────────────────────────────────┐
│   Programme Manager Climate Change & Carbon Reduction          │
└─────────────────────────────────────────────────────────────┘
            │                                    │
  ┌──────────────────┐              ┌──────────────────┐
  │  Climate Change   │              │  Climate Change   │
  │  Project Officer  │              │  Project Assistant │
  │(Currently recruiting)│           │ (Approved degree   │
  │                   │              │  apprentice Sept 22)│
  └──────────────────┘              └──────────────────┘
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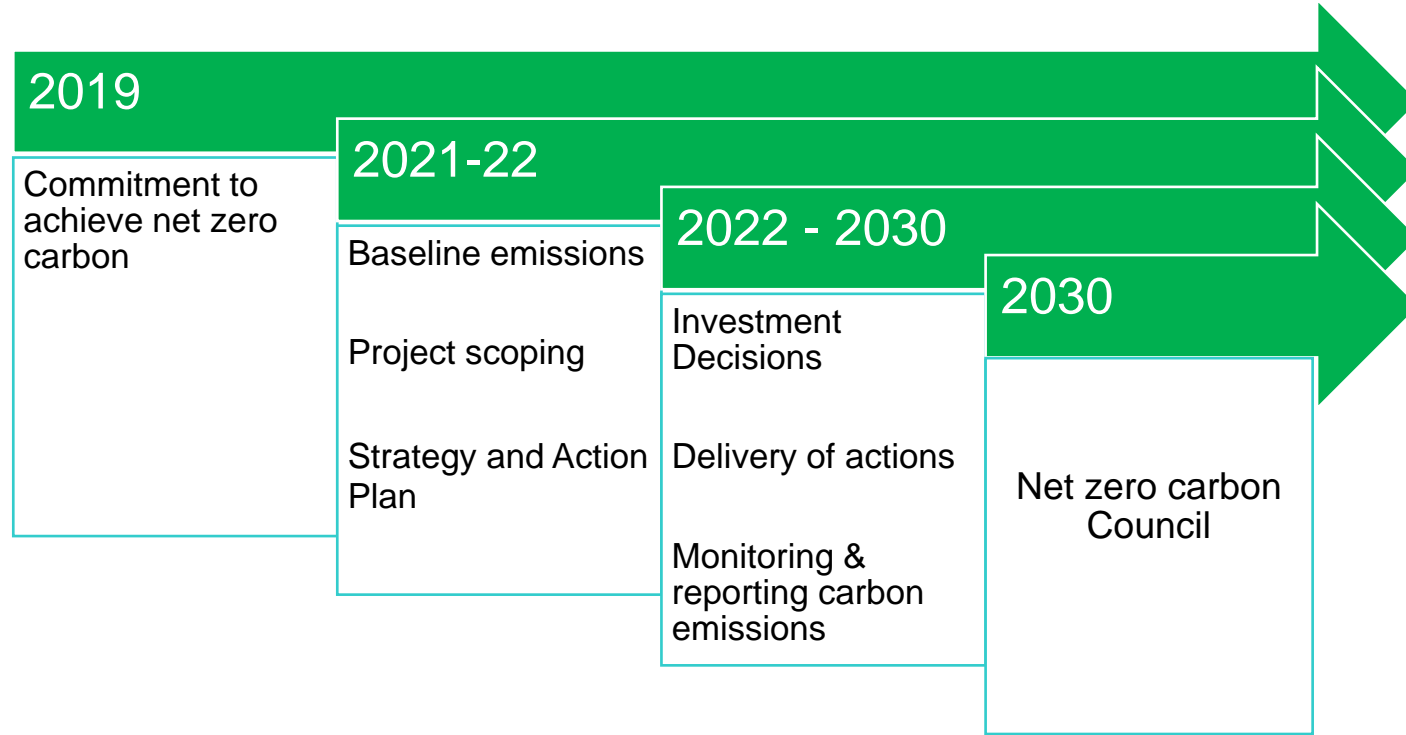COUNTY COUNCIL

Governance Structure

- Climate change and climate adaptation risks added to the corporate risk register.
- Climate change and climate adaptation targets part of Council plan.
- Integrated Impact Assessment completed as part of Climate Change strategy development.
- Annual programme progress reports to Scrutiny and Cabinet.
- Internal Audit scheduled for Q4 2022/23 to review compliance.
- Full strategy review scheduled 2024/25.
- Working with external parties: Joint PSB, NWEAB, Regional and pan-Wales LAs, WGES, WLGA, APSE.

Timeline to 2030

2019

Commitment to achieve net zero carbon

2021-22

Baseline emissions

Project scoping

Strategy and Action Plan

2022 - 2030

Investment Decisions

Delivery of actions

Monitoring & reporting carbon emissions

2030

Net zero carbon Council

2021/22 Progress Report

- Carbon footprint for 2021/22 was 1% over the 2018/19 baseline.
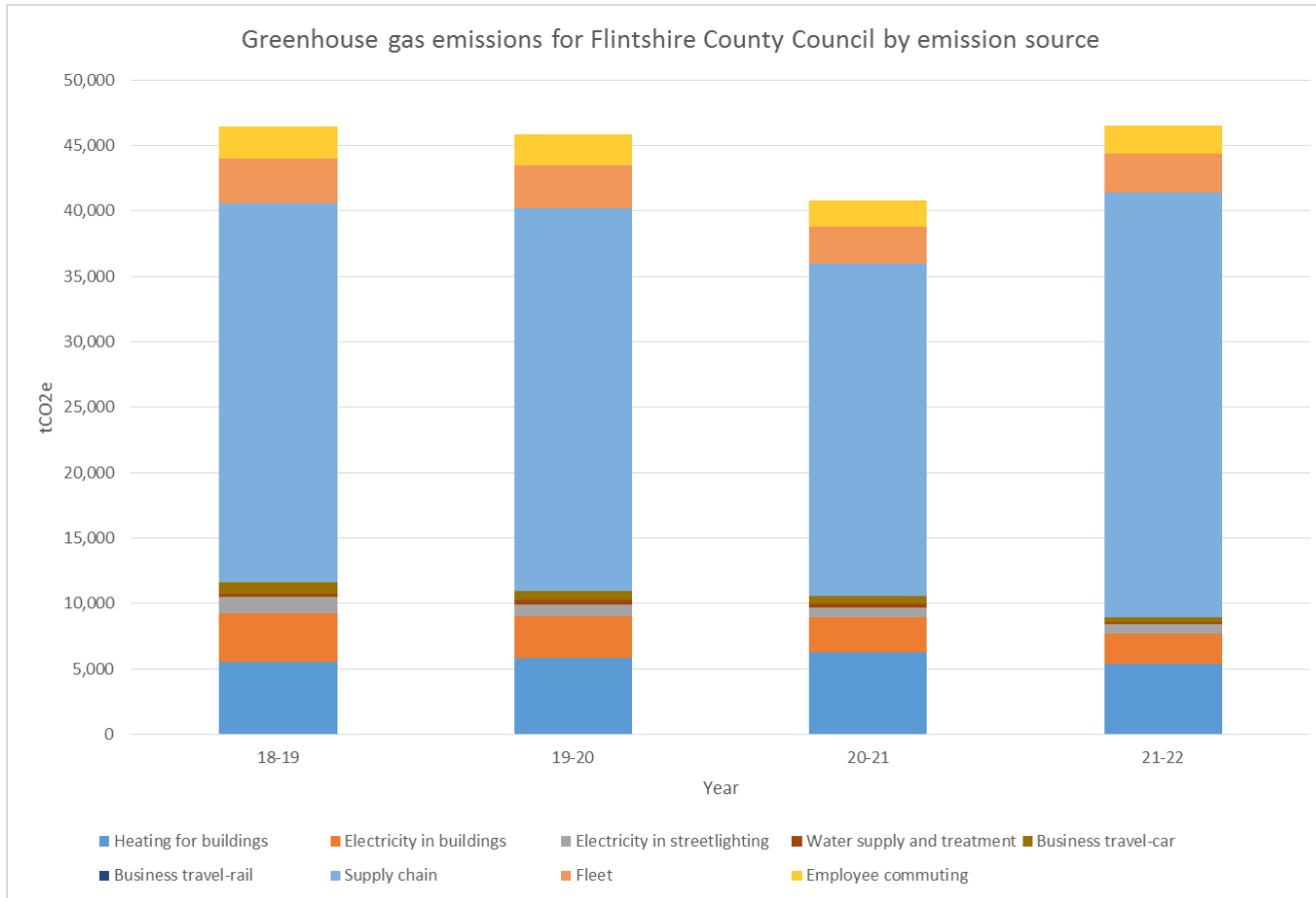- All emissions targets exceeded except Procurement which saw a 24% increase.

Figure: Flintshire County Council GHG emissions over past 4 financial years by emission source

2021/22 Progress Report

Theme	2018/19 Baseline tCO_2e	2021/22 target tCO2e % reduction	2021/22 actual tCO2e	2021/22 actual tCO_2e
Buildings	10,747	9%	8,543	**13% reduction**
Mobility & Transport	6,716	9%	5,504	**16% reduction**
Procurement	28,970	8%	32,446	**24% increase**

Figure: Flintshire County Council Carbon Emission Targets for 2021/22

Aside from supply chain, compared to 2018/19 baseline, we saw a

- 3% reduction in heating from buildings,

- 37% reduction in electricity in buildings,

- 44% reduction in electricity from street lighting,

- 51% reduction in business travel and

- 15% reduction from fleet.

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Recommendations

There are areas of the collection and interpretation of carbon emission data that need to be strengthened over the coming year in order to achieve more meaningful data on the Council's carbon emissions.

These areas include:

- Business mileage,
- Employee commuting / home working,
- Water use,
- Procurement.

Areas that need focus to decarbonise are:

- Procurement,
- Fleet,
- Buildings.

Priorities for 2023-24

- Baselining our buildings – what measures have already been made and what can we still do to reduce carbon emissions.

- Baselining our land – understanding the full benefit of our current land holdings – both with its current carbon absorption and areas where further projects may be suitable.

- Approving our transition to Electric Vehicles in Fleet – Tying in improvements to the EV charging infrastructure with our transition of fleet vehicles.

- Introducing carbon factors within our tendering processes – Supply chain will be the hardest nut to crack – sooner we can start working with local suppliers the better.

- Pilot new builds to NZC – First Net Zero Carbon schools and Care Home

- Working with NWEAB - in development of our Local Area Energy Plan

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CABINET	

Date of Meeting	14th February 2023
Report Subject	Climate Change Strategy
Cabinet Member	Collective Responsibility
Report Author	Chief Officer (Planning, Environment & Economy)
Type of Report	Strategic

EXECUTIVE SUMMARY

In 2019 the Welsh Government called for the Public Sector to become net zero carbon by 2030. Following this declaration, Cabinet resolved in December 2019 to a Climate Change Strategy which would set key aims and actions for creating a net zero carbon Council by 2030.

The Climate Change Strategy and action plan were adopted by Council in February 2022. The strategy detailed the commitment to provide an annual update on the Council's carbon emissions with consideration for further areas for development in achieving the net zero carbon goal.

This report summarises the progress made in 2021/22 across the key themes within the strategy: Buildings, Mobility & Transport, Procurement, Land Use and Behaviour.

The total carbon emissions for 2021/22 saw a 1% increase on the 2018/19 baseline. All carbon emission sources have seen decreases beyond the percentage targets, aside from Procurement which saw a 24% increase. Emissions from this source are directly linked to spend value and therefore the current methodology is adversely affecting the Council's total carbon footprint.

Fleet transition to low carbon alternatives and provision of available EV charging infrastructure for Council fleet is progressing slowly. There is also a need to embed climate change and carbon reduction throughout the Council, and increased visibility and provision of training can achieve this.

Lastly, further developing efficient energy management within our buildings will enable continued reductions from this theme.

	These areas need particular focus and revenue support over the coming year to accelerate decarbonisation and stay on track towards 2030 net zero carbon goal.

RECOMMENDATIONS	
1	To receive the report and note its contents.
2	To support the improvement of internal communications to raise awareness of the Council's positive progress in moving to achieve its climate change ambitions.
3	To support the introduction of embedding carbon measures into procurement processes within a pilot portfolio of the Council.
4	To support the case for an Invest to Save post and resources to introduce Building Management Systems within more of our building assets to improve the management of energy use.
5	To support the embedding of climate change principles throughout the Council, through delivery of Carbon Literacy training to Elected Members, Senior Managers and other key decision makers.

REPORT DETAILS

1.00	EXPLAINING THE REPORT
1.01	**Background:** In 2019, the Welsh Government declared a Climate Emergency in Wales, accepting the recommendations from the United Kingdom (UK) Committee on Climate Change and further setting ambitious plans for the public sector to be net zero carbon by 2030. In December 2019 Cabinet resolved to develop a Climate Change Strategy which would set key aims and actions for creating a net zero carbon Council, and this strategy and action plan was adopted by Council in February 2022.
1.02	**Purpose:** This report provides an update on the progress that has been made on climate change from adoption of the Climate Change strategy in February 2022 – January 2023. During the 12 months of this reporting period, there has been focus on implementation of key projects while carrying out the necessary research and development needed to progress within other priority areas. The report compares the most recent carbon emission data (Apr 2021 – Mar 2022) against previous year's data, and explains areas of increase and decrease. The report then breaks down progress in each theme within the published Action Plan, and starts to indicate where Capital and Revenue resource is needed to further progress within these actions.

	The Climate Change strategy set out a milestone plan for key theme areas. Appendix 1 details the progress made against annual target emissions in order to stay on track with our net zero carbon goal.
1.03	

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This can be summarised in the table below:

Theme	2018/19 actual tCO$_2$e	2019/20 actual tCO$_2$e	2020/21 actual tCO$_2$e	2021/22 actual tCO$_2$e	2021/22 target (% reduction) tCO$_2$e
Buildings	10,747	10,262	9,971	**8,543 (-13%)**	9,004 (9%)
Mobility & Transport	6,716	6,542	5,479*	**5,504 (-16%)**	5,938 (9%)
Procurement	28,970	29,227	25,366	**32,446 (+24%)**	23,337 (8%)

*Due to records retained during the COVID pandemic, in 2020/21, the figures for employee commuting were not previously included. The data detailed above is an estimate.

The table details the reductions made in 2021/22 against the 2018/19 baseline. An increase in emissions has occurred in Procurement due to the increase in spend in 2021/22. All other key themes have seen carbon reductions as we evolve into new ways of working post pandemic.

The Climate Change Action Plan captures the actions needed across the Council in order to achieve Net Zero Carbon by the 2030 goal. The Action Plan is divided into 5 key themes: Buildings, Mobility & Transport, Procurement, Land Use & Behaviour. To monitor progress within each of these themes, Officer Working groups were established with representation from key stakeholders across the Council's portfolios. This is a further way of embedding climate change into the Council, and Climate Change and Climate Adaptation actions continue to be included in the Council Plan.

There are 58 actions within the Action Plan that include both mitigation and resilience actions. This Action Plan is a working document that will be reviewed periodically as and when further intelligence is available to improve carbon reduction forecasts. The progress against this Action Plan is detailed in Appendix 2, and summarised below.

1.04	**Buildings**

Buildings

We continue to invest in our buildings to improve their energy efficiency and subsequent carbon emissions. We have successfully secured Salix loans, Prudential borrowing, Welsh Government grants and utilised internal funds to carry out works across our estate including schools, industrial units and street lighting. These have included LED upgrades, improved insulation, and BMS (Building Management System) upgrades to improve management of energy. We also continue to invest in building mounted renewable energy to reduce the need for grid electricity by installing solar PV and wind turbines on schools and industrial units.

Due to these works we have seen a 3% decrease in heating from buildings, 37% decrease in electricity from buildings, and 44% decrease in electricity in street lighting.

	Work has been underway in designing and developing the Council's first Net Zero Carbon school and is again demonstrating leadership by piloting a Net Zero Carbon Care Home which will be one of the first in Wales.

Rationalisation of assets continues as the Council moves out of the COVID pandemic and embraces new ways of working. The Asset Management Plan has been reviewed to reflect the Council's carbon ambitions when building and land assets become available.

Further opportunities exist to decarbonise our buildings and focussed resource needs to be made available to progress this in the coming year.

The Council continues to provide energy advice and support to domestic properties – both Council tenants and private households. The team works to reduce the risk of fuel poverty and works with occupiers and contractors to fit energy reduction measures in homes including insulation, LED light bulbs, energy use meters, solar energy and improved heating systems such as air source heat pumps.

In terms of economic strategy, place plans are being developed for each of our town centres over the coming year. These plans will help us to understand the regeneration needs within our urban communities and will consider carbon mitigation and adaptation and environmental impacts within these areas. The plans will give us a better understanding of our existing and potential assets and guide and shape decisions to ensure the county thrives and supports the wellbeing of our residents. |
| 1.05 | **Mobility & Transport**

In 2021/22 we have seen a 51% decrease in Business travel, 11% decrease in employee commuting and 15% decrease in Fleet, compared to our 2018/19 baseline.

The decrease in Business Travel and Employee Commuting can be attributed to the hybrid working patterns of the workforce coming out of the pandemic. The data for both of these areas has a reasonably high Relative Standard of Deviation (RSD) due to the methodology used to determine emissions. The RSD for this data can be reduced by improving the vehicle data we collect within our mileage travel claim forms for Business Mileage, and by surveying our employee base to determine methods of travel and average days travelled within Employee Commuting. This would also help us to better understand the impacts of home working on the Council's carbon footprint. The provision of a salary sacrifice scheme for ULEV would also improve our emissions from these sources.

The Council is working to understand the impacts of transition to alternative fuel vehicles with pilots of electric recycling vehicles and 2 electric buses introduced into the public service. These trials will allow us to understand the benefits and challenges associated with this transition, and better scope the network, infrastructure and training needed in order to transition while preventing any adverse effects to service provision. |

	The largest impact in this area comes from our own Fleet. Work is being carried out to develop the Council's EV Transition plan in line with the installation of EV charging points and the renewal of the Fleet contract. This project is one that has many contributing factors affecting a number of the Council's portfolios. There are many aspects of this roll-out that could be detrimental to Council service provision if not completed correctly. Specific skills and knowledge are needed to progress and implement this plan across the Council – overseeing the operational aspects of location of charging points, managing vehicle routes, providing training on the use and care of electric vehicles, provision of ongoing maintenance, while ensuring all stakeholder parties are involved and engaged. The Council needs to invest in specific staff resource to manage the operational side of this transition to reduce the impact on Council service provision. We have invested in EV charging infrastructure to support the public transition to electric vehicles. Working with Swarco, the first phase of 15 public access EV charging points have been installed across the county within public car parks. Feasibility for further phases could see additional provision in well-identified locations. The Council continues to develop its active travel network across the county by identifying and bridging gaps in the network. The Welsh Government Bus Reform on franchising the Bus Network may impact on current plans around public transport.
1.06	**Procurement** **In 2021/22 we saw a 24% increase in carbon emissions from supply chain.** This increase directly correlates with a Council-wide increase in spend over 2021/22. The Council has a responsibility to consider how we can incorporate climate change considerations into our procurement in a way that is proportionate and relevant and influences the market. Reducing emissions from procured goods and services is a significant part of our climate response. Procurement continues to be a contentious reporting figure due to being based on the value of goods and services procured. This will continue to fluctuate in line with Council spend and therefore be an unpredictable carbon emission source until we are able to demonstrate actual carbon emissions within contracts. Work is underway to include the requirement of a carbon plan in contracts over £5 million as per Welsh Government guidance. The biggest impacts will come from establishment of tender scoring criteria on carbon emissions from each contract. This will allow us to add carbon specific weighting to tendering processes and monitor the contract for the actual carbon emissions produced as a result of that service. These figures can then be reported as actual carbon emission figures in place of the contract value.

	The emissions from procurement are split into a number of categories and therefore we are able to pinpoint the key spend areas. These are: Social Care services, Construction, Education Services, and other Professional Services. We can focus on introducing carbon measures within these key spend areas to ensure high impact on carbon reduction within Procurement.

The Procurement Strategy is being reviewed to incorporate the introduction of measures to weight contracts with consideration for the carbon impacts of the contract and collection of that carbon emission data. Engagement work will need to be undertaken with suppliers to guide them on our carbon ambitions and the requirement for this data, and Council officers will require training to understand the carbon impacts.

Management of this process – working with Commissioning officers, our current suppliers and prospective suppliers to enable the collection of this data – is onerous and the Council needs to invest in a skilled staffing resource for this. Opportunities may be available to utilise a shared resource with our Joint Procurement partner Denbighshire County Council. |
| 1.07 | **Land Use**

The Council continues to work on understanding both existing and potential benefits of its land assets. Cross departmental working is being utilised to effectively map land areas that have potential for improved carbon absorption, natural flood defence and biodiversity net gain. These attributes must be weighed against current land use and other land priorities. Key sites will be identified this year to progress feasibility.

The Council has demonstrated leadership with further investment in renewable energy with the launch of two new solar farms potentially generating 3MW of electricity. This complements our existing solar farms and landfill gas generation, with solar farms now at former Flint landfill, Crumps Yard, Connahs Quay, and Standard Road and Brookhill Way, Buckley.

In partnership with University College London (UCL) we have demonstrated the need to innovate by trialling hydro power at Wepre Park. This installation is a proof of concept for this technology in providing renewable energy for the Visitor Centre from water flow.

By investing in these technologies, we can move Flintshire, and Wales as a nation, away from energy produced by burning of fossil fuels. Further opportunities exist to invest in large scale renewable energy schemes and focussed resource needs to be made available to progress this in the coming year.

Municipal waste continues to be sent to Parc Adfer energy from waste facility in Deeside which can power more than 45,000 homes. Kerbside food waste is sent to the anaerobic digester and green waste is converted into compost at the Greenfield facility. Kerbside recycling waste is collected and recycled largely within the UK. Links with Flintshire |

	Refurbs and other charities has improved the waste treatment of large household items and white goods. Items are collected at kerbside or set aside at Household Recycling sites and either repaired and reused or broken down into their component parts for recycling.

The provision for recycling in Council buildings can be improved through audit and education, and on-demand collections of recyclables are being trialled at Schools.

Due to these streams avoiding waste being sent to landfill, the carbon emissions within our baseline are those from fuel used by the Waste collection vehicles. These emissions will reduce once effective alternative fuel sources are available for these heavy use vehicles.

In terms of further biodiversity management, we now have a network of 109 nature areas across the county that incorporate reduced mowing regime, wildflower seeding, etc, with 11.8ha of our grassland estate managed for wildflower diversity. There are still opportunities to extend this network through land mapping and engaging with both internal and external stakeholders. The benefits of this network extend beyond biodiversity and provide accessible and visible green space to improve wellbeing.

Progress to increase tree canopy cover in line with the Urban Tree and Woodland Plan has been affected by storm damage and the continued issue of ash dieback. Ash dieback action plan is in place and tree works are being recorded and continued work with private landowners.

Community food growing sites continue to receive improvements and further potential sites have been identified for consideration for food growing. There are currently 16 sites across the county covering over 3.8ha. |
| 1.08 | **Behaviour**

In order to embed climate change, work has been undertaken to review and update key decision making tools within the Council. The Integrated Impact Assessment tool is used for compliance with the Public Sector Equality Duty and ensure due regard is given to reduce inequalities of outcome resulting from socio-economic disadvantage, when taking strategic decisions. It incorporates Welsh Language impacts, environment and biodiversity, health impacts, etc. This tool now incorporates the impacts associated with carbon to ensure strategic decisions consider our carbon ambitions. Further review of this document is taking place to ease completion by the Officer while ensuring all of the impact criteria is met. The Business case template for Capital expenditure has been updated to incorporate the mandatory modelling of a best-case carbon and biodiversity positive option. This process allows Officers to effectively consider the reduced carbon options within the early business planning process. Further support will be given to Officers completing the new requirements within this document. The Council's Asset Management Plan has been reviewed and updated to give due consideration for carbon impacts related to our building assets as well as |

	the consideration of land use to support carbon ambitions. The Procurement Strategy is also being reviewed as described previously.

To further support the embedding of climate change across the Council, the former Climate Change Programme Board was formalised as a Climate Change Committee and a Cabinet Member for Climate Change & Economy was established. The Board has oversight on the delivery of the Strategy and its Action Plan.

In embedding carbon within the decision making of Officers and Members, the first phase roll out of carbon literacy training has taken place. Carbon literacy training should be a mandatory requirement for Elected Members and Senior Managers across the organisation. Cost implications to the Council have been reduced by providing in-house delivery of a package developed by Carbon Literacy Project specifically for Local Authorities. Twenty Officers within the Themed Working groups have attended this training and feedback has been very positive. The next phase of training needs to focus on Elected Members and Senior Managers across the Council and budget and time allowance for this must be accounted for.

The wider employee base would benefit from completion of a more basic introduction to climate change, and Flintshire Council is leading a regional public sector commission to facilitate the development of an e-learn module for this purpose.

Steps have been taken in the transition towards a 'paperless Council' through provision of hardware for Members to enable access to Report Packs digitally. The default position is now that paper copies of reports are not sent out unless specifically requested. This process is still ongoing to identify further barriers to utilising digital report packs. Further engagement work to improve behavioural change across Officers and Members is needed. Other areas of paper use across the Council are being identified and reviewed in line with the Digital Strategy. |
| 1.09 | Reducing the Council's carbon emissions alone – roughly 2% of the total emissions of the county - will not achieve the net zero Wales by 2050 goal, and the expectation is that we use our influence as a Local Authority to encourage local businesses, voluntary organisations, public services and the general public to work towards reducing their carbon emissions.

We have developed a decarbonisation network for Deeside industrial area to develop aims and objectives and share good practice and are developing a toolkit for local businesses to calculate their carbon footprint and develop a carbon reduction plan.

We have developed public facing 'Climate Change' pages within the Council's website which are regularly updated with our progress and provide a resource for the public and Council employees. In November we launched the Climate Change e-newsletter with a subscription of over 900. The newsletter highlights key projects, useful information and |

	upcoming local and national events. The 'Climate change' topic is now available for selection in the Flintshire Council subscription topics.

The Climate Change Programme Communication and Engagement plan ensures that all stakeholder groups are engaged and informed through a variety of media. During COP Cymru in November 2021, the Council shared its good practice by presenting on the Flintshire Solar Farms and continued investment and leadership in renewable energy generation. During Wales Climate Week in November 2022 drop-in sessions were organised across the county providing energy saving advice, carbon footprint calculations and allocations of trees to Welsh households as part of the 'My Tree Our Forest' programme. Plans are being developed for activities to engage businesses, residents and schools in climate change action.

Networks continue to be developed across public and private sectors to ensure a comprehensive approach to climate change across the county. The Welsh Government Energy Service and Welsh Local Government Association lead both regional and pan-Wales networking groups for decarbonisation officers across the public sector. This is an essential resource for learning and showcasing best practice and provides opportunities for joint working projects where all organisations are working towards a shared outcome. Outputs from these groups are fed into the Local Government Climate Strategy Panel that is represented by Welsh Government. Wrexham & Flintshire Public Service Board (PSB) continues to provide a collaborative environment for all public sector organisations in achieving carbon and environmental ambitions, and the links these have with social prescribing and health and wellbeing. |
| 1.10 | **External influences:**

The Audit Wales report 'Public Sector Readiness for Net Zero Carbon by 2030', published in July 2022, makes five calls for action from public bodies:

- Strengthen your leadership and demonstrate your collective responsibility through effective collaboration
- Clarify your strategic direction and increase your pace of implementation
- Get to grips with the finances needed
- Know your skills gaps and increase your capacity
- Improve data quality and monitoring to support your decision making.

As a Council we have strengthened our leadership through a committed Cabinet Member for Climate Change, a formalised Climate Change Committee, and cross-departmental Officer working groups to demonstrate collective responsibility through collaboration. We are working with our public sector partners to better understand the finances associated with decarbonisation, and to share best practice with improved data quality. The Council must continue to increase the pace of |

implementation of carbon reduction projects and increased capacity where skills gaps exist by providing the necessary investment.

In July 2022 Welsh Government also published their 'Decarbonising Social Care in Wales's report which highlights key actions needed by the public sector to better understand the carbon emissions from social care services and to ensure actions to decarbonise are included in strategic plans. The Council's Climate Change Strategy already encompasses many aspects associated with social care, however, this will be reviewed as part of the strategy review in 2024/25. Within this review content and detail will be compared to the 'Social Care route map' to ensure this service area is effectively represented. Future carbon emission submissions to Welsh Government will require a separate analysis of emissions from social care.

The methodology for the 2021/22 carbon emission data submission to Welsh Government was modified to incorporate the addition of new measures around Homeworking. The methodology used for calculating these emissions has a very high Relative Standard of Deviation due to necessary data being difficult to determine. In order to make this data meaningful and a true reflection of the carbon impacts from home working, we need to better understand the quantity of time our employees work from home. This data collection could be tied into the wider 'employee commuting' survey. Due to the disparity of data, and emissions from Homeworking not being included in our baseline figures, we have not included this in scope for our 2021/22 carbon emission data report.

With the addition of Homeworking emissions in 2021/22, and social care in 2022/23, the moving of reporting goalposts has potential to adversely affect the progress made in reducing our carbon emissions. It should be decided if any changes in methodology are to be included in future internal reporting or if the original baseline figures should be maintained.

In December 2021, the Welsh Government committed to the development of regional energy strategies and Local Area Energy Plans in its approach to create a national energy plan by 2024. This exercise maps out future energy demand and supply for all parts of Wales to identify gaps and enable future planning.

The North Wales Energy Strategy & Action Plan has now been developed through a public sector working group and has been approved by the North Wales Economic Ambition Board. The strategy and action plan now needs to be endorsed by each Council, and implementation of this will be led by Ambition North Wales.

Ambition North Wales are also leading on the development of the Local Area Energy Plans and work with each Council will commence in 2023. The Planning is being funded by Welsh Government and the resulting Local Area Energy Plan will inform both local and national investment and decisions on future requirements for energy across all sectors.

1.11	Significant change will not happen within the organisation without adequate capacity. This can take the form not only in the human resource to lead and manage projects or the financial resource to invest when needed, but also the political will and understanding of realising the long term benefits of decisions made today.
	In times of austerity, it is important to justify how spending decisions are made. Prioritising one area of urgency over another is down to how seriously the Council considers its responsibilities in terms of the ambition to become net zero carbon. The Council has a record of committing to investment in green projects highlighted within the Council Plan and this must be continued to achieve the ambitious targets set out.
	We have invested in staff capacity to lead the delivery of the Climate Change strategy, however we now need to utilise specific knowledge and skills to develop and lead change in decarbonising our Fleet, Buildings and Procurement. These roles should be located within the teams leading on the key actions to reduce carbon emissions from these work areas.
	The Council was successful in securing a degree apprentice in 'Low Carbon Energy and Sustainability' through Welsh Government's initiative to invest in green skills. This placement is in partnership with Wrexham Glyndwr University and is already proving to be a valuable resource for the programme.
1.10	By working to achieve these goals Flintshire County Council can make its contribution to tackling the climate emergency and a net zero Wales by 2050 as detailed in Climate Change (Wales) Regulations 2021. Furthermore, achieving the Council's own well-being goals and those within the Well-being of Future Generations (Wales) Act 2015. As climate change and the environment are intrinsically linked the Council will also deliver on its statutory duties within Environment (Wales) Act 2016 to maintain and enhance biodiversity.

2.00	RESOURCE IMPLICATIONS
2.01	Capital and revenue resource will be required to continue improvement of energy efficiency in buildings assets. Where possible SALIX loans and external funding will support this programme. Costs still to be determined.
2.02	Capital resource will be required for improvement of electric vehicle charging infrastructure to support transition of fleet to EV. Installation cost approximately £600k supported by external funding.
2.03	Next stage large scale renewable energy generation estimated costs £1.1m. This could be funded through Prudential borrowing.
2.04	Dedicated staff resource is needed to progress the decarbonisation of both fleet and procurement. Opportunities exist to utilise a joint Procurement officer with Denbighshire County Council.
2.05	In order to educate and inform key decision makers on climate change actions it is essential that priority is given to completion of Carbon Literacy training. In-house provision of this is saving the Council approx £34,000 in

		training revenue. The estimated costs for delivery to all Elected Members and Senior Managers is £2,000.

3.00	**IMPACT ASSESSMENT AND RISK MANAGEMENT**	
3.01	There will be significant reputational risk if the County Council is not seen to take a leadership role in moving towards net zero carbon. Financial risk will be assessed on a project-by-project basis but lack of availability of internal and external funding will reduce the action that can be taken.	
3.02	**Ways of Working (Sustainable Development) Principles Impact**	
	Long-term	Positive: Decarbonisation of the Council's activities and services will require long term planning and a long term vision to ensure systems and services are fit for purpose as the climate changes as well as reducing the impact of harmful climate change through mitigation. Decarbonisation activities such as planting trees and developing renewable energy will have long lasting impacts over tens to hundreds of years. These activities also contribute to the climate change targets set by Welsh Government particularly Wales generating 70% of its electricity demand from renewable energy by 2030 and becoming a net zero carbon nation by 2050.
	Prevention	Positive: In order to avoid the harmful effects of climate change it is necessary for the Council to reduce its carbon emissions and increase the amount of carbon sequestered in its land assets. Carbon emissions caused by human activities are the main cause of climate change. Mitigating climate change will help to reduce impacts such as extreme weather causing flooding / extreme heat, loss of wildlife and habitats, increased pests and diseases, etc. Adapting to the impacts of climate change now will improve sustainability of our communities as the climate changes.
	Integration	Positive: Becoming net zero carbon integrates with the following priorities under the Council Plan; Green Council, Ambitious Council and Supportive Council. It integrates with the public service board objectives in the Environment priority of the Wellbeing Plan as well as the Smart Access to Energy project in the North

		Wales Growth Deal. It also integrates with the Environment (Wales) Act 2016 and Welsh Government's decarbonisation of the public sector agenda.
	Collaboration	Positive: The climate change programme offers multiple opportunities to work collaboratively both internally and externally – and this collaboration will determine the success of the programme. Collaboration with the following groups is needed to ensure decarbonisation is integrated into everything that the Council and the wider region does and plans for: - Welsh Government - Other public sector organisations such as local authorities, NRW, health boards, universities. - Private sector - Regional groups such as the North Wales Economic Ambition Board - Local Town and County Councillors - the local communities
	Involvement	Positive: If decarbonisation is to succeed and harmful climate change is to be avoided then everyone at a professional and personal level will need to be involved

Well-being Goals Impact

	Prosperous Wales	Positive: Reducing the Council's carbon emissions should enable strategic investment in projects and ways of working that could deliver savings or generate new income streams, therefore supporting delivery of local services. It should also facilitate the development of the low carbon economy through infrastructure projects, sustained tree planting, land management etc which can support local businesses and communities.
	Resilient Wales	Positive: Decarbonisation of the Council's activities and services will promote resilience through actions such as: investment in renewable energy infrastructure which helps to reduce reliance on imports from across Europe and the World and the associated price fluctuations, and increasing ecological resilience through enhancing biodiversity particularly on land with low ecological

		value. By planning for climate change adaptation the Council's services and its communities will also be resilient.
	Healthier Wales	Positive: Decarbonisation requires a shift to active travel, investment in green infrastructure, support for local and sustainable food sources, and development of renewable energy which are likely to promote healthier lifestyles, improved wellbeing and reduced health impacts from poor air quality.
	More equal Wales	Neutral; No impact identified
	Cohesive Wales	Neutral; No impact identified
	Vibrant Wales	Neutral; No impact identified
	Globally responsible Wales	Positive: Reducing the Council's carbon emissions to net zero helps to mitigate climate change and therefore contributes to the achievement of Welsh Government, UK Government and international climate goals.
3.03	Not anticipated to be any negative anti-poverty, equalities or environmental impacts of the scheme.	
3.04	**The Council's Well-being Objectives** Decarbonisation of the Council's activities will support the Green Council objective with a key impact of reducing carbon emissions mitigating climate change, for example, through the development of alternative and renewable energy production, promoting active travel, shifting to electric fleet vehicles, engaging with the supply chain and promoting a low carbon economy through the goods and services purchased. It can also contribute towards the success of other Council Wellbeing objectives such as 'An Ambitious Council' and 'A Caring Council' through providing local job creation and apprenticeships and therefore potentially reducing poverty through maximising residents' income and employability.	

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	

5.00	APPENDICES
5.01	**Appendix 1** – FCC Carbon Emission update **Appendix 2** – Climate Change Action Plan progress

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS

6.01	1. Prosperity for all – a low carbon Wales https://gov.wales/prosperity-all-low-carbon-wales

7.00	**CONTACT OFFICER DETAILS**
7.01	**Contact Officer: Alex Ellis – Programme Manager** **Telephone:** 01352 703110 **E-mail:** alex.ellis@flintshire.gov.uk

8.00	**GLOSSARY OF TERMS** **These are provided corporately on the Infonet (link) and maintained by the Executive Office**
	Capital Funding: Capital funding is usually utilised to acquire or improve a long-term asset such as equipment or buildings. **Carbon emissions**: Used interchangeably with greenhouse gas emissions; meaning emissions of carbon dioxide, methane etc from human and natural activities and sources. Wider greenhouse gas emissions are collectively calculated into a 'carbon dioxide equivalent' displayed as CO_2e. **Carbon sequestration**: the process involved in carbon capture and the long term storage of atmospheric carbon dioxide. **Decarbonisation**: Reducing and ultimately eliminating carbon dioxide and other greenhouse gas emissions. **EV:** Electric Vehicle **Net Zero Carbon**: Balancing carbon emissions with carbon removal or simply eliminating carbon emissions altogether. **Revenue Funding:** is utilised for items that will be used within a year. Examples include salaries, heating, lighting, services and small items of equipment. Routine repairs are revenue expenditures and can include significant repairs that do not extend the life of the asset or do not improve the asset.

Carbon Emission update 2021-22

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1 Executive Summary

Flintshire County Council's target is to become net zero carbon by 2030.

In order to gauge progress towards this target, carbon emissions are tracked and reported on an annual basis. By understanding what the sources of carbon emissions are, the Council can formulate strategic priorities to mitigate climate change.

The progress detailed within the report allows us to pinpoint areas where data collection methods need to be improved, focus investment and decision making on areas that are not performing as expected, and review projected forecasts to take us to our 2030 goal.

The methodology used to determine the Council's carbon footprint is based on Welsh Government guidance 'Welsh Public Sector Net Zero Reporting Guide Version 2, 2022'.

Some of the methodology used within this process has already changed year on year since the baseline calculation was made in 2018/19. Introduction of new measures into the calculation can confuse and undermine the progress that the Council is making in its carbon reduction activities. Due to this, this progress report follows the sources of carbon emission as detailed in our in-scope baseline footprint calculations.

The total carbon emissions for 2021/22 before removing carbon offset from our land was 46,493tCO$_2$e. This is a 1% increase on carbon emissions based on our 2018/19 baseline and is due to the increase in emissions from Procurement. The methodology adopted for emissions from procurement is based on value of spend, and therefore an increase in Council spend will reflect an increase in carbon emissions.

All other sources of carbon have seen reductions above the targeted 9% and 8% as detailed in the climate change strategy.

Focus must be given to adoption of a more effective and accurate methodology for determining the Council's emissions from supply chain.

2 Our Baseline

Everything we do has an effect on the environment we live in; from burning fossil fuels for heating to collecting kerbside waste and recycling. Flintshire County Council reports its carbon footprint to Welsh Government as tonnes of carbon dioxide equivalent (tCO_2e) within its organisational and operational boundaries. This plan relates to the Council's internal operations which are:

- Buildings owned and operated by the Council including offices, depots, schools, community centres, care homes, public conveniences and street lighting. This includes heating, electricity and water use within these facilities.
- Fleet vehicles owned by the Council,
- Business travel for work,
- Employee commuting,
- Procurement of goods and services.

The scope excludes:
- Domestic properties,
- Buildings owned by us that are leased out and operated by third parties,

In order to establish where we are and where we need to be, we first need to look at our baseline figures. In 2018/19 we were able to capture the data set out below. Figure 1 below shows a breakdown of GHG emissions by emission source for 2018/19.[1]
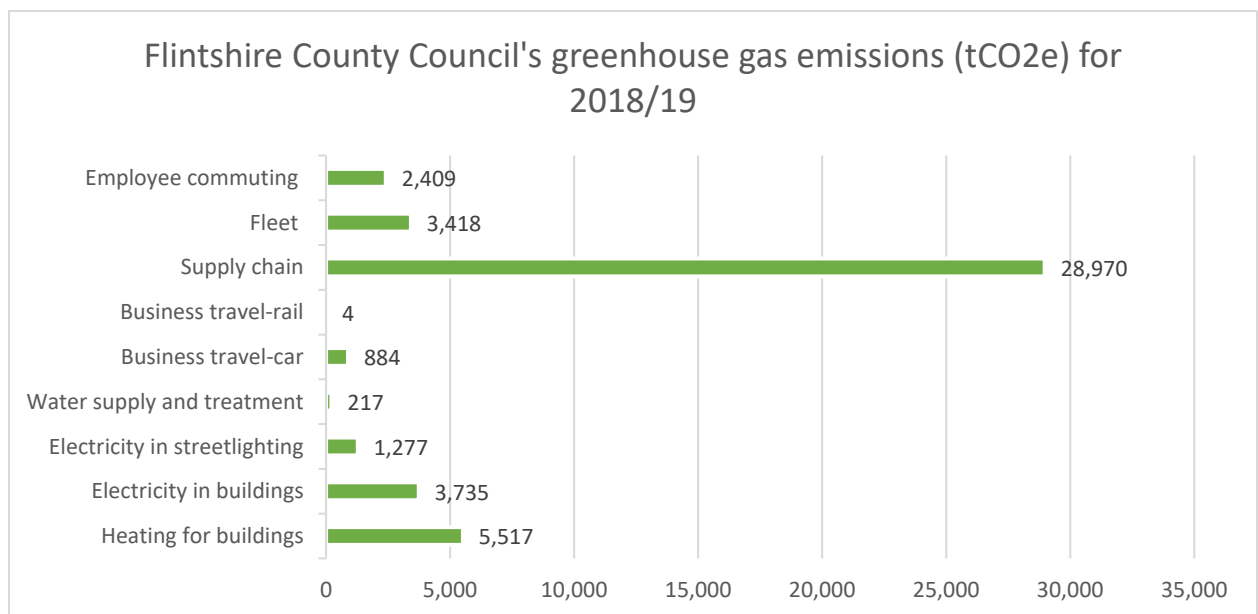

Figure 1: Flintshire County Council's GHG emissions for 2018/19 baseline

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[1] *It should be noted that the data has been collected using the best available methods at that time, and therefore the expectancy is that data accuracy will improve with emerging methodologies.*

As these figures suggest, the biggest contributors to the Council's carbon footprint in 2018/19 were:
- Supply chain; procurement of goods and services: 62%
- Heating for buildings: 12%
- Electricity in buildings: 8%
- Fleet: 7%
- Employee commuting: 5%[2]

The Council produced 1,664 tonnes of waste in 2018-19 from its operations, however all waste collected by the Council, including operational waste, was either recycled or sent to energy from waste plants for incineration when it cannot be recycled. All green waste is composted. Therefore the only carbon emissions related to waste are included in the 'Fleet' data through waste collection vehicles.

Supply chain; procurement of goods and services equates to 62% of our baseline carbon emissions total. The Council understands that there are actions that can be taken to reduce these emissions through decision making processes and supplier engagement, however this figure will only see significant reductions if the appropriate investment, policy and infrastructure is provided and developed by the Government.

From this data we understand that our baseline carbon emissions for 2018/19 were 46,434 tCO2e.

In 2018/19, the Council reported an estimated 1,500 tCO_2e absorbed from its land assets. However, this figure has been estimated based on two specific land types – grassland and woodland/forest – with a common value factor used to determine the absorption of carbon. As yet, no formal baseline figures have been calculated for our land assets to determine more accurate absorption figures and therefore this action is a priority in realizing the true benefits of our land to both carbon sequestration and wider habitat richness.

The 2018/19 carbon absorption total can be removed from our emissions total as a 'carbon offset'. Therefore to meet our net zero carbon goal, the total carbon emitted by the Council, minus the total carbon absorbed from Council owned and operated land, must equal zero by 2030. In 2018/19 the balance of carbon emissions was 44,934 tCO_2e.

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[2] *Note this data has a high level of inaccuracy due to the calculation methodology used*

3 Carbon Emissions for 2021/22

The Council now has carbon emission data for four financial years as shown in Figure 2 below. The total carbon emissions for 2019/20 saw a 1% reduction on the 2018/19 baseline. The total carbon emissions for 2020/21 saw a 17% reduction on the 2018/19 baseline. The total carbon emissions for 2021/22 saw a 1% increase on the 2018/19 baseline.

Emissions reductions in 2021/22 were made across all sources except supply chain where there was a 12% increase on 2018/19 baseline. The methodology adopted for calculating our carbon emissions is mandated by Welsh Government. The methodology for calculating carbon emissions from supply chain is based on the value of spend. Therefore if the Council spends more money one year than a previous year then the consequential emissions will be higher. This is not an ideal or accurate method to calculate these emissions and work must be carried out to improve the recording of actual emissions related to contracts to improve this data accuracy.
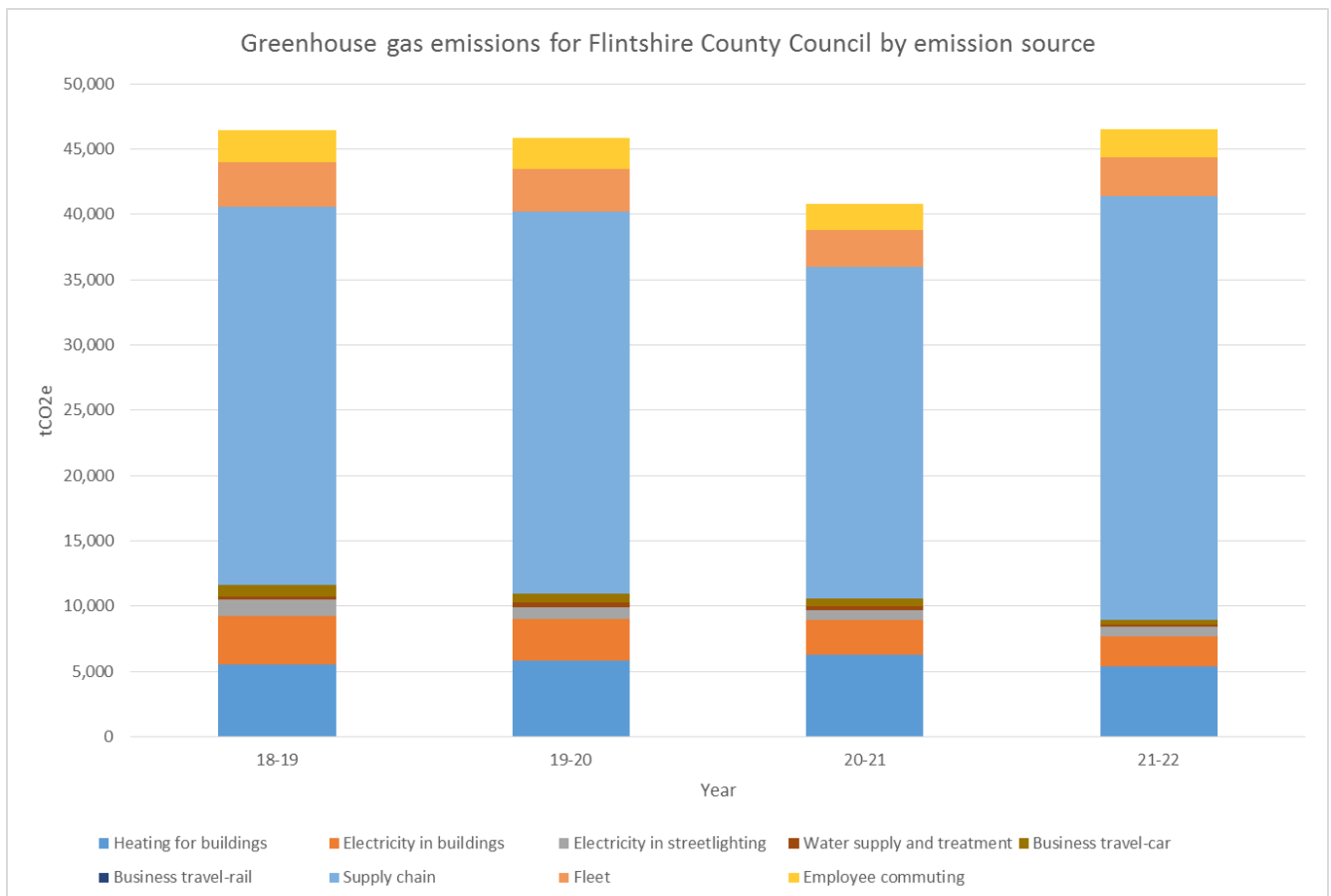

Figure 2: Flintshire County Council GHG emissions over past 4 financial years by emission source

Aside from supply chain, compared to 2018/19 baseline, we saw a 3% reduction in heating from buildings, 37% reduction in electricity in buildings, 44% reduction in electricity from street lighting, 51% reduction in business travel and 15% reduction from fleet. This is reflective of the projects carried out during this reporting year by further reducing emissions from buildings through renewal of heating sources, management of heating controls, other energy efficiency measures and building-mounted renewable energy generation. Emission reductions in business travel and fleet reflect the continuation of hybrid working across the county, and the use of intelligent route mapping for Streetscene and maintenance services.

The methodology used to determine emissions from business mileage and employee commuting continue to have a high level of deviation due to gaps in data records. Data recorded within mileage claims needs to be strengthened so that actual vehicle and fuel types can be captured. This will allow for more accurate calculation of emissions from business travel. An employee survey to determine methods of travel into the workplace and frequency of travel would allow more accurate estimates of related emissions, and the subsequent impact of home working.

The methodology to determine emissions from water use also have a high level of deviation. These figures are currently calculated using invoice cost values. Being able to capture actual water usage figures would improve the accuracy of emissions from water usage across our buildings.

Figure 3 below shows our actual emissions and the milestones we hope to reach between now and 2030. We are currently aiming for a 60% emission reduction in Buildings, 80% emission reduction in Mobility & Transport and 60% reduction in Procurement by 2030.

Theme	Baseline tCO_2e 2018/19	Actual Reduction 2021/22	Targeted Reduction	
			2024/25	2029/30
Buildings	10,747	13%	35%	60%
Mobility & Transport	6,716	16%	50%	80%
Procurement	28,970	24% increase	30%	60%

Figure 3: Flintshire County Council Carbon Emission Milestones to 2030

To achieve these milestones we set annual targets in each theme as detailed below in Figure 4. The target percentage reduction is compared to the 2018/19 baseline. We overachieved on our reduction targets in Buildings and Mobility & Transport, and underachieved in Procurement as detailed previously.

Theme	2018/19 Baseline tCO_2e	2021/22 target $tCO2e$ % reduction	2021/22 actual $tCO2e$	2021/22 actual tCO_2e
Buildings	10,747	9%	8,543	**13% reduction**
Mobility & Transport	6,716	9%	5,504	**16% reduction**
Procurement	28,970	8%	32,446	**24% increase**

Figure 4: Flintshire County Council Carbon Emission Targets for 2021/22

4 Land Use emissions

Land use emissions are determined using the Welsh Government's methodology, emission factors for each land type, and our internal knowledge of land types under our ownership and control. Depending on usage, land can have positive or negative net carbon emissions. Settlements and croplands are net emitters while forests and grassland absorb and store carbon. Wetlands and peatlands also have the potential to absorb and store carbon depending on their condition, however the Welsh Government methodology does not currently include emission factors for these land types.

The emission breakdown from our land types can be seen in Figure 5. We are working to better understand and map our land assets so that we can ensure this data is accurate. This exercise also helps us to identify areas of land that could be beneficial for carbon off setting, natural flood defence and biodiversity net gain.

Land Type	Land area ha	Emission factor	Total kg CO2e
Forest land	151.68	-5.420194632	-822135.1219
Grassland	479.91	-1.44069199	-691402.4928
Settlements	1.23	2.104948644	2589.086832
Wetlands	78.91	N/A	

Figure 5: Breakdown of Flintshire County Council Land Types and Carbon impact 2021/22

Figure 6 shows the 2021/22 emissions and removals of kgCO2e based on the above methodology. By increasing the quantity of forest land and grassland we can increase the amount of carbon that we absorb and store. The pan-Wales decarbonisation network are working with Welsh Government to improve the data and emission factors associated with different land types to better reflect the assets that we have within Flintshire land.

Land based emissions	Units of kgCO$_2$e	
Categories	**Emissions**	**Removals**
Total land based emissions	2,589	- 1,513,538

Figure 6: Summary of Flintshire County Council land based emissions/removals 2021/22

5 Renewable Energy generation

The Council continues to invest in renewable energy generation both within its building assets and large scale solar farms. Investing in renewable energy that is consumed onsite allows a reduction in energy used from the grid. This saving is demonstrated in the emissions from electricity use. Investing in renewable energy that is exported into the grid assists in the local and national decarbonisation of energy provision moving us away from reliance on energy generated by burning of fossil fuels. Figure 7 below shows the energy generated and exported from each of our current renewable energy source types.

Renewables	Units of kWh	
Categories	**Total generated**	**Total exported**
Onsite renewables – Solar PV mounted	636,395	159,099
Onsite renewables – Wind mounted	10,922	2,731
Onsite renewables – Biogas CHP (Landfill gas turbines)	1,614,723	1,614,723
Onsite renewables – Solar PV ground mounted	721,081	721,081
Renewables	**2,983,121**	**2,497,634**

Figure 7: Flintshire County Council Renewable Energy Generation 2021/22

6 Next steps and recommendations

It is the role of the Climate Change Committee to oversee and review the progress made against the Council's ambition to become net zero carbon by 2030. The Committee will continue to develop the Climate Change strategy and action plan and oversee implementation of its delivery.

There are areas of the collection and interpretation of carbon emission data that need to be strengthened over the coming year in order to achieve more meaningful data on the Council's carbon emissions. These areas include business mileage, employee commuting, home working, water use and procurement as detailed within this report.

Officer working groups for each of the key themes continue to work through the action plan, troubleshooting, identifying resource needs and developing business cases where necessary.

Appendix 1 - Glossary

Biodiversity: The variety of plant and animal life that make up our natural world or a particular habitat.

Carbon Dioxide Equivalent (CO_2e): the equivalent amount of carbon dioxide that would produce the same amount of global warming over a 100 year timescale.

Carbon Store: the amount of carbon stored in the natural environment such as soil, woodland, peatland etc. These may also be described as carbon sinks.

Council assets: buildings and land owned by Flintshire County Council.

Decarbonisation: reducing the carbon intensity and greenhouse gas emissions of an activity or service or wider organization.

Net Zero Carbon: Emissions of greenhouse gases are balanced by the removal of greenhouse gases from the atmosphere such as by trees, peatland and carbon capture and storage technologies.

Offsetting: A reduction in GHG emissions (e.g. wind turbines replacing coal) or an increase in carbon storage/GHG removal enhancement (tree planting, peatland restoration) outside of the GHG emissions boundary of an organisation that is used to compensate GHG emissions occurring within the organisation's boundary

Sequestration: Removing carbon dioxide from the atmosphere and then storing it, usually through environmental processes such as photosynthesis, absorption by soil, oceans etc.

Climate Change Programme Action Plan

Ref.	Theme	Action	Target start date	Progress 2021-22
CCBu1	Buildings	All Council buildings and schools electricity delivered through a green energy tariff by 2025	2022	Large percentage of buildings are now included in the green energy tariff. Remaining buildings are being added as and when existing energy contracts end.
CCBu2		Review and rationalise building assets and leases considering new ways of working	2022	The council's Asset Management Plan has been reviewed in line with the climate change strategy and wider Council ambitions. Rationalisation of assets is ongoing.
CCBu3		Improve the standard of energy efficiency within Council buildings through retrofit measures such as; insulation, glazing, installation of efficient / renewable heating systems, and reducing building electricity use.	2022	Energy efficiency works continue to be completed across the Council's assets. A full scoping exercise is needed to determine what remaining improvements can be made and this will inform a completion rate and investment need.
CCBu4		Further explore renewable energy opportunities for Council buildings, council office car parks and depots	2022-23	Work is ongoing with Welsh Government Energy Service to determine feasibility of sites for further renewable energy generation.
CCBu5		Design and refurbish buildings for carbon neutral / low energy operation, biodiversity net benefit and adaptation to the impacts of climate change.	2022	Mandatory requirement for new, extended and refurbished schools to be Net Zero Carbon in operation (NZCio). The first NZCio school is in plan. Ambitious plans also underway for first NZCio care home. New builds are estimated to have 20% cost increase to meet NZC standard.
CCBu6		Ensure green infrastructure is considered throughout all existing Council assets and future schemes	2022	Ongoing process identifying feasibility of potential green infrastructure projects on a case by case basis. Links have been made to ensure officers are consulted on potential of inclusion in future schemes.
CCBu7		Continue to carry out flood investigation and alleviation to identify proactive mitigation measures & prevent recurrent flooding	Ongoing	The Council's Flood Risk Management Strategy is being reviewed and will encompass areas of recurrent flooding.
CCBu8		Prioritise nature based solutions to flooding remediation proposals	Ongoing	This will also be encompassed in the Flood Risk Management Strategy review.

Ref.	Theme	Action	Target start date	Progress 2021/22
CCBu9		Explore feasibility for rainwater harvesting within Council assets, particularly on high water usage sites.	2023	*No update*
CCBu10		Support schools and Town & Community Councils to reduce operation's emissions and engage with our building users to encourage positive behaviour change	2022	Toolkits are being developed for schools and Town & Community Councils to provide advice and guidance on carbon footprint calculation and mitigation measures. This will include aspects of technology, behaviour and best practice.
CCBu11		Develop plan for the decarbonisation of Council homes in line with Welsh Government guidance to ensure optimised thermal efficiency and minimised cost of heating	2022	Decarbonisation strategy in development. Bid secured through Optimised Retrofit Programme for pilot housing scheme which will inform future schemes. Estimate £80k cost per house to meet NZC.
CCBu12		Continue to deliver programmes with private households and local businesses to reduce fuel poverty and provide access to wider energy efficiency and renewable energy schemes.	Ongoing	The Domestic Energy Efficiency Team continues to provide energy efficiency advice and support with installation of energy efficiency measures. Decarbonisation network developed for Deeside industrial area to develop aims and objectives and share good practice. Funding secured through Shared Prosperity Fund to provide grants for commercial carbon reduction feasibility studies.
CCBu13		Provide support through Flood Risk Planning to businesses and households to better implement property flood resilience	2024	Updated TAN 15 will be available June 2023 with guidance from NRW.

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Ref.	Theme	Action	Target start date	Progress 2021/22
CCM1	Mobility & Transport	Review fleet policy with consideration for charging of vehicles.	2022	Policy under review to incorporate decarbonisation of fleet.
CCM2		Learning from accelerated change due to COVID-19, review and implement policies and initiatives that support the reduction of carbon emissions from business mileage. Continue to implement and develop agile working practices to reduce employee journeys and utilise virtual meetings. Act as an example to businesses.	2022-23	Hybrid Working Policy has been published encouraging flexible working approach and utilisation of virtual meetings.

CCM3		Ensure vehicle charging points are available at key areas across the county - rural and urban.	2022	17 electric vehicle charging points have been installed across 8 public car park sites across the county.
CCM4		Introduce electric vehicles into the recycling fleet	2022	2 x trial vehicles have been awarded by Welsh Government. These will be implemented into rounds once received and charging infrastructure has been established.
CCM5		Transition of small fleet vehicles to electric and alternative fuels (hydrogen, etc)	2023-24	*No update*
CCM6		Transition of heavy vehicles to electric or alternative fuels (hydrogen, etc)	2027	*No update*
CCM7		Facilitate a car sharing forum for employees – once measures post COVID-19 are reviewed.	Post-Covid	*No update*
CCM8		Actively promote the existing employee cycle to work scheme to increase participation and review cycle storage facilities at principle work places (i.e. County Hall, Mold, County Offices, Flint, Ty Dewi Sant and Alltami Depot)	2022	Review needed of resources required to improve uptake eg. Storage facilities, showering facilities, electric bike charging infrastructure, and sufficient safe cycle routes to work places.
CCM9		Promote and launch a managed salary sacrifice scheme for low and ultra-low emission vehicles.	2022	Launch of scheme delayed due to resource being allocated to other priorities.
CCM10		Promote use of public transport, active travel, and further develop the Council's walking and cycling network	2022	Active Travel Network has gone through consultation and moving to next stage improvements.
CCM11		Promote multi-modal transport journeys and the development of strategic transport hubs. Improve access to storage, charging and hiring facilities.	2022	Review of current transport hubs needed to determine if they are fit for purpose and any additional facilities needed to support active travel connections.
CCM12		Investigate further opportunities for reducing car use with consideration for local contexts and accessibility through ultra-low emission areas, car free zones and pedestrianised streets.	2023	Place plans will be developed during 2023-24 for town centres. The associated consultation processes will include car use needs within each town centre.
CCM13		Work with partners to enable greener fleet in the public transport sector (buses, rail, taxis) including Council contracted services such as school transport	2023	2 x electric buses are being introduced into the public service on a trial basis. This will allow for monitoring and review ready for wider roll out in future.

Ref.	Theme	Action	Target start date	Progress 2021/22
CCP1		Review of procurement strategy in line with the Council's carbon ambitions to ensure specific measures around carbon and biodiversity are embedded in procurement process.	2022	Procurement Strategy currently being reviewed to reflect carbon ambitions and need for this to be embedded within procurement processes.
CCP2		Increase the utilisation of the TOMs (Themes, Outcomes and Measures) framework in procurement across the Council's operations by working with employees who manage procurement activities	2022-23	TOMs framework has recently been updated with additional carbon outcomes included. Key tenders need to be identified to target for carbon outcomes.
CCP3	Procurement	Work collaboratively with Denbighshire County Council to develop a toolkit to ensure all procurement exercises are awarded giving appropriate consideration to carbon reduction priorities and monitor contract against declared emissions. Provide communication and training to all affected employees suppliers and prospective bidders.	2022-23	Working with Welsh Local Government Association (WLGA) to develop a toolkit for implementing carbon measure scoring within tender processes. Expected launch of toolkit early 2023. WLGA will also provide support to officers and suppliers in utilising the toolkit. Dedicated resource is required for embedding this into the Council's procurement process. Potential for joint resource with Denbighshire County Council as Joint Procurement authority.
CCP5		Enable carbon offsetting best practice schemes providing local place-based environmental outcomes, where required	2022-23	Research continues into best practice for carbon offsetting within procurement.
CCP6		Ensure carbon reduction is appropriately considered throughout Council procurement policy, strategy, business cases, commissioning templates, tender evaluations, etc.	2022-23	Commissioning form to be reviewed to include carbon reduction and Exceptions report to be modified to include carbon.

Ref.	Theme	Action	Target start date	Progress 2021/22
CCP7		Increase local participation and stakeholder involvement by working with local businesses to ensure decarbonisation and social value outcomes are achieved	2022-23	*No update*
CCP8		Work in collaboration where procurement of goods and services can be utilised on a regional or joint basis	2022-23	*No update*

Ref.	Theme	Action	Target start date	Progress 2021/22
CCL1		Identify current carbon storage capacity within Council assets through mapping habitat types	2022-23	Mapping exercise is ongoing. Revenue is needed to commission this work.
CCL2		Investigate the potential of our land assets for new renewable energy installations and operating models and develop these schemes to increase the amount of energy generated from these sources	2022	Work is ongoing with Welsh Government Energy Service to determine feasibility of sites for further renewable energy generation.
CCL3	Land Use	Undertake a study identifying land for habitat restoration and tree planting schemes within land assets to mitigate climate change and enhance biodiversity	2022-23	Land mapping exercise is ongoing. Sites have been identified for potential tree planting however further feasibility of these sites is needed.
CCL4		Audit the amount of herbicide and pesticide use on Council land assets	2023	Use of herbicide and pesticide is being recorded and where possible use is rationalised and alternatives adopted.
CCL5		Increase proportion of Council land managed for biodiversity	Ongoing	Network of 109 nature areas across county covering 11.8hectares – grassland estate with reduced mowing regime managed for wildflower diversity.
CCL6		Support the increase of tree canopy cover across the county in line with the Urban Tree and Woodland Plan.	Ongoing	Canopy cover at risk due to storm damage and ash dieback. Ash dieback action plan in place and opportunities being developed for further tree planting.
CCL7		Assess impacts of Ash Dieback and tree planting within Flintshire assets on canopy cover and net carbon sequestration	Ongoing	As above.
CCL8		Increase area with reduced mowing regimes to enhance biodiversity and increase carbon storage	Ongoing	*No update*

CCL9		Strengthen the monitoring of sustainable drainage systems (SuDs) installation and quality in new developments.	Ongoing	*No update*
CCL10		Explore best practice policies and encourage provision of space for food growing in new developments and vacant and under used sites	2023	Sites receiving improvements such as water harvesting measures. New sites identified for food growing and are going through feasibility. Currently 16 food growing sites across the county covering 3.8hectares.
CCL11		Review and improve recycling provision in Council offices, schools and public buildings and remove use of single-use plastics. Communicate and engage building users to utilise provision	2022-23	Review of recycling provision in Council buildings taking place. Trials of on-demand collections at schools are ongoing.
CCL12		Support circular economy initiatives diverting reusable items from disposal through recovery at Household Recycling Centres	Ongoing	Deconstruction and set aside available at household recycling centres for large household items to be repaired and reused or broken down into component parts for recycling. Working with Flintshire Refurbs and local charities.
CCL13		Create guidelines for Council procurement of food in offices, schools, etc, to be local and sustainable	2025	*No update*
CCL14		Undertake a land use strategy to ensure land is managed and protected for green infrastructure, decarbonisation and biodiversity benefit.	2023	*No update*
CCL15		Work with Tenant farmers to share best practice on sustainable farming, increasing carbon absorption and biodiversity value.	2023	*No update*
CCL16		Work with communities to increase biodiversity value and carbon storage.	Ongoing	*No update*
CCL17		Identify opportunities to acquire new Council land for the purpose of carbon sequestration and biodiversity enhancement.	2023-24	*No update*

Ref.	Theme	Action	Target start date	Progress 2021/22
CCBe1	Behaviour	Ensure climate change and biodiversity is considered a priority in decision making across all Council services	2022-23	Integrated Impact Assessment, Capital business case template, Asset Management Plan, Procurement Strategy and Due diligence form within Social Services have been reviewed to reflect carbon ambitions. Ongoing exercise to identify and review further key decision making policies.
CCBe2		Ensure Councillors and employees complete carbon literacy / introduction to climate change / Naturewise training. Inclusion of climate change within induction process.	2022-23	20 x Council employees have completed Carbon Literacy training. This should be a mandatory requirement for Elected Members and Senior Managers. Minimal financial cost of £10 per person can be absorbed through existing training budgets. E-learn module for climate change and biodiversity under development as part of a regional commission.
CCBe3		Engage employees and Trade Unions to renew job descriptions to include climate change and biodiversity responsibilities where applicable, e.g. managers, budget holders, planning.	2023-24	*No update*
CCBe4		Facilitate transition towards a 'paperless Council' through, for example, digitisation of wage slips, report packs, contracts, applications.	2022	Enrolment of new Elected Members included iPad and laptop to remove need for paper-based report packs post-May 2022. Default is that paper copies of reports are not sent out. Behavioural change communicating policy on printing needs to be adopted by Officers and Members.
CCBe5		Facilitate corporate volunteering for climate and biodiversity action	2023-24	*No update*
CCBe6		Investigate the possibility of divesting pensions and other investment portfolios away from fossil fuels in support of green energy.	2022	Clwyd Pension Fund have a climate change strategy in place to achieve net zero carbon by 2045. Divesting decisions are made by Committee. Investment of £50 mill agreed on clean energy projects in Wales. Sustainable active equity mandate being implemented.

CCBe7		Facilitate community events and activities to raise awareness of climate change and how to reduce carbon footprints.	2023	4 x events taken place as part of Wales Climate Week – energy saving and carbon footprint drop in sessions across the county. 'Calculating your carbon footprint' page launched on FCC website and climate change e-newsletter launched to over 900 subscribers.

Carbon Footprint & Homeworking

Flintshire County Council Climate Change Committee Notes:
1. That Flintshire County Council, prior to covid, offered a range of flexible working options in a number of roles where this was feasible;
2. That as a result of restrictions imposed during the pandemic, a significant number of staff were required to work from home;
3. That as we have emerged from the pandemic, the council now has a greater number of staff working from home than was the case prior to the pandemic, and that this is reflected in our emissions data, in particular relating to employee transport, and
4. That the experience of staff working from home varies, with some more enthusiastic than others, and some more keen to work from home in the Summer than when energy bills are higher in Winter.

Flintshire County Council Climate Change Committee Believes:
1. That the issue of provision of flexible working options is complex and requires a significant number of factors to be fed into formulation of policy in this area;
2. That one of the factors that must be taken into consideration is the carbon impact of various proposed policy options;
3. That at present, the methodology the council uses, in accordance with Welsh Government guidance, reflects employee travel (and therefore working from home shows a reduction in carbon emissions as people don't drive to the office), but not energy use by staff working from home;
4. That while failing to account for this energy usage may be correct as part of determining the council's own emissions, the council has a wider responsibility to reduce actual emissions and not just those that are accounted for as the council's own;
5. That homeworking in Winter is likely to lead to higher emissions than office based working, while the reverse is likely to be the case in Summer, but that the council lacks firm evidence either way, and
6. That employee preference should remain a significant factor in determining homeworking policy.

Flintshire County Council Climate Change Committee Resolves:
1. To recommend that cabinet reviews the homeworking policy, establishing a coherent and climate-informed framework for the council;
2. To recommend to the cabinet that a study is commissioned in respect of total net emissions from homeworking, whether this takes the form of a survey of Flintshire staff or a review of comparable evidence from elsewhere in the UK if similar studies are already available;
3. To recommend that as an interim measure pending the completion of a review of the climate evidence, the council should allow anyone who wishes to work from the office in Winter to do so, particularly in light of rising heating costs, and
4. To instruct the Chair to write to the Welsh Government's Climate Change Minister requesting that a mechanism that accurately reflects seasonal variation in net homeworking emissions is included in the guidance for assessing emissions, such that the council is not penalised for taking steps to reduce total emissions at the expense of those that show on its own figures.

Mae'r dudalen hon yn wag yn bwrpasol

This committee notes;

That paper and print products account for around 1% of all carbon emissions.

Taking the UK government's conversion factors for carbon emissions, just 100,000 sheets of A4 paper has a carbon footprint of 6,000kg and requires eight trees and 2,000kWh of energy. The same paper recycled seven times produces 3,200kg of carbon over its lifetime.

Paper
- Copier paper recycling can save 2 tonnes of wood for every tonne of paper
- Recycled paper creates 74% less air pollution, with 40% less energy needed and 35% less water needed.

Printers
Energy consumption during the printing process plays an important role in carbon release. This is almost negligible for an inkjet printer, which only needs 15 watts to print. Using a laser printer (the expected majority for Flintshire Council), which during the warm-up phase requires around 1300 watts:

- Per kilowatt hour, 474g CO_2, or 7.9g of CO_2 per minute is produced.
- A laser printer that prints 10 pages per minute with 1.3KW causes 7.9g CO_2 x 1.3KW = 10.27g CO_2.

Producing an average of CO_2 emissions per printed page is 5g if an inkjet printer is used, and 6g if a laser printer is used.

This doesn't take into consideration the components used in print devices can include non-recycled plastics used to make the device. Like the plastics required for toners and cartridges, essential to run the devices.

While toner waste is one of the major electronic waste materials posing serious environmental threat and health hazards. Globally, only about 20–30% of toner waste is recycled, while the remaining percentage is dumped in landfills.

Over 65 million printer cartridges are sold each year in the UK alone. Of these 65 million cartridges, only an estimated 15% are recycled or reused.

All while an estimated half of all pages printed are never even looked at.

The committee recommends to cabinet that a policy be implemented across all departments setting out that printing should only be considered where:
- There is a statutory requirement to provide information in printed form;
- A disabled staff member or service user requires material in printed form because they are disabled;
- A staff member or service user requires material in printed form because they are digitally excluded;
- The relevant chief officer has directed that a paper backup of the document is necessary for service resilience, or
- For the purposes of advertising a service or change in service to the general public; and
- That all paper, toners, inks and consumables procured will be made of recycled materials and recycled after use.

The committee also calls on the cabinet to initiate an efficiency review of the current stock of printers owned or operated by the council with a view to rationalising these to the minimum strictly necessary.

Proposed by Dan Rose
Seconded by Gillian Brockley

Mae'r dudalen hon yn wag yn bwrpasol

Motion to Flintshire County Council Climate Change Committee: Columbaria in Flintshire County Council managed cemeteries

Flintshire County Council Climate Change Committee notes:

1. that local authorities across the United Kingdom are facing challenges with limited burial space, with the shortage of burial space in Wales being described as reaching 'crisis point'[1]
2. that Flintshire County Council has itself faced issues in relation to limited burial space, with Flintshire previously having been described as having an 'unusually high' number of people who opt for traditional burials, placing significant pressure on local authority cemeteries[2]
3. that UK trends show an increase in demand for cremation and a reduction in demand for traditional burial, with up to three-quarters of Britons now choosing cremation over burial[3]
4. that both burial and cremation have a significant detrimental impact on the environment
5. that Flintshire County Council currently offers traditional burials, cremation and natural woodland and meadowland burials
6. that a number of local authorities and community councils across the UK offer columbaria as an option for the deceased

Flintshire County Council Climate Change Committee believes:

1. that Flintshire County Council must explore options to tackle the problem of reducing burial space across the County
2. that Flintshire County Council should be adequately prepared for an increase in demand for cremation of deceased remains and their associated storage
3. that columbaria* offer a more efficient form of storage for human remains than traditional burial and cremated remains burials as they are relatively small in size (per individual) and above ground meaning cemetery space can be better utilised and diversified
4. that residents of Flintshire should be able to access as wider-range of bereavement options as possible
5. that the offering of columbaria would assist the authority in solving the problems caused by a lack of space for traditional burials and could reduce the necessity of purchasing and using more land for cemetery space, which has a significantly detrimental impact on the environment
6. that columbaria are a versatile option which can be situated on areas of land which may not have suitable ground for traditional burials

Flintshire County Council Climate Change Committee resolves:

1. to recommend to Cabinet and the Environment & Economy Scrutiny Committee that Flintshire County Council offer columbaria as an option for residents as part of its suite of bereavement and burial services

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[1] Wales' burial space running out, warns Church - BBC News
[2] Flintshire bucks the national trend for more burials - BBC News
[3] A greener way to go: what's the most eco-friendly way to dispose of a body? | Death and dying | The Guardian

2. to recommend to Cabinet and the Environment & Economy Scrutiny Committee that Flintshire County Council explores the viability of offering other environmentally-friendly burial options, such as resomation**, in the longer term

* a columbarium is an above ground piece of funerary architecture which is made up of individual chambers which house cremated remains

** resomation is sometimes referred to as 'water cremation' or alkaline hydrolysis. It involves the use of water and alkali at high temperatures and pressure to chemically reduce the body to liquid and white ash. The resulting ash is returned to relatives as is the process for flame cremation. The excess fluid created during the process can then be used as fertiliser because of the high nutrient content.

Flood Resilience & Adaptation

1 - Outline

1.01   With the changing climate, Flintshire faces an increased risk of flooding of all types.

1.02   Coastal flooding and fluvial flooding receive a significant amount of attention and investment, with clearly delineated responsibilities in terms of the planning process, mitigation, management and emergencies.

1.03   Surface water flooding has historically been dealt with at a lower level, with local authorities taking steps to make improvements where this occurs regularly in populated areas without any overarching national strategy. This reflects the less predictable nature of surface water flooding and the often smaller scale measures needed to address it.

1.04   In respect of surface water flooding, climate change poses two problems. Firstly, any increase in rainfall will lead to more stagnant water that cannot be absorbed by the ground immediately. Secondly, increased frequency of extreme weather events are likely to see drainage systems across the county more regularly overwhelmed and flooding of homes more frequently occur. When these two risks are combined, with a period of increased rainfall followed by an extreme weather event, it is likely that infrastructure will struggle to cope. Whereas we know where coastal and fluvial flooding is likely to take place, extreme weather events leading to flash surface water flooding can impact anywhere in Flintshire.

2 - Purpose of Inquiry

2.01   The inquiry will review the current position in terms of high risk areas for surface water and small watercourse flooding, and the likely impact of climate change on these areas.

2.02   The inquiry will also seek information on the costs of a range of infrastructure upgrades that may be required to protect homes in the county.

3 - Form of Inquiry

3.01   The inquiry will gather evidence and make recommendations on a county-wide basis. However, in order to facilitate a thorough exploration of the particular technical challenges, the inquiry will also look at a case study from the county where surface water flooding is currently a problem.

3.02   The case study for the inquiry will be the Sandycroft / Pentre / Lower Mancot area due to the scale of the issues at this location.

3.03   The inquiry will take written and oral evidence from relevant persons and bodies as to the substantive issues and the funding position.

3.04   The inquiry will result in a report containing recommendations that the committee may choose to adopt. These recommendations may be addressed to other parts of the council, to the Welsh Government, or to any other body as the committee sees fit.

3.05   The inquiry will conclude and the report be submitted for consideration no later than the July meeting of the climate change committee.

3.06   The following are to be invited to submit written evidence:
- Andy Roberts, Flintshire County Council
- Andy Farrow, Flintshire County Council
- Natural Resources Wales
- Dwr Cymru Welsh Water (sewerage)
- Representatives of the Welsh Government (climate adaptation and resilience)
- Residents of Flintshire who are affected by this issue

3.07   In addition to the persons listed above, any other person or organisation who wishes to do so may submit written evidence. All written evidence should be submitted in advance of the March meeting of the climate change committee.

3.08   To facilitate the provision of written evidence, a series of questions shall be drafted in consultation with the Chair and Vice Chair of the committee to which witnesses may wish to respond in their evidence.

3.09   The committee will consider a witness list for oral evidence sessions at the March meeting.

4 - Recommendations

4.01   That the inquiry be established on the basis set out above.

4.02   That provision is made for an oral evidence session, including a venue, in either April or May.

Clwyd Pension Fund & Divestment

1 - Outline

1.01   Flintshire County Council's pension scheme is the Clwyd Pension Fund. While the fund is run by FCC, and the pension committee hosted by FCC, this is done on behalf of all member authorities and Flintshire has no more or less a formal role in decision making regarding the fund.

1.02   Within Flintshire's structures, the Corporate Resources Overview & Scrutiny Committee holds responsibility for scrutinising the council's role as an employer in the fund. Not being an overview and scrutiny committee, the climate committee does not have specific scrutiny responsibilities, but can under the committee's terms of reference undertake any work of relevance to its objectives of reducing the council's direct and indirect carbon footprint.

1.03   Pension funds are major institutional investors and hold significant shares in fossil fuel extraction and trading companies. The Clwyd fund is no exception to this. Varying estimates have been produced, including a detailed list from Friends of the Earth of Clwyd's fossil fuel investments. Representatives of the pension fund have disputed this list.

1.04   According to the fund's strategy, it has an "ambitious" target to be carbon neutral by 2045. Flintshire's target is to achieve net zero by 2030. Other local government pension funds have earlier targets than Clwyd.

2 - Purpose of Inquiry

2.01   The committee will hold an inquiry with the objective of providing a detailed report setting out the considerations the council as one of the employers feels that the fund should make in setting its investment strategy insofar as fossil fuel investments are concerned.

2.02   The committee's report will take into account recommendations from various interested parties, and will propose a course of action consistent with the fund's fiduciary duty.

3 - Form of inquiry

3.01   The inquiry will take written evidence from any person or organisation who wishes to give it. The inquiry will actively seek written evidence from particular sources set out in Appendix 1. Requests for written evidence shall be issued in the name of the chair of the committee on behalf of the committee.

3.02   The inquiry will take oral evidence from persons or organisations invited to take part. A list of invitations shall be prepared for submission to the March meeting of the committee, taking into account written evidence received. Requests for oral evidence shall be issued in the name of the chair of the committee on behalf of the committee.

3.03   Witnesses in oral evidence sessions will be invited to give evidence in person wherever possible, which is the committee's strong preference.

3.04   In view of the relevance of this inquiry to their work, an invitation to observe oral evidence sessions and contribute to the drafting of the report will be extended to members of the corporate resources overview and scrutiny committee, and to all members of the Clwyd Pension Fund Committee, including those members not from Flintshire.

3.05   The report will be proposed for adoption at the May meeting of the Climate Committee. The report will contain recommendations for action, and the motion accompanying the report will detail the steps to be taken in relation to conveying these.

4 - Formal recommendations

4.01   That the committee commissions an inquiry into the climate performance and targets of the Clwyd Pension Fund.

4.02   That this inquiry shall take written and oral evidence as set out in section 3.

4.03   That the inquiry will report back to the committee at the March meeting.

Appendix 1 - List of persons and organisations from whom written evidence shall be actively sought

- Clwyd Pension Fund management
- Clwyd Pension Fund committee members
- The Chair of Corporate Resources Committee
- Members of Clwyd Pension Fund
- The Cabinet Member for Governance and Corporate Services including Health and Safety and Human Resources
- Fossil fuel extracting or trading companies in which the fund holds investments
- Third sector organisations with campaigns on pension fund fossil fuel divestment, including Friends of the Earth and Greenpeace

CLIMATE CHANGE COMMITTEE   FORWARD WORK PROGRAMME

Date of meeting	Subject	Actions
Tues 28th March	Climate Change Programme Review,	
	EV charging infrastructure,	
	Hydrogen fuelled vehicles,	
	Recyclable materials for potholes,	
	Tidal Energy and associated grant funding,	
	Reaching out to wider community on Climate Change	
Tues 23rd May	Renewable energy generation, Alternative renewable energy generation opportunities including, wind, solar on Council owned car parks, Hydro power and Milwr Tunnel,	
	Review of catering facilities – mandatory plant based meals,	
	Carbon offsetting – tree planting	
	Review of data storage & cloud facilities and zero email standards	
Tues 18th July	Feasibility of bioreactors for grass arisings/food waste,	

	Planning changes to incorporate requirements for Passivhaus/solar/EV charging,	
	Use of local trades and local products to reduce carbon footprint	