North Somerset Council

Report to Council

Date of Meeting: 19 September 2023

Subject of Report: Climate Emergency Strategy and Action Plan update and progress report

Town or Parish: All

Officer/Member Presenting: Annemieke Waite, Executive Member for Climate, Waste and Sustainability

Key Decision: N/A

Recommendations

- 1. To formally reconfirm the commitment of North Somerset Council to achieving Net Zero across North Somerset by 2030, and to the delivery of the Climate Emergency Strategy and Action Plan, in recognition of the criticality of the Climate Emergency.
- 2. To note the progress, actions and proposals recorded in this report (including improved governance) and to recognise the need for an acceleration in delivery.
- 3. To endorse the proposed creation of a Net Zero Pathway for North Somerset Council, to be reported to a future meeting of North Somerset Council.
- 4. To approve the delegation of authority to the Section 151 Officer, in consultation with the Executive Member for Climate, Waste and Sustainability, to submit funding bids of up to £10m (including match-funding of up to £5m) to support the decarbonisation of assets owned by North Somerset Council.

1. Summary of report

The report provides an update on North Somerset's Climate Emergency Strategy and Action Plan¹, starting with the most recent data on the emissions of North Somerset Council and the wider North Somerset area and considering how we are performing in relation to our Net Zero target. It requests that the Council reconfirm its commitment to delivery of the Net Zero target and the strategies and plans in place to deliver this.

The report provides updates on actions identified in the Climate Emergency Action Plan and makes proposals on accelerating progress and improving governance. This includes information about the development of a Climate Adaptation Strategy, which will support the area in adapting to the effects of climate change.

The report outlines work that is underway to decarbonise assets owned by North Somerset

¹ North Somerset Council Climate Emergency Action Plan (n-somerset.gov.uk)

Council and requests authority to be delegated to the Section 151 Officer, in consultation with the Executive Member for Climate, Waste and Sustainability, to submit funding bids in support of this work to the value of £10m including match -funding of up to £5m where a clear business case has been established.

2. Policy

In 2019 NSC declared a climate emergency and the ambition of becoming a Net Zero council and area by 2030. In November 2022, Full Council adopted a refreshed Climate Emergency Action Plan (CEAP) that identifies priority areas aimed at decarbonisation:

- Become a net zero carbon council
- Decarbonise transport
- Decarbonise the built environment
- Low carbon business and skills
- Renewable energy generation
- Resources and waste
- Adaptation and resilience
- Replenish our carbon stores.

3. Details

3.1. North Somerset Council commitment to achieving Net Zero

As above, in Feb 2019, North Somerset Council (NSC) declared a Climate Emergency and a commitment to reaching Net Zero across the area. This is because internationally it is recognised that global greenhouse gas emissions need to reach net zero by 2050 in order to prevent the worst impacts of climate change².

NSC is aspiring to be a leader in this field and therefore had set a target of reaching Net Zero by 2030, 20 years ahead of the national 2050 target. This is in line with many others: of the 301 local authorities that have declared a Climate Emergency, 181 have selected 2030 as a target date.

In 2020 the Committee on Climate Change (CCC) published the sixth Carbon Budget report³. The recent Progress Report to UK parliament by the CCC (2023)⁴ in relation to the Carbon Budget report underlines that more leadership and action is needed to meet the set targets.

In light of the above, and in recognition that we have a new Council administration, members are asked to collectively reaffirm North Somerset Council's commitment to achieving Net Zero across North Somerset by 2030, and to delivery of the Climate Emergency Strategy and Action Plan.

3.2. North Somerset Council's emissions

How the council's emissions are measured

² https://www.ipcc.ch/sr15/

³ Sixth Carbon Budget - Climate Change Committee (theccc.org.uk)

⁴ 2023 Progress Report to Parliament - Climate Change Committee (theccc.org.uk)

The 2018/19 financial year acts as a baseline against which to monitor emissions.

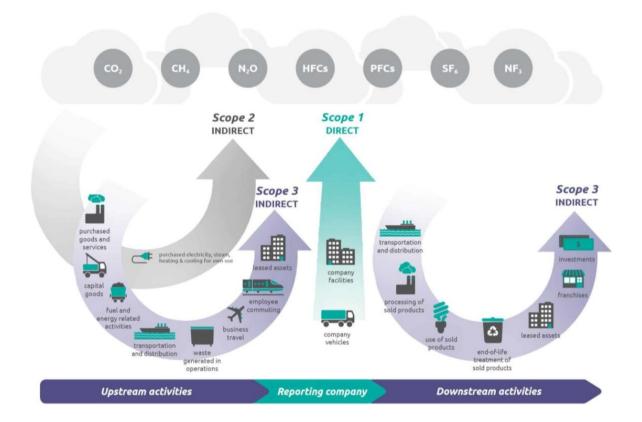
Emissions are categorised within the following groupings as per Greenhouse Gas protocol⁵ and Department for Environment, Food and Rural Affairs guidance ⁶ (further illustrated in the diagram below):

Scope 1: Direct emissions from company's facilities (gas) and vehicles.

Scope 2: Indirect emissions from purchased electricity.

Scope 3: indirect emissions from business activities including business travel, supply chain, purchased goods etc.

Figure 1. Definition of Emissions Scopes. Source: Greenhouse Gas Protocol.



The data across the three scopes is collected manually from several sources across organisation and external partners. Climate Emergency officers have no ability to check the reliability of data, therefore, the data collected might not be entirely accurate. For more information on the methodology used to report the council's emissions, please see the baselining report available on our website at <u>North Somerset Council Climate Emergency</u> - <u>Report on Baseline Emissions (n-somerset.gov.uk)</u>. Each year we aim to improve the completeness of our inventory by including more information.

Please note that the emissions detailed have been updated since the latest Transport, Climate and Community Policy Scrutiny Panel (2023)⁷. This is due to the late receipt of the data from external providers.

⁵ ghg-protocol-revised.pdf (ghgprotocol.org)

⁶ Guidance on how to measure and report your greenhouse gas emissions (publishing.service.gov.uk)

⁷ Committee Report NSC (moderngov.co.uk)

Summary of data on council emissions

The Council aspires to reach net zero for at least Scopes 1 and 2 at an earlier date than 2030 if possible. Good progress has been made over the years since 2018/2019, however the data from 2022/23 financial year has seen an increase in the council's emissions.

		2018/19	2019/20	2020/21	2021/22	2022/23	Change since base year
	Scope 1						
Scope 1	Own buildings	1,181	1,067	1,208	1,232	914	-23%
	Own transport	2,018	2,083	1,958	1,974	1,673	-17%
	Leased buildings	1,408	1,164	710	1,188	1,147	-19%
	Total Scope 1	4,607	4,314	3,877	4,394	3,733	-19%
Scope	Scope 2 (Purchased Electricity)	_					
2	Own buildings	1,451	1,334	1,041	1,067	1,390	-4%
	Leased buildings Streetlights, traffic control, other	758	705	265	422	562	-26%
	buildings, miscellaneous	2,001	1,791	1,064	733	890	-55%
	Owned electric vehicles	22	22	14	20	20	-8%
	Total Scope 2	4,231	3,851	2,384	2,242	2,863	-32%
	Total Scope 1 and 2	8,838	8,165	6,261	6,636	6,596	-25%
	Scope 3						
Scope 3	Buildings	4,214	4,283	3,802	3,835	3,114	-26%
	Transmission & distribution	288	260	176	155	194	-33%
	Business travel	138	162	150	225	217	57%
	Outsourced activities	770	768	673	770	769	0%
	Employee commuting	733	699	174	421	556	-24%
	Water	57	53	34	15	13	-78%
	Total Scope 3	6,200	6,226	5,009	5,421	4,863	-22%
	Total Gross Emissions	15,038	14,391	11,270	12,057	11,459	-24%

Table 1. Emissions associated with Council's activities.

The table above demonstrates the following changes:

- Overall emissions decreased from the baseline year by 24%, however, there is only a very slight decrease from 2021/2022.
- Decrease in Scope 1 (gas usage) is associated with:
 - Installation of air source heat pumps in Clevedon Library
 - o Closure and refurbishment of the Carlton Centre
 - Heating issues in Castlewood.

- Increase in Scope 2 (purchased electricity) for own buildings, street lighting and leisure centres is associated with the increased usage of council facilities post-Covid.
- Four of the council's maintained schools have become academies (Burrington, Churchill, Golden Valley, Wrington). The emissions from the four schools have been moved to Scope 3. The baseline year was adjusted accordingly to monitor the change in line with the Greenhouse Gas Emissions protocol.
- Purchased materials data from the Milestone contract was removed due to insufficient information provided. The baseline year was adjusted accordingly to monitor the change in line with the Greenhouse Gas Emissions protocol.

The charts below show the council's emissions across the three scopes and the overall trend from the baseline year.

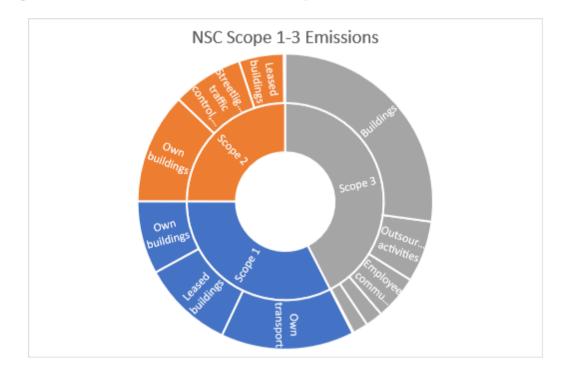
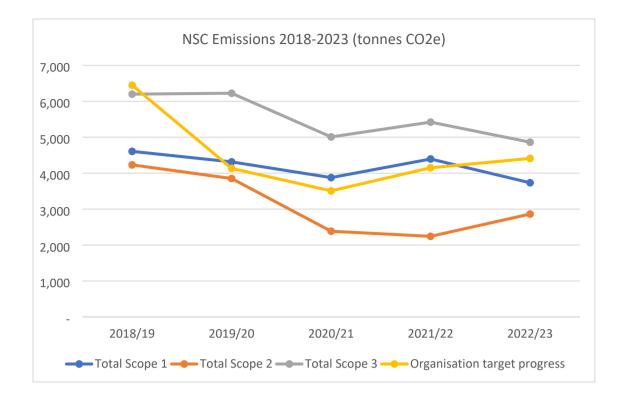


Figure 2. North Somerset Council's scope 1-3 emissions.

Figure 3. North Somerset Council's emissions 2018-2023.



Progress against targets

The table below shows that given our current carbon emissions we would need to reverse the recent trend of increased emissions, and instead accelerate the reduction in emissions to an average of 551 tonnes every year to hit our net zero target of 2030.

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Financial													
year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Scope 1 and 2 (tonnes													_
CO2)	6,448	4,134	3,508	4,150	4,411	3,860	3,308	2,757	2,206	1,654	1,103	551	0
Reduction required (tonnes													
CO2)		-2314	-626	642	261	-551	-551	-551	-551	-551	-551	-551	-551
Percentage			-15%	18%	6%	-13%	-14%	-17%	-20%	-25%	-33%	-50%	-100%

Table 2. North Somerset Council's organisational target.

Based on the data available to us through the scope 1,2, and 3, it is evident that North Somerset Council is significantly off target to reach its net zero target for 2030.

Based on the GHG protocol and recommendations provided by CCC in the progress report to UK Parliament, officers are pursuing a series of actions to help put in place the right leadership and actions to accelerate delivery.

Central to this is developing a "Net Zero Pathway", which will seek to quantify and address the most significant sources of the council's emissions and to prioritise the most effective actions and resources within the CEAP to address them. Each workstream and action will be assessed as to their level of impact on the reduction in emissions. The pathway will allow a more robust monitoring of progress and provide opportunities for the Council to take action and prioritise decisions.

Emissions from council buildings

Emissions from council buildings can be seen from the table above to make a significant contribution to the council's overall outputs, representing over a third of Scope 1 and 2 emissions. Progress in reducing the emissions has been mixed and not fast enough to help us meet targets. Recent re-structuring of the Place Directorate has enabled the creation of a Property and Projects Team to lead on this work, however, to fully address the issue will require a long-term capital programme supported by significant capacity and investment.

Current external (government/private) funding availability is very fragmented, with pockets of highly competitive funding streams available through central government including the Salix Finance Public Sector Decarbonisation Scheme (PSDS).

PSDS funding is available to public sector organisations including local authorities on a "first come first serve" basis. The exact date on which the window for bids opens is not confirmed until a few days in advance, and once the window is opened, it re-closes again as soon as enough bids have been submitted to claim the available funding (typically this is after around 20 minutes).

To prepare for the next PSDS funding round, expected in Autumn 2023, officers are working to identify potential buildings eligible for the scheme. However, at this stage we do not know the specific amount for which we will bid, in part because the criteria of the funding rounds sometimes change.

Given the extremely tight timescales that apply to this funding stream, and in general to support the decarbonisation of NSC's estate, authority is requested to be delegated to the Section 151 Officer, in consultation with the Executive Member for Climate, Waste, and Sustainability to in future authorise bids to the PSDS (or other funding streams enabling decarbonisation of public sector assets), to a value of up to £10m with match-funding not exceeding £5m.

3.3. North Somerset Area Emissions

Each year an assessment is produced for the area of North Somerset using publicly available data sources on energy consumption, waste disposal, land use and agricultural statistics. It builds a picture of emissions resulting directly from activity within our district, as well as those associated with the production of the energy we use – grid supplied electricity and extraction and distribution of fuels – which happen outside the area. Detail on the methodology used to estimate emissions for North Somerset can be found on our website⁸. The latest data available for local authorities is for 2021 and was released by Department for Energy Security and Net Zero (DESNZ) in June 2023.⁹

Total emissions for North Somerset area in 2021 equals to 1212 kt CO2e. The emissions have decreased by 473 kt CO2e since 2005, however, they have increased by 80 kt CO2e since the last reported year (2020). The drop in emissions in 2020 was caused primarily by the Covid-19 pandemic and the effects of the lockdowns. The increase in emissions for 2021 is linked to economic recovery. The current change in emissions reductions is not fast enough to meet our climate ambitions. Reaching Net Zero is not a simple task. It requires transformative change across the whole country and the whole economy.

⁸ https://www.n-somerset.gov.uk/sites/default/files/2020-

^{11/}Climate%20Emergency%20Baseline%20Report%20-%20July2020_0.pdf

⁹ Final UK greenhouse gas emissions national statistics: 1990 to 2021 - GOV.UK (www.gov.uk)

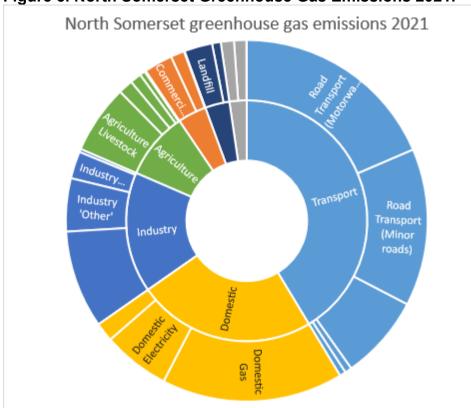


Figure 5. North Somerset Greenhouse Gas Emissions 2021.

As a summary of this inventory, by far the largest single sector for North Somerset remains to be Transport, with approximately 42% of our emissions. Road transport makes up 99% of North Somerset's transport emissions and have increased since 2020 coming closer to pre-pandemic levels.

The emissions in domestic and non-domestic buildings have steadily decreased since 2005, however, no significant change has been made between 2018 and 2021. Building retrofit is a key action for the whole of the UK and currently funding focuses mainly on lower income families in the domestic sector. While this will reduce household bills and improve health, it tends to be higher earners who use more fuel to heat their homes and have a greater impact on domestic emissions. Much more is required in terms of funding, advice and skills to enable retrofit.

Further support for industry decarbonisation is required to support emissions reduction in non-domestic premises.

Full breakdown of emissions since 2005 can be seen in Appendix 1.

3.4. Carbon budget

The Tyndall Centre for Climate Change has produced a tool to set carbon budgets for each local authority across the UK¹⁰.

For North Somerset, the outline recommendations are:

1. Stay within a carbon budget of 6.9 MtCO₂ between 2020 to 2100;

¹⁰ Local and Regional Implications of the United Nations Paris Agreement on Climate Change (manchester.ac.uk)

2. Initiate an immediate carbon mitigation programme to deliver carbon emissions reductions of -13.9% per year; and

3. Reach zero or near zero carbon no later than 2040.

At current levels, this entire budget will be used by 2026.

At the current rate of reduction of 17 thousand tonnes of CO_2e each year, it would take a further 85 years to reach net zero. Even in 2020, with significantly reduced travel and activity, emissions at a national level only reduced by ~9%, with a reduction in transport emissions of 20%.

The graph below shows steady decline in North Somerset's emissions of approximately 31 thousand tonnes CO_2e per year from 1,685 thousand tonnes in 2005 to 1,284 thousand tonnes in 2019. There is a sharp drop of 152 thousand tonnes between 2019 and 2020 and provisional data shows a rise of 75 thousand tonnes in 2021 and then projected business as usual emissions decreasing by approximately 34 thousand tonnes per year until 2030. For 2030, these business-as-usual emissions would be approximately 880 thousand tonnes CO_2e .

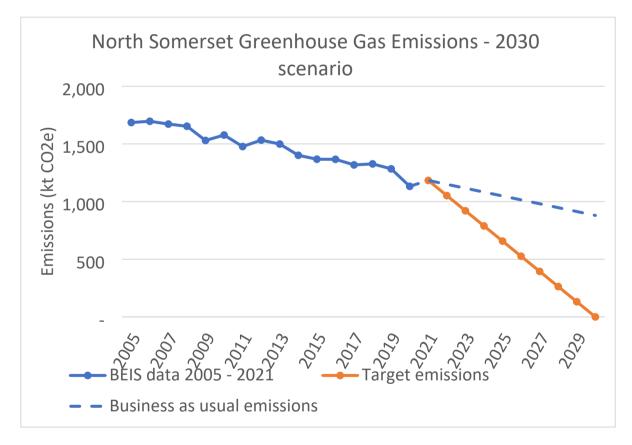


Figure 6. North Somerset Greenhouse Gas Emissions 2030 scenario.

North Somerset Council can influence around 30% of the territorial emissions, however, we will not be able to reach net zero across the area without businesses and residents also taking significant action to support this goal.

The Committee on Climate Change (CCC) ¹¹ estimates that nearly 60% of the changes needed rely on societal and behavioural changes. Engaging with our businesses and communities will be crucial in achieving this.

The latest CCC's Progress Update to UK Parliament¹² underlines the importance of crosscutting enablers and sets out a range of recommendations including:

- Increased public engagement and green choices conversation;
- Strengthened net zero plans and actions for businesses;
- Improved private sector investment and finance;
- Increased innovation;
- Investment in skills.

This means that improved resident engagement and stronger links between wider council's strategies are required to maximise the opportunities for carbon reduction.

Robust central government action is required to support UK society with transition to Net Zero. Scarce funding opportunities available to local authorities are not sufficient enough to accelerate the progress against targets. This has been identified as highest risk in council's risk register of CEAP delivery.

3.5. Climate change adaptation

Why we need adaptation

Despite our efforts to reduce carbon emissions, climate change has and will have significant impacts on North Somerset, and it is important that we prepare for these.

Adaptation is a key part of the NSC's Climate Emergency Action Plan which identifies that North Somerset can expect to experience more regular flooding, higher temperatures, and more regular instances of extreme weather over the coming years. Climate change is also likely to increase water insecurity and worsen air quality in North Somerset. We need to ensure that our climate emergency response is not just about reducing emissions but also about preparing our businesses and communities to be more resilient to a changing climate.

We need adaptation to first and foremost protect our residents but also ensure that as a council we can continue to deliver our services and ensure the area continues to thrive. Therefore, the Climate Change Adaptation Plan will aim to be a source of information for residents, businesses, and the council. It will contain a comprehensive overview of how different aspects of North Somerset are at risk and what adaptation actions are already in place and what is being done by North Somerset Council. The Adaptation Plan will draw on strategies and policies that are already in place too such as the recently passed Flood Risk Management Strategy. The identified actions will then need to be internally monitored on a regular basis.

What we already have (internal and external consultation and coproduction)

We have used the UK's Climate Change Risk Register which has identified the key risks which are specific and unique to North Somerset's physical, social, and economic environment.

¹¹ Local Authorities and the Sixth Carbon Budget - Climate Change Committee (theccc.org.uk)

¹² 2023 Progress Report to Parliament - Climate Change Committee (theccc.org.uk)

We have carried out internal workshops with key service areas including workshops on health and wellbeing, local economy, heritage and buildings, infrastructure, natural environment and emergency management and flooding. These workshops used the Risk Register identified risk areas and involved officers suggesting adaptation actions.

There are national tools which have helped inform this work including the Local Climate Adaptation Tool (LCAT) which is due to be released later in 2023 and will offer effective monitoring guidance for adaptation strategies. This tool will look to create a consistent and comparable framework for council's creating their climate adaptation strategy.

The National Climate Scorecards have provided criteria which Local Authority adaptation has been assessed against. Currently our score stands at 6 out of 18 for adaptation and mitigation.

What are the key focus points for North Somerset Council's Climate Change adaptation?

Key areas which have been focused on through the workshops:

- Buildings and Heritage
- Local Economy
- Natural Environment
- Infrastructure
- Health and Wellbeing
- Emergency Management and Flooding

They represent key service areas and areas of the council which face complex climate change risks and need adaptation actions. Splitting the adaptation actions down through these themes allows for the existing policies and work to be identified. By breaking the adaptation response into these themes, it is also easier to identify gaps in our adaptation measures within our existing work.

Next steps

We are anticipating that the imminent release of the Local Council Adaptation Tool will be of great use to the development of the adaptation strategy. It will likely shape the format of this piece of work and so when it has been released, we will be able to apply our current information and work to their suggested format.

3.6. Climate emergency action plan project updates

This section highlights progress on projects identified within the Climate Emergency Action Plan, grouped according to priority themes. Full updates on the plan can be found by visiting our electronic dashboard at <u>Microsoft Power Bl</u>.

The dashboard details progress across all actions identified within CEAP and provides a risk register, which details risks to achievements of the key principles.

- Detailed description of key successes can be found in <u>Appendix 2</u>, that includes:
 - Carbon literacy silver accreditation;
 - PSDS capital funding award to help decarbonise the Campus building;
 - Levelling up capital funding award for placemaking and regeneration activities in Weston-super-Mare (which includes sustainability and energy efficiency improvements for a number of buildings);

- Arts Council capital funding award for Clevedon library (including energy efficiency measures);
- Bus Service Improvement Plan award;
- Launch of schemes for residents, such as thermal imaging cameras, Bright Green Homes, Solar Together;
- Net Zero Business Support Grants Scheme.

3.7 Climate Governance

In addition to the above actions, officers have been reviewing NSC climate governance and engagement (including member engagement) to ensure strong leadership, good cross-council / cross-party cooperation, and accurate monitoring and oversight. A more mainstream approach to the consideration of climate change will help ensure that actions are fully embedded within the council's decision-making and provide improved leadership and urgency for change.

A three-part structure is proposed:

- 1. Joint Corporate Leadership Team and Executive Leadership Board, comprising all members of CLT and the Executive to proactively champion climate action across the organisation. Reports will be at least quarterly.
- 2. Climate Emergency Management Team: comprising all members of the Place Directorate's Leadership Team, plus senior managers from other relevant directorates including Public Health.
- 3. A Climate Emergency Officers Group, which will be made up of officers from across the council whose work has a relevance to climate action. The main purpose of the group is to exchange information, progress and ideas, and to champion climate action within services.

The first two groups will oversee climate action and monitoring and receive regular in-depth updates on progress.

In addition to the above, six-monthly progress reports will be taken to Full Council and Scrutiny. The Transport, Climate and Communities Policy and Scrutiny Panel (TCCPSP) has also expressed an interest in carrying out more in-depth reviews of specific topics with a view to informing future council strategies and actions. The TCCPSP will play an essential role in scrutinising council's decision-making to make sure the net zero agenda is considered across multidisciplinary workstreams. Regular reports will be prepared for the TCCPSP by officers to update on the progress and highlight risks and opportunities.

The Executive Member for Climate, Waste and Sustainability will remain the overall portfolio holder for council's net zero agenda and will play a proactive role to champion the agenda across all political parties.

The above mechanisms are to enhance climate leadership and engagement, but do not replace the existing formal governance required by the Council's Standing Orders in relation to decision-making.

4. Consultation

The report was developed in consultation with the Climate Emergency Project Officer group.

5. Financial implications

To deliver net zero carbon and to transition to a low emissions area, significant additional funding will be required. Where this requires funding from council budgets, proposals will be subject to normal financial governance and decision-making, including the preparation of costed business cases. The business cases will also need to consider the potential costs of inactivity on climate change, including lost revenue and impact to life.

This report requests authority to be delegated to the Section 151 Officer, in consultation with the Executive Member for Climate, Waste and Sustainability, to submit funding bids of up to £10m (including up to £5m match-funding requirements) to the PSDS or other similar funding pots to support the decarbonisation of assets owned by North Somerset Council. In doing so, the Section 151 Officer will have regard to the financial implications and value for money of any submission. Any match-funding will be sourced from the existing Capital Programme and further decision-making will be required if there is a need to increase the amounts.

Specifically in relation to the expected round of PSDS in autumn 2023, it is expected that NSC will need to provide 30% match-funding. The current capital programme for decarbonisation of NSC assets has an allocation of £1,000,000 from which this match-funding would be sourced (cost centre KFA 125).

6. Legal powers and implications

The recommendations of this report do not in themselves have legal implications. As initiatives within the Action Plan are further developed, there may be legal implications for the council. These will be considered through formal governance arrangements and decisions as required by the council's constitution.

7. Climate Change and environmental implications

The aim of this report is to address the Climate Emergency and deliver a net zero council and area by 2030.

8. Risk Management

The Climate Emergency is recognised as a key corporate risk which the Strategy and Action Plan will help to address. There are risks associated with the Climate Emergency in terms of extreme weather and sea level rise as well as risks which reduce the Council's ability to meet the net zero target by 2030 target. These include:

Risk	Inherent risk score	Residual likelihood	Residual impact	Residual Risk score	Comments
Inability to secure PSDS funding and achieve the NSC's	HIGH	4	4	HIGH	The progress against targets to achieve the net zero target for NSC's estate by 2030 is off track. The progress relies on the capital funding available to process heat decarbonisation of own estate. In the instance of failing to secure PSDS funding, further opportunities for capital funding will need to be explored.

net zero target					
Inability to meet the NSC's area Net Zero Target	HIGH	5	5	HIGH	The progress against targets to achieve the net zero target for NSC's area by 2030 is off track. The re-confirmation of target and further acceleration of delivery is required. The progress relies on position of central government and funding availability.

9. Equality implications

No specific Equality Impact Assessment has been completed for this progress update, however a number of national- and international studies (IPCC¹³) point to the impacts of climate change falling most heavily on the most disadvantaged members of society.

Individual projects will be subject to EIAs as required.

10. Corporate implications

The climate emergency is a cross-cutting issue and a corporate priority; all services will be required to assist in delivery of the Strategy and Action Plan.

Directorate Action Plans for the Climate Emergency are in place across all services.

11. Options Considered

Not to apply for PSDS – rejected as there is limited funding available in council's capital programme to support estate decarbonisation.

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Appendices:

Appendix 1. Emissions for all years for North Somerset. Appendix 2. Details of successful projects supporting the delivery of the Climate Emergency Action Plan.

Background Papers:

Climate Emergency Action Plan <u>n-somerset.gov.uk/sites/default/files/2023-03/31208</u> Climate Emergency Action Plan ACC.pdf

¹³ <u>Climate Change 2022: Impacts, Adaptation and Vulnerability | Climate Change 2022: Impacts, Adaptation and Vulnerability (ipcc.ch)</u>

Appendix 1. Emissions for all years for North Somerset.

Sector2	Sector	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Industry	Industry Electricity	59	64	62	61	51	53	51	55	50	42	36	30	27	26	24	20	30
	Industry Gas	103	101	94	92	81	90	80	86	88	76	79	88	83	95	88	85	107
	Large Industrial Installations	5	5	5	5	5	5	5	5	5	4	5	4	4	3	3	3	3
	Industry 'Other'	57	55	54	51	47	51	45	47	47	51	49	50	49	49	44	43	58
Industry	Total	224	225	215	209	184	200	181	193	190	174	169	171	163	173	159	151	198
Commercial	Commercial Electricity	135	147	142	139	116	123	117	126	114	97	82	65	60	55	46	35	31
	Commercial Gas	25	25	23	23	20	22	20	21	22	19	19	23	22	25	20	20	15
	Commercial 'Other'	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Commercial	Total	162	173	166	163	137	146	137	148	136	117	102	88	83	80	67	56	47
Public Sector	Public Sector Electricity	37	40	39	38	32	33	32	34	31	26	22	18	15	14	13	10	13
	Public Sector Gas	13	13	12	12	10	11	10	11	11	10	10	12	12	13	10	13	14
	Public Sector 'Other'	4	3	2	3	3	3	3	3	3	3	1	1	1	1	1	1	0
Public Sector	Total	54	56	53	52	45	48	45	48	45	39	33	30	28	28	24	23	28
Domestic	Domestic Electricity	216	226	224	215	196	201	191	202	184	156	132	108	93	84	75	72	73
	Domestic Gas	244	238	224	232	211	232	190	212	218	181	193	203	194	194	196	192	198
	Domestic 'Other'	25	26	24	25	23	26	21	22	22	21	21	21	21	22	21	22	21
Domestic	Total	486	490	472	471	429	458	402	436	424	358	347	332	308	300	292	286	292
Transport	Road Transport (A roads) Road Transport (Minor	127	123	118	116	115	111	110	102	100	105	109	108	107	104	96	77	92
	roads) Road Transport	210	215	222	219	213	209	204	198	197	203	205	209	213	214	214	174	172
	(Motorways)	225	215	228	227	215	214	207	217	216	217	214	238	226	238	238	180	226
	Diesel Railways	9	9	9	9	9	10	9	9	9	9	9	9	9	9	9	7	8

	Transport 'Other'	14	14	14	14	13	13	13	13	14	14	15	15	16	16	17	16	7
Transport	Total	585	576	592	585	565	556	544	539	536	547	552	580	571	581	574	453	505
Agriculture	Agriculture Electricity	11	12	12	12	10	10	10	10	9	8	7	6	5	5	4	4	6
	Agriculture Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Agriculture Livestock	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	72	75
	Agriculture 'Other'	13	13	12	12	12	12	12	12	12	12	13	14	14	14	14	14	16
	Agriculture Soils	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	14	12
Agriculture	Total	114	114	113	113	110	111	111	112	110	109	108	108	107	107	107	104	111
Waste Management	Landfill Waste Management	27	27	27	27	27	27	27	27	27	27	27	27	27	27	30	28	31
	'Other'	8	9	9	9	9	8	8	8	8	9	8	8	9	8	9	9	9
Waste Management	Total	35	35	36	35	35	35	35	35	35	35	35	35	35	35	39	36	40
LULUCF	Net Emissions: Cropland Net Emissions: Forest	13 -	13 -	13	13 -	13	13 -	13 -	6									
	land Net Emissions:	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	29
	Grassland Net Emissions: Harvested Wood	16	16	15	15	15	15	15	15	15	15	14	15	15	15	15	15	8
	Products Net Emissions: Indirect	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N2O Net Emissions:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Settlements	14	13	13	13	12	12	12	12	11	11	11	11	11	11	11	11	7
	Net Emissions: Wetlands	0	0	- 0	- 0	- 0	0	- 0	0	- 0	- 0	- 0	- 0	0	- 0	- 0	- 0	0
LULUCF	Total	27	26	25	24	24	23	23	23	22	22	21	22	22	22	22	22	- 8
BEIS data 2005 – 2021		1,685	1,696	1,672	1,653	1,530	1,577	1,477	1,533	1,499	1,401	1,367	1,367	1,318	1,327	1,284	1,132	1,212

Appendix 2. Details of successful projects supporting the delivery of Climate Emergency Action Plan.

Become a net zero carbon council

Carbon Literacy

The Climate Emergency Action Plan states that the council needs to take a leadership role across the area to encourage, support and enable others to reduce carbon emissions. Carbon literacy training is an effective tool to raise the awareness of risks and opportunities related to climate change across organisation. In July 2022 North Somerset Council was awarded a Carbon Literacy Silver award. To date we have trained 337 members of staff which equals 24% of our workforce.

To achieve a Gold Award, the council is required to train 50% of all employees. To achieve this target the Council has agreed to participate in the global Carbon Literacy Action Day on 4th of December, with an ambitious plan to train 350 people in one day. The training day will be funded through UK Shared Prosperity Fund and will be offered to all council staff, members and key individuals within the community.

NSC estate

The council has appointed new staff within its Property and Projects Team who are working on developing a Net Zero Estate Plan. The purpose of the plan is to assess, developer and deliver investments across the range of council-owned assets to enable achievement of net zero, aligning this with other planned capital maintenance where possible. The plan will allow NSC to identify opportunities for solar panels installations and energy efficiency measures.

In addition, other successes include:

- In January 2023 NSC has been awarded £886,000 from the Public Sector Decarbonisation Scheme (PSDS) to proceed with decarbonisation works at the Campus building. The project work started in April 2023 and is due to be completed in October 2024. The project is forecast to deliver 120 tonnes of annual CO₂ savings.
- In March 2022 North Somerset Library Service has been awarded a grant of £215,900 by the Department for Digital, Culture, Media and Sports, delivered by Arts Council England. The grant allowed the council to perform capital works that contributed to libraries carbon footprint reduction.
- In December 2022 the council has been awarded the £20m through the Levelling up Fund for a range of regeneration and placemaking initiatives across Weston. Where appropriate these will include energy efficiency and decarbonisation improvements.

NSC fleet

Council is delivering the Accommodation Strategy that supports flexible working for staff and contributes to emissions reduction. A Travel and Parking workstream is identified as part of strategy development and is looking into changing staff behaviours for more sustainable and active travel. For more details see <u>Committee Report NSC</u> (moderngov.co.uk).

Decarbonising transport

Bus Service Improvement Plan

The Bus Service Improvement Plan (BSIP) outlines a major investment programme by North Somerset Council in partnership with the West of England Combined Authority. The ambition is to improve the quality and provision of bus services to a level that creates an attractive alternative to the use of private vehicles. It will also accelerate the decarbonisation of transport which is a key priority for the council as part of its commitment to tackle the climate emergency.

To achieve this ambitious programme, council identified a significant number of opportunities to introduce bus priority measures on key areas. Council plans to redesign over 18 junctions and routes which are known to cause delays to services.

The first package of schemes are set for construction beginning in 2023. There are seven currently planned:

- A38 at Barrow Gurney
- A370 Long Ashton bypass
- A370 at Brockley Combe
- A370 at Wood Hill
- A370 at Congresbury Smallway junction
- A369 at Beggar Bush Lane
- A369 Martcombe Road

For more information visit <u>Bus service improvement plan | North Somerset Council (n-somerset.gov.uk)</u>.

Decarbonising the built environment

Thermal images cameras

North Somerset Council is funding the Thermal Images Camera Loan scheme to assist people in identifying areas of their homes where heat is being lost. The thermal imaging camera service is designed to allow homeowners to do a basic heat loss survey on their homes to identify if and where heat loss is occurring, and then will be provided with signposting and supplementary information to make these changes. North Somerset residents will have an idea of what changes they can make to save energy, carbon emissions and money. The scheme will go live in Autumn 2023. The scheme will also include a series of energy training sessions which will be open to library and housing staff, as well as community leaders and volunteers.

Bright Green Homes

For the Bright Green Homes project, North Somerset Council has partnered with Bath and North East Somerset Council and Bristol City Council to provide grants to help low income households install technologies which reduce carbon emissions and lower energy costs. To qualify for the funding, applicants must live in North Somerset and:

- be the owner, landlord or private rented tenant of the property.
- have a combined annual income of £31,000 or lower.
- do not have gas central heating.

Together with the other councils, we successfully bid for £11m of funding from the government's Department for Energy Security and Net Zero (DESNZ). The eligibility criteria were set by DESNZ.

To date 34 North Somerset based homeowners were successful for the scheme.

Social Housing Decarbonisation grant

£1.1m was awarded to Alliance Homes to upgrade homes and off-grid households with energy efficiency measures through Social Housing Decarbonisation Fund and Home Upgrade Grant. The money will go towards improvements to vulnerable households and off-gas grid homes with an EPC rating of D or below and could save tenants between £220 and £400 a year on energy bills. These schemes could also support around 20,000 jobs in the construction and home retrofit sectors, helping to deliver on our promise to grow the economy and create better paid jobs, whilst supporting families across the country.

Low carbon business and skills

Net Zero Business support grants programme

North Somerset Council launched the Net Zero Business support grants programme funded through UK Shared Prosperity Fund. The programme aims to support Small and Medium Size Business in the region by providing access to capital grants aimed at decarbonisation of the business premises. The total value of the scheme is £255,000 spread across 2 financial years.

Round 1 – April 2023 - March 2024 - has an allocation of \pounds 105,000. The applications received from 11 business and are being assessed. The proposed projects through round 1 can save approximately 50 tonnes CO2 per annum.

Round 2 – April 2024 - March 2025 will go live in winter 2023. In preparation of the grants application businesses will be able to apply for the free carbon survey through appointed contractor. Details to follow in August 2023.

Renewable energy generation

Solar Together Round 2

The West of England Combined Authority has an agreement in place (August 2021-August 2025) with iChoosr administers of the Solar Together scheme. A turn-key collective buying scheme for owner/occupiers wishing to invest in a solar panel system on their home, with the option of adding a battery. 'Solar Together - West of England' Round 1, delivered in 2021 and achieved 842 solar PV installations and 105 batteries equating an estimated carbon reduction of 18,000 tonnes over 25 years. The Regional Low Carbon Delivery team propose working with iChoosr to run a second round of Solar Together - West of England by joining Cohort 4 along with seven other authorities across England. This proposal is being discussed with the Local Authorities on 23 June at the Climate Working Group. North Somerset Council is considering participation in the scheme following the success of the Round 1.

Resources and waste

We are the best performing authority in the South West and second highest unitary authority in England. We continue to work with our NSC waste and recycling team and local community groups and organisations to maintain our high recycling rate of 60.4%, which placed us 7th out of 341 English local authorities in the overall recycling performance league table.

Adaptation and resilience North Somerset Flood Risk Management Strategy

In June 2023 North Somerset Council adopted the Flood Risk Management Strategy that focuses on managing the risk of flooding to people and property due to surface runoff, ordinary watercourses and groundwater, in line with our responsibilities. The Strategy identifies communities in North Somerset which are considered to be most

vulnerable to flooding from surface runoff, ordinary watercourses and groundwater. It identifies the measures we propose to take in these communities to reduce flood risk, subject to sufficient funding and resource availability. More information can be found here <u>20.8 Local Floor Risk Strategy Summary - Local Flood Risk Management Strategy</u> for North Somerset.pdf (moderngov.co.uk).