

BY SUBMITTING THIS REPORT TO THE CABINET OFFICE, I, Andrew Gregory, Director of Planning Transport & Environment AM CONFIRMING THAT THE RELEVANT CABINET MEMBER(S) ARE BRIEFED ON THIS REPORT

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**CARDIFF COUNCIL
CYNGOR CAERDYDD**

CABINET MEETING: 21st March, 2024

REPORT TITLE One Planet Cardiff Update

CABINET PORTFOLIO TITLE

**Cllr Caro Wild – Cabinet Member for Climate Change
AGENDA ITEM:**

Reason for this Report

1. ~~To note progress and to~~ To report on the Carbon Emission analysis for 2022-23.
2. To note progress on key One Planet Cardiff Programmes and Projects
3. To note implications of new and emerging policy and innovations at local regional and national level
4. To note the funding gap risk in delivering Carbon neutral ambitions and to trigger a One Planet Cardiff review and Green Paper consultation into the investment opportunities and delivery challenges and around the green energy transition.

Background

5. We are in the advancing stages of a man-made climate crisis, with severe consequences for humanity and future generations around the world, including Cardiff. The over-heating of the planet's atmosphere has been caused by the unsustainable use of the earth's resources, and particularly by the associated carbon emissions from the use of fossil fuels.
6. As in many other cities and developed nations, Cardiff's businesses and citizens emit more carbon than the world's average and this has been part

of an entrenched pattern of behaviour that has created today's environmentally unsustainable global economy.

7. The current and future risks to humanity from these threats are clear. Without significant action:
 - Rising sea levels will submerge currently inhabited land and increase the likelihood of flooding.
 - The climate will get progressively more unstable with storms and heatwaves increasing in regularity and intensity.
 - Global heating will make some parts of the world uninhabitable, leading to the displacement of millions of people.
 - Drought, storms and changes to the weather seasons will impact farming and global food production, leading to food shortages and price increases.
8. It remains the case that the wealthier regions of the planet cause disproportionately more harmful emissions, whilst the poorest have experienced the worst effects of climate change to date. However, as a globally connected city, Cardiff and other western regions have also felt these effects both directly and indirectly. This has been underlined even more starkly in recent times with the emergence of the energy and cost of living crises, and floods and fires across Europe, North America and Australia.
9. The Council declared a climate emergency in 2018 and then published its strategic response to this in the One Planet Cardiff (OPC) Strategy in 2021. One Planet Cardiff established two overarching goals:
 - for the Council to be Carbon Neutral in its activities by 2030, and
 - to work in partnership with stakeholders to develop a pathway for a Carbon Neutral City by 2030.
10. Since then, significant progress has been made by the Council and key partner organisations in identifying the high impact priorities for action, developing a robust programme for change, and starting to make tangible and bold steps towards carbon reduction improvements.
11. The Council's internal policy position has also strengthened over the intervening period, and the approval of the new Administration's "Stronger, Fairer, Greener" strategy placed Climate Change at the centre of the Council's agenda.
12. Full Council debated and passed a Motion in September 2022 around climate justice and the impact of climate change on nations around the world. The motion calls on the Council to commit to being a 'globally responsible city' and also reinforced the commitment to acknowledge and tackle the global consequences of climate change.
13. This report is the second review of the OPC Strategy since its approval in 2021. It records the progress that the Council has made so far, both in striving to reduce the climate implications of our actions and in

understanding the scale of the challenge and the collective resources needed to address them.

14. In response to the Welsh Government's ambition for a Carbon Neutral public sector in Wales by 2030 the Council's operational emissions are calculated annually and submitted to WG. The findings of the second annual Operational Carbon Analysis are discussed below, along with carbon statistics produced by Central Government relating to the city as a whole. This reporting provides the basis for the monitoring of our progress against the One Planet Cardiff 2030 target.
15. It should be noted that this report does not cover the entirety of the council's response to the climate emergency. Actions around climate change are now linked to every part of the council. Because of the cross-portfolio nature of our One Planet Cardiff plan, strong Governance arrangements have been put in place. A climate change board of senior officers meets regularly to monitor progress and this group is chaired by the CEX. An OPC Steering Board also meets quarterly, with relevant Cabinet members and senior officers in attendance, to be briefed on progress and emerging issues.
16. The Council has recently been successful in securing grant funding from Innovate UK to support an internal project to further strengthen and embed carbon and climate change considerations into our core governance and decision making processes. A senior officer has been recruited to steer this project and is based with the council's central policy team. Their task is to develop a set of recommendations and actions to centralise carbon and climate issues in our policy and decision making structures, in consultation with internal stakeholders, and based on a national and international best practice review by mid 2025.

Issues

Flood Risk

17. Whilst this report is focused the steps required to meet our net-zero ambitions, the council is aware of the very real flood risk that climate change brings. Our flood risk responsibilities and policies are set out in the Cardiff Local Flood Risk Management Strategy due to be updated and published in the summer of 2024.
18. We are in the process of developing various flood prevention schemes utilising a risk based approach and prioritisation process in partnership with WG and NRW. The following is a list, which is not exhaustive, of projects at various stages of development:
 - Cardiff Coastal Protection Project – a circa £37M investment to protect the South of the city from the risk of flooding from the sea.

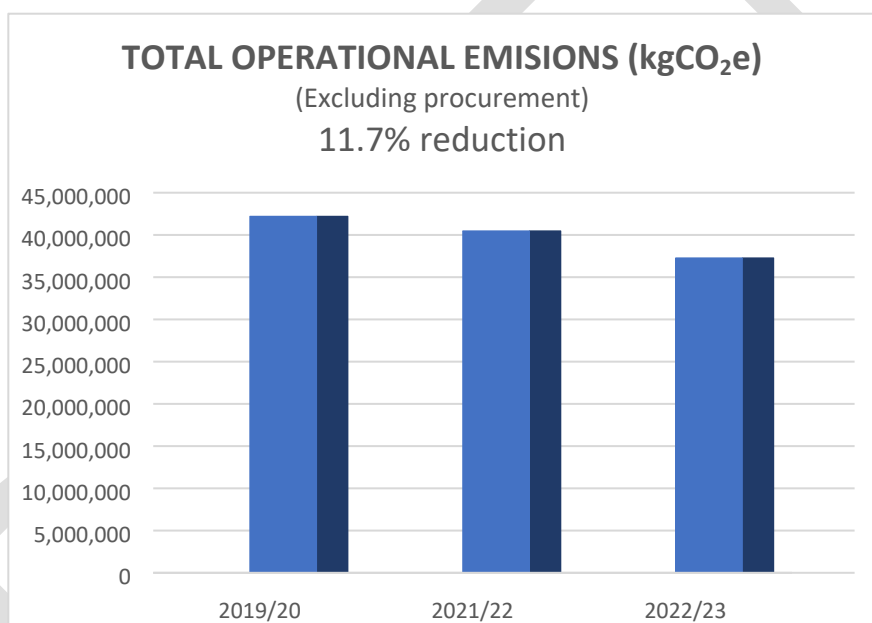
- Greener Whitchurch – A flood alleviation scheme to reduce flood risk in the Whitchurch area through the introduction of sustainable drainage features and other innovative solutions.
 - Roath Dam – Parks not Highways
 - Rumney – a combined flood risk alleviation scheme with WG, DC/WW and Cardiff Council to reduce the flood risk to areas of Rumney.
 - Nant Y Wedal Brook – investigations and assessments are ongoing with the development for an outline business case to design a flood alleviation scheme that will protect affected areas of the Heath ward.
19. We will have an updated local flood risk management strategy by summer 2024. This updated policy will outline how we assess the flood risks across the city and our policy for investment, including more localised risks and opportunities for advancing sustainable drainage solutions.

Analysis of the Council's Annual Operational Carbon Emissions

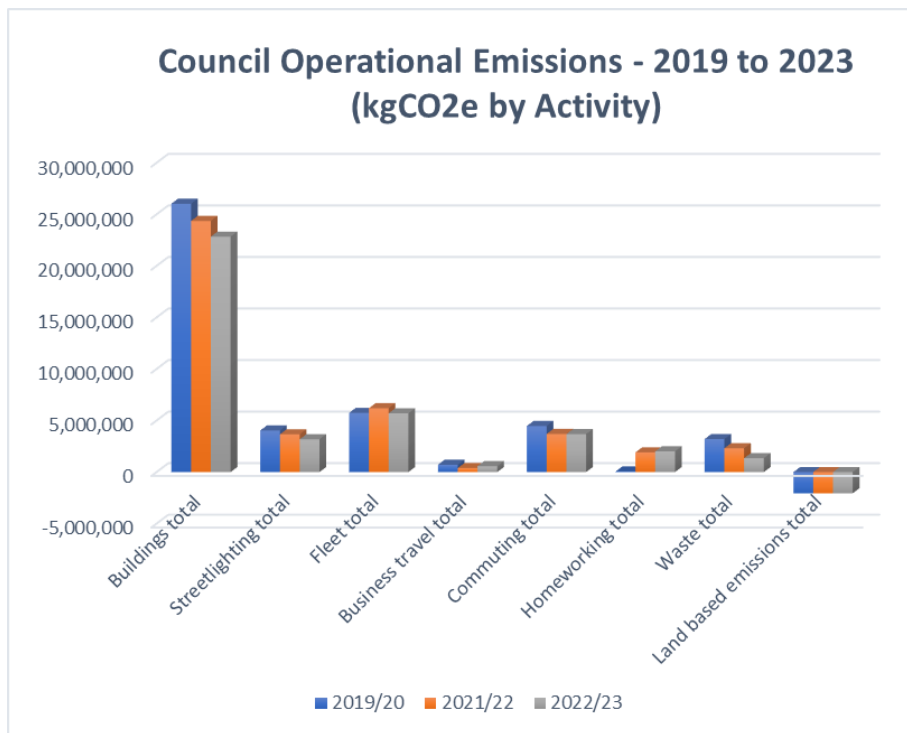
20. The initial 2021 One Planet Cardiff Strategy reported the Council's estimated carbon emissions at a 2019/20 baseline year, alongside an analysis for 2020/21. This was to ensure that the One Planet Cardiff carbon baseline related to "normal" pre-pandemic activities, so as not to be skewed by the various implications of the Covid lockdowns.
21. The key recognition from that analysis was that the carbon emissions "caused" by the Council's Procurement activities dwarfed all other types of more direct emissions, i.e., those from heating and powering buildings and from our travel and mobility activities.
22. The Council has now adopted the Welsh Government carbon reporting framework methodology to record its emissions in a consistent way that aligns with other public sector organisation across Wales. This framework requires us to use "activity" based reporting under the following headings.
- Buildings
 - Streetlighting
 - Fleet
 - Business travel
 - Commuting
 - Homeworking
 - Waste
 - Land based emissions and sequestration (carbon capture)
 - Supply chain (emissions arising from Procurement spend)
23. Welsh Government continues to make methodological and scope adjustments and improvements to this framework following feedback on

the system in operation. For example, estimates of carbon impacts arising from homeworking, and the attribution of initial processing emissions to non-landfill waste collected in Council vehicles are now included. Whilst these improvements are welcomed, it means that the latest analysis for the 22/23 operational year doesn't now fully align with the published 2019/20 baseline data. We have therefore gone back to our 2019/20 data and recalculated a baseline to align as closely as possible to the new methodology to ensure that we can reflect a more accurate picture of the changes. This has had the effect of increasing our baseline emissions, though it should be made clear that this is the result of the wider scope and accuracy of the calculation and additional items included rather than an increase per-se.

24. Excluding Procurement emissions this analysis showed that the Council's direct operational emissions between 2019/20 and 2022/23. reduced from 42,211 tonnes CO₂e to 37,284 tonnes. This represented an 11.7% reduction since the start of the OPC strategy. The chart below gives further details.



25. The more detailed analysis that now follows is based on Welsh Governments 'activities'-based carbon accounting reporting methodology. Overall, it is important to understand the current data in the light of the highly abnormal circumstances associated with the Covid Pandemic. In particular, some of the figures show a "bounce-back" from the pandemic years as activities resumed.
26. The chart below shows how emissions (calculated with the new WG methodology) changed over the last three years and compared to the baseline on an "activity" basis.



27. **Building emissions** reduced by 12.3% from the baseline of 2019/20 and by 6.3% between 2021/22 and 2022/23. The majority of the decrease was observed in electricity consumption with gas consumption (largely associated with heating) still proving difficult to tackle. The downward trend identified is attributable to a number of influences including hybrid working initiatives, the installation of energy conservation and insulation measures, removal and replacement of heating oil systems, local energy improvement projects such as LED upgrades, and new build schools' programmes and other asset renewal. In addition, behavioural change and awareness of the need to reduce consumption is starting to filter through particularly across the school's estate. However, it should be recognised that the largest share of the change is still attributable to the national and local decarbonisation of electricity supplies in the grid.
28. **Street Lighting** emissions reduced by 21% from the baseline year of 2019/20 and by 13% from 2021/22 to 2022/23. This is mostly due to the ongoing roll out of LED street lighting across the city, which still shows a reduction in emissions despite the increase in the electricity emissions factor for 2022/23. Cardiff Council has recently completed the installation of over 23,500 residential led street lights so will consequently expect to see a further reduction in energy use and emissions in 2023/24.
29. Diesel and petrol emissions from the **Council's Fleet** decreased at the start of Covid but then subsequently rebounded to higher than the baseline post Covid. This was due to an increased number of individual vehicles being used to enable social distancing, combined with street maintenance services moving from a contracted-out service (counted in "Caused/Procurement" emissions categories previously) to being delivered in-house. There was also an unexpected increase in the use of

older hired vehicles resulting from long lead times for new electric vehicles (EV's), delaying our planned purchase of new, more efficient fleet.

30. The last year, however, saw a new reduction in fleet emissions. This was the result of the addition of some EV's during that period, alongside initiatives from our Central Transport Service working with Directorates to encourage wider use of these electric vehicles. 10% of our smaller vehicles (under 3.5 tonnes) are now fully electric along with 8% of our larger vehicles.
31. Progress on the additional purchase/hire of electric fleet vehicles remains slower than anticipated due to a global semiconductor shortage and very high demand for electric vehicles. This situation appears to be easing and, working with Welsh Government Energy Service, we've managed to secure access to an all-Wales procurement framework whose aim is to help speed up delivery and, where possible, manage costs through grouping together LA purchasing into larger requests making them more attractive to the market.
32. The Council's **commuting emissions** reduced by 17.7% since the baseline year. This calculation is now based on a broad assumption that 25% of staff work from home (information generated by HR). It is the intention in early 2024 to conduct a staff survey to develop better statistics around this area of Council emissions for future reporting and policy formulation.
33. **Business travel** (i.e., travel in private cars and public transport trips for the purposes of conducting Council business during the working day) decreased by 19% from the baseline year due to private car mileage and public transport usage significantly decreasing during the Covid period and the subsequent move to online meetings. However, post Covid business mileage claims for staff personal cars (grey fleet) have increased significantly, with a 47.7% increase between 21/22 and 22/23. This "bounce back" is suspected to be amplified further due to less car sharing post covid, with many journeys starting from home rather than office locations, as well as increased demand from areas of the Council responding to increased social service demands. In response the Communities directorate has instigated a successful electric bike scheme which has resulted in some staff diverting from cars to bikes for their business travel needs.
34. All **waste** is collected in Council waste vehicles and the fuel used accounted for in the fleet footprint calculation. However, since 2021/22 the WG methodology has required us to record emissions attributed to the additional offloading and initial processing of all non-landfill waste including recycling, composting and energy recovery. To allow comparability across years we have used the 2021/22 emissions factors to recalibrate 2019/20 in this area.

35. In percentage terms this represents one of the most significant reductions over the period since 2019/20 with an overall decrease of 57.9%. This decrease is thought to be attributable to an increased diversion of “rejected” waste now being sent to the local energy reclamation facility (Viridor) rather than as landfill. The 2021/22 figure was also abnormally high due to a prolonged outage at the City’s energy from waste plant in that year resulting in some waste being diverted to landfill.
36. The figures for **Land Based Emissions** give an indication of the positive effects that trees and green infrastructure on the Council’s land have in capturing, or “sequestering” carbon thus having a positive impact on carbon reduction. The “Coed Caerdydd” initiative is seeking to protect and extend this biodiversity asset.
37. Since its inception the project has planted 58,000 trees with plans for an additional 22,000 in the current planting season. This planting will soon have covered approximately 24Ha of land. The project has also secured a new Tree Nursery, extensive volunteering and schools’ engagement to help plant, and a system of “Tree Guardians” to look after the assets in the longer term.
38. The static figures reported for land based emissions therefore disguise some very positive progress made in extending our tree canopy. This is because the true effects of new planting aren’t captured until the trees start to mature. A new “iTree” survey planned for 2026 will produce a more detailed assessment of achieved and forecast progress.
39. Supply chain or **Procurement emissions** still account for the huge majority of the Council’s operational carbon footprint – around 78% in total. As noted in previous OPC reports, the methodology used for assessing this complex area had some significant limitations. Welsh Government instigated several pieces of work aimed at improving the analysis framework, and the Council’s Procurement team have also made good progress in work to understand the Council’s supply chain footprint and to identify the highest carbon spend areas. Cabinet has also approved a new “Socially Responsible Procurement Strategy” which has carbon, climate change and circular economy as central themes.
40. One of the key changes since the last OPC report is that UK Government has reviewed the “carbon factors” that they publish and which attribute carbon emissions to pounds spent across all purchasing categories. This has both improved accuracy and updated areas where progress has been made nationally.
41. We can therefore report that procurement related emissions reduced by 25.5% between 2021/22 and 2022/23 despite actual Procurement spend increasing by around 17%. This is because many of the carbon emission factors provided by UK Government, notably construction and social care where we have significant spend, reduced greatly, reflecting grid decarbonisation and other modernising delivery practices. Although this result is positive, Procurement remains the largest element of the Council’s

operational carbon footprint by far, and one that remains a very challenging area, requiring engagement and change throughout our supply chain.

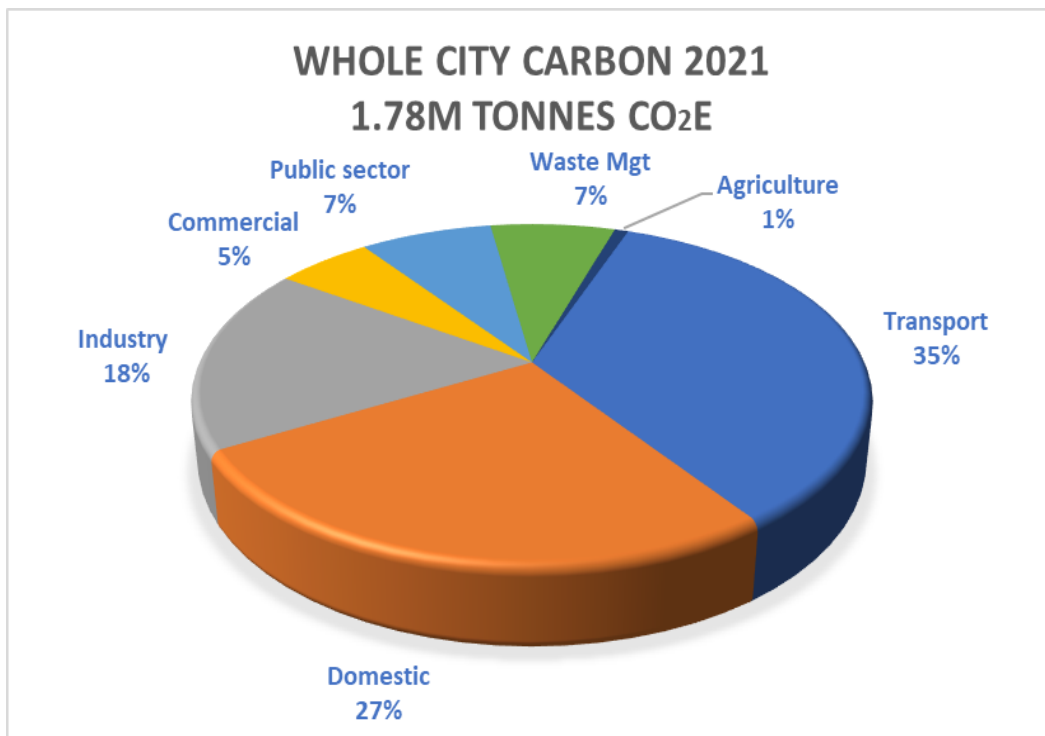
Council Operational Emissions – Summary

42. Across all of the Council's operations there has been a recognisable decrease in carbon emissions, despite the context of the Covid lockdown which brought a larger initial decrease in emissions followed by a "bounce back effect" as services resumed normal practice and other Council demands, particularly around levels of social care, increased. More positively the change in the last year, between 2021/22 and 22/23, indicates a significant downward trend (-22%) albeit that some of that is attributable to national trends in grid decarbonisation and supply chain emissions calculated in our Procurement analysis.
43. The Council's operational emissions attributable to all activities excluding Procurement also show a positive position. Over the period since 2019/20 there has been an 11.7% reduction with a 7.9% fall in the last year (21/22 - 22/23)
44. Overall, the above analysis shows that the Council's major areas of challenge remain in its buildings, fleet and procurement spend emissions. Another key observation is that, though the downward trend is positive, the pace of change will need to accelerate considerably as we move towards 2030 if we are to meet our carbon neutral targets as an organisation.

Analysis of Cardiff's City-wide Emissions

45. In monitoring the progress of the wider City's decarbonisation, we rely on Central Government's Department for Energy Security and Net Zero (DESNZ) estimates. They publish carbon emissions at a local authority boundary level annually. These figures relate to calendar years and the latest data relates to 2021, i.e. the year prior to those reported for the Council activities above. The published City-wide figures showed that emissions across the entire City boundary (i.e., relating to all citizens, organizations and visitors in the city) stood at 1.79 million tonnes, representing a very modest decrease of 0.9% since the 2019 base year.
46. Recognising the 1-year time difference between this data and that shown above for the Council's performance, it should be remembered that the City-wide data is particularly highlighting the effects of the Covid lockdown and subsequent return to business-as usual. We will need to wait until the publication of data for 2022 (due next summer) to get a clearer picture of post-covid trends. Nevertheless, the data shown here gives useful insight, identifying the key areas of focus for future decarbonisation action.

47. The chart below shows how the City's emissions were distributed amongst the key sectors in the city.



48. Transport remains the highest emitting sector for the city, contributing 617,400 tonnes, or 35% of city emissions in 2021. This decreased by 8.9% from 677,800 tonnes CO₂ e in 2019, no doubt assisted by a slow increase in the number of electric vehicles and the utilization of some of the Council led active travel initiatives now progressing throughout the city. However, this sector is still the highest carbon emitter and remains one of the key target areas for focussed and ongoing decarbonisation action.
49. Domestic emissions were the second highest, accounting for 472,500 tonnes CO₂ e, or 27% of city emissions in 2021, with only a very small change since the baseline year. This underlines the need for intensified action, at the local, regional and national levels, to mobilise and kick start progress on this important and complex area of challenge.
50. The increase in public sector emissions of 43.9% since 2019 is also notable. This covers *all* public sector activity including health, emergency services and government. This trend is consistent across UK core cities, although Cardiff is showing a higher-than-average increase. We understand that the increase results from a number of factors, including higher than average cremation following increased mortality rates, more hospital wards being open and busy during the Covid period, and Covid rules requiring public buildings to both heat and ventilate (usually by keeping windows open and heating at maximum). There has also been a marked increase in the demands placed on public services following the pandemic and cost of living crisis.

51. The increase in waste emissions is also something of an anomaly, but this is thought to be explained by the temporary increase in waste tonnage sent to landfill due to the city's energy from waste plant being closed for part of 2021.
52. The table below gives details of the changes in emissions by key sector and illustrate clearly that the key challenges, and target areas for action in the city remain as transportation decarbonisation and domestic building retrofit.

Cardiff city-wide % change in emissions 2019-21 Kt CO2 e (DESNZ)										
	Transport	Domestic	Industry	Public Sector	Waste Management	Commercial	Agriculture	LOUCLF Net Emissions	Grand total	Per capita
2019	677.8	472.3	351.9	93.5	80.1	103.5	14.7	9.8	1803.8	5.0
2021	617.4	472.5	315.4	134.5	127.2	97.5	14.0	8.6	1787.2	5.0
% change	-8.9%	0.0%	-10.4%	43.9%	58.8%	-5.8%	-4.8%	-12.2%	-0.9%	0.0%

One Planet Cardiff Programme Review and Highlights 2022/23

53. Since the first approval of One Planet Cardiff Strategy and Action Plan, a very large number of actions, projects and investigations have been successfully instigated. Together these have helped to move the decarbonisation agenda forwards considerably, and the work has also helped to develop an ever more detailed understanding of the scale and complexity of the challenge both for the Council itself and for our city partners and funders.
54. Highlights from the past year include:
- A successful **Climate Summit** event, bringing together private and community sector organisations in the city to share climate actions, best practice and challenges.
 - The formal launch of our **One Planet Schools Pledge** in a two-day event where schools and pupils were introduced to a wide range of resources to help them plan their own school climate action plans and to integrate associated learning into the curriculum.
 - Significant progress to develop a **Local Area Energy Plan** for the city, aiming to identify and quantify the future energy demands, matching these with opportunities for efficiency and local clean energy generation. This study will become a central resource for the Council and partners over the next decade, and the work is supported and funded by Welsh Government who will also use collective findings from across Wales to develop a national energy position.
 - The roll out of a **Carbon Literacy** training module for Council staff.
 - Securing Innovate UK funding to support a new Operational Manager and apprentice posts whose work will focus on researching and proposing a methodology to **embed carbon and climate considerations** into the Council's governance and decision-making systems.

- Significant progress on the construction of the **Cardiff Heat Network**, which will deliver low carbon heat to major buildings and development in the Bay. Completion is anticipated in summer 2024.
- Completion of a major study to understand and investigate the potential costs and challenges of reaching Net-Zero in the Council's **built estate**.
- Completion of a **"Refit" energy retrofit tender** to secure the next phase of our building decarbonisation focussing on a first tranche of around 15 Council buildings to commence in early 2024.
- The installation of extensive **sensors and data collectors** throughout our estate to develop a closely monitored understanding of energy use and opportunities for savings.
- Development of a new **domestic retrofit initiative**, called "LA Flex" linking Energy Company Obligation funding with home occupiers in fuel poverty to install energy efficiency measures. This launched in February 2024.
- Progress on further energy improvements to the Council's housing stock through low-rise flats retrofit initiative and a Welsh Government Grant for works to **hard-to-treat steel framed houses**.
- Progress on **new Council House** partnership delivering low carbon affordable homes.
- Successful hosting and expansion of the **"Climate Emergency Board"** which brings together public sector, academic and utility organisations in the city to share best practice on decarbonisation and to develop collaborative decarbonisation and behaviour change actions.
- Detailed designs for the construction of a **low carbon new-build high school** as a pathfinder for future builds.
- Successful grant funding to pilot and install **air source heat pumps** in some council buildings.
- Securing over £2m of grant funding from the Cardiff Capital Region Challenge Fund, in partnership with Monmouth Council, to investigate and sponsor innovative new ways to deliver local, **low carbon and healthy food solutions**.
- Planting of 58,000 trees so far, as part of the **Coed Caerdydd** initiative,
- Lamby Way Solar Farm performance levels above expectations for the year

Emerging Challenges

55. Though the above list is impressive, and clearly demonstrates the commitment of the Council and partners to the Climate Emergency response, the work has also begun to shine a light on the scale of the challenge ahead of us. Alongside these key achievements there have also been a number of blockages, issues and clarifications that will need close attention moving forward.
56. In particular, the study to quantify the resources needed to decarbonise our own buildings shows that the sheer scale of funding required to fully each of our 240 council buildings is likely to be beyond our reach between now and 2030. Early pilot work is also starting to indicate potential shortages in

the local workforce and supply chain needed to deliver at the scale and pace required, though this is also acknowledged to be a significant economic opportunity if addressed well.

57. Efforts to secure more renewable energy generation schemes on Council land have also been challenging with two key schemes having encountered external barriers that have dramatically slowed down, and potentially halted progress.
58. The uptake of domestic retrofit initiatives in the wider city, beyond the directly funded Council initiatives, appears to be very much slower than the rate needed for major impact.
59. Notwithstanding the Council's new Socially Sustainable Procurement Strategy and good progress made, the feedback is that our suppliers are not yet ready to provide dramatically lower carbon goods and services. It is likely that considerable national support, incentivisation and regulation will be needed alongside local policy to fully address this challenge.
60. The National grid decarbonisation progress is also not yet of sufficient scale and pace to help us meet a 2030 deadline in advance of the national 2050 goal.
61. From analysis of this data examining the areas where a further acceleration of change is required, it is clear that the fundamental issue remains the limitation on major capital funding from central government to fund such transformation.
62. Indeed, we know through our various networks that many other Welsh Public Sector organisations, and UK core cities have identified similar challenges and there are many active and constructive discussions at all levels on these issues. Together these are starting to bring clarity and agreement around the key challenges and barriers that we collectively face.
63. Alongside this, major national initiatives such as the Welsh Government's Draft Heat Strategy consultation, Climate Engagement Strategy, the all-Wales Local Area Energy Plan project and emerging Climate Adaptation Risk Assessments are all bringing greater clarity and policy direction to the agenda. Together this work is helping to develop a much better understanding of the challenges and costs of decarbonisation, as well as the costs of doing nothing.
64. In this respect, our One Planet Cardiff annual review has also highlighted the need to draw an even closer relationship between our carbon reduction or "climate change mitigation" plans and those that address "adaptation" around known climate change risks. In particular our flood defence work, which has delivered significant increased resilience in lower lying areas of the city needs to continue. Robust assessments of the "worst case" risks around this will help develop a better picture of what balance we need to strike between prevention and protection. Similarly a better understanding of the potential effects of other climate change risks, such as overheating, food chain disruption and climate related migration is needed to inform

strategies moving forward and to provide a better sense of the local “cost of doing nothing” to slow and prevent climate change.

Conclusion

65. Even with the impressive progress and action across the Council’s portfolios and amongst our partners it is becoming clear that, for some of our key action areas, reaching a net-zero carbon position by 2030 looks to be challenging, and will almost certainly not happen without significant government investment. We are proud that our actions to date have brought a very strong focus to the need for urgent climate action, have delivered significant progress towards our goals, and brought invaluable pathfinder intelligence to the debate. We are determined to carry on with this work and to ensure that the groundwork we’ve put into the early years of the OPC strategy is mobilised. It is also clear that these activities need to accelerate and that we need co-ordinated partnership and Government support to achieve our goals.
66. We also need to assess how the varied national targets and action plans fit with and influence our own. Whilst the Welsh Government ambition for public sector decarbonisation by 2030 has been a vital driver for us so far, it is apparent that the levels of funding required to achieve this are not currently available. We are also mindful there is not a settled position from the UK Government on key target dates, levels of investment and phase-out dates for gas boilers and petrol/diesel cars.
67. Other global initiatives, such as the “Race to Zero” with its 50% carbon removal by 2030, warrant further investigation and we plan to do this in consultation with partners and policy makers over the coming months.
68. What is also very clear are the potential economic development and wellbeing benefits that could be delivered if there is a strong and focussed effort on resolving the above issues productively and accelerating out implementation plans.
69. Taking all of this learning and evidence building into consideration we now believe it is pertinent to being forward a wide review to look into the latest situation with regards the financing required to get to net zero, including what the economic opportunities are with the green energy transition.
70. We are therefore proposing to commence work on a “Green Paper” that will help us better-understand the latest financial situation with regard meeting carbon-neutral targets and how this aligns to associated government targets. The Green Paper will also provide a clearer understanding of the investment opportunities for the city and region of a green energy transition. This will set out a much clearer picture of goals and targets as well as engaging the public in changes the transition will bring. This work will be based on:
 - Findings from the forthcoming Local Area Energy Plan work;

- Analysis of the funding and partnerships required to get to net zero – Council and City - including a collaborative focus on building retrofit and transport modal shift;
- Analysis of opportunities for renewable energy on our own estate and consultation on how these could be best delivered;
- Analysis of options of investment models for the green energy transition and economic growth, including opportunities for joint work with the CCR into regional 'green city deal' type opportunities; and
- Consultation with the public on steps required to reduce emissions, including uptake of Electric Vehicles and home green energy measures.

71. This Green Paper work will commence immediately with the aim of reporting back to Cabinet during the 24/25 financial year.

Local Member consultation (where appropriate)

72. N/A

Reason for Recommendations

73. To ensure that the progress and momentum of our Climate Emergency response is recorded and to agree a course of action to review this in light of experience and intelligence gathered to date.

Financial Implications

74. This report and recommendations do not result in any additional financial implications but record progress and actions taken to date as part of the One Planet Cardiff Strategy and the Cardiff Council Climate Emergency response.

75. It should be noted that the very challenging targets set out in this report will require additional capital and revenue budgets that have not been assumed in the current budgetary framework. Any proposed actions and strategies that continue or are developed must consider financial implications alongside other Council financial commitments and pressures to ensure the budget framework for 2025/26 and future years includes the full approved commitments for the Council in the medium to long term.

76. It will be necessary to work closely with Welsh Government and other partners to understand key requirements, targets, delivery methods and costs associated along with any financial penalties for non-compliance with carbon reduction targets. Prior to entering into any commitments, decision makers must ensure that funding is at a sufficient level to fully cover the capital programme and revenue costs implications of those commitments.

77. The report proposes an interim review of the Council's One Planet Cardiff strategy based on experience and information gathered to date, prior to the development of a review for consultation and to establish a future plan of action. It is essential that a full understanding of the financial issues, risks and deliverability of any proposed strategy and actions is made available as proposals are considered and before being taken forward.
78. Where data is being used to inform decision making and prioritisation, the source of that data needs to be robust, to ensure interventions and scarce resources are allocated to priority areas and requirements for sustainability reporting can be complied with.

Legal Implications (including Equality Impact Assessment where appropriate)

79. The report also seeks to undertake a review of progress on the One Planet Cardiff Strategy. Detailed legal advice will need to be taken on each of the proposed action plan as the same is developed. To the extent that any of the proposed actions, measures or projects require any changes to be made to any of the documents, which comprise the Council's Policy Framework, then such matters will be subject to decision of Council. To the extent that the action plan provides, without caveat, that specified actions will be undertaken, then the adoption of the plan and strategy will serve to create a legitimate expectation that such actions will be undertaken by the Council. The report refers to consultation which it is understood will be undertaken at a later point. It should be noted that consultation gives rise to the legitimate expectation that the outcome of the consultation will be taken into account when developing and determining to adopt the strategy and action plan.

Equality Duty.

In considering this matter, the Council must have regard to its public sector equality duties under the Equality Act 2010 (including specific Welsh public sector duties). This means the Council must give due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. The protected characteristics are: age, gender reassignment, sex, race – including ethnic or national origin, colour or nationality, disability, pregnancy and maternity, marriage and civil partnership, sexual orientation, religion or belief – including lack of religion or belief.

When taking strategic decisions, the Council also has a statutory duty to have due regard to the need to reduce inequalities of outcome resulting from socio-economic disadvantage ('the Socio-Economic Duty' imposed under section 1 of the Equality Act 2010). In considering this, the Council must

take into account the statutory guidance issued by the Welsh Ministers ([WG42004 A More Equal Wales The Socio-economic Duty Equality Act 2010 \(gov.wales\)](#)) and must be able to demonstrate how it has discharged its duty.

Well Being of Future Generations (Wales) Act 2015 - Standard legal imps

The Well-Being of Future Generations (Wales) Act 2015 ('the Act') places a 'well-being duty' on public bodies aimed at achieving 7 national well-being goals for Wales - a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.

In discharging its duties under the Act, the Council has set and published well being objectives designed to maximise its contribution to achieving the national well being goals. The well being objectives are set out in Cardiff's Corporate Plan 2023-26. When exercising its functions, the Council is required to take all reasonable steps to meet its well being objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the well being objectives and must be satisfied that all reasonable steps have been taken to meet those objectives. The well being duty also requires the Council to act in accordance with a 'sustainable development principle'. This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:

- Look to the long term
- Focus on prevention by understanding the root causes of problems
- Deliver an integrated approach to achieving the 7 national well-being goals
- Work in collaboration with others to find shared sustainable solutions
- Involve people from all sections of the community in the decisions which affect them

The decision maker must be satisfied that the proposed decision accords with the principles above; and due regard must be given to the Statutory Guidance issued by the Welsh Ministers, which is accessible using the link below: <http://gov.wales/topics/people-and-communities/people/future-generations-act/statutory-guidance/?lang=en>

General

The decision maker should be satisfied that the proposal is within the Policy and Budget Framework, if it is not then the matter must be referred to the Council. All decisions taken by or on behalf the Council must (a) be within the legal powers of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers of behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. Council Procedure Rules; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances

The decision maker should also have regard to, when making its decision, to the Council's wider obligations under the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards.

HR Implications

There are no HR implications arising from this report.

Property Implications

There are no direct Property Implications arising from this report. Detail relating to Carbon reduction within the Built Environment is covered in the Annual Property Plan and other associated governance.

RECOMMENDATIONS

Cabinet is recommended to:

- 1) Note the progress made on carbon reduction over the period of the One Planet Cardiff Strategy
- 2) Approve the commencement of work on of a Climate Change Response "Green Paper" to include a clear picture of challenges, goals and potential investment opportunities associated with them.

SENIOR OFFICER	RESPONSIBLE	Director Name Andrew Gregory
		Date submitted to Cabinet office.

*The following background papers have been taken into account.
One Planet Cardiff Strategy*