



RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CLIMATE CHANGE CABINET STEERING GROUP

18TH NOVEMBER 2019

**DISCUSSION PAPER - WORK PROGRAMME FOR THE CLIMATE
CHANGE CABINET STEERING GROUP**

**REPORT OF THE CHIEF EXECUTIVE IN DISCUSSION WITH THE
CABINET'S CLIMATE CHANGE CHAMPION (COUNCILLOR RHYS LEWIS)**

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1. PURPOSE OF THE REPORT

- 1.1 The purpose of the report is to set out a potential work programme for the Members of the Climate Change Cabinet Steering Group to consider in order that action can be proposed to Cabinet to response to the Cabinet's commitment for the Council to be Carbon Neutral by 2030, and to work with residents and businesses within the Borough to ensure the whole County Borough is Carbon Neutral as close as possible to the 2030 target.

2. RECOMMENDATIONS

It is recommended that the Steering Group:

- 2.1 Note the contents of this report;
- 2.2 Discuss and consider the draft four month work programme to 31 March 2020. This will enable the Steering Group to present to Cabinet early in the new financial year, a series of recommendations to further reduce the Council's carbon emissions and make good progress towards achieving the 2030 Carbon Neutral target;
- 2.3 Consider whether other public, private or community organisations should be invited to contribute to advising and supporting the Steering Group on specific items within the Work Programme.

3 REASONS FOR RECOMMENDATIONS

- 3.1 For the Council to respond to strive to become Carbon Neutral by 2030.

4. BACKGROUND

4.1 In March 2018, Rhondda Cynon Taf Council signed up to the UK100 Clean Energy Commitment to take appropriate action in order to transition towards being a fully environmentally responsible Authority by 2050. In doing so, the Council acknowledged:

- The historic commitments made at the 2015 United Nations Climate Change Conference in Paris towards the future of renewable energy;
- Our responsibility to help secure an environmentally sustainable future for our residents and in relation to the global effects of man-made climate change;
- That air pollution increases the risk of lung cancer, it can worsen existing lung conditions and stunt the growth of children's lungs;
- That climate action is not an inhibitor of economic growth but rather a driver of it, and additional benefits of the development of green industries include the potential to capitalise on the objectives of the Cardiff Capital Region City Deal, in creating well-paid, high-skilled employment locally, regionally and nationally; better health and wellbeing and financial savings to residents and businesses in the short and longer term.

4.2 In light of this, the Council resolved to:

- Match the ambitions of the UK100 Agreement through pledging to achieve 100% clean energy across Rhondda Cynon Taf Council's full range of functions by 2050;
- Work in partnership with our residents and business community to deliver against the commitments made nationally and internationally at the 2015 Paris Summit;
- Turn these commitments into reality through developing a `route map` to a sustainable future, working together with local business, educational and residential communities as part of an integrated approach to a shared sustainable future.

4.3 Over the past year there has been significant worldwide escalation in the environmental pressure placed on political leadership across international, national, regional and local government to provide strong leadership to accelerate the international commitments set out in the Paris Agreement of 2015. The aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. However, many environmental experts consider that the world is on the cusp of a significant detrimental environmental change caused by climate change, and that the timescales for the targets set out in the Paris Agreement need to be reduced to 2040 or even 2030.

- 4.4 There is a growing demand for governments at all levels to accept that climate change is an emergency and radical action needs to be taken by us all, individually and collectively, to reduce our carbon footprint and to reduce the impact of greenhouse gasses on our environment. The Climate Emergency Group that has sought to commit government at all levels to declare a “climate emergency” is seeking the UK to have zero - carbon emissions by 2030.
- 4.5 Zero-carbon is defined as “no carbon is produced from a process such as heating a building”, whereas Carbon Neutral (or Net Zero) is defined as “*achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset.* For example, a building with solar panels that sends renewable energy to the grid that is equal to the energy it uses from the grid can be considered carbon neutral.
- 4.6 In March 2019, the Welsh Government published Prosperity for All: A Low Carbon Wales, which sets out the Welsh Government’s approach to “***cut emissions and increase efficiency in a way that maximises wider benefits for Wales, ensuring a fairer and healthier society. It sets out 100 policies and proposals that directly reduce emissions and support the growth of the low carbon economy***”. The report references the findings of the UN Intergovernmental Panel on Climate Change, published in advance of the Committee on Climate Change Net Zero report. A ‘Low Carbon Wales’ sets the foundation for Wales to transition to a low Carbon nation and puts in place and provides a framework that will also enable the Council to demonstrate the steps it is already taking to manage carbon reduction and also to support, inform and supplement a necessarily ambitious plan for the future.
- 4.7 On 2nd May 2019, the Committee on Climate Change (the CCC), an independent, statutory body established under the Climate Change Act 2008 to advise the UK Government and Devolved Administrations on emissions targets and monitor the progress made in reducing greenhouse gas emissions and preparing for climate change, published **Net Zero – The UK’s contribution to stopping global warming.**
- 4.8 Net Zero is the response to a request from the Governments of the UK, Wales and Scotland, asking the Committee to reassess the UK’s long-term emissions targets. The reports key findings are that:
- The Committee on Climate Change recommends a new emissions target for the UK: net-zero greenhouse gases by 2050.
 - In Scotland, it recommends a net-zero date of 2045, reflecting Scotland’s greater relative capacity to remove emissions than the UK as a whole.

- In Wales, it recommends a 95% reduction in greenhouse gases by 2050, due to the extent of the farming industry.
- 4.9 Its conclusion is ***“A net-zero Green House Gas target for 2050 will deliver on the commitment that the UK made by signing the Paris Agreement. It is achievable with known technologies, alongside improvements in people’s lives, and within the expected economic cost that Parliament accepted when it legislated the existing 2050 target for an 80% reduction from 1990.*”**
- 4.10 ***However, this is only possible if clear, stable and well-designed policies to reduce emissions further are introduced across the economy without delay. Current policy is insufficient for even the existing targets.”***
- 4.11 It is expected that the governments of the UK will accept the advice of the Committee for Climate Change and adopt these targets which are over and above the commitment made by Rhondda Cynon Taf Council in committing to the UK 100 Commitment.
- 4.12 Further independent scientific research has suggested that unless significant action to reduce the impact of carbon emissions is taken by governments across the world by 2030, the current changes to the climate will be irreversible. The impact of this will be catastrophic, with significant changes to the temperature of the Earth creating rising sea levels, destroying many countries and cities, and forever changing our eco systems that support human life.
- 4.13 **In light of this, the Council’s Cabinet, in approving to consult on the Council’s new Corporate Plan, committed to becoming a Carbon Neutral organisation by 2030 and to work with residents and businesses within the Borough to ensure the whole County Borough is Carbon Neutral as close as possible to the 2030 target.**

5 WHAT ACTION DOES THE COUNCIL NEED TO TAKE?

- 5.1 Over the past 10 years, the Council has invested significant sums in reducing its energy consumption, the energy from which has been derived from fossil fuels. The Council already purchases 100% of its electrical energy supply from renewable energy sources and has reduced its carbon footprint by 37% or 12,725 tonnes over the past five years, Examples of the action taken to date by the Council include:
- The upgrading of all street lights to efficient LED units and turning off street lights in specific localities;
 - Investing in solar panels, LED lighting, wall and roof insulation, energy efficient gas boilers, and combined heat and power units in

many schools, leisure centres and council buildings. The solar panels fitted on council buildings are the equivalent size of two football fields;

- Installed electric cooking equipment in all new kitchens to benefit from the renewable electricity we procure;
- Significantly reduced the amount of waste that is disposed of by landfill or through energy for waste;
- Invested in the Healthy Hillside project with Welsh Government and the Fire Service with benefits for carbon reduction, biodiversity and air quality;
- Through planning agreements with windfarm developers, hundreds of hectares of peat and associated habitats have been targeted for restoration and their carbon and water storage has been increased;
- Invested in 20 micro generation Hydrogen Fuel Cells for our highest energy users (care homes, large schools and leisure centre) with the ambition to do more – this has a significant impact on the emission of greenhouse gases;
- Ensured all new schools and other council buildings are certified as BREEAM “Very Good” or “Excellent” with EPC ratings of A;
- Through various government grant schemes, enabled many residents on low incomes to improve the heat insulation in their own homes;
- Worked with partners to develop renewable energy projects such as, Clydach hydroelectricity, Vattenfall Wind Farm, Gasification Boiler at Ynysangharad War Memorial Park, Bryn Pica Eco Park. Other projects currently under consideration include three smaller wind farms and a solar farm;
- We have received over £450,000 of income from renewable energy generated from Council buildings.

5.2 However, there are considerable opportunities to do more.

5.3 We need to identify and measure the Council's carbon footprint as a direct response to its own activities. At present, we are required to identify the amount of carbon produced from our energy requirements on which we pay carbon tax, but nothing else. The next stage would involve taking into account the wide range of services and those services provided by other organisations on behalf of the Council. Finally, we would look to work with the communities and businesses within the boundaries of the Council to measure the carbon footprint of the Authority as a whole.

5.4 Calculating a baseline of the Council's Carbon and other greenhouse gases will enable the Council to identify short term and long term actions to change the way we work, procure and deliver our services, and highlight those changes that will have the greatest effect on reducing the Council's carbon footprint.

- 5.5 Currently, there is no consistent way of calculating the Carbon emissions baseline, however, Welsh Government has committed to providing detailed guidance and a model which all public bodies can use in April 2020. The advice from the WLGA is to wait a few months and use this consistent WG approved model, as it could become a statutory requirement in the near future.
- 5.6 There are carbon impact models prepared by other research organisations such as the University of Manchester which seek to disaggregate national carbon emissions data and seek to identify sub regional/local authority based emissions. However, when these models disaggregate the data, they fail to take into account the socio-economic factors in each area, the green energy produced within each area, and apply a uniform share of the national carbon effects from air and sea travel, and airports and ports. Therefore, this data is not sufficiently robust upon which to make informed decisions.
- 5.7 Nevertheless, to put into context the impact we, in Rhondda Cynon Taf, are having on the world's climate is: **if everyone in the world were to consume the same as the average Welsh citizen, the Stockholm Environmental Institute estimate that just over 2.5 planets would be required.** That is to say in order to sustain our current consumption in the long term we would require more than one planet Earth to provide the resources and absorb the wastes. Therefore, we all need to make changes to the way in which we live, work and play to reduce our demands on planet Earth if we are to sustain the current environment.
- 5.8 The Committee on Climate Change Net Zero Report recommends the UK focuses on:
- **Resource and energy efficiency**, to reduce the demand for energy across the economy. Without these measures the required amounts of low-carbon power, hydrogen and carbon capture and storage (CCS) would be much higher. In many, though not all, cases they reduce overall costs.
 - Some **societal choices** that lead to a lower demand for carbon-intensive activities, for example an acceleration in the shift towards healthier diets with reduced consumption of beef, lamb and dairy products.
 - Extensive **electrification**, particularly of transport and heating, supported by a major expansion of renewable and other low-carbon power generation. The scenarios involve around a doubling of electricity demand, with all power produced from low-carbon sources (compared to 50% today). That could for example require 75 GW of offshore wind in 2050, compared to 8 GW today and 30 GW targeted by the Government's sector deal by 2030. 75 GW of offshore wind would require up to 7,500 turbines and could fit within 1-2% of the UK

seabed, comparable to the area of sites already leased for wind projects by the Crown Estate.

- Development of a **hydrogen** economy to service demands for some industrial processes, for energy-dense applications in long-distance HGVs and ships, and for electricity and heating in peak periods. By 2050, a new low-carbon industry is needed with UK hydrogen production capacity of comparable size to the UK's current fleet of gas-fired power stations.
- **Carbon capture and storage (CCS)** in industry, with bioenergy (for Green House Gas (GHG) removal from the atmosphere), and very likely for hydrogen and electricity production. CCS is a necessity not an option. The scenarios involve aggregate annual capture and storage of 75-175 MtCO₂ in 2050, which would require a major CO₂ transport and storage infrastructure servicing at least five clusters and with some CO₂ transported by ships or heavy goods vehicles.
- Changes in the way we farm and use our **land** to put much more emphasis on carbon sequestration (Carbon sequestration is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide or other forms of carbon to mitigate or defer global warming such as using trees, hedgerows etc) and biomass production. Enabled by healthier diets and reductions in food waste, our scenarios involve a fifth of UK agricultural land shifting to tree planting, energy crops and peatland restoration.

5.9 Taken together, these measures would reduce UK emissions by 95-96% from 1990 to 2050. Tackling the remaining 4-5% would require some use of options that currently appear more speculative. That could involve greater shifts in diet and land use alongside more limited aviation demand growth, a large contribution from emerging technologies to remove CO₂ from the atmosphere (e.g. 'direct air capture'), or successful development of a major supply of carbon-neutral synthetic fuels (e.g. produced from algae or renewable power).

5.10 So what does this mean for Rhondda Cynon Taf Council and what are some of the options we should consider if we are to become a "Net Zero" Council? This list below are some examples of actions we could take as a Council, which we will need to consider planning for over the next 12-18 months:

Energy and Energy Efficiency

- Procuring **all** our Council energy requirements from sustainable green energy sources. This will include reducing our demand for gas by converting to green electricity, hydrogen and other green energy sources when they become readily available;
- Explore opportunities to create our own green sustainable energy supply from using land in the Council's or NRW's ownership for wind

farm or solar powered energy. This will include schemes such as the Taffs Well Thermal Spring;

- Offer a grant scheme to residents to convert from coal fired heating systems to initially low energy usage gas fired heating systems;
- Continue to invest in energy and water efficiency technology in our schools and other buildings, such as solar panels, water harvesting etc;
- Through planning policies require large housing and commercial developers to use less energy and manage demand during construction and operation; be clean in exploiting local energy resources (such as secondary heat) and supply energy efficiently and cleanly; and be green: generate, store and use renewable energy onsite;
- Working with Welsh Government and energy suppliers to improve the insulation of homes and other buildings, as a cost effective way of reducing carbon emissions and fuel poverty;
- Ensure that new housing and commercial developments include solar, where feasible, and our planning policies don't restrict solar installation on existing properties.

Mobility

- Ensuring Council vehicles, commissioned home to school transport vehicles, bus operators and taxi vehicles are fit for purpose and are as environmentally friendly as possible. This could involve small cars and vans being electric vehicles and/or hybrid vehicles and the larger HGVs being Euro 6 compliant until such time as the vehicles are fit for purpose. The underlying objective will be to phase out diesel vehicles as soon as is practically possible;
- Supporting installation of infrastructure to fuel zero emission vehicles and encouraging residents to opt to purchase electric vehicles by offering free car parking and use of bus lanes;
- The Council will promote and prioritise more sustainable travel, including walking, cycling and public transport;
- The introduction of the Metro and the increased capacity and frequency will encourage greater sustainable travel;
- The Local Development Plan needs to consider a radically different approach to mobility – to create a socially just, zero-carbon mobility plan. This shifts mobility away from the car by eliminating the conditions that make cars necessary. For example, by 2030, it is estimated that half of all journeys will need to be taken by bus, bike or walking. All remaining journeys will be via electric vehicles.

Greening Our Local Environment

- Afforestation targets for 20,000 hectares per year across the UK nations (due to increase to 27,000 by 2025), are not being delivered,

with less than 10,000 hectares planted on average over the last five years. The Council will commit to a comprehensive **tree planting programme** across the County Borough, near roads, in parks and open spaces and across the countryside in partnership with National Resources Wales (NRW). This will need to be well planned and should have a positive impact on reducing the impact of carbon emissions, but also improve air quality, reduce road traffic noise and reduce the risk of flooding;

- Strengthening the Council's Local Development Plan to create a greener built environment that works well with the local environment;
- Reducing pollution from new housing and commercial developments through planning, as well as from existing buildings;
- Targeted measures at air pollution hotspots, such as vehicle restrictions and green infrastructure;
- Prevent and reduce emissions from non-road Council mobile machinery;
- Offering community grants for creating greener space, encouraging community groups to invest in small and medium scale greening projects in urban locations across the County Borough;
- Explore opportunities to create and use our own green sustainable energy such as micro hydro-electric schemes which utilise natural river and water course features;
- Developed a flooding infrastructure programme to ensure the drainage is sufficient to meet the increase in extreme weather events;
- The Council will continue to target its parks and green spaces for investment. This will include working with NRW and other land owners to protect and manage sites of special ecological interest;
- Exceed the Welsh Government waste recycling targets, and ensure that zero municipal waste is landfilled;
- Create a circular approach to recycling and reusing waste material such as plastic at every opportunity. This will include developing the Eco Park at Bryn Pica;
- Eliminate single use plastics and coffee cups etc across schools and other council facilities.

5.11 There will inevitably need to be a significant UK wide investment in green energy, in the use of hydrogen and other carbon free energy sources to heat and light homes and businesses across the country. As a Council we will play a role in helping to facilitate these changes.

6 THE PROPOSED WORK PROGRAMME

6.1 Despite, the ambitious targets being recommended by the Committee on Climate Change, the list of potential actions in Paragraph 5.8, that the Council could possibly consider and implement in the future, do not appear unreasonable, and will need to be carefully planned and budgeted for.

- 6.2 Nevertheless, committing to the Net Zero targets will require the Council to revisit its priorities and its budget setting. The Council is consulting on its new Corporate Plan – Making A Difference 2020-2024, and it is important that this Plan reflects the commitments and the actions that are necessary for the Council to achieve the 2030 Net Carbon targets.
- 6.3 It is therefore proposed that the Climate Change Cabinet Steering Group meets monthly for the next four months to consider the following reports that set out the actions that need to be included within the Council's Corporate and other plans.

November Meeting:

- Biodiversity Duty;
- Corporate Estates Energy and Carbon Reduction Update;
- Community Use of Underused/Vacant Land.

It is also worth Members of the Steering Group noting the Warmer Homes: A Fuel Poverty Strategy for Rhondda Cynon Taf which was considered at 17th October Cabinet meeting: <https://www.rctcbc.gov.uk/EN/Council/CouncillorsCommitteesandMeetings/Meetings/Cabinet/2019/10/17/Reports/Item7WarmerHomesAFuelPovertyStrategyForRhonddaCynonTaf.pdf>

The major political parties have recently made some General Election statements/promises in respect of Carbon Neutral homes, and it is likely that the Council's Warmer Homes Strategy could be extended to have a greater impact in the near future. It is estimated that 17% of greenhouse gas emissions are from water and space heating systems in our homes. The opportunity to reduce this energy usage and ensure homes are suitably heated will be a significant benefit to us all.

December Meeting:

- **Waste Management – how do we attain peak recycling in RCT?**
- Welsh Government has set each local authority the target of recycling at least 70% of its household waste by 2025. The Council is already very close to achieving this target. How do we increase our level of ambition to recycle at least 80% of all household waste by 2030? How do we ensure all commercial and other public sector bodies meet similar commitments?;
- **Local Procurement of Supplies and Services** – The Council spends £227m on supplies and services of which £51m is spent with businesses registered in Rhondda Cynon Taf, and £138m on businesses registered in South East Wales. This report sets out targets and plans to significantly increase the amount of money the Council spends locally, initially focusing on small and medium sized companies based in the County Borough, and South East Wales.

- **Elimination of single use plastics in all Council contracts and premises** – The purpose of this report is to identify all the procurement contracts where the Council purchases single use plastics for its day to day business, including schools, and puts in place a recyclable or carbon friendly alternative;
- **Taffs Well Thermal Spring – Generating carbon free energy for the community of Taffs Well** – A report setting out a proposal for the Council to provide funding to support the Taffs Well Spring Heat Source.

January 2020 Meeting

- **Transportation – how do we reduce our carbon emissions and change our modes of transport?**; - This report will focus on maximising the benefits of the South Wales Metro; consider electrical vehicle charging; opportunities to significantly increase active travel options; how we reduce the impact of the Council's fleet of vehicles, commissioned/subsidised public transport, licenced taxis and home to school transport;
- **Air Quality – how do we improve air quality, and eliminate the “hotspots”, the Air Quality Management Areas in the County Borough** – The report will consider what proactive action we can take in the air quality management areas, to ensure air quality improves across the County Borough;
- **Community Engagement – What can the residents of Rhondda Cynon Taf do to reduce their carbon footprint?** – How can the Council working with Friends of the Earth, Extinction Rebellion, Greenpeace and other local environmental groups engage residents and businesses to adapt and change how they live their lives to reduce their demand on planet Earth? *This will be a joint report with the Community Members of the Steering Group.*

February 2020 Meeting

- **Energy Generation – What opportunities do we have to generate energy on public sector land and/or rivers in Rhondda Cynon Taf** – This report will set out a series of proposals for the Council to build and finance potential solar, wind and hydro schemes on Council or other public sector owned land and rivers, that will make a significant contribution to the Council achieving its Carbon Neutral target;
- **Nature's Assets - Using the Natural Environment to reduce carbon emissions and the effects of climate change** – This report will seek to build upon the statutory Biodiversity Report considered in the November Steering Group meeting, and will focus on a range of projects, such as a long term tree planting programme in town centres, schools, public sector land and other sites, which will have a positive impact on improving air quality, supporting flood

management and prevention schemes, reducing noise and vehicle pollution and generally improving the living environment of residents. We will seek to prepare this report in partnership with National Resources Wales;

- **Strategic and Local Development Plans – How do we plan for the future, and ensure new homes, new buildings, and other infrastructure are carbon neutral?** – The Cardiff Capital Region and the Council are planning to prepare a regional SDP and a RCT LDP. It is essential that these ten year plans include new policies and commitments to ensure our housing, transportation and business infrastructure minimises our carbon footprint and it is fit for purpose in the 21st Century and beyond. This will include commitments to ensure offices and homes are well connected with public and active travel options; town centres become places to live as well as work and socialise; and the natural environment is enhanced.

March 2020 Meeting

- Progress Report on the Commitments and Actions Recommended by the Steering Group to date;
- Other Agenda items to be set by the Community Members of the Steering Group who are invited to bring forward other ideas and options for consideration by the Steering Group. These ideas and options will be shared with Council officers early in the New Year to ensure there is sufficient time for officers to prepare any reports if required and offer any help and support on data analysis or other information gathering to help inform reports.

Future Meetings – possible reports for consideration

- **Quantifying Rhondda Cynon Taf’s carbon footprint on Wales and the World** – This report will seek to use Welsh Government’s planned carbon footprint measurement tool to establish a robust baseline for the County Borough and to determine the next steps to prioritise interventions and investments;
- **Learning from Best Practice across the UK and the World** – The report will identify examples of best practice from across the World and consider how the Council, residents and businesses can apply the best practice in Rhondda Cynon Taf to reduce our footprint?.

- 6.4 This draft Work Programme for the Steering Group is flexible and can be changed to meet Members’ requirements.

7 EQUALITY AND DIVERSITY IMPLICATIONS

- 7.1 An Equality Impact Assessment is not required with regard to this report.

8 CONSULTATION

- 8.1 There are no consultation requirements at present but if specific recommendations from individual reports set out in the Steering Group Work Programme are approved by Cabinet, a public consultation will be required later in the financial year.

9 FINANCIAL IMPLICATION(S)

- 9.1 There are no financial implications aligned to this report. Any investment required to address any of the recommendations will be reported and considered separately.

10 LEGAL IMPLICATIONS

- 10.1 There are no legal implications aligned to this report.

11 LINKS TO THE CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT

- 11.1 This report seeks to set out a Work Programme for the Steering Group to develop and recommend to Cabinet a series of proposals and recommendations to reduce the impact the Council and its residents and businesses have on the environment and respond to the issues set out in the Committee on Climate Change Report – Net Zero. The future actions that arise as a result of the recommendations in this report will be considered by the Council's Cabinet and it will take full regard to the seven national wellbeing goals.

12 CONCLUSION

- 12.1 The Council's Cabinet has revisited its commitment to becoming a Carbon Neutral Council, and has set an ambitious target of achieving this by 2030, along with the residents and businesses of the County Borough. This work programme for the Climate Change Cabinet Steering Group seeks to set out an ambitious programme to enable the Council to achieve the 2030 target, and the Council welcomes input from other organisations and individuals in helping to achieve this ambitious target.