



RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CABINET

18TH JUNE 2019

THE COUNCIL'S RESPONSE TO NET ZERO – THE COMMITTEE ON CLIMATE CHANGE

REPORT OF THE CHIEF EXECUTIVE IN DISCUSSION WITH THE LEADER OF THE COUNCIL (COUNCILLOR ANDREW MORGAN)

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1. PURPOSE OF THE REPORT

- 1.1 The purpose of the report is for Members to consider the Council's response to the Committee on Climate Change recent report – Net Zero.

2. RECOMMENDATIONS

It is recommended that the Cabinet:

- 2.1 Note the contents of this report;
- 2.2 Agree that a new draft Corporate Plan, that takes into account the Medium Term Financial Strategy is presented to a Cabinet meeting in October 2019 that sets out the Council's response to the findings of the Committee on Climate Change as set out in its report – Net Zero;

3 REASONS FOR RECOMMENDATIONS

- 3.1 For the Council to respond to the challenges posed by the Committee on Climate Change in its Net Zero report.

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 six months 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 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 It is essential that we begin to plan and take the necessary steps to ensure Rhondda Cynon Taf is able to take full responsibility for becoming a “Net Zero” Council and supporting the UK and Welsh Government to achieve their respective targets.

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 Firstly, 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 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.

5.6 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.

5.7 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).

- 5.8 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 concerting 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.

- 5.9 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 NEXT STEPS

- 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's Corporate Plan – The Way Ahead 2016-2020, will need to be replaced in March 2020 and a new Corporate Plan produced for the next five years. It is proposed that the Council's response to the Committee on Climate Change report is incorporated into the new Corporate Plan and is taken into account in preparing the Council's Medium term Financial Plan for the period 2020/2023.
- 6.3 It is recommended that a draft Corporate Plan, which takes into account the Medium Term Financial Plan, will be presented to Cabinet for consideration in October 2019 before being subject to pre-scrutiny and a comprehensive public consultation, and to be subsequently considered for approval by full Council in February/March 2020. Council will then have the opportunity to consider and approve an ambitious Corporate Plan that sets out the Council's approach to becoming a Net Zero local authority by 2050, supported by a robust financial strategy.

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 the recommendations are approved 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 understand its impact 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 set out new requirements and aspirations of a new Council Corporate Plan and it will take full regard to the seven national wellbeing goals.

12 CONCLUSION

12.1 The Committee on Climate Change is clear:

“The UK should set and vigorously pursue an ambitious target to reduce greenhouse gas emissions (GHGs) to 'net-zero' by 2050, ending the UK's contribution to global warming within 30 years. A net-zero GHG 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.

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.

A net-zero GHG target for 2050 would respond to the latest climate science and fully meet the UK's obligations under the Paris Agreement:

- It would constitute the UK's '**highest possible ambition**', as called for by Article 4 of the Paris Agreement. The Committee do not currently consider it credible to aim to reach net-zero emissions earlier than 2050.*
- It goes beyond the reduction needed globally to hold the expected rise in global average temperature to **well below 2°C** and beyond the Paris Agreement's goal to achieve a balance between global sources and sinks of greenhouse gas emissions in the second half of the century.*
- If replicated across the world, and coupled with ambitious near-term reductions in emissions, it would deliver a greater than 50% chance of limiting the temperature increase to **1.5°C**.*

Now is a crucial time in the global effort to tackle climate change, with revised pledges of effort currently being considered ahead of the UN climate summit in late-2020. An ambitious new UK target would encourage increases in ambition elsewhere, including the adoption of other net-zero GHG targets, such as the 2050 target currently under consideration by the European Union.

In committing to a net-zero GHG target, Parliament must understand that, while many of the policy foundations are in place, a major ramp-up in policy effort is now required.”

- 12.2 As a UK 100 Clean Energy organisation we need to revisit our commitment, become more ambitious and reset our targets to become a Net Zero Council by 2050 as set out by the Committee on Climate Change. This report seeks to build on our existing commitments and take the opportunity to set out a new Corporate Plan and a Medium Term Financial Strategy that will underpin the delivery of these ambitious environmental targets in the best interests of the residents of the County Borough.

Other Information:-

Relevant Scrutiny Committee:

Overview & Scrutiny Committee

Background Papers:

None

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LOCAL GOVERNMENT ACT 1972

AS AMENDED BY

THE LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

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18TH JUNE 2019

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OF THE COUNCIL (COUNCILLOR ANDREW MORGAN)**

Item: **THE COUNCIL'S RESPONSE TO NET ZERO – THE COMMITTEE
ON CLIMATE CHANGE**

Background Papers:

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