

# Merthyr Tydfil County Borough Council Decarbonisation Plan 2023 – 2030





#### Statement of Commitment

I am pleased to present the Council's Decarbonisation Plan which provides a framework for working towards net zero carbon emissions in the county of Merthyr Tydfil up to 2030.

Merthyr Tydfil County Borough Council is fully committed to tackling the challenges of climate change and working towards net zero as a public body by 2030. As a local authority, we acknowledge that we have an important role to play in providing leadership and encouraging residents, businesses and partner organisations to take positive action which will reduce their carbon footprint.

As greenhouse gas emissions have increased, Merthyr Tydfil has experienced all of the key symptoms of man-made climate change, including erratic weather patterns, air pollution, flooding, heatwaves and changes in biodiversity. This has also come with associated economic and social costs as businesses and citizens have struggled with issues like flood damage and other interruptions to daily life.

The Merthyr Tydfil CBC Decarbonisation Plan provides a starting point and a pragmatic route towards the Council Decarbonising by 2030. It is intended to be a living document and will evolve over time. The document is separated into key theme areas with accompanying Action Plans. The delivery of the Decarbonisation Plan will be governed through a programme management approach to ensure continuous improvement.

Significant progress has already been made to reduce carbon emissions in the Council with previous and active projects including a large scale upgrade to LED street lighting and energy conservation and renewable technologies installed in over 30 Council buildings and Schools. The Council's fleet is also transitioning to an electric fleet with additional charging infrastructure planned, and numerous land areas have been improved through implementation of biodiversity projects.

We are committed to carrying out wider actions throughout the Council to support all our business areas to address global warming. We also support Welsh Government's ambitions for establishing a net zero carbon public sector, and will work in partnership alongside local authorities and other organisations towards achieving this hugely significant milestone.

I look forward to seeing Merthyr Tydfil continuously improve the quality of life for our residents and the environment for local businesses through reduced carbon emissions and enhanced green spaces.

Ellis Cooper

Chief Executive Officer

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# **Key Terms and Definitions**

The following key terms are used in this Decarbonisation Plan. For reference a definition of each term has been provided in the following table.

Key Term/Acronym	Definition
Carbon Dioxide Equivalent (CO₂e)	Standard unit of measurement of Greenhouse Gas emissions used to compare relative impacts of different GHG's based upon their global warming potential.
Greenhouse Gas Emissions (GHG emissions)	Greenhouse Gas gases defined as gases which are capable of absorbing infra-red radiation (heat) from the sun, contributing to the Earth's greenhouse gas effect.
Gross Total GHG Emissions (per annum) (tonnes CO₂e)	An organisation/entity's annual GHG emissions total before adjustments are applied for sequestration or GHG removals, measured in tonnes CO <sub>2</sub> e.
Net Total GHG Emissions (per annum) (tonnes CO₂e)	An organisation/entity's annual GHG emissions total after adjustments are applied for sequestration or GHG removals, measured in tonnes $CO_2e$ .
NHS Wales Decarbonisation Strategic Delivery Plan	Strategic delivery plan developed by NHS Wales covering (2021-2030) which sets out key initiatives and targets to deliver an ambitious but achievable reduction in carbon emissions.
Scope 1 GHG Emissions	GHG emissions from operations under the direct control of the Council including fuel combustion (e.g., natural gas in boilers) and fuel use in our fleet vehicles.
Scope 2 GHG Emissions	GHG emissions from the generation of purchased grid electricity used by the Council across our sites.
Scope 3 GHG Emissions	GHG emissions resulting from wider Council operations including procurement, water consumption, waste disposal, business travel (grey fleet), employee commuting, outsourced services, transmission and distribution of purchased grid electricity and well-to-tank emissions related to direct and indirect fuel use.
Sequestration	Process of physical removal of carbon dioxide from the atmosphere by the biosphere (i.e., trees, plants, oceans, soils) and by anthropogenic means (i.e., carbon capture & storage)
Well-being of Future Generations Act	Welsh Government Act which sets out seven well-being goals which are designed to improve the social, cultural, environmental and economic well-being of Wales.
Well-to-Tank GHG Emissions (tonnes CO₂e)	Emissions from the processing and refinement of fuels and energy consumed by reporting organisations.

Table 1 - Key Terms and Definitions

# 1) Introduction

This document outlines Merthyr Tydfil County Borough Council's (MTCBC) Decarbonisation Plan, which will be used to help inform our transition to becoming a carbon neutral public sector organisation by 2030. Reducing our GHG emissions and actively developing a low carbon economy provides opportunities such as clean business growth while also enriching the well-being of our local communities and the environment across the County Borough.

Our Roadmap highlights the actions we will undertake to actively reduce our GHG emissions, reduce our reliance on fossil fuels and transition into a low carbon economy whist ensuring a fair and healthy society. This Roadmap also sets out the Council's wider role within the Welsh Public Sector in tackling climate change.

# 2) Our 6 Key Themes

Our Net Zero Roadmap will take a themed based approach, each of which represents a clear area of action where distinct decarbonisation strategies can be implemented in order to achieve carbon neutrality.

Recognition of these different themes allows the concept of decarbonisation to be broken down into manageable associated actions The Council has identified the following six Key Themes which are the core focus of our Decarbonisation Plan.

Key Theme		Context
MTCBC Buildings and Estate Planning		Reducing and removing GHG emissions from our existing property portfolio through implementing net zero carbon requirements for new build and major refurbishment projects. Improving our approach to strategic estate planning and use of our buildings.
Mobility & Transport		Reducing and removing GHG emissions in the Council's vehicle fleet and supporting our staff to utilise sustainable travel and active travel options for business travel and commuting.
Procurement	SCUREAL PARTY	Improvements to carbon accounting to help identify GHG emissions hotspots within our supply chain and inform a programme of supplier engagement to reduce emissions (decarbonise) our supply chain.
Outsourced Services	OUTSOURCING	Working with the Merthyr Leisure Trust to reduce and remove GHG emissions from the operation of leisure facilities across the County Borough through the implementation of net zero carbon requirements for new build and major refurbishment projects.
Land Management		Managing Merthyr Tydfil CBC's open spaces, parks, and woodlands to maximise carbon sequestration and improve biodiversity across the County Borough.
Governance	<u></u>	Clear governance processes to manage the delivery of continuous improvement and a planned programme management approach to achieving net zero.

Our Decarbonisation Plan and progress against our decarbonisation actions will be closely monitored and reviewed on a regular basis. A programme of rolling reviews will allow the Council to include further decarbonisation actions and opportunities as they arise.

The Council recognises the challenge that achieving Net Zero by 2030 poses to normal operations and delivery of service. It should be noted that many decarbonisation initiatives presented in the action plans within this report will be subject to resource, finance availability and an individual business case assessment. Initiatives are ambitious to drive the transformational change within the organisation that is required to achieve a Net Zero future.

# 3) Climate Change & Net Zero Wales

#### Climate Change - The Global Context

Action on an international scale is required for any level of meaningful change to the Earth's climate. The 2030 framework developed by The United Nations (UN) aims to increase momentum towards sustainable development and climate change resilience through the UN Sustainable Development Goals and the UN Framework Convention on Climate Change (UNFCCC) Paris Agreement.

Ratified at COP 26 in November 2021, The Paris Agreement brings all nations into a common cause to undertake ambitious efforts to combat Climate Change and adapt to its effects. As such, it charts a new course in the global climate effort, to keep global temperature rise below 2°C above pre-industrial temperatures and pursue efforts to limit the temperature increase even further to 1.5°C.

Since that time however, global average temperatures have risen by over 1°C with further inevitable rises projected to occur as a result of carbon already emitted. Increased climatic consequences are already prevalent due to this rise, increasing the urgency of which we must act to drastically reduce global carbon emissions. If we don't act now, the threat we face becomes critical as we risk global temperatures rising above a tipping point resulting in irreversible changes to our planet.

#### Climate Change - The National Context

Wales is already experiencing significant climatological impacts as a result of Climate Change. The Committee on Climate Change's (CCC) Third Independent Assessment of Climate Change Risk report highlights that the UK as a whole has been impacted by higher average annual temperatures (0.3°C increase per decade since 1980), sea level rise (currently estimated to be rising at 2.5cm per decade), and significant increases in temperature and precipitation extremes. Most noticeably this has been demonstrated with the milder/wetter winters, warmer/drier summers, and increased extreme weather events (e.g., flooding, heatwaves, storms) occurring in the UK.

The biodiversity of the UK is also under threat from the impacts of Climate Change. Across the UK, different habitats and ecosystems are at risk from a range of factors including rising sea levels, extreme weather, and temperature extremes. This has led to a 40% decline in UK native species with 25% of mammals being at risk of extinction.

The already highly variable nature of the UK's climate poses a significant challenge for local authorities; not only in maintaining high-quality service provision for our local communities but also through additional financial burdens from adaptation and mitigation of the impacts of Climate Change.

#### Welsh Public Sector Net Zero Target

In 2019, Welsh Government became one of the first nations in the UK to declare a Climate Emergency, committing to achieve a carbon neutral public sector by 2030. The Welsh Government has further supported its commitments to decarbonisation through its recent publication of 'Prosperity for All: A Low Carbon Wales', which set out 100 policies and proposals to ensure the 2030 carbon emission ambitions are met.



Figure 1 - Extract from the Welsh Government Climate Emergency Document

The Partnership Council for Wales will head up the 'Team Wales' approach to allow public bodies to work together to reduce our carbon emissions. This will build on the good work already underway across Wales and encourage a partnership approach to maximise resources, avoid duplication and ensure communication is consistent.

The Welsh Government has committed to achieving a Carbon Neutral Public Sector by 2030, and to coordinating action to help other areas of the economy to make a decisive shift away from fossil fuels, involving academia, industry and the third sector.

Merthyr Tydfil CBC undertook the development of our GHG emissions baseline for the 2019/20 reporting year (1<sup>st</sup> April 2019 - 31<sup>st</sup> March 2020). This was submitted to the Welsh Government in October 2021 and is the first stage of our Net Zero carbon journey.

#### The Well-being of Future Generations

The Well-being of Future Generations (Wales) Act 2015 aims to improve the recognised four dimensions of well-being in Wales - social, economic, environmental and cultural, captured in the seven well-being goals. This Act ensures our decarbonisation actions help to support the Welsh Government's objectives and the 7 national well-being goals.

Public bodies, including Merthyr Tydfil CBC are required to embed the 'sustainable development principle' in everything we do and adopt the 5 Ways of Working; thinking more about the long-term impact of our operations, working better with our local communities and each other, and having a joined-up approach and look to prevent problems.

Climate Change is considered one of the greatest global challenges and requires innovation and collaboration to ensure the well-being of the future generations in Wales. Identifying opportunities and actions to reduce carbon emissions within our day-to-day activities will limit our contribution to Climate Change and thereby its consequences.



Figure 2 - The Well-Being of Future Generations Act's seven national well-being goals

# 4) Merthyr Tydfil CBC's GHG Emissions Baseline

Merthyr Tydfil CBC's (MTCBC) GHG emissions baseline was calculated for the 2019/20 financial year aligned with Welsh Public Sector Reporting Guidance (published in May 2021). Merthyr Tydfil CBC's emissions for this period were determined to be 32,572.80 tonnes  $CO_2e$ . This will act as our baseline which will be used to inform target setting and trajectory modelling to reach our Net Zero 2030 target. (Results include sequestration from Merthyr's land assets).

Our GHG Emissions Baseline includes the following sources of GHG emissions:

**Scope 1**: GHG emissions from operations under direct control of the Council including: fuel combustion (e.g. natural gas in boilers) in buildings and fuel use in fleet vehicles.

**Scope 2**: GHG emissions from the generation of purchased electricity used by the Council across our sites and unmetered supplies (street-lighting/CCTV).

**Scope 3**: GHG emissions resulting from wider Council operations including procured goods & services, operation of outsourced services (Leisure Trust), water consumption, business travel and commuting completed by Council staff.

Table 2 – MTCBC's 2019-20 GHG emissions footprint split by reporting scope

GHG Emissions Reporting Scope	Calculated GHG Emissions (tonnes CO2e)	Percentage of Total (%)
Scope 1	3,338.50	9.8%
Scope 2	1,823.64	5.3%
Scope 3	28,914.35	84.9%
(Gross) Total GHG Emissions (tCO₂e)	34,076.49	-
Land-use Sequestration (tCO₂e/pa)	-1,503.69	-
(Net) Total GHG Emissions (tCO₂e)	32,572.80	-

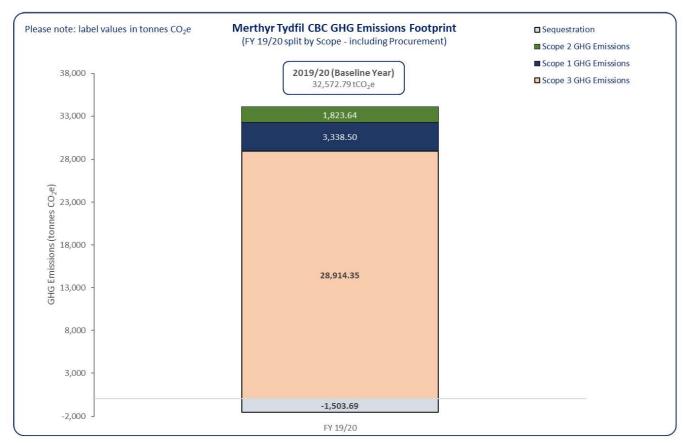


Figure 3 - MTCBC's 2019-20 GHG emissions footprint split by reporting scope

Our GHG emissions footprint is comprised of direct and indirect GHG emissions sources. The approach to decarbonising these emissions sources will differ based on the level of direct control and ownership of each GHG emissions source.

#### Merthyr Tydfil CBC's Direct GHG Emissions Footprint

Our direct GHG emissions represent those sources over which the Council has the most control, and those where we will have the greatest impact in reducing our footprint.

The Council's direct GHG emissions footprint (factoring in GHG emissions sequestered by the Council's land assets) for our 2019 baseline year is **3,948.36 tonnes CO<sub>2</sub>e**. Our direct GHG emissions covering the following emissions sources:

- ✓ Utilities consumption across our offices, schools, and depot sites (electricity, natural gas, water, gas oil, biomass).
- ✓ Fuels used in the operation of Council vehicles, plant machinery, and equipment.
- ✓ Business travel completed by Council employees using their own vehicles (Grey Fleet).

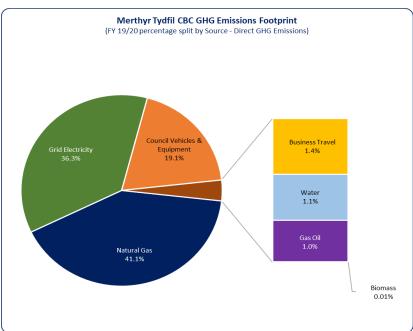


Figure 4 - MTCBC's 2019-20 direct GHG emissions footprint

GHG Emissions Source	Calculated GHG Emissions (tonnes CO2e)	Percentage of Total (%)
Natural Gas	2,240.22	41.1%
Grid Electricity	1,978.46	36.3%
Council Vehicles & Equipment	1,042.49	19.1%
Business Travel (Grey Fleet)	74.26	1.4%
Water	60.83	1.1%
Gas Oil	55.17	1.0%
Biomass	0.62	0.01%
(Gross) Total GHG Emissions (tCO₂e)	5,452.05	-
Land-use Sequestration (tCO₂e/pa)	-1,503.69	-
(Net) Total GHG Emissions (tCO <sub>2</sub> e)	3,948.36	-

Table 3 - MTCBC's 2019-20 direct GHG emissions footprint split by source

#### **Results Commentary**

The consumption of natural gas and grid electricity across our operations are the most significant sources of the Council's direct GHG emissions (76.3%). The largest consumers of gas and electricity across our portfolio include the Civic Centre, residential cares homes, and schools.

The decarbonisation of heating (currently fuelled by natural gas) represents one of the core challenges of decarbonisation of the Council's operations.

The operation of the Council's vehicle fleets (Highways, Refuse Collection) also accounts for a significant proportion (18.8%) of the Council's direct GHG emissions footprint.

The Council will use these results to identify emissions reduction priorities, which initially will be focused upon our utilities consumption and transport assets.

#### Merthyr Tydfil CBC's Indirect GHG Emissions Footprint

Our indirect GHG emissions represent those sources which the Council can apply its influence to help to

reduce our GHG emissions.

The Council's indirect GHG emissions footprint (factoring in GHG emissions sequestered by the Council's land assets) for our 2019 baseline year is **27,120.75 tonnes CO<sub>2</sub>e.** Our indirect GHG emissions covering the following emissions sources:

- Procurement of Goods & Services (includes business travel by public transport)
- ✓ Employee Commuting
- ✓ Well-to-Tank GHG Emissions (from utilities, fuels, vehicle use).
- Outsourced Services (provision of Leisure Services through Leisure Trust)

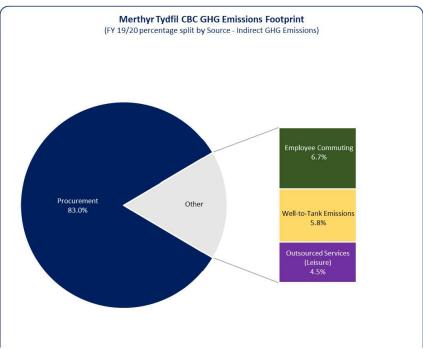


Figure 5 - MTCBC's 2019/20 indirect GHG emissions footprint

GHG Emissions Source	Calculated GHG Emissions (tonnes CO2e)	Percentage of Total (%)
Procurement	23,759.61	83.0%
Employee Commuting	1,913.83	6.7%
Well-to-Tank GHG Emissions	1,672.89	5.8%
Outsourced Services	1,278.11	4.5%
(Gross) Total GHG Emissions (tCO <sub>2</sub> e)	28,624.44	-
Land-use Sequestration (tCO <sub>2</sub> e/pa)	-1,503.69	-
(Net) Total GHG Emissions (tCO₂e)	27,120.75	-

Table 4 - MTCBC's 2019-20 indirect GHG emissions footprint split by source

#### **Results Commentary**

GHG emissions arising from the procurement of goods and services by the Council is the largest source of our indirect emissions; accounting for 83.0% of our total indirect GHG emissions footprint. This is by far the most challenging emissions source to manage and will require the Council to develop an individual strategy to tackle GHG emissions. In the first instance we will look to utilise this information to inform initial engagement with suppliers, with a view towards obtaining further detailed information to inform target setting.

The operation of leisure services by the Merthyr Leisure Trust accounts for 4.5% of our indirect GHG emissions. GHG emissions relate to utilities consumed during the operation of leisure facilities. These are outside of our direct control however the Council can exercise influence to support decarbonisation across these sites.

Well-to-Tank GHG emissions are those associated with upstream refinement and processing of fuels and energy used in our operations; the majority associated with fossil fuels (natural gas, gas oil) and electricity consumption. As the Council switches to low carbon alternatives in future, we are likely to see the proportion of well-to-tank emissions to reduce.

# 5) Merthyr Tydfil CBC's GHG Emissions Trajectory

Using our 2019/20 GHG emissions baseline the Council has developed a series of reduction trajectories, which will be used to monitor our progress towards our Net Zero target. Trajectory modelling at this stage provides the Council with an indication of the reductions required to achieve our target, and the level of offsetting/insetting required to mitigate our residual GHG emissions.

Please note: GHG emissions trajectories shown below exclude the Council's procurement emissions; focusing instead on our direct GHG emissions footprint and those indirect GHG emissions over which we have the greatest scope to reduce.

The summary chart and accompanying results table presents the results of the Council's GHG emissions trajectory modelling demonstrating our gap to reach Net Zero GHG emissions in 2030. The model as it currently is presented does not factor in emissions reductions potential from active decarbonisation measures and is used as guidance only. These trajectories will be used by the Council as benchmarks against which we monitor progress against our Net Zero target.

#### **Business As Usual Scenario**

Our model contains a worst-case business as usual scenario based upon our 2019/20 baseline year. Reductions in GHG emissions are achieved only through passive decarbonisation of the National Grid and increased fuel efficiency of fossil fuel vehicles. This model does not currently factor in the impact active decarbonisation measures will have upon the Council's future GHG emissions.

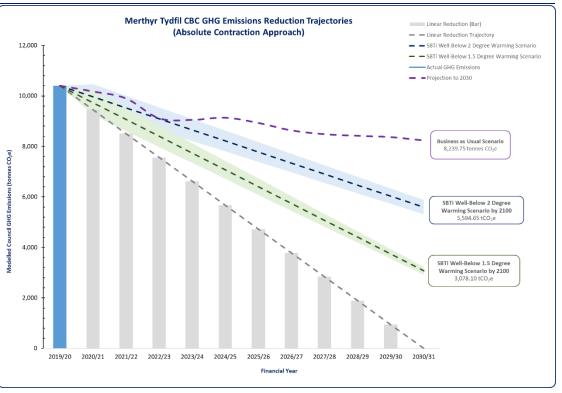
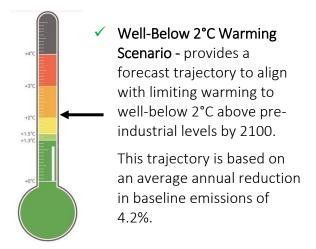


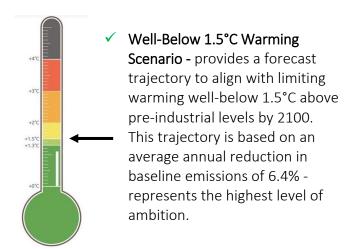
Figure 6 – MTCBC GHG Emissions Reduction Trajectories to 2030 aligned with SBTi scenarios. Table below details results.

Modelled Scenario	Gap to Net Zero (tonnes CO2e)
Business-as-Usual Scenario	8,239.75
SBT Well below 2°C Warming by 2100	5,594.65
SBT Well-below 1.5°C Warming by 2100	3,078.10

#### Science Based Targets Initiative (SBTi) Warming Scenarios

Merthyr Tydfil CBC has aligned our GHG emissions reduction trajectories with following climate change scenarios (by 2100) published by SBTi. Scenarios are aligned with internationally agreed reduction targets set out by the Paris Agreement:





# 6) Our Net Zero Response Strategy

Merthyr Tydfil CBC's ambition is to become a Net Zero authority by 2030, in-line with the collective 2030 target for the Welsh Public Sector as a whole. The calculation of our 2019/20 GHG emissions baseline and trajectory modelling was the first step towards achieving this important milestone.

The Council has outlined our Net Zero Response Strategy over the following section. Split between our 6 Key Themes, we have outlined details of initial projects and reduction priorities Merthyr Tydfil are looking to implement to decarbonise our operations.

#### **Supporting Aims & Objectives**

It is important to highlight that Merthyr Tydfil CBC has the following additional objectives, which will help support the Council's Net Zero ambitions as well as providing additional wellbeing benefits to our residents:



Promoting and encouraging renewable and low carbon energy across the County Borough



The Council is committed to supporting an integrated transport system, promoting active travel and ensuring new developments are accessible by walking, cycling and public transport



Promoting the efficient use of materials and resources and ensure an integrated network of waste management facilities



To improve habitats which contribute to ecosystem resilience and connectivity, and which support protected species.

#### **Current and Previous Projects**

Merthyr Tydfil CBC is already active on a number of decarbonisation projects and wider environmental management initiatives across our operations.

We recognise that one of our largest environmental impacts is associated with the consumption of energy through the operation of Council buildings and services. We have installed energy conservation measures across many of our sites and schools using Re:fit Phase 1 funding support and are continuing to review opportunities to further improve energy efficiency. Coupled with refurbishment programmes the Council is currently undertaking a programme of installing electric and gas smart metering and water data loggers, to improve monitoring, reduce wastage, and inform our future decarbonisation actions.

Our Street lighting has been upgraded to LED resulting in large amounts of energy and carbon savings. MTCBC has also installed renewable energy technologies (Solar PV) across some of our sites to reduce our reliance on electricity from the National Grid and is exploring the feasibility of Low Carbon Heating technologies (with further building fabric improvements) across Council buildings and leisure facilities.

Front line services now have a number of electric vehicles in operation, and our Fleet strategy aims to support a transition to an all-electric fleet by 2030.

# 7) Best Practice Carbon Management

Merthyr Tydfil CBC commits to and understands the importance of introducing best practice carbon management processes to enable successful implementation of our Decarbonisation Plan. We recognise that best practice carbon management goes beyond the monitoring and reporting of our GHG emissions to include the development implementation, and ongoing review of our Decarbonisation Plan, target setting, and supporting behavioural change in relation to decarbonisation.

Our Decarbonisation Plan and progress against our decarbonisation actions will be closely monitored and reviewed on a regular basis. A programme of rolling reviews will allow the Council to include further decarbonisation actions and opportunities as they arise.

The role the Council plays in our local communities gives us the opportunity to work closely with our key external stakeholders and local businesses to help drive decarbonisation of our services and the wider County Borough. We understand that this is also an important element of our carbon management processes supporting the Welsh Government's net zero carbon ambitions. An upskilled workforce will be needed to drive and implement the actions outlined in this Decarbonisation Plan and will need to be supported to learn, innovate and embed carbon reduction into everyday activities.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
Management	carbon	CM01	Continue to calculate our annual GHG emissions footprint following Welsh Public Sector Net Zero Carbon reporting guidelines. Utilise our annual GHG emissions footprint to identify emissions reduction priorities and to inform the development of interim milestones	Decarbonisation Programme Manager	In progress
		CM02	Embed decarbonisation into the Council's decision-making processes to support implementation of our Decarbonisation Plan, by having regard to tackling climate change and whole life costing in business case templates and Integrated Impact Assessments.	Decarbonisation Programme Manager	In progress
		CM03	Engage with our external partners, other Local Authorities, and public sector organisations to collaborate on decarbonisation initiatives and communicate best practice decarbonisation guidance.	Decarbonisation Programme Manager	In progress

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		CM04	<ul> <li>Raise staff awareness of their role in reducing our carbon emissions, and help them change their behaviour through measures such as:</li> <li>General awareness/engagement training for all employees</li> <li>Climate Literacy Training for key staff and directorate leads</li> <li>Internal engagement platforms (e.g., newsletters, employee intranet)</li> <li>Include in all staff job descriptions their responsibility around climate and ecological change (following consultation with employees and unions).</li> <li>Rolling out E-Learning Module for all Staff</li> </ul>	Decarbonisation Programme Manager	Dec 2024
		CM05	Work with WG Consultant and MTCBC stakeholders to produce Local Area Energy Plan	Decarbonisation Programme Manager	April 2024

Table 5 - Best Practice Carbon Management Actions

# 8) Key Theme 1 - MTCBC Buildings & Estate Planning

GHG emissions relating to energy use across the Council's operations emissions are primarily associated with the operation of our council offices and depots, schools, and unmetered supplies (street-lighting, CCTV). GHG emissions from energy consumption represent the most significant sources of our direct GHG emissions.

#### **GHG Emissions Impact**

GHG Emissions from energy consumption across our sites and operations, totalled **4,274.47 tonnes CO<sub>2</sub>e** for our 2019 baseline year. Combined GHG emissions from these sources account for 78.2% of our total direct GHG emissions footprint.

Table 6 - MTCBC's 2019-20 GHG emissions sources from energy use in our building stock

GHG Emissions Source	GHG Emissions (tCO2e)	% of Total Direct GHG Emissions
Natural Gas	2,240.22	41.1%
Grid Electricity	1,987.46	36.1%
Gas Oil	55.17	1.0%
Biomass	0.62	0.01%

Both the consumption of natural gas (for heating) and grid electricity represent both the most significant GHG emissions sources within the Council's direct GHG emissions footprint, and the sources over which we have the most direct control.

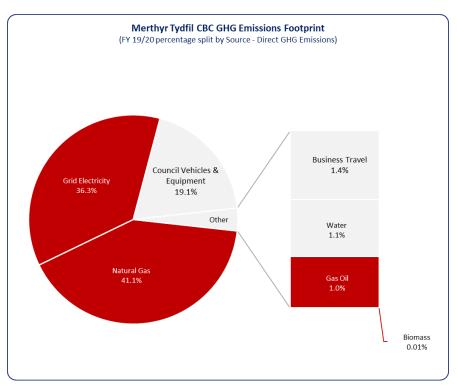


Figure 7 - MTCBC's 2019-20 direct GHG emissions footprint highlighting buildings GHG emissions sources

#### **Current Projects & Measures**

Merthyr Tydfil CBC currently has a number of large-scale retrofit projects which are ongoing or in planning stages across our property portfolio. The Council recognises that schools are some of the most intensive users of energy and represent the largest potential to reduce operational GHG emissions. Projects such as the refurbishment of Pen-Y-Dre High School, or planned support for the redevelopment of Merthyr Tydfil town centre are being planned with future Net Zero operation in mind.

#### **Opportunities & Challenges**

The decarbonisation of heating is perhaps the greatest challenge the Council will have to overcome to achieve our Net Zero target. The Council recognises that low carbon heating technologies such as heat pumps or switching our heating to electric may not be applicable for all sites within our corporate estate.

Energy efficiency standards across our corporate estate will need to be improved, with building stock comprising of varying ages and build quality. Building fabric improvements and retrofit (where applicable) provide the opportunity to improve the Council's energy efficiency and reduce energy wastage. Continued decarbonisation of the National Grid will provide the Council with passive decarbonisation benefits but will not be enough to meet our Net Zero target.

The Council recognises the requirement for specific Net Zero Carbon standards to be developed covering multiple refurbishment projects, the Council is likely to undertake over the coming years. As mentioned previously these standards will need to be designed to go beyond current building regulations in order to achieve net zero operation. Developing these standards will provide the opportunity to collaborate with other local authorities and Welsh Government, to ensure these are as robust as possible.

Ensuring new build developments and retrofit projects are net zero in their operation will require significant engagement with the Council's wider supply chain and third-party businesses to ensure materials used and processes employed are as sustainable as possible. This is a significant challenge but also represents an opportunity to help influence wider decarbonisation across the County Borough. To ensure the successful deployment of low carbon technologies across the County Borough (e.g. heat pumps), the Council will need to invest in bridging the skills and knowledge gap of our staff and local businesses.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		BU01	Implement current and planned building fabric and energy efficiency projects across the Council's estate with support from our established Re:fit Service Provider and other appropriate resources.	Energy Engineer/ Building Services and Property Group Manager	In progress
Current Buildings (retrofit and use)	Decarbonise and increase the energy efficiency of our current buildings	BU02	Identify opportunities to improve energy efficiency of the Council's existing building stock to maximise building efficiency considering measures such as:  • reducing overall energy use through technological (e.g., LED lighting, power management) and behavioural change (e.g., awareness training for Council and school staff)  • improving the thermal efficiency and air tightness (e.g., loft & cavity wall insulation, upgrading heating controls, building management systems)  • feasibility of converting existing gas-fired heating systems with renewable and low carbon technologies (e.g., heat pumps) within our existing building stock.	Energy Engineer/ Building Services and Property Group Manager	In progress
		BU03	Undertake a programme of targeted decarbonisation audits to explore opportunities to further reduce GHG emissions from smaller buildings and energy consumers within our buildings portfolio; including those which are considered as hard to treat.	Energy Engineer/ Building Services and Property Group Manager	Dec 2024

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		BUO4	Undertake a rolling programme of feasibility studies across our estate to identify further opportunities to implement low carbon technologies (i.e. heat pumps, solar PV).	Energy Engineer	In progress
	BU05		Implementation of Energy Management System (ISO 50001) across the Council pilot sites to improve energy monitoring and drive energy efficiency.	Energy Engineer	Dec 2023
		BU06	Legacy lighting will only be replaced with modern LED alternatives; all lighting will be LED by 2030.	Energy Engineer	In progress
		BU07	The Council will work closely with schools to help support and drive Carbon Reductions in education buildings.	Energy Engineer	In progress
		BU08	Mandate within the project brief that only low carbon heating solutions are to be considered as heating sources.	Energy Engineer/Building Services and Property Group Manager	Completed 2022
		BU09	Ensure project team / building users have received necessary training on low carbon technology solution options.	Building Services and Property Group Manager	In progress
New Buildings	New Build Design & Construction	BU10	New buildings must strive to be built to a net zero standard, with a defined approach to be set by 2024 – engage and collaborate across the UK on the emerging net zero building standards that go beyond BREEAM excellent and adopt a net zero building accreditation approach.	Energy Engineer/Building Services and Property Group Manager	April 2024

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		BU11	Continue to review and amend design specifications and briefs to reflect new technologies and energy-efficient equipment to be installed within Council buildings.	Energy Engineer/Buildings Services and Property Group Manager	In progress
		BU12	Mandate that (where appropriate in Planning terms) all new building design makes provision to maximise the installation of on-site renewables.	Energy Engineer/Building Services and Property Group Manager	Completed 2023
		BU13	Mandate within the Project Brief that 'Total embodied carbon from the product and construction stages [A1-A3, A4 & A5] should be less than or equal to 550 kgCO2e/m² through efficient design and criteria to utilise the use of new material and wastage. Review our supply chain to identify opportunities to improve the sustainability of raw materials procured and construction practices employed by our suppliers.	Energy Engineer/Building Services and Property Group Manager	June 2025
	BU14		Integrate specific embodied and operational carbon impact assessments within existing integrated assessment reports.	Energy Engineer/Building Services and Property Group Manager	June 2025
Estates	Utilising our	EP01	Continue to undertake estate rationalization/ assessment, as part of the existing Property Review process, to determine if our existing building stock is being fully utilised.	Corporate Property Group Manager	Review 2025
Planning	estate EP02	For buildings that have areas that are not being appropriately utilised, continue to review the potential for leasing or disposing of these spaces as appropriate to reduce our energy and resource use.	Corporate Property Group Manager	Review 2025	

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		EPO3	For Council buildings that are severely underutilised or not being appropriately used, continue to investigate opportunities to consolidate/utilise services into other buildings, considering the following:  • Review whether the building is still required • Options for selling or decommissioning buildings to reduce estate wide GHG emissions.	Corporate Property Group Manager	Review 2025
		EP04	Align our Asset Management Plan with the ambition to become net carbon zero, which also supports retaining or/ and buying land for carbon absorption and ecological improvement.	Corporate Property Group Manager	Dec 2023
Enhancing of owned Estates land assets Planning and improving biodiversity		EP05	Continue with the Property Review work that is currently being undertaken to determine whether there is underutilised land and/or green spaces across our estates that could be enhanced and/or redeveloped to enhance carbon sequestration and support biodiversity	Countryside Planning Officer/Corporate Property Group Manager	March 2024

Table 7 – Buildings and Estates Planning Actions

# 9) Key Theme 2 – Travel & Transport

Our transport and travel GHG emissions are primarily associated with the operation of our vehicle fleet, supporting equipment (plant machinery) and business travel completed by Council employees.

#### **GHG Emissions Impact**

Overall GHG emissions resulting from MTCBC's direct travel and transport totalled **2,314.47 tonnes CO<sub>2</sub>e** for our 2019-20 baseline year. Combined GHG emissions from these sources account for 20.5% of our direct GHG emissions footprint (Table 8). The initial focus for decarbonisation travel and transport will be upon reducing GHG emissions from our Council vehicle fleet; which accounts for the majority of our direct travel and transport GHG emissions. The remainder of travel GHG emissions are associated with our Grey Fleet (employees using their own vehicles for business travel).

Employee commuting by Council employees represents additional indirect GHG emissions sources. GHG emissions resulting from commuting totalled **1,913.83 tonnes CO<sub>2</sub>e** (6.7% of our total indirect GHG emissions footprint) for the 2019-20 baseline year.

Emissions	GHG Emissions	% of Total Direct GHG
Source	(tCO2e)	Emissions
Council Vehicles & Equipment	1,042.49	19.1%
Business Travel (Grey Fleet)	74.26	1.4%

Table 8 – MTCBC's 2019-20 direct GHG emissions sources from the operation of our vehicle fleets and business travel by employees

Emissions	GHG Emissions	% of Total Indirect GHG
Source	(tCO2e)	Emissions
Employee Commuting	1,913.83	6.7%

Table 9 – MTCBC's 2019-20 indirect GHG emissions sources from commuting of Council employees

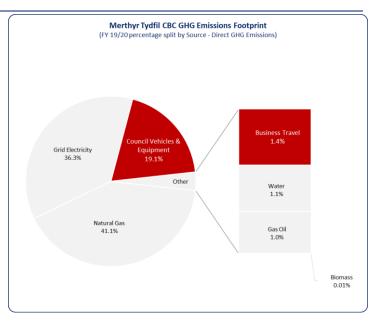
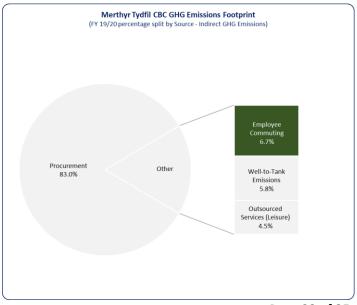


Figure 8 - MTCBC's direct (top) and indirect (bottom) transport GHG emissions sources.



Employee commuting data is not currently collected by MTCBC. GHG emissions were calculated using average commuting metrics as outlined within the Welsh Public Reporting Guidance; based upon our employee numbers for 2019/20. To improve the accuracy of commuting GHG emissions the Council will need to implement regular employee commuting surveys. Increasing the accuracy of this assessment will help to better inform opportunities to reduce GHG emissions and support decarbonisation.

#### **Opportunities & Challenges**

We have an important role to play in decarbonising our vehicle fleets as well as supporting our employees to make more sustainable transport choices. Currently our owned vehicle fleet is comprised overwhelmingly of vehicles which operate using petrol and diesel fuels. This represents a significant challenge in finding suitable hybrid and/or electric vehicle alternatives which will continue to provide service continuity across the County Borough.

Charging infrastructure to support the move to an all-electric vehicle fleet will need to be either expanded or introduced across numerous Council sites and our depots. This represents a significant financial and logistical challenge which will need to be accounted for within future planning. Options for collaborative procurement with neighbouring authorities will also be identified. Electric and hybrid vehicle technologies are well developed for cars and smaller commercial vehicles but are currently limited for plant equipment and machinery. As technologies advance the Council will need to keep abreast of these to ensure smooth transition to EV and/or hybrid fuel alternatives.

Despite the increase in agile working seen over the past 2 years as a result of the COVID-19 pandemic, it is likely commuting will still account for a significant proportion of our indirect GHG emissions footprint. The Council understands that many employees will still need to be commute to our offices and facilities to deliver our services. The Council has a role to play in encouraging those employees to consider switching to public transport and active transport alternatives where appropriate.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
Enabling Infrastructure	Supporting the ULEV transition	TRO1	Review current provision of charging infrastructure across MTCBC's estate and identify opportunities to increase electric vehicle charging infrastructure across the County Borough.	Transport Manager/Strategic Infrastructure Programme Manager	May 2023

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		TRO2	<ul> <li>Develop an implementation strategy to expand the current provision of electric vehicle charging infrastructure across the County Borough considering the following topics:         <ul> <li>Percentage of car parking spaces with charging provision across our sites and depots,</li> <li>Inclusion of public charging access points to support our local communities to transition to electric vehicles,</li> <li>Scheduling of roll-out to meet current and forecast levels of demand,</li> <li>Planning and development of renewable energy sources to power future charging infrastructure across the County Borough.</li> </ul> </li> </ul>	Transport Manager/Strategic Infrastructure Programme Manager	In progress
		TRO3	Engage with neighbouring authorities and public sector bodies to share and develop best practice approaches to support the roll out of charging infrastructure.	Transport Manager/ Strategic Infrastructure Programme Manager	In progress
Owned	Fully transition our owned vehicle	TRO4	Continue with the phased transition of our current fleet to EV/hybrid alternatives, to reduce emissions from the use of petrol and diesel vehicles.	Transport Manager	April 2025- 2030
Transport	fleet to electric/hybrid vehicles	TR05	Undertake a review of existing electric/hybrid vehicles within our fleet to Identify opportunities to upgrade these vehicles where feasible.	Transport Manager	April 2027

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)	
Business Travel & Commuting	Supporting our employees to decarbonise business travel and commuting	TR06	<ul> <li>Undertake a review to assess current business travel requirements to identify opportunities to practically reduce the amount of unnecessary business travel undertaken considering topics such as: <ul> <li>The 'need for travel' and the availability of remote conferencing/meeting facilities for employees to use.</li> <li>Implementation of agile/smart working practices and their impact upon business travel and commuting requirements,</li> <li>Opportunities to use pool cars and sharing initiatives for employees to minimise business travel in their own vehicles.</li> <li>Provision of facilities across our sites to support the uptake of active travel by employees.</li> </ul> </li></ul>	HR Manager	April 2025	
	Commuting		TR07	Ongoing engagement with employees to promote sustainable and active travel options (where practically possible) for commuting and for business travel including:  • Internally supported campaigns to promote public transport use and car sharing schemes  • Internal workshops and training on the benefits (GHG emissions and health) of decarbonising travel & transport.	Strategic Infrastructure Programme Manager/HR Manager	April 2024
	Supporting					
Business Travel & Commuting	our employees to decarbonise business travel and commuting	TR08	Implement a programme of regular employee commuting surveys to improve the accuracy and understanding of GHG emissions from commuting by employees. Use the results of these surveys to help inform opportunities to reduce GHG emissions and support decarbonisation.	HR Manager/ Decarbonisation Programme Manager	Sept 2023	

# 10) Key Theme 3 - Procurement of Goods & Services

The procurement of goods and services represents the single biggest GHG emissions impact across the Council's operations. The Council understands that reducing GHG emissions from this source will require a dedicated programme of supplier engagement as well as process changes between now and 2030.

#### **GHG** Emissions Impact

GHG emissions from outsourced services totalled **23,759.61 tonnes CO₂e** for our 2019-20 baseline year; accounting for 83.0% of our indirect GHG emissions footprint. Procurement GHG emissions have been calculated following Welsh Public Sector Reporting guidance; based upon cost-based metrics.

Table 11 - MTCBC's 2019-20 indirect GHG emissions sources from the procurement of goods and services.

Emissions Source	GHG Emissions	% of Total Indirect
	(tCO2e)	GHG Emissions
Procurement	23,759.61	83.0%

The majority of our Procurement GHG emissions for 2019-20 are associated with construction and maintenance services and social community care services; aligned with the most significant expenditure categories for 2019-20. The Council will undertake engagement with our suppliers to understand the level of carbon management which exists within our supply chain, and how we can improve the accuracy of calculated GHG emissions.

# Merthyr Tydfil CBC GHG Emissions Footprint (FY 19/20 percentage split by Source - Indirect GHG Emissions) Employee Commuting 6.7% Well-to-Tank Emissions 5.8% Outsourced Services (Leisure) 4.5%

Figure 9 - MTCBC's 2019-20 indirect GHG emissions footprint highlighting procurement GHG emissions sources

#### **Opportunities & Challenges**

The variety and scale of goods and services which are procured by MTCBC represents a significant challenge in being able to set meaningful GHG emissions reduction targets across our supply chain. Added to this we also have to ensure that we are still delivering value for money and continuing to maintain high standards of service provision across the County Borough.

We have the opportunity to use our influence to engage with our suppliers to help them to understand, report and reduce their GHG emissions. Currently the GHG emissions of our suppliers and the product/services we procure are not commonly requested in tender/supply contracts. This process will therefore need to be updated to ensure we are collecting the correct information. Awareness of the Council's Net Zero ambition and broader engagement with our suppliers

on carbon management, will need to be increased over the coming years. Ensuring our suppliers understand how they contribute to our GHG emissions footprint and the role they play in reducing our emissions, will ensure our Net Zero Strategy is as effective as possible.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
Procurement	Active Interventions	PRO1	<ul> <li>Develop and publish the Council's Supplier Engagement Strategy considering the following key elements informed by our 2019-20 baseline procurement GHG emissions:         <ul> <li>Identified GHG emissions hotspots and focus areas within our supply chain,</li> <li>Development of a methodology for reviewing and validating decarbonisation actions undertaken by our suppliers,</li> <li>Decarbonisation strategies of our existing/new suppliers</li> <li>Integration of our decarbonisation strategy within existing procurement standards and procedures used by MTCBC</li> </ul> </li> </ul>	Commercial Unit Manager	April 2024
		PRO2	Review the decarbonisation strategies of our key suppliers to understand the level of carbon management and monitoring which currently exists within our supply chain. Contract Managers should continue to work with businesses and suppliers in Merthyr Tydfil to encourage lower carbon practice.	d Manager/Decarbonisation	In progress
		PRO3	Monitor the development of new technologies and innovations to work towards substituting existing technologies for low-carbon alternatives where they are available	Decarbonisation Programme Manager	In progress

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
Procurement	Supply Chain	PRO4	Identify the Council officers who procure most regularly to target communication and training on the climate and ecological change agenda and the contribution of environmentally responsible procurement.	Commercial Unit Manager / Decarbonisation Programme Manager	April 2024
	Engagement	PRO5	Undertake a focussed programme of supplier engagement throughout the procurement process and during contract delivery to support suppliers to decarbonise their operations.	Commercial Unit Manager	April 2024 In progress
Procurement		PRO6	Review and update our existing procurement processes to ensure the Council are actively evaluating decarbonisation commitments from our suppliers and how these are evaluated within tenders.	Commercial Unit Manager /Procurement team	In progress
	Supply Chain	PRO7	Establish a Social Value Policy to embed sustainability and GHG emissions targets within tenders as well as monitoring to ensure targets are being met.	Commercial Unit Manager /CMT	Dec 2023
	Awareness	PR08	Develop a series of appropriate GHG emissions and Social Value targets and implement in the form of key competency requirements within all future tender opportunities.	Commercial Unit Manager	Dec 2023
		PRO9	Support client departments and suppliers to raise awareness on social value through ongoing engagement with workshops and educational resources.	Commercial Unit Manager	March 2024

Table 12 - Procurement Actions

# 11) Key Theme 4 - Outsourced Services (Leisure Trust)

The operation of leisure facilities across the County Borough is managed by the Leisure Trust with direct support from the Council. GHG emissions from this source

are associated with the consumption of utilities (grid electricity, gas and water) across these sites.

#### **GHG Emissions Impact**

GHG emissions from outsourced services totalled 1,278.11 tonnes  $CO_2e$  for our 2019-20 baseline year; accounting for 4.5% of our indirect GHG emissions footprint. Consumption of gas and grid electricity across the leisure portfolio accounts for the majority of GHG emissions from outsourced services.

Emissions Source	GHG Emissions (tCO2e)	% of Total Indirect GHG Emissions
Natural Gas	861.99	
Grid Electricity	371.74	4.5%
Water	44.38	

Table 13 - MTCBC's 2019-20 indirect GHG emissions sources from the procurement of goods and services

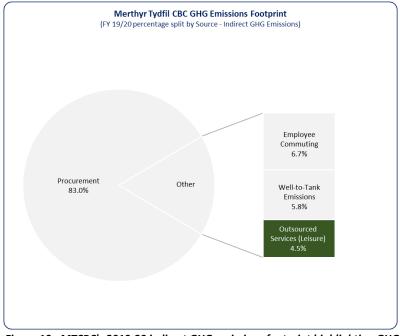


Figure 10 - MTCBC's 2019-20 indirect GHG emissions footprint highlighting GHG emissions from outsourced services.

#### **Opportunities & Challenges**

The Council has identified the need for improving current metering and monitoring systems across our leisure sites, to better to manage utilities consumption (electricity, gas, water) moving forwards.

We will work with the Leisure Trust on an ongoing basis to implement these systems and agree processes for submitting meter readings and dealing with utilities providers.

Our leisure sites present us with an opportunity to expand the Council's deployment of renewable energy technologies, reducing reliance on grid electricity, and helping to reduce GHG emissions from our leisure sites.

Leisure facilities are typically large consumers of energy (particularly for heating). Decarbonisation measures implemented at these sites will in the first instance need to consider a fabric-first approach (i.e. making these sites as energy efficient as possible) before low carbon technologies are installed.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
		OS01	Identify and implement opportunities to improve the monitoring and measurement of energy consumption across our leisure facilities to support future decarbonisation actions considering measures such as:  • Smart Metering  • Automatic meter readings  • Development of specific energy monitoring procedures for employees use within these sites (e.g., regular meter reads, utility bill validation)	Chief Executive of Leisure Trust	April 2024
Outsourced Services	Decarbonise and increase the energy efficiency of our leisure facilities	OS02	Implement a programme of targeted decarbonisation audits to explore opportunities to further reduce GHG emissions from leisure facilities; including those which are considered as hard to treat.	Chief Executive of Leisure Trust	Sept 2023
		OS03	Implement a rolling programme of feasibility studies across the leisure estate to identify further opportunities to implement low carbon technologies (i.e. heat pumps, solar PV).	Chief Executive of Leisure Trust	In progress
		Implementing Energy Management System (ISO 50001) across Le OSO4 Trust Buildings to improve energy monitoring and drive energy efficiency.		Chief Executive of Leisure Trust	Dec 2023

# 12) Key Theme 5 - Land Management

Merthyr Tydfil CBC owns or directly manages over 850 hectares of open space and land assets across the County Borough; a valuable resource to support our Net Zero ambition. Open space has the potential be used to generate electricity (through siting of renewables), sequester carbon, support biodiversity and has the added benefit of promoting health and well-being amongst residents of the County Borough.

#### **Sequestration Potential**

Sequestration refers to the amount of carbon dioxide equivalent which is removed from the atmosphere by plants; with different environments having different sequestration potential. The sequestration potential of our land assets is **1,503.69 tonnes CO<sub>2</sub>e**. This is based upon land assets the Council owned and/or managed during our 2019/20 baseline year.

Negative values represent GHG emissions removals from the atmosphere.

Table 14 - Sequestration potential per annum for MTCBC owned land assets

Land Catagony	Area	Sequestration Potential	
Land Category	(hectares)	(tCO2e)	
Grassland	459	-661.61	
Forest Land	217	-1,176.56	
Settlements	159	334.48	
Wetlands	21	0	
Other Land	11	0	
Totals	867	1,503.69	

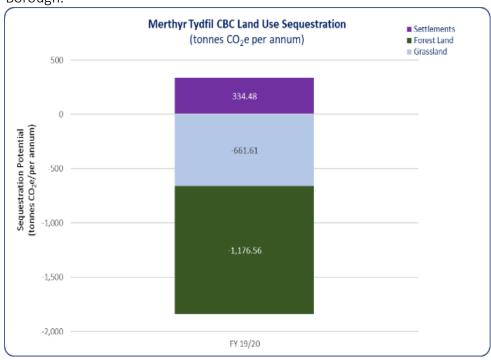


Figure 11 - Land use Sequestration for MTCBC managed land assets

#### **Opportunities & Challenges**

The Council's approach to managing our land assets has been to sustain these habitats rather than looking to improve these assets. The Council has the opportunity to improve our land management processes to help maximise carbon sequestration potential; particularly through improved woodland management to minimise the impact of Ash dieback.

The Council also will work with planners to embed considerations for the protection of open spaces within future developments. We also have the opportunity to work closely with local schools to identify opportunities to enhance sequestration on school grounds through additional tree and hedgerow planting as well as improved grounds management.

Theme	Key Action	Action Ref	Action	Action Owner(s)	Target Date(s)
Land Management  Enhancing of owned land assets and improving biodiversity  LN	LM01	LM01	Develop a common understanding of the current status and sequestration potential of land under public ownership within the Council and set out an agreed level of expectation and ambition.	Landscape Architect/Principal Planning Officer/ Biodiversity Officer	Dec 2023
	LM02	Explore the feasibility of, and identify land for, tree planting and other such measures (such as increasing the carbon store in soils and biomass) on Council-controlled land in order to contribute towards carbon offsetting (action will include improving baseline data in relation to tree cover across the local authority).	Landscape Architect/Principal Planning Officer	April 2025	
	LM03	Identify opportunities to expand the use of green roofs and green walls across the Council's buildings and our outsourced leisure facilities.	Biodiversity Officer/Building and Property Services Group Manager	April 2024	
	LM04	Engage and work with local schools to identify planting opportunities on school grounds and open spaces.	Biodiversity Officer	April 2024	
		LM05	Review and update our current woodland and open spaces management processes to maximise sequestration potential, and adapt any green infrastructure strategies to consider biodiversity, carbon reduction and natural flood management	Landscape Architect/ Head of Engineering and Transport	April 2025
		LM06	Implementation of 'green corridor' projects in conjunction with MTCBC Engineers (removal of tarmac/hard space and replacement with green space).	Biodiversity Officer/Head of Engineering and Transport	April 2024

# 13) Key Theme 6 - Governance

There will be a clear governance process to manage the delivery of continuous improvement.

- A lead officer has been identified for each of the 6 key theme areas, and will be responsible for delivery of their theme Action Plan.
- The Decarbonisation Programme Manager will work closely with each lead officer to provide regular updates and to monitor and measure progress.
- Each key theme will provide an update to the Corporate Management Team (CMT), these will be programmed 6 monthly. Therefore, each theme will attend CMT with an in-depth update twice a year.
- Key performance indicators will be developed with the Corporate Team for each theme area. To
  ensure continuous improvement.

#### **Monitoring framework**

Once the Merthyr Tydfil 2030 Net Zero Plan is adopted, measuring progress will be an essential part of its implementation.

Ongoing monitoring is crucial to understand if the strategy is on track. Through this monitoring process; Council officers can check; validate and analyse the data at point of collection. Having a robust data management process in place enables more transparency with regards to the progress being made against desired outcomes; and will enable earlier intervention and solution development early on; and establish interventions if things are not progressing as planned.

Having robust monitoring and evaluation processes in place also supports the more effective use of resources, improving efficiency levels and ensuring resources are targeted where there is an identified need. It is the intention to review these plans annually in order to track the progress against the carbon baseline, monitor effectiveness, resource appropriately and include new initiatives, technology and projects as they arise. Having regularly reviewed data will also support improved decision-making.

The Council will calculate its carbon emissions and carbon absorption in April-June each year to measure performance on the net carbon zero metrics in the previous financial year (April-March). These metrics will be submitted to Welsh Government each year, as part of the new Welsh Public Sector Greenhouse Gas Reporting Regime.

Decarbonisation has been identified as an emerging priority within the Council's Recovery, Transformation and Improvement Plan; and within the Council's Corporate Wellbeing Plan (Focus on the future: well-being in our community); early work has identified proposed actions showing how services from across the organisation will support delivery of the Decarbonisation Plan by undertaking carbon reduction activities.

The development process for the next iteration of the Corporate Plan will be undertaken with a view to ensuring clear alignment between key strategies to which the Council will respond; including this Decarbonisation Plan. This will mean that when monitoring the corporate Strategies on a Page (SOAPs); this

process will also act as a way to develop a deeper understanding of how corporately we are addressing the need to make positive progress against the key performance indicators that are identified.

The decarbonisation sector is developing rapidly and it is likely that by 2030 new innovative technologies and solutions will come into the mix that may have not been considered at the time of this report. With that in mind, this Merthyr Tydfil 2030 Strategy will be reviewed in full, updated and published in 2025, providing a plan from 2025 – 2030 to update against the fast-moving sector and ensure the carbon reduction measures are still relevant.

To further enhance the progress being made towards the net zero target, the Council are currently working towards external of ISO 50001 and the One Planet Standard.

- The Council are aiming to achieve accreditation to the ISO 50001 Energy Management System by December 2023. This is a continuous improvement model that will implement a standardised system through which Merthyr Tydfil County Borough Council can demonstrate commitment to reducing environmental impacts by managing energy consumption through monitoring and measurement of outputs and continuously improving performance.
- In addition to this, the Council are working towards the One Planet Standard and aiming to reach the Bronze Award by September 2023. The standard focuses on decarbonisation and climate change, and embraces the 'five ways of working' (long term; prevention; integration; collaboration; involvement) to create a cycle of continuous improvement.