

Energy Management Policy 2019/20 – 2029/30



ENERGY
MANAGEMENT

FODC

Contents

1.	Introduction	2
2.	Strategic Context	3
3.	Strategic Objectives	4
3.1	Improve Energy & Utility Management across Council's Estates	4
3.2	Reduce emissions from day-to-day operations	4
3.3	Commitment to sustainable building practices for construction projects	4
3.4	Increase contribution of renewable energy generation on-site	4
3.5	Sustainable Leadership and Behaviour	5
4	Scope for Energy Management Development	6
4.1	Analysis / Observations	6
4.2	Baseline	6
5	Policy Targets	7
6	Implementation of the Policy	8
6.1	Targets	8
6.2	Operational	8
6.3	Investment	8
6.4	Building Improvements and Life-Cycle Assessment	8
6.5	Staff Awareness and Training	9
6.6	Energy Audits	9
6.7	Procurement	9
	Appendix 1 – Legislation, Policy and Relevant Guidance	10
	Appendix 2 – Council Buildings	11
	Glossary	12

1. Introduction

- 1.1 The science associated with global climate change has now proved well beyond a reasonable doubt that the warming of the planet's atmosphere is as a result of human behaviour, a situation that can be attributed to the fact that our economies have been predominately fuelled by carbon-intensive energy sources. Therefore, in order to avoid the effects of global climate change, our economic interactions must be decoupled, insofar as it is possible, from emissions.
- 1.2 Energy must begin to be used as efficiently as possible and most importantly individual behaviour – led by the guidance of National and Local Government - must align itself with the challenges society as a whole now faces. In recognition of this fact – and led by the UNFCCC global agreements at Kyoto and Paris - the EU has issued a number of targets and directives setting out European abatement targets and the mechanisms through which these may be achieved. These targets and directives have in-turn resulted in the development of National, Regional and Local Climate Policies aimed at contributing to the greater global effort. Shaped by this evolution of a more climate-aware society, Local Governments and Councils are becoming more aware of their responsibilities as beacons of leadership when it comes to the management of the resources that they use.
- 1.3 Fermanagh and Omagh District Council is committed to leadership in the area of environmental sustainability. To-date, the Council has achieved CO₂e savings of an estimated 58% against the status quo using a 1990 benchmark. This has been achieved through the foresight of Council management and staff with decisions such as the Council's commitment to procure only renewable electricity for use in Council buildings.
- 1.4 As per the latest UNFCCC guidance however, the developed world is still not doing enough to reduce its emissions and to limit man-made climate change. Thus, the Council is looking to build on its solid environmental foundations and has now developed this Energy Management Policy and supplementary Action Plan in order to improve the environmental performance of the Council in its day-to-day operations across its own Estate/Buildings and to provide leadership to the district.

2. Strategic Context

2.1 The Fermanagh and Omagh 2030 Community Plan was adopted in April 2017; it is the overarching plan for the Fermanagh and Omagh District, covering the social, economic and environmental pillars. The 2030 Community Plan establishes a shared vision, shared values/principles and shared outcomes.

Our vision is of a welcoming, shared and inclusive Fermanagh and Omagh district, where people and places are healthy, safe, connected and prosperous, and where our outstanding natural, built and cultural heritage is cherished, and sustainability managed.

Shared values:

- i) Openness, accountability and transparency;
- ii) Equality, inclusivity and diversity;
- iii) Addressing deprivation;
- iv) Prevention and early intervention;
- v) Sustainability;
- vi) Evidence led approach;
- vii) Effective engagement;
- viii) Continuous improvement; and
- ix) Working collaboratively.

2.2 The Fermanagh and Omagh District Council Corporate Plan is the guiding strategy for the activity of the Council. It is closely aligned to the 2030 Community Plan, with an additional outcome relating to good governance and quality service provision directly relating to the Council. The Corporate Plan builds on the vision, values and outcomes of the Community Plan, setting out the actions the Council will undertake to help deliver the 2030 Community Plan. These actions are addressed on an annual basis through individual service plans, all which stem from, and are related to, the Corporate Plan.

2.3 Both plans are built on a platform of comprehensive – and ongoing – community engagement. The environmental pillar is of key interest to the local community and this is evident in the Council's commitment to working towards the environmental outcomes.

The Energy Management Policy is a key contributor in this regard. It seeks to establish a clear approach to supporting the delivery of sustainability. This includes identifying a methodology for collecting consistent evidence relating to energy usage, which will be utilised as the Council strives to reduce its energy consumption, thus supporting the Council in being an evidence led organisation.

2.4 A summary of relevant legislation, policy and statutory guidance is provided at Appendix 1.

3. Strategic Objectives



1. Improve Energy and Utility Management across Council's Estate

The foundation for this is the development of procedures to improve energy/utility data capture, management, analysis and reporting.

This Policy and supplementary Action Plan aim to improve energy and utility (electricity, heating, water) management across relevant Council Estate/Buildings. In addition to the headline GHG reduction target, supplementary targets will be set for reduced consumption of electricity, heating and water across relevant Council Estate/Buildings.

2. Reduce emissions from day-to-day operations

In line with the Council's commitment to "*progressively integrate sustainability practices into its daily activities*"¹ and the request from Department of Agriculture, Environment and Rural Affairs for Councils to contribute to the delivery plan for Indicator 29 of the Programme for Government which aims to reduce greenhouse gases² this Policy will, where relevant, practicable and economically viable, endeavour to reduce harmful GHG emissions from its day-to-day operations.

This will be achieved through the setting of a headline target for GHG emissions reduction against which progress will be monitored, analysed and reported upon annually.

An Action Plan will supplement this Policy document and will serve to enact some of the measures required to achieve the specified objectives.

3. Commitment to sustainable building practices for construction projects

Fermanagh and Omagh District Council has an extensive portfolio of buildings incorporating a wide range of building types, ages and profiles. As part of this Policy, the Council will commit to a long-term retrofitting plan to improve the energy efficiency of its building stock. This refurbishment work, and indeed any new building works to be undertaken by the Council from this point forward, should be carried out in line with the relevant legislation, ie the EU Energy Performance of Buildings Directive regarding "nearly zero-energy buildings" in refurbished, or newly built/purchased public buildings.

¹ FODC Sustainable Development Action Plan 2019/2020

² See Outcome 2 of Draft Programme for Government (DAERA)

4. Increase contribution of renewable energy generated on-site

The benefits from renewable energy investment can be two-fold: (i) increased on-site renewable energy capacity leads to reduced demand for purchased electricity/heat (leading to reduced emissions and utility bills), and (ii) possible positive return-on-investment (ROI) from installing certain renewable technologies. This Policy aims to enact a renewed uptake in renewable energy investment for relevant Council Estate/Buildings.

5. Sustainable leadership and behaviour

Fermanagh and Omagh District Council has made a commitment to “*strive to act as an exemplar for sustainable development, ensuring policies and actions provide a lead to the local and wider community*”³. This Policy aims to support that commitment and will support resourcing accordingly.

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³ FODC Sustainable Development Action Plan 2019/2020

4. Scope of Energy Management Policy Development

4.1 Following an analysis of historical energy/utility data from Fermanagh and Omagh District Council, the following observations were made regarding the scope of the exercise:

- Facilities Management has identified 33 'Priority 1' facilities which are required by legislation – ie being facilities over 250m² - to record energy data and ensure a Display Energy Certificate (DEC) rating is calculated and publically displayed each year.
- As these 33 buildings are already required to collect data for DEC purposes, the datasets available should be accurate which is vital when setting baselines and targets.
- Analysis of the energy data for Council sites suggests that the 20 highest energy consuming buildings account for over 80% of the Council's total energy usage. Thus, targeting the 33 DEC buildings will capture the vast majority of the Council's overall energy demand.
- It must be noted that while these 33 sites will be the focus of the initial target setting,
 - the supporting Action Plan will include actions targeting ALL Council buildings,
 - a separate body of work will be undertaken to develop procedures for recording – and refining accuracy - of meter readings from ALL sites (including a programme of identifying and rolling out sub-meters) with the aim of incorporating these sites into Council target setting as and when the data is deemed accurate/reliable.
- The scope of this exercise will primarily target GHG emissions reductions from the consumption of heat (Scope 1), purchased electricity (Scope 2), and water (Scope 3) across the most energy-intensive sites across the Council Estate/Buildings.
- The GHG emissions will be calculated using the *UK Government GHG Conversion Factors*⁴ for 2018.
- The Council properties identified for focus within the scope of this policy are detailed at Appendix 2.

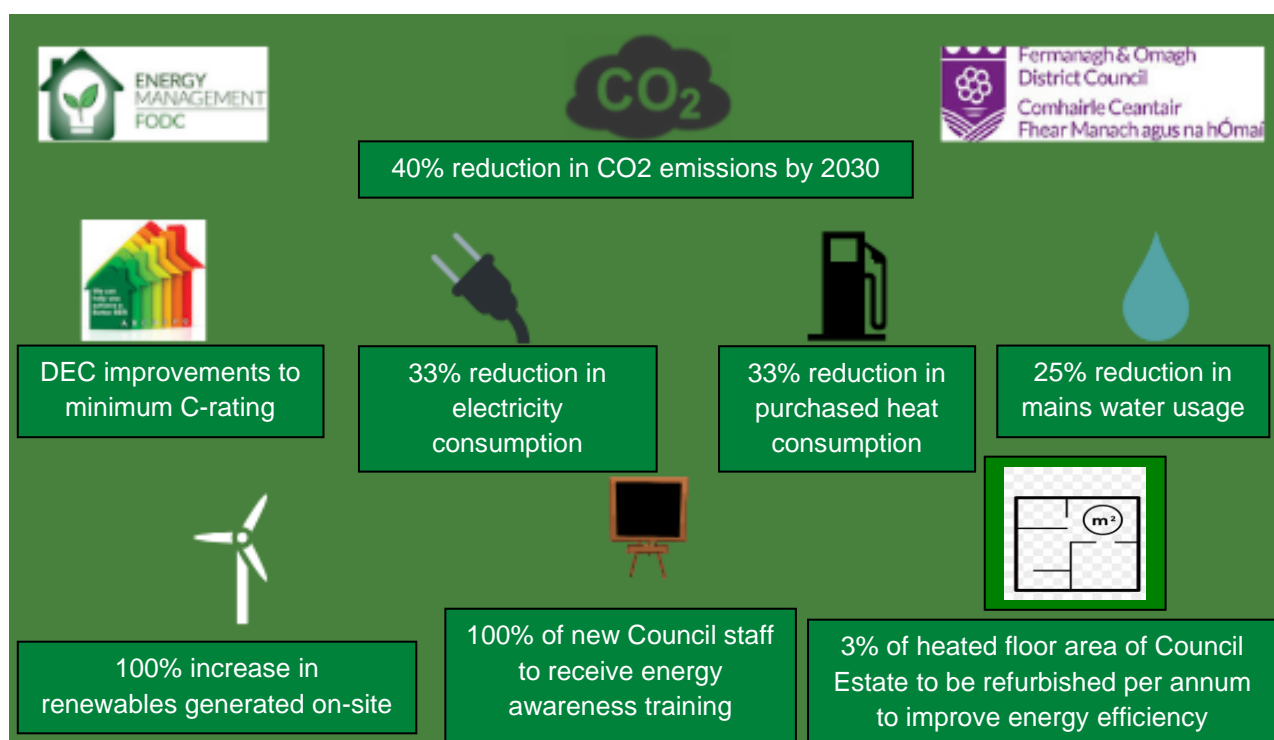
4.2. Baseline

Due to an absence of accurate and reliable historical energy/utility data, it was not possible to set a baseline alongside those used in international Climate and Energy Policy targets (ie 1990, 2005, or 2010). Following an analysis of data, it has been agreed to use the 2017/18 dataset to identify a baseline for this exercise.

It should be noted that as data capture, management, recording and analysis improves, it is likely that this baseline will be revisited and refined in the coming years to include further elements of the Council's Estate/Buildings and perhaps other business operations.

⁴ <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018>

5. Policy Targets



Each target must be considered alongside the assumptions made, which are:

40% reduction in CO₂ emissions by 2030	<ul style="list-style-type: none"> - Versus 2017/18 baseline (should also reflect the 1990 baseline) - from Council Buildings listed in Appendix 2
Improvement to a minimum C-rating of all Council buildings currently requiring Display Energy Certification (DEC) (see Appendix 2) by 2025	
3% of heated floor area of Council Estate/Buildings to be refurbished per annum to improve energy efficiency	
33% reduction in electricity consumption by 2030	<ul style="list-style-type: none"> - Versus 2017/18 baseline - from Council Buildings listed in Appendix 2
33% reduction in purchased heat consumption by 2030	<ul style="list-style-type: none"> - Versus 2017/18 baseline - from Council Buildings listed in Appendix 2
25% reduction in mains water consumption by 2030	<ul style="list-style-type: none"> - Versus 2018/19 baseline - from Council Buildings listed in Appendix 2
100% increase in on-site renewable energy output (kWh) by 2025⁵	<ul style="list-style-type: none"> - Versus 2017/18 baseline
100% of all new Council staff to be given training on energy awareness as part of their induction programme	

⁵ This only applies to energy consumption within buildings and does not include the existing landfill gas power generators at Tullyvar and Drummeemee

6. Implementation of the Policy

- 6.1 The targets outlined in Section 6 are explicit targets against which progress will be monitored and reported upon on a yearly basis in an Annual Energy Management Report. In addition to the explicit targets referenced, there is a range of additional policy objectives that the Council will endeavour to achieve over the lifetime of this Policy but for which explicit measurement might prove difficult. This however does not mean that such objectives should not be included nor progress reported upon.

In that regard, this section outlines additional Policy objectives which the Council will aim to achieve over the duration of this Policy and against which progress will be monitored and reported upon annually. These objectives are further supplemented by explicit actions listed in the Energy Management Action Plan which accompanies this Policy document.

6.2 Operational

- Fermanagh and Omagh District Council recognises that a dedicated resource will be required to oversee the Energy management agenda across the Council. It is acknowledged that failure to provide such a resource could result in the mismanagement of the energy agenda within the Council with real and significant negative impacts on both the Council annual operating budget and the broader environment.
- The Council aims to establish an Energy Management Forum with the remit of implementing this Policy – and the subsequent Action Plan - and monitoring progress against specified Policy targets and objectives. It is proposed that this Forum would meet quarterly and should be supported accordingly.
- As of 1 April 2019, the Council will strive to ensure that all Council buildings will have meter readings (electricity, heat, water, renewables output) recorded and reported on a monthly basis to the relevant delegated person⁶. This information can then be presented to the Council's Energy Management Forum on a quarterly basis for monitoring/management purposes.
- The Council envisages that a review of the 2017/18 baseline used for target setting will take place in April 2020 following the collection of one complete year of data (1 April 2019 – 31 March 2020). This review will incorporate a refinement of the baseline, if required, and a recalculation of targets if deemed appropriate by the Council's Energy Management Forum.

6.3 Investment

Fermanagh and Omagh District Council recognises that in order to achieve the targets and objectives set out over the lifetime of this Policy, there will be a requirement for a programme of investment (eg in refurbishment and retrofitting of buildings, in renewable energies, sub-meters, etc) to be developed.

6.4 Building improvements and life-cycle assessment

- The Council considers a priority is the introduction of life-cycle assessment⁷ for all capital projects and purchases, ie to ensure that a “whole-of-life” approach is applied when building or procuring new buildings or purchases.
- The Council takes note of the latest requirements set out in the EU Energy

⁶ Roles and responsibilities will be clarified in finalised Action Plan to be approved by Council's Energy Management Forum

⁷ See Glossary for definition

Performance of Buildings Directive⁸ regarding “nearly zero-energy buildings” in refurbished, or newly built/purchased public buildings and acknowledges that adherence with these regulations will help to ensure that such developments are “future-proofed” and commits the Council to ensuring building works will be to a higher standard than the minimum standards within national building regulations.

- The Council recognises the importance of the Estates Facilities Team within the Council being consulted prior to approval of any business cases for capital projects/purchases so that considerations of life-cycle costs, energy management, etc can be appropriately considered.

6.5 Staff awareness and Training

- Fermanagh and Omagh District Council will encourage staff – where relevant and appropriate - to access energy awareness training/modules as part of their continuous professional development (CPD).
- The Council will appoint an Energy Policy Officer on a 2-year initial secondment basis to lead implementation of the Energy Management Policy.
- The Council is aware of the importance of utilising the energy management resources already in situ and in this regard considers it appropriate that a minimum of TWO people receive training to use the Building Energy Management Systems (BEMS) in those sites which have such systems installed. A record of those trained in BEMS should be maintained by Human Resources and be reviewed on an annual basis by the Energy Management Forum to ensure all buildings are adequately covered.
- In order to identify the aspects of Council operations which are having the most negative impact on energy demand, it is important to have properly trained staff internally to undertake energy audits, etc on a routine basis. In this regard, the Council could support a minimum of TWO Council employees to undergo a recognised and accredited energy audit course (eg ISO 50001).
- The Council recognises the importance of developing a “brand” to publicise and promote the energy management agenda within Council buildings and will support in-house efforts in this regard.
- An energy management training module is to be made available to all Council staff as part of the ongoing training and CPD programmes within the Council. It is envisaged that by 1 April 2022, 50% of all Council staff will have completed a training module in energy awareness/management.

6.6 Energy Audits

Fermanagh and Omagh District Council supports the conducting of an internal energy audit on all Display Energy Certificate Council buildings with a floor area greater than 250m²⁹. These audits will then be reviewed and suggested actions considered by the Council’s Energy Management Forum.

6.7 Procurement

- In future procurement and tendering exercises, the Council will continue to support the commitment that 100% of the electricity supplied to the Council must be generated from renewables.
- The Council appreciates that when acquiring goods and services on the

⁸ <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/nearly-zero-energy-buildings>

⁹ Note that these audits could be carried out by internal staff trained in energy-audits as per 6.5 Bullet 3 if such staff are trained in a timely manner

Council's behalf, consideration should not only given to meeting users' needs and delivery of "value for money", but also maximising social and economic benefits and minimising damage to the environment.

- As per Article 6 of Energy Efficiency Directive, the Council commits – as a public body - to only procuring goods, services and buildings with high energy performance¹⁰.

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¹⁰ See www.europa.eu - EU Energy Efficiency Directive – Article 6

Appendix 1 - Legislation, Policy and relevant guidance¹¹

Government/ Organisation	Applicable to	Target	Period	Scope	Additional Notes
UNFCCC – Paris Agreement	195 signatory countries (NI included as part of the EU-bloc).	Keep the increase in global average temperature to well below 2°C above pre-industrial levels; and to aim to limit increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change	2020 - 2050	Economy-wide	Some major economies have threatened to withdraw from Agreement.
EU 2030 Climate and Energy Package	All 28 EU Member States (including NI)	40% reduction in GHG emissions by 2040 27% share of renewables in total energy mix by 2040 27% improvement in energy efficiency (reduced consumption) by 2040	2020 - 2040	Economy-wide	Supplemented by: Renewable Energy Directive, Energy Efficiency Directive, Energy Performance of Buildings Directive
UK Carbon Budget (Climate Change Act 2008)	UK as a whole	2008 to 2012 - 25% emissions reduction 2013 to 2017 - 31% emissions reduction 2018 to 2022 - 37% emissions reduction 2023 to 2027 - 51% emissions reduction 2028 to 2032 - 57% emissions reduction <i>Headline target of -80% by 2050</i>	2008 - 2050	Economy-wide	No specific target set for NI but expectation to contribute to overall level of ambition. Also, no mandatory target set for emissions reduction from public sector.
Draft NI Programme for Government (2016-2021)	Northern Ireland	No explicit target but reference to “Indicator 29 – Increase Environmental Sustainability (to be measured by GHG emissions)”. Previous Programme for Government contained commitment to work towards reduction in GHG emissions of at least 35% by 2025	Economy-wide	Economy-wide	Note that this was never transposed as a legally-binding target
UK Clean Growth Strategy	UK economy	Voluntary Public sector emissions target of -30% by 2021, and -50% by 2030 (versus 2) If clear progress is evident, consideration will be given to mandatory targets	Economy-wide	No explicit responsibility on NI devolved Government	No explicit responsibility on NI devolved Government as of yet. Binding/Mandatory targets for UK-wide public sector could be considered

¹¹ Note: this list is non-exhaustive and it will be responsibility of person(s) designated to implement this Policy to ensure that the Council is aware and compliant with all relevant policy developments

Appendix 2 – Council Buildings

	Council Building		Council Building
1	Ardhowen Theatre	18	Intec Centre
2	Bawnacre Leisure Centre	19	Kesh Community Centre
3	Bawnacre Tennis Pavillion	20	Killyvilly Depot Officers
4	Belcoo Community Centre	21	Killyvilly Depot Maintenance Shed
5	Belleek Community Centre	22	Lakeland Canoe Centre
6	Castle Park Leisure Centre	23	Lakeland Forum
7	Celtic Park Changing Rooms	24	Lisnamallard House
8	CKS Community Centre	25	Marble Arch Caves
9	Ederney Townhall	26	Newtownbutler Community Centre
10	Enniskillen Castle – Barrack Coach House	27	Omagh Leisure Complex
11	Enniskillen Castle – Heritage Centre	28	Strule House, 16 High Street Omagh
12	Enniskillen Castle – Visitor Centre	29	Roslea Community Centre
13	Enniskillen Townhall	30	Strathroy Community Centre
14	Gortrush Depot Office	31	Strule Arts Centre
15	Grange Office	32	Westend Community Centre
16	County Buildings	33	Broadmeadow Office
17	Hospital Road Community Centre		

Glossary

- **BEMS** – Building Energy Management System is an electronic/automated system used to improve the efficient management of a building's heating/energy usage
- **Benchmark** – A historic figure for consumption of energy – calculated through data analysis - against which targets may be set and future progress can be monitored.
- **Carbon Budget** – An allowance or “budget” of carbon emissions set out over a period of time and within which an organisation must operate.
- **Carbon intensive** – refers to those tasks and operations which are more reliant and demanding on energy and thus generate greater emissions
- **Climate and Energy Package** – EU Policy Framework which sets out the Climate and Energy targets (CO₂ emissions, energy efficiency, renewable energy) and associated legislation in the period to 2030.
- **CO₂** – Carbon Dioxide
- **CO_{2e}** – Carbon Dioxide equivalence (used for target-setting and measurement where emissions are all converted into CO_{2e} for comparison purposes).
- **Decoupled** – To break the link between economic growth and increasing emissions
- **GHG** – Greenhouse Gas emissions
- **Headline Target** – a “headline” emissions target is the primary feature or focus of a Climate/Energy Policy and is achieved through the setting of targets for its constituent factors such as heating, electricity, renewables generation, etc.
- **Kyoto Protocol** – First ever global agreement on reducing Greenhouse Gas emissions
- **Life-Cycle Assessment** – refers to the assessment of environmental impacts associated with all stages of a product/project/development's lifespan, ie does not just include – for example – the emissions associated with construction but rather the emissions associated with the lifetime operation of a building.
- **Nearly Zero-Energy Building** – a building that has a very high energy performance as determined in accordance with Annex 1 (Directive 2010/31/EU as amended). The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby.
- **Paris Agreement** – is a UNFCCC Agreement – adopted in Paris in 2015 – with the goal of limiting the increase in global temperatures to below 2°C and with the aim of limiting to below 1.5°C since this would substantially reduce the risks and effects of climate change.
- **ROI** – Return on Investment
- **UNFCCC** – United Nations Framework Convention on Climate Change