

DoF Office Estate

Energy Efficiency/Carbon Reduction Plan

FY20/21 – FY22/23

Year One Progress Summary

First year progress summary for the DoF Office Estate, Energy Efficiency/ Carbon Reduction Plan FY2020/21 – FY2022/23.

1 Background

The DoF Office Estate, Energy Efficiency/Carbon Reduction Plan FY 2020/21 – FY2022/23 issued September 2020, replaced the original policy target of seeking to make the government estate carbon neutral by 2015, which had been withdrawn by the then DFP Minister. This is the forth reduction plan within the strategy to reduce energy consumption across the NICS Office Estate.

The plan outlines the actions aimed at improving the energy efficiency of the office estate under three generic areas.

- Reduction in the footprint of the office estate;
- Capital investments in energy efficiency measures and equipment;
- Behavioural change of staff occupying the estate.

When combined it was anticipated that the actions were capable of generating a 4% reduction in energy consumption over 3 year period of the plan, 20/21 -22/23.

In order to reduce the length of this document, specifics and tables included in the original plan have not been reproduced.

2 COVID -19

In May 2020, CIBSE (the Chartered Institute of Building Services Engineers) and REHVA (the Federation of European Heating, Ventilation and Air Conditioning Association) and REHVA (the Federation of European Heating, Ventilation and Air Conditioning Association) issued guidance relating to the operation and use of building services in helping to reduce the risk of spread of Covid-19. The guidance centred on seeking to supply as much outside air as reasonably possible into buildings. (Version 5 of the CIBSE guidance was issued in July 2021 and version 4 of the REHVA guidance in April 2021.)

Consequently, also in May 2020, following consultation with and advice from professional and technical colleagues in the Department's Construction and Procurement Delivery Property Services Division (CPD, PSD), all DoF buildings in the office estate that had a mechanical ventilation system moved to 24/7 operation, i.e. the ventilation system was set to run continuously. Carbon dioxide set

points were also lowered and building occupants advised to open openable windows for periods of around 15 minutes at a time. Occupying departments also completed COVID-19 risk assessments.

The extended operating times of building services has significantly increased the energy consumption associated with both electricity and natural gas and this will be reflected in the progress report. Higher energy consumption, as well as increases in unit cost price for all forms of energy will result in financial commitments for energy being higher than pre-pandemic levels.

Nevertheless, by utilising building energy management systems (BEMs); using energy supply collaborative contracts facilitated through CPD; and by continuing to follow CPD professional and technical advice, Properties Division (PD) remains committed to providing modern energy efficient office space for the NICS within the constraints of available budget.

3 Progress

3.1 Reduction in the footprint of the office estate;

During the first year of the plan (Apr 2020 – Mar 2021) two buildings were given up from the estate.

- One owned building that had been vacant since 2014 was sold, and one recently vacant owned building was also sold. These two buildings equate to 2,465m² net internal area of office space.
- No leased buildings were given up during 2020/21

In year one the NICS office estate was reduced by 2,465, equating to an estimated 0.25% reduction in energy (see annex 1).

3.2 Capital investments in energy efficiency measures and equipment;

During year one, four buildings had capital investment with the aim to increase energy efficiency. Details of these projects can be seen at annex 2. Three of the projects were to replace inefficient lighting with energy efficient equivalents. The fourth project replaced an existing inefficient heating system for an energy efficient solution. In most cases the existing installations were at the end of their serviceable life.

Unfortunately, all of these projects were not completed until during 2020 mainly due to contractor's ability to progress works due to the

impact of Covid-19 restrictions on both work activities and availability of components, Consequently, energy savings will not be realised until the next reporting year i.e. year 2 of the plan.

3.3 Behavioural change of staff occupying the estate.

Responsibility for energy savings which can be directly associated with staff behaviour is managed in the first instance by the Premises Officer (PO) under the direction of the Departmental Energy Manager (DEM).

It is extremely difficult to confirm with certainty that staff behaviour has resulted in energy reduction across the estate; however there is evidence that energy awareness across the estate has increased primarily exhibited through increased correspondence from DEMPOs to DoF PD Estates Management Unit staff on energy related matters..

4 Summary

Following year one of the DoF Office Estate, Energy Efficiency/Carbon Reduction Plan, reporting data indicates a total weather-corrected increase in the overall energy consumption of 13.3% when compared to the base year 19/20.

While there has been a 9.5% drop in electricity consumption, there has been an increase of 30.2% in natural gas consumption. The overall consumption in 20/21 equates to 76MWh whereas the base year was 67MWh. This increase can be directly associated with the implementation of the 24/7 COVID-19 mitigation ventilation strategy from May 2020 in the DoF Office Estate.

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Annex 1, Reduction in the footprint of the office estate

Buildings given up during year one (2020/21).

	Building	Details	NIA	Date
1	Ballyclare CBO	Vacant since 2014 - Sold	113	19/06/2020
2	Northland House	Vacant since October 2019 - Sold	2,352	05/08/2020

Annex 1 continued, reduction in the footprint of the office estate - Buildings given up during year one.

TO BE VACATED			MOVE TO		ENERGY SAVINGS		
Building(s) Vacated	NIA *	Exit Date	Building(s) Moving to	NIA *	Year 1 Planned Reduction kWh (20-21)	Year 1 Actual Energy Reduction kWh (Weather Corrected to 19/20)	
1	Ballyclare CBO	113	19/06/2020	Staff moved to Antrim JBO in 2014	0	0	0
2	Northland House	2,352	05/08/2020	Goodwood House	6,672	136,685	177,981
					Total (kWh)	136,685	177,981
					% Reduction	0.17%	0.25%

Notes;

Ref Detail

* Net Internal Area

1 Ballyclare CBO was vacated in 2014 and staff were moved to Antrim JBO. The building was mothballed from 2014 when electricity, heating and water was isolated meaning there were no utility costs to the department.

Annex 2, capital investments in energy efficiency measures and equipment

Energy/Sustainability Projects 2020/21

	Building	Capital Investment	Completion Date
1	Coleraine Co Hall	External Lighting	Oct-20
2	Goodwood House, floors 1,2,3,4 and 5	LED Lighting	Nov-20
3	DFI Crescent Road, Lisnagelvin	Heating Upgrade	Nov-20
4	Ballymena County Hall	External Lighting Upgrade	Nov-20