

Petition: Shut the door on wasted energy.

Y Pwyllgor Deisebau | 21 Mai 2019

Petitions Committee | 21 May 2019

Research Briefing:

Petition Number: P-05-878

Petition title: Shut the door on wasted energy.

Text of petition:

We call on the National Assembly for Wales to urge the Welsh Government to encourage all supermarkets and retailers to have doors on all their fridges and freezers, and so reduce our national carbon footprint, electricity consumption and pave a way for a greener Wales.

Irish retailer, Supervalu estimates that a typical 2.5 metre mineral fridge with doors will typically save 10,000kWh per year compared to fridges without doors.

This is the equivalent of 7 tonnes of carbon dioxide greenhouse gas and would be enough to power at least two homes of electricity for one year! The power saved from one fridge with doors is enough to power two homes!

The Environment (Wales) Act of March 2016 (Part 2: Climate change) gave Welsh Ministers the "powers to put in place statutory emission reduction targets, including at least an 80% reduction in emissions by 2050 and carbon budgeting to support their delivery. This is vital within the context of our existing UK and EU obligations and sets a clear pathway for decarbonisation. It also provides certainty and clarity for business and investment."

This is a great opportunity for the Welsh Government to work towards this goal and contribute to the 80% reduction to emissions by 2050. This act could have huge consequences nationally and globally! Let Wales be a leading nation on the international stage with a "healthy and resilient environment" by shutting the door to wasted energy for this and the next generation!

Background

The [European Ecodesign Directive](#) provides consistent EU-wide rules for improving the environmental performance of products, such as household appliances. The Directive sets out minimum mandatory requirements for the energy efficiency of these products and aims to harmonise the requirements for such products across the European internal market.

In order to develop appropriate requirements, the European Commission mandates preparatory studies for various product groups. In 2007 a study regarding commercial refrigerators and freezers was undertaken, with the [final report](#) (PDF,7.45MB) being published in December 2007.

The report made a number of recommendations and found that installing doors on commercial fridges and freezers across Europe would amount to an energy saving of approximately 30 TWh of electricity per year by 2020. This would amount to around the same as the total annual residential electricity consumption of Poland.

As [summarised in this article](#), the report findings were challenged by manufacturers and no action was taken at the time. In 2014, an updated analysis was undertaken and confirmed the potential annual electricity savings to be the equivalent of offsetting the production of around 25 medium sized coal power plants. However, again no action has been taken by the European Commission since.

French Voluntary Code of Conduct

A [2008 French study](#) (PDF,2.85MB) modelled the potential financial savings that could be made by retailers of different sizes through fitting supermarket fridges with doors. Following this study, a voluntary code of conduct was signed in 2012 by a number of large French retailers in partnership with the French Ministry of Ecology, Sustainable Development, Transport and Housing. However, [this 2014 article suggests](#) that there was also support from the French Government in the form of financial incentives.

UK Supermarket Action

As [reported in the media](#), a number of UK supermarkets have previously trialled the use of fridge doors across their stores with the Co-operative stating in 2012 that it was saving an estimated £50m a year in energy bills. However, as reported in the article, other supermarkets were reluctant to do so, suggesting that fridge doors are unpopular with customers and could impact on sales.

In 2013, the then UK Minister of State for Climate Change, Greg Barker MP, [announced that a retail refrigeration taskforce would be established](#) to focus on energy reduction in the sector. The work was due to conclude in Autumn 2014, however there is no update available on the [UK Government website](#) on the outcome of this work.

More recently, technology has become available that is attached to the front of fridge cabinet shelves and acts to create an air curtain to stop cold air escaping out into supermarket aisles. [As reported in the media in 2017](#), Sainsburys has used this technology which has reduced the company's energy costs. However, as reported in the article, the Carbon Trust suggests that "this is just a stop-gap. The best way to reduce energy consumption is to put sliding or pull-out doors on all their fridges – this could cut electricity usage by 30%–40%."

Welsh Government and National Assembly action

In his letter to the Chair of the Petitions Committee, dated 26 April 2019, the Minister for Economy and Transport has highlighted a number of initiatives that aim to encourage the retail sector to reduce its emissions.

This includes the [UK Government's Climate Change Levy and Climate Change Agreements](#). The Minister highlights that:

The Levy is a tax on energy delivered to businesses in the UK, while the Agreements are opt-in schemes where participants receive a discount from the Levy in return for meeting pre-agreed energy efficiency improvement targets.

The Minister also states that the "Welsh Government supports the [Courtauld Commitment 2025](#)". This is a voluntary initiative across the food and drink supply chain to "identify priorities, develop solutions and implement changes to cut the carbon, water and waste associated with food & drink by at least one-fifth in 10 years".

As highlighted by the petitioner, the Welsh Government is also subject to statutory targets to reduce emissions.

The Environment (Wales) Act 2016

The [Environment \(Wales\) Act 2016](#) (the Environment Act) placed new duties on the Welsh Government to reduce emissions:

- The Welsh Government must ensure that **net emissions for 2050 are at least 80% lower than the baseline (1990 or 1995)**;
- By the end of 2018, the Welsh Government must have **set interim emissions targets for 2020, 2030 and 2040**;
- For each five year budgetary period the Welsh Government **must set a maximum total amount for net Welsh emissions (a carbon budget)**, with the first two budgets to be set by the end of 2018;
- The Welsh Government may by Regulations establish or designate a body or person to be an advisory body. If no Regulations are in force, the advisory body is the UK Committee on Climate Change (UK CCC); and
- The Welsh Government must take into account international agreements to limit increases in global average temperatures.

The Climate Change (Wales) Regulations 2018

The Welsh Government has made five sets of Regulations to give effect to the commitments arising from the Environment Act. They are:

- [*The Climate Change \(Interim Emissions Targets\) \(Wales\) Regulations 2018*](#) (PDF,80KB);
- [*The Climate Change \(Carbon Budgets\) \(Wales\) Regulations 2018*](#) (PDF,76KB);
- [*The Climate Change \(International Aviation and International Shipping\) \(Wales\) Regulations 2018*](#) (PDF,125KB);
- [*The Climate Change \(Credit Limit\) \(Wales\) Regulations 2018*](#) (PDF,80KB); and
- [*The Carbon Accounting \(Wales\) Regulations 2018*](#) (PDF,144KB).

Accompanying the Regulations is an [Explanatory Memorandum and Regulatory Impact Assessment \(RIA\)](#) (PDF,1.33MB).

Carbon Budgets

The *Climate Change (Carbon Budgets) (Wales) Regulations 2018* set out the first two carbon budgets. They are:

- For the 2016 to 2020 budgetary period, the carbon budget is limited to an average of **23% lower** than the baseline; and
- For the 2021 to 2025 budgetary period, the carbon budget is limited to an average of **33% lower** than the baseline.

Interim Targets

The purpose of the Climate Change (Interim Emissions Targets) (Wales) Regulations 2018 is described in the accompanying Explanatory Memorandum as setting out decadal targets “that represent a pathway to the 2050 target established in the Act”, i.e. at least 80% lower than the baseline.

Section 30(1) of the Environment Act provides that, for each interim target year (2020, 2030, 2040), the Welsh Ministers must by Regulations set a maximum amount for the net Welsh emissions account, expressed as a percentage below the baseline.

The Regulations set out the interim emissions targets as follows –

- The maximum amount for the net Welsh emissions account for 2020 is **27% lower** than the baseline;
- The maximum amount for the net Welsh emissions account for 2030 is **45% lower** than the baseline; and
- The maximum amount for the net Welsh emissions account for 2040 is **67% lower** than the baseline.

The interim targets reflect advice given to the Welsh Government by the UK CCC.

Low Carbon Delivery Plan

The Welsh Government published its first low carbon delivery plan in March 2019. [Prosperity for All: A Low Carbon Wales](#) sets out how Wales aims to meet its first carbon budget (2016–2020) and consequently the 2020 interim target through 76 existing policies from across the Welsh Government, UK Government and the EU – and 24 new proposals.

The low carbon delivery plan includes Policy 61 – Food and Drink Action Plan – Towards Sustainable Growth and highlights that:

[The] Welsh Government’s [Food and Drink Action Plan ‘Towards Sustainable Growth \(2014–2020\)’](#) was launched in 2014 to deliver an overall headline target to grow the value of the food and drinks sector in Wales by 30% to £7 billion by 2020. The Plan includes 48 actions grouped around 5 main themes to support the sector, including promoting low carbon productivity and a more efficient use of resources.

... A successor Plan to ‘Towards Sustainable Growth’, which will in effect be an enabling plan for Food as a Foundation Sector under the Economic Action Plan, will be launched at the end of the year [2019].

The existing Food and Drink Action Plan references an ambition for Wales to become a “low carbon food production company”. It also highlights the significant carbon footprint created from the food chain including in the “processing, storage, packaging, distribution, retail [and] transport” of products. However there are no specific references made to how food is stored in fridges in supermarkets.

There is no record of this issue being debated in the National Assembly.