

POLICY NOTE

THE BUILDING (SCOTLAND) AMENDMENT REGULATIONS 2023

SSI 2023/177

The above instrument was made in exercise of the powers conferred by sections 1 and 54(2) and schedule 1 of the Building (Scotland) Act 2003. The instrument is subject to negative procedure.

Summary Box

To ensure new domestic and non-domestic buildings, as well as existing buildings undertaking certain conversion works, no longer have their space heating, cooling and hot water demand met by heating and cooling systems which produce direct greenhouse gas (GHG) emissions.

Policy Objectives

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 sets targets to reduce Scotland's emissions of all greenhouse gases to net zero by 2045, and also includes an interim target for a reduction in emissions of 75% by 2030.

Progress has been made in the decarbonisation of Scotland's electricity market, and our focus has now shifted to other key areas such as agriculture and transport - as well as the GHG emissions associated with our buildings.

In 2020, direct emissions from buildings accounted for almost 22% of Scotland's total GHG emissions – therefore, meeting our legally-binding targets requires further action to be taken. Buildings (both new and existing) as a sector, can no longer be responsible for the generation of GHG emissions. In particular, the heating and cooling of buildings must no longer contribute to Scotland's GHG emissions.

This secondary legislation, The Building (Scotland) Amendment Regulations 2023, will prohibit the use of direct emission heating (DEH) systems in new buildings. It is being made to eliminate the greenhouse gas emissions associated with delivering space heating, hot water, and cooling in new buildings, as well as conversions of existing buildings under specific circumstances. This is the first regulatory step in changing the way Scotland's buildings are heated and cooled to be compatible with net zero.

Scottish Government have committed to introducing a legislative framework that will prohibit the use of DEH systems in all homes by 2045. This amendment to Building Regulations in Scotland will support future legislation by ensuring that new buildings, constructed under a building warrant which is applied for on or after 1 April 2024, will not have to retrofit their heating systems with a zero direct emission heating (ZDEH) alternative in future. This will help to reduce potential disruption caused to building owners and occupants, while also reducing emissions and stimulating and building capacity within the ZDEH supply chain.

Direct Emissions Heating System

A direct emission heating system is defined as one which, during normal operation produces, more than a ‘negligible’ level of greenhouse gas emissions.

The rationale for this decision is to ensure that new and developing technologies, which may produce insignificant or trace direct greenhouse gas emissions, are not inadvertently prohibited.

Although the regulations are, and will remain, technology neutral, it may be important to provide some context for this decision. Using 100% hydrogen as an example, recently concluded independent testing demonstrated that the annual emissions from an individual 100% hydrogen boiler are – effectively - zero. The Scottish Government estimates around 0.9kg CO₂e/year which is equivalent to 0.03% of annual emissions from an average household with a gas boiler (2, 592.3 kgCO₂e/year).

Consultation

Two full, public consultations have taken place. An initial scoping consultation ran from 9 December 2020 to 3 March 2021. This sought views on high-level proposals relating to the use of ZDEH systems in new homes from 2024, as well as the anticipated challenges and opportunities this would bring. 92 responses were received, and an analysis of those responses was undertaken by Why Research. The consultation analysis report was published on the Scottish Government website in October 2021.

A second consultation ran from 28 July 2022 to 20 October 2022, and 112 responses were received. This consultation sought views on specific issues such as the treatment of bioenergy systems, conversions and non-domestic buildings. An analysis of those responses was undertaken by the Lines Between, and was published on the Scottish Government website in June 2023.

During both consultation periods, public ‘themed’ webinars were held. These themes included: consumers; business and industry; islands; equality; and non-domestic buildings. A number of stakeholders participated, including representatives from building developers, housing associations local authorities, and heating technology manufacturers. These webinars were open to all and advertised on the consultation website.

A full list of those consulted and who agreed to the release of this information is attached to the consultation reports published on the Scottish Government website.

As a result of the second consultation, potential unintended consequences relating to non-domestic buildings with complex heat needs and the provision of emergency back-up supplies were highlighted. As a result, a provision is included within the proposed SSI for prohibition of DEH not to extend to the supply of emergency heating.

12 one-to-one meetings were held with small, medium and large businesses based across Scotland impacted by the proposals during the second consultation period. The

findings from these one-to-ones has been used to inform the Business and Regulatory Impact Assessment (BRIA).

A number of related research projects have also been commissioned to help inform the development of the regulations and accompanying impact assessments. A full list of these published projects is contained below:

- *Costs of zero emissions heating in new build*, ClimateXChange
- *Direct greenhouse gas emissions from low and zero carbon heating systems*, ClimateXChange
- *Electricity network constraints and the 2024 New Build Heat Standard*, Ricardo Energy & Environment
- *Evaluation of renewable and zero emissions heating systems in affordable housing projects*, Locogen
- *Renewable and zero direct emissions heating systems in affordable housing projects (phase 2): evaluation*, Locogen
- *Understanding direct emissions associated with 100% hydrogen boilers*, TÜV SÜD
- *Zero emissions heating in new buildings across Scottish Islands*, ClimateXChange

Impact Assessments

The number of impact assessments have been completed for the Building (Scotland) Amendment Regulations 2023. They are:

- Business and Regulatory Impact Assessment (BRIA);
- Child Rights and Wellbeing Impact Assessment (CRWIA);
- Equality Impact Assessment (EQIA);
- Island Communities Impact Assessment (ICIA);
- Fairer Scotland Duty (FSD); and
- Strategic Environmental Assessment (SEA).

All were published on the Scottish Government website in June 2023 except the SEA. A copy of the SEA determination will be made available on the SEA database.

There were no children's, equality, island-specific, socio-economic or environmental impact issues identified.

Financial Effects

A full BRIA has been completed and will be published on the Scottish Government website. As part of this, businesses were consulted on the impact of the regulations, and depending on the sector they operated in, viewed the standard as bringing with it opportunity or increased costs. Increased costs include an impact on building developers, due to the current uplift in costs between DEH and ZDEH technologies, as well as costs associated with upskilling staff to these systems.

All businesses involved in the construction of new domestic and non-domestic buildings, including existing buildings undergoing conversion, will be equally affected through the prohibition of DEH systems. However, whilst the cost will be

minimal when spread out over the whole cost of the development - whether it be housing or commercial - the additional installation costs of ZDEH systems may be passed on to the customer.

No significant issues of competition, restriction or imbalance were identified.

Scottish Government
Directorate for Energy and Climate Change

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