

Emissions avoided by curtailing fossil fuel heating system installations.

Number of new properties built per year

Domestic - Department of Infrastructure response to FOI request 2649649 'Homes Built' shows an average of 210 homes built, per year, over the period 2012-2021.

Across: Fig 1. DoI figures for homes built

Commercial – no information available

Oil or gas?

Information as to the type of heating systems installed in those properties is not available; however, the Isle of Man Renewable Heating Scenarios estimates a split of around 60% gas to 40% oil in existing properties¹. So, using the average of 210 homes, that would be an average of 126 gas and 84 oil heating systems per year.

Year	Total Homes Built
2012	308
2013	209
2014	209
2015	244
2016	188
2017	242
2018	146
2019	205
2020	160
2021	195

Emissions avoided

The table below provides estimates of the emissions savings possible from beginning to refuse Building Control applications for new buildings containing fossil fuel heating systems in August 2023 (or 1 Jan 2024, for comparison).

Annual averages have been used to generate monthly averages. It is acknowledged that this is a blunt tool. Properties are not completed at a steady monthly average, for example, there will be seasonal fluctuations in the number of buildings being completed. It also does not estimate additional construction that may occur in response to the Economic Strategy's aim to increase population, or does it include commercial properties (as data is not available), so the potential savings could be larger.

	Gas	Oil
Average annual consumption	12,960 kWh ²	18,550 kWh ³
Emissions per kWh	0.18 kgCO ₂ e	0.27 kgCO ₂ e
Annual emissions (Average annual consumption x BEIS emissions factor)	2,332.8 kgCO ₂ e (12,960 x 0.18)	5,008.5 kgCO ₂ e (18,550 x 0.27)
Average lifespan of heating system	15 years ⁴	15 years ⁵
Total lifespan emissions (15 x annual emissions)	34,992 kgCO ₂ e	75,127.5 kgCO ₂ e
Average homes built per year	126	84
Average per month	10.5	7
Refusal of plans begins 1 August 2023 - 17 months ahead of 1 January 2025 ban		
Potential installations avoided:	178.5	119
Potential emissions avoided: (Potential installations avoided x total lifespan emissions)	6,246,072 kgCO ₂ e 6,246 tCO ₂ e	8,940,172.5 kgCO ₂ e 8,940 tCO ₂ e
Total potential emissions avoided:	15,186 tCO₂e	
Refusal of plans begins 1 January 2024 - 12 months ahead of 1 January 2025 ban		
Potential avoided installations:	126	84
Potential emissions avoided: (Potential installations avoided x total lifespan emissions)	4,408,992 kgCO ₂ e 4,408 tCO ₂ e	6,310,710 kgCO ₂ e 6,310 tCO ₂ e
Total potential emissions avoided:	10,718 tCO₂e	

¹ Page 98, <https://netzero.im/media/d4xb3dpl/isle-of-man-report-dec-2021-final-combined-v2-compressed.pdf>

² UK 2021 average per gas meter,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1126284/subnational_electricity_and_gas_consumption_summary_report_2021.pdf

³ <https://certasenergy.co.uk/news/my-home/how-much-heating-oil-should-i-purchase/>

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1026356/domestic-offgg-consultation.pdf

⁵ As per footnote 4