

The eHeat opportunity – €1.5Bn annual economic benefit for Ireland

The decarbonisation of energy use, especially heat, remains a significant challenge for companies. Electrification is a sustainable, efficient and economic, means of generating heat, and in recent years many countries within Europe have found it to be highly effective way to decarbonise industrial heat. Electric heat (eHeat) is also a flexible demand that can be controlled to respond to variation in renewable electricity supply.

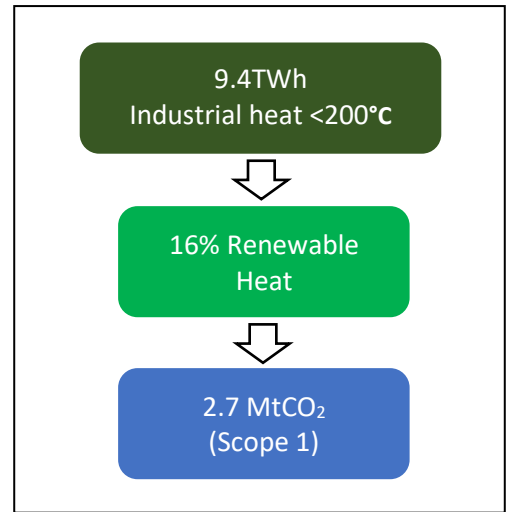
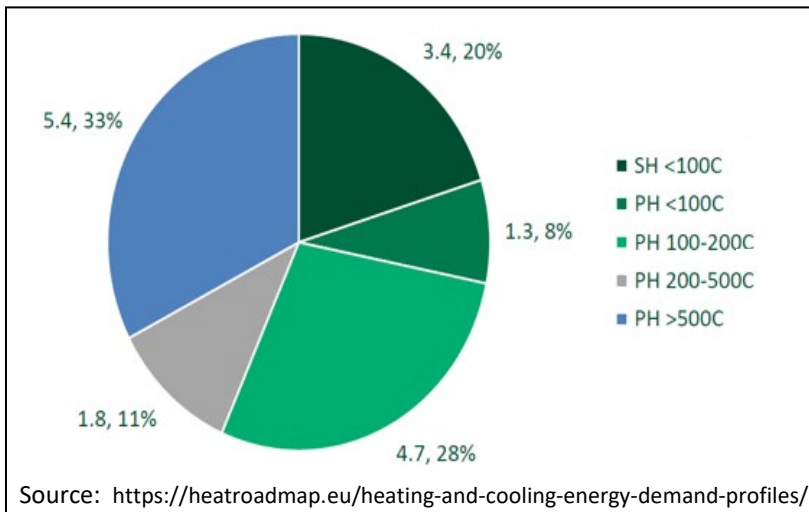
eHeat is the most realistic, practical means of decarbonising heat and will deliver significant benefits to Irish business and the wider economy.



Unlocking the eHeat opportunity

Ireland's total heat demand	Ireland's industry heat demand		
	Total demand	% of total demand	MtCO ₂
41 TWh	16.6 TWh	40%	14

Electrification potential
Heat demand <200°C = 9.4TWh



Electrification of 9.4 TWh (heat) displaces 12.5 TWh fossil

Creating 3 TWh additional RES-E demand

Carbon saving = 2.7 MtCO₂
Avoided penalty €270M/yr
*based on a cost of carbon of €100/tonne

€440M per annum reduction in fossil fuel imports

Increased security of supply

*based on fossil fuel price of €35/MWh

80% Utilisation of 3TWh surplus renewable electricity delivers an economic benefit of **€200M/yr** to wind developers

Greater utilisation of the electricity network could generate **€36M/yr** additional revenue based on UoS approx. €15/MWh

Benefits for Irish business

Cost to generate 9.4TWh heat with fossil **€820M**

Cost to generate 9.4TWh heat with eHeat **€300M**

Economic benefit to Irish business **€520M**

*based on fossil fuel price €35/MWh, electrical generation price €80/MWh & UoS €15/MWh

Additional national benefits

eHeat utilises indigenous renewable resources to create est. **10,000 jobs**.

Less emissions improves air quality, health and well-being and has an economic advantage for Ireland