

# THE DECADE OF LOW-CARBON HEATING

For the EU to be carbon neutral by 2050, heating system replacement rates will need to increase six-fold from where they are today. We believe we can get there.

The UK Department of Energy & Climate Change says that heating and cooling solutions account for 37% of carbon emissions in that country. Across the globe, we know that heating and cooling buildings is contributing the climate change, and still, the heating market has been on a slow road to decarbonisation.

Delta-EE is a European research and consultancy company providing insights into the energy transition. According to 2020 report by Delta EE\*, the share of fossil fuels in the overall energy consumption for heat has decreased by only a few per cent over the last decade. There are still over 100M fossil fuel boilers in European homes today, compared with just 15M heat pumps (the most successful low-carbon alternative to date).

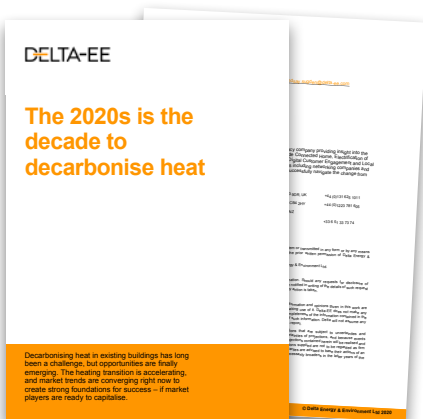
At this rate, it would take more than 200 years for the remaining fossil boilers in Europe to be replaced by lower-carbon alternatives.

### Change is on the horizon

The EU's ambition to reach carbon neutrality by 2050 might massively boost the rate of heat decarbonisation. The ambition has spawned a range of bold policies all over Europe, which could help accelerate the push for lower-carbon heating systems.

Among these, the EU Green Recovery package is pushing for an increasingly efficient building stock across Europe. The Delta-EE report outlines that in July 2020, EU leaders agreed to a €1.8 trillion package – including €750 billion for post-COVID recovery – of which 30% will be made available for the “Green Transition”. This proposal aims to increase building renovation rates by at least double to meet decarbonisation targets.

Ambitious policies are not only happening on the EU level. Across the bloc, national governments are taking action to tackle the retrofit challenge – and the resulting policies are starting to influence heating system buying decisions. Cities and municipalities are also setting their own targets to accelerate decarbonisation that go beyond the national goals.



\*2020 report by Delta EE

### Heat pumps are the future

Ambitious policies are only part of the story. At the same time, the market is seeing an influx of efficient low-carbon heating systems – that suit any building – and retrofittability is on the rise.

Technical objections to retrofitting lower-carbon heating systems have been that “they cannot reach high enough flow temperatures” or “they are too big or difficult to install”. But over the last 10 years, technologies like electric heat pumps, gas heat pumps, hybrid pumps and plug-and-play modular approaches are becoming increasingly available.

Digitalisation is also helping overcome the retrofitting barrier. Solutions like remote monitoring and diagnostics make life easier for installers by reducing expensive site visits. They also enable better performance visibility and reducing running costs for end-users.

### End-users want to play their part

Once end-users learn of the high-efficiency heating options available to them, there is interest in adopting them, according to the aforementioned DELTA-EE report.

DELTA-EE's research shows that awareness of high-efficiency heating systems is relatively low across the UK, France, Germany, Italy and the Netherlands. Still, at least 50% of younger people (aged 16-34) are ‘very interested’ in replacing their existing heating appliance with a more expensive high-efficiency heating appliance.

That may be because public awareness of the need for decarbonisation is arguably at an all-time high. A majority of survey respondents say they viewed climate change as ‘a very serious problem’.

At Grundfos, we see ourselves as optimists when it comes to climate change and our ability to make an impact. And we are optimistic that decarbonisation will take off in the next decade. We'll continue developing solutions that support this transition – solutions that make it easier for installers to deliver the low-carbon heating that end-users are looking for – and that will help ensure the EU reaches its ambitious target of carbon neutrality by 2050.

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