

# Heating just got cool

By Federica Sabbati, Secretary General, European Heating Industry

Few would consider the heating sector as cool.

For a long time, in Brussels, “heating” has been a technical, not a political issue. Partly, it is because it is way too complex to regulate: fragmented, different from country to country, climate zone to climate zone, building to building. A regulatory nightmare.

What’s more, nobody even knows what heating system they have at home – and they will not know until it breaks down next Christmas Eve.

This is probably why discussions on heating and buildings have been left to a few dedicated engineers on either side of the regulatory line: a few engineers-turned-Commission officials, and many more engineer-engineers. That is, until Paris happened. Paris forced policymakers to get creative and find new potential solutions.

Luckily, it turns out that buildings have a huge untapped potential in terms of energy saving. Ali Baba’s cave of energy saving, in fact.

Space heating and hot water production account for 85% of the energy consumption in a house. European buildings have mostly been built before the 1960s – before energy performance codes existed – while heating systems installed are on average class D or E on the energy label (if they had one, but that’s another story). District heating does not fare better: according to the European Commission’s Strategy for Heating and Cooling, close to 75% run on fossil fuels (mainly gas and coal) and are old and inefficient networks.

New-builds perform very well but at a

rate of 1% per year, they are too slow to make us reach our 2030 climate goals in time, let alone the 2050 ones.

Can we look at this as an interesting opportunity, instead of a discouraging challenge? I think so, provided that we resist the temptation to try and find ONE magic word to open Ali Baba’s cave: I’m afraid there isn’t. “Open sesame” works only in fairy tales.

The energy performance of your building depends on the heating system you have, but also on whether your building is well or badly insulated. It depends on whether you live in a skyscraper in the middle of Frankfurt, connected to the electricity and gas grid; or if you are in a guesthouse in Sicily.

That’s why you cannot decarbonize buildings working in silos, just like you cannot use the same solution everywhere. You cannot say: ‘we’ll put biogas condensing boilers everywhere in Europe’ because it all depends on whether there is enough supply and suitable distribution of biogas, and on whether appliances are able to run on biogas.

But you can say: ‘I’ll use a hybrid heating system in an apartment building in Rome and a pellet boiler with solar thermal in that Tyrol cottage’. And ‘I’ll have an electrical heat pump in my refurbished house outside Berlin’, with good insulation, a cellar and a garden for my outside unit.

This means two things: first, there are different solutions to decarbonize different types of buildings, across different climatic regions in Europe. These heating technologies are

already there, that’s the good thing.

Second, we need to look at integrated solutions across energy sectors. Sector-coupling is already happening, so it makes sense to sit together with all the chain of energy supply, distribution and use, including manufacturers of heating appliances, installers and the insulation industry, to build the puzzle of decarbonized buildings in 2050. Only this way can we be in line with the Paris climate goals, as well as make sense to our consumers.

This is exactly the spirit of the European heating industry’s initiative #Build2050 ([www.ehi.eu/build2050/](http://www.ehi.eu/build2050/)). The first things to tackle together is clear: to accelerate the renovation rate of buildings and, particularly, of the installed stock of heating appliances, which today is largely inefficient.

To that end we need to work with installers: they are the gateway to innovation in the market. How can we support this precious network of specialists that you and I rely on for choosing a new heating system?

We also need to raise awareness amongst consumers, because knowing how (in)efficient your heating system is, is the first step towards finding innovative, renewable solutions. How to do that? We propose to use the new energy label: next time your maintenance technician comes over to check the safety of your boiler, he will also tell you how efficient it is, and make you think of efficient and renewable alternatives.

We have to start working with those local administrations willing to improve energy efficiency in their



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communities. We can establish projects of cooperation between appliances industry, energy suppliers, insulation industry, consumer organisations and local administrations to renovate buildings and then scale the project up to the next level: start small but think big.

At the same time as the renovation work, it will be necessary to produce together with energy suppliers and distributors a roadmap for renewable gas and electricity for the heating market towards 2050.

This should take into consideration the energy demand from heating in buildings; it should consider the new technologies that are entering the

market such as hybrids, but also the growing share of heat pumps, mCHP, solar thermal, biomass and consider the thermal storage possibilities; finally it should take into account the innovation of smart heating, which will make production and management of energy in our houses more intelligent and efficient.

In conclusion, it is undeniable that heating is a key part of the energy transition in Europe. It is also a connecting point for the different energy players in the building sector, and as such it can play an important role in turning our buildings into efficient, green buildings in 2050. That’s why heating is cool. ●

Federica Sabbati is Secretary General of the European Heating Industry (EHI [www.ehi.eu](http://www.ehi.eu)), which brings together companies that are leaders in the production of efficient heating systems. EHI members cover 90% of the European market for all heating solutions from boilers to solar thermal systems, from heat pumps to fuel cells, from radiators to underfloor heating. For today’s changing energy landscape, EHI members are innovating in hybrid and digital solutions, as well as ever more energy-efficient and renewable-based integrated systems.