

Too ambitious for EU? It's high time to modernize heating systems in our buildings.

My not-so-veiled tips to Mr Timmermans

By Federica Sabbati (pictured), Secretary General, European Heating Industry

Today most buildings in Europe have a poor energy performance, and this is preventing their decarbonization.

The good news is that the energy efficiency of our buildings can be greatly improved by accelerating the replacement of installed heating systems, which are largely old and inefficient. The technologies to replace them with already exist: from condensing boilers to electric and gas heat pumps, from hybrids to solar thermal, from micro combined heat and power to fuel cells, from thermal energy storage to digital energy managements systems.

What's more, these technologies are flexible enough to allow the progressive, gradual modernization of your building, with increasing insulation for example. They can integrate new renewable sources of energy: whether it's biomethane or hydrogen, innovative technologies are in the making. Building renovation, as we know, requires considerable financial investment for the average family to carry in one go: replacing a heating system is the investment which can have the highest impact on energy efficiency today – as heating is responsible for about 80% of the energy consumption in a house.

But why do we need to accelerate the replacement rate of installed systems? Can we not just go on replacing them as we do now? To answer this question, let me ask YOU a question: when was the last time that you replaced your heater? If you don't remember, that's probably too long ago. But this means that there

are many heaters in Europe which are too old and we need historical pieces in our museums, not in our cellars.

If you answer to my question “On 3 January, last year” you probably remember it because you spent New Year's Eve in the cold and can consider yourself lucky to have found



an installer on 2nd January for a one-to-one replacement. The bad news is that you probably missed on the great innovation available on the market, which needs a bit of planning ahead.

Let me try with another question: what alternatives to your current heater would you install in your house? If you don't know... that's quite common, because a heating appliance is not a TV which you buy online and just plug in: you need a specialized technician, an installer to check your home, recommend the suitable option and install it for you. A final one: how much are you prepared to spend to save energy and CO₂ at home today: €200, €2,000 or €20,000?

You should know that with €200 you will probably repair a small malfunctioning in your boiler; with €2,000 you may get a new energy-efficient, state of the art heating appliance. Do you want to go for even

more efficient and renewable? The bill may get closer to €20,000, and you may need system adaptations in your home.

Low consumer awareness; high upfront investments; shortage of installers, scarcity of upskilled professionals to match innovation; asymmetry of technical information; replacements required in an urgency situation: these are some of the real issues affecting the replacement rate of inefficient heaters and hence the decarbonization of buildings. Today's European policy framework doesn't target effectively any of these aspects.

In recent years, EU policies have focused on improving the efficiency standards of new products sold in the EU market (so called Ecodesign policy, affecting about 5 million new heating products sold every year in Europe) and setting standards for new buildings (Energy Performance of Buildings Directive), currently 1% of the building stock. This is good, because it ensures that new appliances and our new homes are sustainable.

But these policies are only "greening" the tip of the iceberg: 5 million new appliances over 130 million old appliances; only 1% of European newly built dwellings versus the large majority of old and historical European buildings. And the rate of replacement across Europe is too slow: at the current speed of 4% a year, it will take over 20 years to replace the 72 million inefficient heaters installed in European homes.

It's high time that European policymakers showed ambition in the renovation field.

The potential for energy saving from buildings is huge and would allow Europe to meet the increasing CO₂ emissions cut targets. A 2016 Ecofys study shows how accelerating the modernisation rate of old heating systems from today's slow rate of 4%

a year to 5% – which is a whopping 25% increase in the rate – can bring almost 40% CO₂ savings by 2030, compared to 1990 levels.

But new, ambitious policies are needed. For starters, policies to inform and empower consumers such as Europe-wide communication campaigns on the benefits of energy efficiency; launch the energy label for installed appliances in every European country; require regular inspections of heaters, because inspections are a moment where end-users and experts meet and can plan ahead.

Second, policies to accelerate the dismissal of older systems, such as national scrapping schemes for old appliances below a certain efficiency level or above a certain age. And financial instruments to support the upfront investment in energy efficient appliances, renewable-based ones and renovation.

Third, don't look at the energy transition only with product policy glasses. Think education and training initiatives: we need to attract and upskill many more installers and technicians to put innovation in our homes. We need to adapt the curricula to match the energy transition and to provide lifelong training, because technologies evolve and industry innovates to keep competitive.

Finally, don't think that you can avoid all of this with a single, silver-bullet solution, i.e. imposing only one technology or heating solution for the whole of Europe. It won't work.

The energy transition in the building sector, with its large supply chain could create European jobs while bringing the energy transition in every home, in every school, in every city. It's high time that we prioritize the modernization of the heating stock. This is a not-so-veiled tip to the new Commission Executive Vice President Frans Timmermans for his European Green Deal. ●