ehi
association of the
European Heating Industry

Brussels, 24 March 2022

To: **Frans Timmermans**
Executive Vice-President

Kadri Simson
Commissioner for Energy
European Commission

How the heating sector can REPower the EU

The European heating industry is ready to help Europe's energy system become more affordable, secure and sustainable

Dear Vice-President Timmermans,
Dear Commissioner Simson,

The *REPowerEU* Commission communication has reminded Europe of the importance of completing a rapid clean energy transition. It is devastating that the context in which we are acting is one of war in Ukraine.

Your communication has highlighted that we need to cut our energy dependence from Russia now, through a combination of measures which include using available energy more efficiently, diversifying supply sources and routes and enhancing storage capacity. As producers of technologically advanced, energy efficient and renewable-based heating systems, we fully support Europe's effort to address the emergency, become more energy independent and massively cut greenhouse gas emissions.

The way we source and use energy to heat buildings is highly relevant. Buildings represent about 40% of the energy consumption of Europe. Most of it comes from heating and hot water needs. A large part of the heating appliances installed in Europe's buildings today are natural-gas-based and, crucially, also old and inefficient (almost 60% of the stock). The potential to slash energy consumption from buildings is indeed great.

How can we cut our energy dependence and make our homes ready for the next winters? Certainly, a fundamental measure to quickly achieve these goals will be to accelerate the phase-in of efficient and renewable-based heating systems.

This means, no doubts, boosting the deployment of heat pumps and hybrids. As heat pump manufacturers, we fully support the Commission's goal to double the yearly pace of deployment of these technologies and achieve 10 million installed hydronic heat pumps by 2025. In fact, we have already installed one million hydronic heat pumps in 2021, with a spectacular market growth compared to 2020.

Hybrids, in particular, can either be ready-made by manufacturers as a single solution, or be made of a heat pump installed on top of an already existing modern condensing boiler. They can quickly reduce gas consumption, while allowing the continued, safe operation of the power system at peak times, reducing the need to carry out extensive and costly generation and/or grid reinforcement.

We are conscious of the current financial, technological and supply-chain related barriers to a faster phase-in of heat pump technologies – electric, hybrid and thermally-driven; but there are also possible solutions. We have summarized them in the paper Rolling out heat pumps in support of the

Association of the European Heating Industry (EHI)
EU Transparency Register 95685068542-71
Avenue des Arts 40 | B-1040 Brussels – Belgium | + 32 2 880 30 70
www.ehi.eu

decarbonisation of heating, which we enclose for your convenience. Equally important, the production of electricity should also be decarbonised as quickly as possible, to avoid transferring emissions upstream from the point of consumption to the point of production.

Just like we support every day the growth of heat pumps, we are also conscious that electrification alone will not do it all. Other technologies will be needed, to ferry the whole European building sector to decarbonisation. Differences in building types and insulation levels, readiness of energy grids and generation capacities, as well as different financial availabilities among households, call for a significant role of other fuels and efficient solutions.

On the gas side, the roll-out of modern technologies is already cutting natural gas consumption. As a reference, whenever a household switches away from an old and inefficient non-condensing boiler (still most of Europe's stock), they cut energy consumption by at the very least 20%. Moreover, our appliances [1] can already efficiently use any percentage of biomethane and modern heaters can consume up to 20% hydrogen, mixed with natural gas or biomethane. Likewise, we have developed new technologies which will soon become market-ready and are able to use 100% hydrogen, immediately or thanks to a kit to be installed where and when this gas becomes available for consumers. To put it differently: technology on the heating side is not an issue and the heating sector can immediately act as a driving force for the strong ramp-up of green gases' production. To further reduce consumption, existing or new gas installations can be coupled with solar thermal.

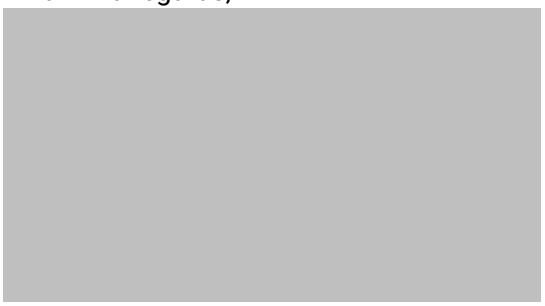
Crucially, by using green gases, the heating sector can significantly contribute to energy efficiency on a system level. The available gas infrastructure and large seasonal storage capacity can balance limitations of the electricity system during winter electricity demand peaks. Hence, they support electrification of heating and transport.

Finally, all of this will also reduce the energy bills of Europeans, as modern heating systems can contribute to shield consumers from the price hikes that we have been grappling with since last summer and have recently reached new heights. These modernisations can be ideally integrated into staged deep renovation pathways. This would quickly attain urgently needed efficiency gains, while taking consumer's financial capabilities and limited capacities in the construction sector into account.

The uptake of modern heating technologies will be essential to achieve our 2030 and 2050 emissions goals, as well as to quickly reduce our exposure to energy imports.

We would be delighted to discuss with you how we can make it happen and remain available to set a suitable meeting schedule.

With kind regards,



[1] Hybrid heaters, condensing boilers, micro-cogeneration units including fuel cells, thermally driven heat pumps. Technological difference will be key to adapt to existing circumstances in member states (grids, buildings, climate zones) and ensure quick consumption cuts.

Association of the European Heating Industry (EHI)
EU Transparency Register 95685068542-71
Avenue des Arts 40 | B-1040 Brussels – Belgium | + 32 2 880 30 70
info@ehi.eu – www.ehi.eu

About the European Heating Industry (EHI)

EHI represents **90% of the European market for heat and hot water** generation, heating **controls** and heat **emitters**, 75% of the hydronic **heat pump** market, 80% of the **biomass** central heating market (pellets, wood) and 70% of the **solar thermal** market. EHI Members produce advanced technologies for heating in buildings, including: heating systems, burners, boilers, heat pumps, hybrids, micro combined heat and power, fuel cells, components and system integrators, radiators, surface heating & cooling.
With an estimated **1.8 million jobs** in its value chain, the heating sector is labour-intensive, local and European by nature. Imports in this sector from non-EU countries are estimated to be lower than 10%.