POSITION PAPER

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EHPA contribution to the Call for Evidence on the Heat Pump Action Plan

On the 28th of April, the European Commission (EC) opened a call for evidence on its upcoming EU Heat Pump Action Plan. This Action plan is to be published by the EC in Q4 of 2023. This paper is the European Heat Pump Association's (EHPA) contribution to this call for evidence. First we explain the context demonstrating the importance and need of an EU Heat Pump Action Plan. Secondly we highlight some specific points of attention for this EU Heat Pump Action Plan.

The need for an EU Heat Pump Action Plan

Over the past decade, the importance of heat pumps has been hailed in the context of climate change. They have been mainly recognized for the highly efficient use of renewable energy and the related much lower emission of CO_2 . While the policy framework has been adjusted over time with more ambitious targets for the use of renewable energy, energy efficiency and CO_2 emission reduction, the economic framework has been left untouched until recently. The resulting mismatch between ambition and speed of conversion is observable in the slow transition speed from the use of fossil energy to more renewables as documented by the Eurostat SHARES tool¹. The average increase of renewables used in heating and cooling has only been 0.6 percentage points for the decade until 2020, far below the target of 1.3 percentage points as set forth in the current European Renewable Energy Directive² or the targeted 2.5 percentage points³ proposed in its future version.

From 2021 onwards, a new momentum was observable.

- 1. Increasingly recognizable effects of **global warming** made change urgently necessary, including a more ambitious focus on heating and cooling in legislation. Several European countries have started to discuss and/or to introduce measures that are giving an economic advantage to heat pumps over fossil based solutions.
- 2. Throughout the **COVID pandemic**, end users spent much more time in their homes and buildings, realizing the need for good environmental quality.
- 3. The war waged by Russia on Ukraine has shaken the belief of "gas as a transition fuel" and has destroyed policy makers and end-users trust in Russia as a reliable partner for energy delivery. This recognition has materialized in conceptual papers like the IEA 10 point plan to reduce Europe's dependence on Russian gas⁴ and powerful policy packages like "REPowerEU"⁵. Consequently, end-users are now asking for alternatives to their fossil based heating systems.

All three effects trigger additional demand at a level unexpected by industry and installers. The combination of this additional demand and supply shortages of components in a global value chain has led to bottlenecks across the heat pump sector. All three effects will mutually reinforce each other and stabilize the trend away from fossil heating and ensure the necessary exponential growth throughout this decade. Continued policy support both regarding targets and supporting their implementation on

² European Parliament and Council: Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) (Consolidated text). <u>http://data.europa.eu/eli/dir/2018/2001/2022-06-07</u>.

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¹ Eurostat. SHARES (renewables). <u>https://ec.europa.eu/eurostat/web/energy/data/shares.</u> Accessed 4.1.2023.

³ European Commission: Proposal for a Directive amending Directive (EU) 2018/2001 as regards the promotion of energy from renewable sources. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0557&from=EN.

⁴. International Energy Agency: A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural gas. <u>https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas</u>. Accessed 1.2.2023.

⁵ European Commission: REPowerEU: affordable, secure and sustainable energy for Europe. <u>https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en_Accessed 1.2.2023.</u>

all levels is needed to overcome them and to accelerate and stabilise deployment. Therefore, a heat pump action plan comes very timely and is highly needed. EHPA strongly supports this initiative by the European Commission and contributes to it also through the heat pump accelerator initiative (see further explanation below). The different elements highlighted by the European Commission in the call for evidence document are very important. EHPA specifically wants to express its support for:

- the intended action on pricing to "creating the right national conditions including a favourable electricity/gas price ratio". The electricity/gas price ratio for the end user should not be more than 2 so that the investment in the heat pump pays off.
- the proposed dedicated heat pump skills partnership. This is crucial to achieve the heat pump targets, especially in the residential sector.
- the link with the Net-Zero Industry Act to further consider and support EU industrial leadership.
- ensuring that heat pumps can be widely rolled out without undermining power-grid stability. 14 utilities, companies and organisations wrote in this statement, that even if the remaining heat demand was fully supplied by heat pumps, the need for additional electricity would be limited compared to today's demand and generation capacity.

Specific comments on the elements in the Call for Evidence document

• Refer to the importance of heat pumps for energy system integration

Next to the different legislative and other EU documents referred to by the EC, which are all very relevant, also the <u>EU Strategy on Energy System Integration</u> should be referred to and used for the heat pump action plan. In specific regarding the additional flexibility that heat pumps can offer to the electricity grid and on the advantages of using large heat pumps in industry and district heating to connect heating and cooling, close energy cycles and recover excess heat.

• Include all types of heat pumps in targets and measures

In the "political context" part of the call for evidence, the EC refers to the REPowerEU plan which "translates into the objective to install at least 10 million additional heat pumps by 2027. In addition, with the phase-out of stand-alone boilers by 2029 under Ecodesign, a total additional deployment of 30 million or more heat pumps by 2030 can be expected as compared to 2020, most of them hydronic (including hybrids)." The focus of the EU Commission is on water-based ('hydronic') heat pumps. However all types of heat pumps play a significant role in reducing our dependence on fossil fuels and achieving our energy and climate targets. As these targets and measures will have positive effects also on heat pumps that heat air rather than water, we estimate that the predicted values for the EU market will double. This comes to an **additional 20 million heat pumps** by 2026 and 60 million by 2030, building on a 2021 stock of about 17 million units today. Heat pumps with an air distribution system play a significant role in the European market especially in more Mediterranean countries like Italy, Spain, Portugal and France and in the Scandinavian countries like Finland and Sweden.

• Increase focus on streamlining legislation

The factors lined up by the EC that risk slowing down the roll-out of heat pumps are indeed the right ones and EHPA fully supports this approach. However additional focus should be put on the need to adopt a holistic approach at a European level across all policy areas involved in heat pump deployment. Legislation should be streamlined to increase the uptake of sustainable heating options, by ensuring that legislation on the energy performance of buildings, Ecodesign, refrigerants, interoperability and demand response matches the REPowerEU targets for a large-scale heat pump roll-out. All legislation affecting heat pumps should be assessed against the REPowerEU targets by 2030 so they do not cause any disruption but actually contribute to that target. Very concretely, the EPBD should not allow to keep installing fossil fuel boilers that are "certified to run on renewable fuels" since that would risk "22 million old individual heating appliances and several thousand large old fossil-based heating units of being replaced by fossil boilers"⁶. The zero emission buildings definition in the EPBD should also take into



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⁶ <u>https://energy.ec.europa.eu/topics/energy-efficiency/heat-pumps_en</u>

account heat pumps connected to an increasingly decarbonised grid. Another very important example is that the F-gas Regulation and the REACH investigation should ensure that enough refrigerants, components and consequently heat pumps will be available for reaching the ambitious REPowerEU targets.

• Implementation and taking stock is key

The legislative rules listed under point 3) are all ongoing or finalised legislative initiatives. So the correct and ambitious national implementation of these is the most important aspect. Therefore, EHPA particularly welcomes the "future monitoring" part of the call for evidence which points out that a system to monitor outputs, results and impacts will be set up as well as a detailed data and monitoring platform. Such a monitoring system of implementation and impact should also focus in specific on the national contexts to avoid national loopholes and ensure that national policy and implementation is in line with EU policy and EU heat pump targets.

• Heat pump accelerator will provide extensive and concrete additional input

Together with the European Climate Foundation, the European Heat Pump Association is leading the work on the EU Heat Pump Accelerator which brings together key stakeholders and decision makers (among which different DG's of the European Commission) to make progress towards overcoming barriers for heat pump deployment. This report with an overview of the solutions discussed by this group to the barriers they identified will be published and officially handed over to Commissioner Simson on the 6th of June. This will be another document providing extensive and concrete additional input for the heat pump action plan. It shows the commitment of the EHPA to strongly support the EC and cooperate to overcoming the barriers for a large-scale heat pump rollout.

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