



# REPowerEU – immediate measures to move the European heating sector closer to decarbonisation

This document aims to outline measures that help accelerate the deployment of heat pumps by positively influencing the necessary market dynamics. It is aimed at policy makers on the EU and national level and connects current and proposed policy measures to the legal environment.

REPowerEU proposes an ambitious target to wean off Europe of (Russian) gas. It includes a fast forward target of 10 million hydronic heat pumps to be installed by 2026 aiming at doubling the installation rate, and a total of 30 million newly installed hydronic units by 2030/31. Extrapolating this to all heat pump technologies<sup>1</sup>, needed to achieve the transition towards renewable and efficient heating and cooling, this would deliver more than 18 million heat pumps by 2026 and 53 million heat pumps by 2031.

The impact of heat pump deployment on gas demand can be simplified as:

- **one million heating heat pumps deployed, reduce demand for gas by about 1.1 – 1.5 bcm** (when installed in new single family buildings), **and about 2 – 2.5 bcm** (when replacing boilers in existing buildings).
- **One million of sanitary hot water heat pumps deployed replaces the need for approx. 0.3-0.4 bcm of gas.**
- **Big heat industrial heat pumps multiply the impact. A 50 MW district heating heat pump has the same benefit as 2 500 to 5 000 smaller ones, depending on whether it is used to supply heat to new or old buildings.**

**This requires unprecedented measures** as achieving these targets will occupy the heating value chain from R&D to manufacturing to planning, installation and maintenance.

This calls for a “**Heat-pump Accelerator**”, inside REPowerEU, to cover five top activity areas:

1. **Decision makers need to create trust in long-term ambition for heat pumps.** Stakeholders (including industry and end-users) need to be convinced of the long-term ambition through strong confirmation and measures by policy makers that align with the REPowerEU message. Heat pumps must become an accepted political choice. Ambition must be kept high for all heat pump solutions.
2. To **make clean heating economically most attractive:** this will ensure demand with all end-users and can be achieved on the EU and MS level.
3. To **avoid disrupting the current market dynamics** through new requirements on components, such as on F-gases, fans or pumps that will reduce the manufacturer’s capacity to accelerate their deployment.
4. To focus on action fostering **quantity and level of skilled staff** both on the installation and planning/design level.
5. To **focus on R&D** including calls for projects on market deployment and new business models.

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<sup>1</sup> Covered in the annual EHPA European heat pump market report and statistics.

The industry is convinced, that the ambition level presented in REPowerEU is feasible, but suggests measures must be taken to shape a policy and market framework that generates demand, leads to increased manufacturing and installation capacity and triggers innovation.

#### **A) measures with a short-term impact on the market**

1. Continue **communication** on the importance of heat pumps within REPowerEU, give high level support to heat pump related events, including communication on heat pump friendly legislation (taxonomy, state aid guidelines, RE target in buildings ... )
2. **Cutting cost to end-users** (both residential and industrial)
  - a. **Reduce VAT on installation and energy used to 0 % for the next 5 years**
    - i. **Role of EC:** Communicate the recent decision on the VAT directive<sup>2</sup> and ensure it is understood as applicable for heat pump installations; provide transparency. Frontload the VAT Directive agreement which called for an end to reduced rates for fossil appliances by 2030 to 2022.
    - ii. **Role of MS:** Implement a reduced VAT rate on clean heating and cooling.
  - b. **Encourage support programs on heating and renovation as part of the SCF and national schemes, including establishing one-stop-shops**
    - i. **Role of EC:** Provide transparency; compile best practice; set-up a “Guidance on establishing one-stop-shops”.
    - ii. **Role of MS:** Give priority for heating and cooling in national action on renovating the building core and heater replacement with heat pumps.
  - c. **Rebalance taxation and levies away from electricity to incentivise electrification**
    - i. **Role of EC:** Finalise an ambitious electricity taxation directive (ETD) proposal.
    - ii. **Role of MS:** Support ambitious ETD and implement as soon as possible.
  - d. **Encourage MS to set up subsidy schemes based on the revised guidance on state aid and to target low-income households.**
    - i. **Role of the EC:** Ensure that eligibility of heat pumps is understood. Collect best practise of impactful subsidies (examples: Italy, Denmark, Germany). Stress the high impact of subsidy schemes where the burden of the upfront cost is taken away for low-income households (as is done in Italy with the super eco bonus).
    - ii. **Role of MS:** Implement subsidy schemes that take away the upfront cost for clean heating for low-income households.
  - e. Push member states to fully **transpose** the **Electricity market design directive** which will eventually enable end-consumers to benefit from new business models based on the flexibility offered by a final consumer
    - i. **Role of the EC:** Address those Member States that have not yet fully transposed the electricity market design directive.
    - ii. **Role of MS:** Fully transpose the electricity market design directive and communicate to the general public about the value of using flexibility including thermal flexibility offered by a heat pump.
  - f. **Push for the introduction of the ETS2 and SCF for buildings to internalise external effects from fossil use**
    - i. **Role of the EC:** Communicate about the importance of ETS2 and SCF for decarbonising buildings and heating.
    - ii. **Role of the MS:** Support an ambitious ETS2 and SCF in the co-decision procedure and call for swift implementation.

<sup>2</sup> COUNCIL DIRECTIVE amending Directives 2006/112/EC and (EU) 2020/285 as regards rates of value added tax - recital 15 and the related point 22 in Annex III



3. **Make financing of investment both for heat pumps and infrastructure easier**
  - a. **Set up an EU wide renovation loan targeted to low-income housing (lower 2 deciles) with a 30% interest over 30 years**
  - b. **Derisk large projects (factory or infrastructure investment)** through an EU wide financial risk mitigation framework by 2023. This should leverage private capital into large-scale renewable heating and cooling projects.
  - c. **Ensure the correct implementation of the EU taxonomy** in among others the taxonomy compass rules, which support the uptake of all technologies contributing to EU renewables targets, **hence all heat pumps put on the market (--> no exclusions based on refrigerant use)** The accurate interpretation of EU taxonomy rules (delegated acts on climate mitigation) affecting heat pumps [are available here](#)<sup>3</sup>
  
4. **Establish an industrial ecosystem for heat pumps**
  - a. **Role of EC:** DG GROW to support setting up an **industrial ecosystem** that can serve as an **accelerator for the development of the heat pump value chain**, ensuring R&D, components and skills are readied for fast deployment.
  
5. **Address the skills challenge**
  - a. **On the EC level:** on top of Pact4Skills, Erasmus+ and other initiatives, make sure all MS work jointly on the provision of training and education programs for heating/cooling/PV (all electric buildings) through an RESkillsEU summit.
  - b. **On the MS level:** encourage re-training of existing heating system installer through smart financial incentives (subsidies paid over time as reaction to the number of HP installed); encourage a revision of vocational training legislation, introduction of a “renewable heat installer” and a new category of a “fitter” (can be obtained through limited, very specific training) to increase the capacity of installers.
  
6. **Industrial/light commercial applications**
  - a. **Chiller upgrade scheme:** “if you need cooling, you get the heat for free” – encourage and incentivise the extension of existing cooling equipment with additional heat exchangers and heat pumps to make use of the otherwise wasted energy.

## **B) Acceleration of measures in legislation currently under consideration**

For a number of **policy measures currently under discussion** in the co-decision procedure, the REPowerEU Communication should be recognized by **fast forwarding specific measures** shifting impact from medium to short term, thus achieving an earlier impact in the market place through accelerated heat pump deployment. Frontloading the targets will require more ambitious action on the Member State level. While the impact of the measures listed below is undisputed, it is left to the policy level, to decide how far forward the different targets and measures can be moved.

1. F-gas Regulation: give priority to the supply of refrigerants to heat pumps, avoid bans and reduced availability of fluorinated gases that would limit heat pump deployment.<sup>4</sup>
2. RED III Art. 3: Increase 2030 renewables target, make mandatory, and introduce a trajectory with interim target levels.<sup>5</sup>

<sup>3</sup> [https://www.ehpa.org/fileadmin/red/03.\\_Media/Position\\_papers/20210510\\_Note\\_on\\_Taxonomy\\_and\\_heat\\_pumps.pdf](https://www.ehpa.org/fileadmin/red/03._Media/Position_papers/20210510_Note_on_Taxonomy_and_heat_pumps.pdf)

<sup>4</sup> COM(2022) 150 final 2022/0099 (COD) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on fluorinated greenhouse gases, amending Directive (EU) 2019/1937 and repealing Regulation (EU) No 517/2014

<sup>5</sup> COM(2021) 557 final 2021/0218 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652



3. RED III, Art. 15: Move the target on renewables in buildings (49%) forward in time.<sup>6</sup>
4. RED III, Art. 23: Increase the renewable energy in heating and cooling target to be in line with the targets of the REPowerEU Communication, make mandatory.<sup>7</sup>
5. EED Recitals 50, 54, 123 and Annex I g, h: move to 2023 that direct fossil fuel combustion will not be eligible energy savings under energy savings obligation<sup>8</sup>
6. EPBD (recast) art. 15(10): move forward in time that Member States shall not provide any financial incentives for the installation of boilers powered by fossil fuels.<sup>9 10</sup>
7. EPBD (recast): general – move forward the zero emission buildings target for all buildings from 2050 to (xxxx) and ensure the zero-emission building definition fully unlocks all heat pump potential<sup>11 12</sup>
8. EPBD (recast): art. 2: reintroduce the full definition of heat pumps to stress their importance for the energy transition in line with the REPowerEU Communication<sup>13</sup>
9. Ecodesign: Review of Lot 1 on space heaters: increase the minimum efficiency requirements for hybrids to 125% in a second tier in the very near future.<sup>14</sup>
10. Ecodesign: Review of Lot 1 on space heaters: postpone the introduction of the compensation method which is not fit for short-term introduction.<sup>15</sup>
11. Ecodesign: Review of Lot 2 on water heaters: reduce the peak temperature to no more than 50°C with the current load profile.<sup>16</sup>
12. Energy Label: rescale the energy label as soon as possible and ensure that the energy efficiency classes are wide enough to differentiate the heat pump technologies.<sup>17</sup>

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<sup>6</sup> COM(2021) 557 final 2021/0218 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652

<sup>7</sup> COM(2021) 557 final 2021/0218 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652

<sup>8</sup> COM(2021) 558 final 2021/0203 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on energy efficiency (recast)

<sup>9</sup> Link to EHPA position on EPBD recast and proposed amendments:

[https://www.ehpa.org/fileadmin/user\\_upload/202203\\_EHPA\\_amendments\\_EPBD.pdf](https://www.ehpa.org/fileadmin/user_upload/202203_EHPA_amendments_EPBD.pdf)

<sup>10</sup> COM(2021) 802 final 2021/0426 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the energy performance of buildings (recast)

<sup>11</sup> Link to EHPA position on EPBD recast and proposed amendments:

[https://www.ehpa.org/fileadmin/user\\_upload/202203\\_EHPA\\_amendments\\_EPBD.pdf](https://www.ehpa.org/fileadmin/user_upload/202203_EHPA_amendments_EPBD.pdf)

<sup>12</sup> COM(2021) 802 final 2021/0426 (COD) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the energy performance of buildings (recast)

<sup>13</sup> Link to EHPA position on EPBD recast and proposed amendments:

[https://www.ehpa.org/fileadmin/user\\_upload/202203\\_EHPA\\_amendments\\_EPBD.pdf](https://www.ehpa.org/fileadmin/user_upload/202203_EHPA_amendments_EPBD.pdf)

<sup>14</sup> Full and detailed EHPA Position Paper on Lot 1 space heaters (November 2021):

[https://www.ehpa.org/fileadmin/user\\_upload/20211115\\_EHPA\\_written\\_comments\\_on\\_Lot\\_1.pdf](https://www.ehpa.org/fileadmin/user_upload/20211115_EHPA_written_comments_on_Lot_1.pdf)

<sup>15</sup> Another EHPA Position on the Compensation Method which includes the experience of 18 EHPA members participating to the round robin tests of BAM:

[https://www.ehpa.org/fileadmin/user\\_upload/20210607\\_EHPA\\_Position\\_on\\_Compensation\\_Method.pdf](https://www.ehpa.org/fileadmin/user_upload/20210607_EHPA_Position_on_Compensation_Method.pdf)

<sup>16</sup> Full and detailed EHPA Position Paper on Lot 2 water heaters (November 2021):

[https://www.ehpa.org/fileadmin/user\\_upload/20211115\\_EHPA\\_written\\_comments\\_on\\_Lot\\_2.pdf](https://www.ehpa.org/fileadmin/user_upload/20211115_EHPA_written_comments_on_Lot_2.pdf)

<sup>17</sup> More explanation is available in the two previous position papers on Lot 1 & 2.