POSITION PAPER

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Innovation Fund pilot auction on industrial process heat decarbonisation

EHPA welcomes the initiative to launch a pilot auction on decarbonising industrial process heat under the Innovation Fund, and the focus on direct electrification and heat pumps as key technologies to reduce GHG emissions from industry.

Key auction parameters

EHPA supports the proposed **scope of the auction**, namely projects that decarbonise industrial process heat through innovative electrification technologies such as heat pumps, electric boilers, resistance heating, induction heating, plasma heating and other solution as well as renewable solutions (solar thermal and geothermal). However, we propose to expand it to include **industrial process cooling**; in practical terms, the temperature requirements proposed below should not change, but projects should be allowed to integrate process cooling and count the related abated CO2 in their bid.

We also fully support not expanding the scope, since the inclusion of other technologies would make the design of the auction too complex to account for their specificities; moreover, other technologies already benefit from significant support by the Innovation Fund (including a dedicated auction for hydrogen under the Hydrogen Bank).

The proposed budget of EUR 1 billion shall be raised over time, especially if split into differentiated baskets, to achieve optimal results and meet the investment needs to decarbonise EU industry

Importantly, the participation in the auction this year is not going to be representative of the participation in future calls, nor of the investment needs in the market. First, companies will have already planned their investments for 2026 before the publication of the Terms and Conditions, reducing the pool of projects that could potentially participate in the auction. Secondly, there are examples of eligible projects that have been selected for different aid schemes, preventing them to apply since cumulation is not allowed. Thirdly, the auction is unlikely to achieve widespread awareness in its first year, especially considering the tight timeline of its launch; therefore, ensuring continuity with additional calls over the next years will be key to raising awareness and hence participation in the auction.

The budget of the auction should be split into **two baskets based on temperature levels** to ensure uniformity of the auctioned good, since process heat varies considerably and is hardly the same ‘good’ at different temperature levels. The threshold should be set at 200ºC.

Considering the average size of projects to decarbonise industrial process heat, the **minimum size** of the bid should be set at EUR 1 million and the **maximum size** at EUR 50 million to ensure that a good number of bids are awarded funding.

Generally, we agree that the **support received via the auction should not be cumulated** with other subsidy schemes to avoid distortion of the auction functioning as it is purely based on price.

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Since projects will be ranked on price only, we agree that applicants should be allowed to factor into their bid any cost that needs to be covered to make the project financially viable. Therefore, **eligible costs** should include:

- Development costs (DEVEX)
- CAPEX
- OPEX, for example in the form of PPAs
- Connection to the grid
- Energy storage (thermal and/or power)
- Investments in demand-side flexibility
- Costs for heat distribution

Regarding the **beneficiaries**, ESCOs shall be allowed to participate in the auction.

The **duration of the support** should be 3 years to reduce the payback period of the projects. All bids under the same basket should use the same duration to ensure comparability in terms of EUR/tonne of CO2 abated during the reporting period.

Auction procedure

We agree with the idea of a **single-stage static auction** that awards a **fixed-premium subsidy.** The premium shall be calculated in **EUR/tonne of CO2 abated** for two reasons: first, industrial process heat varies depending on the temperature levels so using MWh would not allow for a uniform assessment; second, using abated CO2 will favour projects targeting older and more emission-intensive installations.

Currently, the evaluation process for the regular grants of the Innovation Fund assumes 0,202 tons of CO2 / MWh from gas and recommends using 90% LHV **efficiency for gas systems**, which results into 0.224 tons of CO2 / MWh. However, the efficiency for steam systems can be as low as 70% in some cases. To reward projects addressing older and less efficient installations while preserving simplicity, we propose to provide bidders with two options:

- Option A: using a standard of 85% average efficiency in their calculation of GHG savings, with no proof needed.
- Option B: using a lower efficiency rate based on the actual installation addressed, which should be verified through a third-party audit report.

As explained by Fraunhofer, the higher efficiency and demand-side flexibility of heat pumps ensures that **indirect emissions** due to the carbon intensity of the electricity used are largely offset by the reduction in direct emissions. Moreover, as the electricity supply decarbonises the carbon abatement will increase, and the projects prevent lock-in effects by avoiding the replacement of existing systems with new fossil-based equipment. Therefore, the carbon intensity of electricity should be set at zero to ensure simplicity and geographical balance, since the electricity will gradually decarbonise over time in all Member States.

We also welcome the possibility for Member States to participate in the auction via so-called **Auctions-as-a-Service (AAAS)** and support projects that are not selected for insufficient budget. EHPA encourages the Commission to start promoting this possibility among Member States as soon as possible and stands ready to support these efforts.

Qualification requirements

The Terms and Conditions shall include a **minimum temperature threshold** of 70ºC to ensure that projects address industrial process heat and cold decarbonisation.

The EU can count on a strong manufacturing base for heat pumps and there is no existing strategic dependency for equipment/components. Therefore, we believe that the introduction of **qualification requirements for resilience** is not needed and should be avoided.

Similarly, there should be no **qualification requirements for consumption during peak hours or demand-side flexibility**. On one hand, the incentive to consume off-peak remains as a result of market dynamics and ETS prices. On the other, requiring and verifying the actual contribution of the project in terms of demand-side flexibility would significantly increase the complexity of the application, evaluation and monitoring of the bids.

Rights and Obligations

Considering the faster evaluation process and higher maturity of the projects bidding in the auction, it is reasonable to require a **1-year time to Financial Close and 3-year maximum time to Entry into Operation (EiO)** after the grant signature.

The required **completion guarantee** should be set at 4% of the total grant; this would particularly favour the participation by SMEs and small mid-caps, which generally have more limited access to liquidity. In case the Commission decides for a higher completion guarantee (e.g. 8%), a reduced completion guarantee of 4% should be allowed for SMEs.

Lastly, we do not foresee any challenges in **measuring and verifying the actual output** of the projects using heat pumps to produce industrial process heat.

Cross-cutting aspects

Several recommendations in this paper aim at promoting the **participation of SMEs and small mid-caps** in the auction, including the minimum size of the project of EUR 1 million, the support duration of 3 years, the higher payment frequency to reduce liquidity costs during the project implementation phase, and the 4% completion guarantee. On top of this, we encourage the Commission to offer technical assistance for the participation in the auction and ensure a fast evaluation procedure and short waiting times after the auction closes.

In terms of **geographical balance**, projects located in Member States with a low spark gap (ratio between electricity and gas prices) would have higher chances of being successful in the auction. Nonetheless, we recommend not introducing additional criteria to address this unbalance for three reasons:

- It would add complexity and hamper one of the main benefits of the auction, which is simplicity.
- Member States with higher spark ratios would be further incentivised to address the problem.
- Member States with higher spark ratios would be incentivised to participate in Auctions-as-a-Service, since they would be funding projects located in their national territory.

As for the **balance across different industrial sectors**, the differentiation into separate baskets based on temperature levels shall contribute to it; additionally, to ensure further diversification, for each of the two baskets, the budget share finally allocated to a specific sector should be capped at no more than 33% of the available budget.

Lastly, our recommendations aim to strike a balance between introducing differentiating criteria and preserving the **simplicity of the auction**. As rightfully noted by the European Commission, industrial process heat is far more diverse than renewable hydrogen, which is so far the only other good auctioned under the Innovation Fund. Therefore, the Terms and Conditions for this auction will necessarily include more criteria to ensure a uniform evaluation of the projects and achieving the objectives of the auction.

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The European Heat Pump Association (EHPA) represents the European heat pump sector. Our over 170 members include heat pump and component manufacturers, research institutes, universities, testing labs and energy agencies.

EHPA advocates, communicates and provides policy, technical and economic expertise to European, national and local authorities, and to our members.

We organise high level events and manage or partner in multiple projects.

We work to shape EU policy that allows the heat pump sector to flourish, and to become the number one heating and cooling choice by 2030. Heat pumps will be a central part of a renewable, sustainable and smart energy system in a future decarbonised Europe.