

## Written evidence submitted by the UK Noise Association (DHH0001)

### The points we wish to make are as follows:

1. Much less heat – from any source – would be required if a nationwide programme of **thermal insulation** has taken place first.

1a. A nationwide programme of **acoustic insulation** should take place at the same time. Too many people live in homes with poor acoustic insulation.

2. Any measures to decarbonise heat in homes should take full account of **the noise impact** they may have.

#### 2.1. There are noise concerns about heat pumps.

2.1.1. Thomas Lefevre, the director of Etude, which was commissioned by the Greater London Authority to study heat pumps, said, “The noise coming out is not huge, but it is not negligible. People who say they will not introduce any noise risk at all are wrong.” [https://www.london.gov.uk/sites/default/files/low\\_carbon\\_heat\\_-\\_heat\\_pumps\\_in\\_london\\_.pdf](https://www.london.gov.uk/sites/default/files/low_carbon_heat_-_heat_pumps_in_london_.pdf)

2.1.2. Mike Stigwood, the director of the consultancy MAS Environmental told the journal Noise Bulletin (April 2019 edition) that the tonal and low-frequency noise from heat pumps would be a problem.

2.1.3. We have particular concerns about the potential noise impacts on houses of multi-occupation and on blocks of flats.

2.1.4. There is an expectation that the technology might improve as the mass market justifies and stimulates investment in quieter pumps. And there are signs less noisy heat pumps have been developed (and installed in some properties).

2.1.5. Our concern is that pressure to meet a 2024 deadline will mean the installation of heats pumps which cause noise disturbance in a situation similar to the last Labour Government’s rush to get onshore wind turbines installed. That resulted in many turbines which have caused people very real noise problems being given the go-ahead.

2.1.6. At this stage heat pumps should be considered no more than an experimental option. Their noise impacts need to be thoroughly tested.

2.1.7. If it is decided to go ahead with them, they should be subject to tight noise regulations. At present UK regulations lag behind most European countries. [https://www.ehpa.org/fileadmin/user\\_upload/HEAT\\_PUMPS\\_AND\\_SOUND\\_-\\_WHITE\\_PAPER-compressed.pdf](https://www.ehpa.org/fileadmin/user_upload/HEAT_PUMPS_AND_SOUND_-_WHITE_PAPER-compressed.pdf)

#### 3. There are alternatives to heat pumps.

3.1. A recent report from the CBI proposed that all new gas boilers fitted from 2025 should be **“hydrogen ready”**: <https://www.cbi.org.uk/articles/net-zero-the-road-to->

[low-carbon-heat/](#). The CBI estimated that “Cost predictions are falling fast and current suggestions from industry indicate that a hydrogen-ready boiler could cost an extra £50-100 for the consumer, when compared to the equivalent natural gas boiler in the early years of the roll-out. Due to the rapid development of this new technology, it is understandable that specific costs have not yet been finalised by industry. As more people adopt the technology, the cost is expected to reduce to the same as a natural gas boiler.

**3.2.** There is also the option of using surplus energy from a new generation of **nuclear** reactors to heat homes. This is set out in a new report from the Royal Society: <https://royalsociety.org/topics-policy/projects/low-carbon-energy-programme/nuclear-cogeneration/> Its lead author, Robin Grimes from Imperial College, has said that reactors producing 300 megawatts or less could be on the grid by 2028.

#### **4. Conclusion**

It is more important to get it right than rush to meet a particular date or deadline. Although the technology seems to be improving, there remain noise concerns about heat pumps. In our view, it would be better to wait, if necessary, and look to use hydrogen or nuclear generated heat, both of which replace fossil fuels as effectively as heat pumps but without the noise concerns.

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