

Tequs is the first heat pump manufacturer in the world to successfully achieve an Ecodesign certification for high-temperature heat pump space heating (No 813/2013) with a CO₂ heat pump.

We at Tequs are proud to announce that we are the first company in the world to achieve Ecodesign certification for high-temperature comfort heat pumps with a CO₂ heat pump.

- We have completed and received approval for extensive testing, and we are very pleased to now guarantee certification on all our products,” say Joakim and Marius from Tequs with a smile.

Tequs is therefore the first supplier in the world able to offer CO₂ high-temperature comfort heat pumps with Ecodesign certification. The certification has extremely strict testing criteria, which until now have been impossible to achieve for similar products using CO₂ as a refrigerant.

The heating solution of the future

This new certification covers all heat pump models and proves that CO₂ can be used for comfort heating across a much wider temperature range and for many more applications than previously thought possible.

- The original testing criteria are extremely demanding for CO₂ heat pumps, as these pumps are most efficient at a low return temperature (preferably below 40°C) and large temperature lifts. Previously, meeting the requirements with a CO₂ heat pump was considered impossible, something we decided to challenge. The criteria require, among other things, a Seasonal Coefficient of Performance (SCOP) of at least 2.6 throughout the test, starting from 47/55°C at 100% capacity, followed by runs at different partial loads and temperatures. The average COP then becomes the SCOP, which forms the basis for the energy label. Although this is not the optimal temperature range for CO₂, we have nonetheless managed to achieve this result.

CO₂ technology represents an entirely new approach to heating and aligns with the new EU requirements. By 2030, 70 million buildings in the EU are expected to transition from fossil-based heating to heat pump heating, requiring high energy efficiency and the use of renewable energy. Existing buildings must be upgraded to meet stricter energy efficiency standards, including better insulation, energy-efficient heating systems, and smart control systems. The building sector, which accounts for a significant portion of the EU's carbon emissions, is also expected to reduce CO₂ emissions both during the construction phase and throughout the building's lifecycle.

- The high temperatures we can deliver are especially beneficial for commercial buildings, where existing radiator systems can be retained without the need for

extensive replacements. This allows for the safe replacement of old heating solutions with new, environmentally friendly products.

- This is a big day for us. We were confident we would succeed, but for a long time, we thought someone else had beaten us to the finish line. Then we received the news that we are actually the first in the world – an amazing feeling, say Marius and Joakim from Tequs.

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About Tequs

Tequs is a Norwegian technology provider specializing in the development of sustainable heating solutions. With a focus on innovation and energy efficiency, Tequs is a leading player in CO₂ technology and comfort heating. Tequs will begin rolling out its products in Norway and plans to expand into Europe within the next year. The new CO₂ technology provides us with a distinct advantage in replacing fossil-based heating solutions, and we look forward to bringing this green and exciting technology to the market.

Additional Information:

Ecodesign and CO₂ high-temperature comfort refer to sustainable solutions in heating and ventilation, focusing on energy efficiency and CO₂ emission reduction.

Ecodesign: An EU directive that sets requirements for the energy efficiency of electronic products to reduce energy consumption and environmental impact.

CO₂ high-temperature comfort: Heat pumps that use CO₂ as a refrigerant to deliver heat at higher temperatures, making them ideal for older buildings that require high temperatures for comfortable heating.