

Build a **better business** with **energy efficient products** – all you need to know about **EPBD**

The buildings where we live, sleep and work hold enormous potential in energy savings. The revised EPBD – Energy Performance of Buildings Directive – is a validation of best practice in the heating industry and is key to unlock the energy efficiency potential of our buildings and make them future proof for digitalization. All to create huge savings, more jobs and better places to live.



The energy performance

of all technical buildings must now be assessed and documented



Self-regulating devices

must now be introduced in all new build and when heat generators are replaced in existing buildings.



Relevant

for renovation and new builds.



40%

of energy consumption derives from **buildings**.



36%

of CO₂ emissions in the EU derives from **buildings**.



35%

of buildings is over **50 years old**.



75%

of building stock in Europe is **energy inefficient**.

How big an impact will meeting the EPBD have?

ECOFYS study initiated by Danfoss gives the answer.

EPBD in numbers.

EUR 67 billion

Annually savings on energy bills for EU citizens can be achieved by 2030.

82.000.000

cars worth of CO₂ can be saved by optimizing our technical building systems.

Our 3 steps to a **successful EPBD implementation**



STEP 1

Introduce a more effective framework for heating, cooling and ventilation systems



STEP 2

Help people and businesses to control indoor temperature and comfort in homes and offices



STEP 3

Use smart energy monitoring and automated control systems to match actual needs with expected energy performance

**48 - 69%**of the total home **energy use** in EU homes accounts to **heating****500 million****radiators** in EU homes are still fitted with **uncontrolled radiator valves****250 million****radiators** in EU homes with **TRV's older than 20 years**

Danfoss solutions help you **become EPBD compliant**

With the revised EPBD (2018/844/EU), EU countries will have to establish stronger long-term renovation strategies, aiming at decarbonizing the national building stocks by 2050. To achieve the ambitious goals, a number of provisions have been introduced.



Mandatory installation of self-regulating room temperature regulation devices in new buildings or when heat generators are replaced.

New EPBD, Art. 8(1), 3rd subparagraph



Performance optimization and documentation of heating, hot water, cooling, ventilation systems.

New EPBD Art 8(1) and 8(9)



Electronic monitoring that measures systems' efficiency and effective control functionalities as alternative to inspections in MFH > 70 kW.

New EPBD Art. 14(5), 14(6) and 15(5), 15(6)



Danfoss **Radiator Valves and Thermostats**

The range of market-leading Danfoss TRVs offer a wide range of benefits and help users comply with the new legislation:

- ✓ Achieve the desired temperature in each room with automatically distribution of heated water based on actual needs
- ✓ Maintain the desired room temperatures – room by room thanks to the self-regulating function
- ✓ Minimize energy use by responding to internal and external heat load



RA-FN



RA-N



RA-Dynamic



RA-IN



RA2000



RAW



RAX



RAS-C2



RAS-D2

Danfoss **Smart Heating**

Exploit the latest technology to improve heating efficiency:

- ✓ Full control of radiator and underfloor heating via smartphone
- ✓ Higher level of comfort and energy efficiency by adapting room temperature to daily schedule



Danfoss Eco™ / Danfoss Link™

For more information, ask your local provider or visit [Danfoss.com](https://www.danfoss.com)

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