


Chillventa Specialist Forums 2022

Chillventa Fachforen 2022

**CONNECTING
EXPERTS.**





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Danfoss

Improving the energy efficiency of a light commercial application

Talk green. **Walk** green.

EcoDesign Directives

Motivation and target are mentioned in each Directive

Example light bulbs

Directive 244/2009

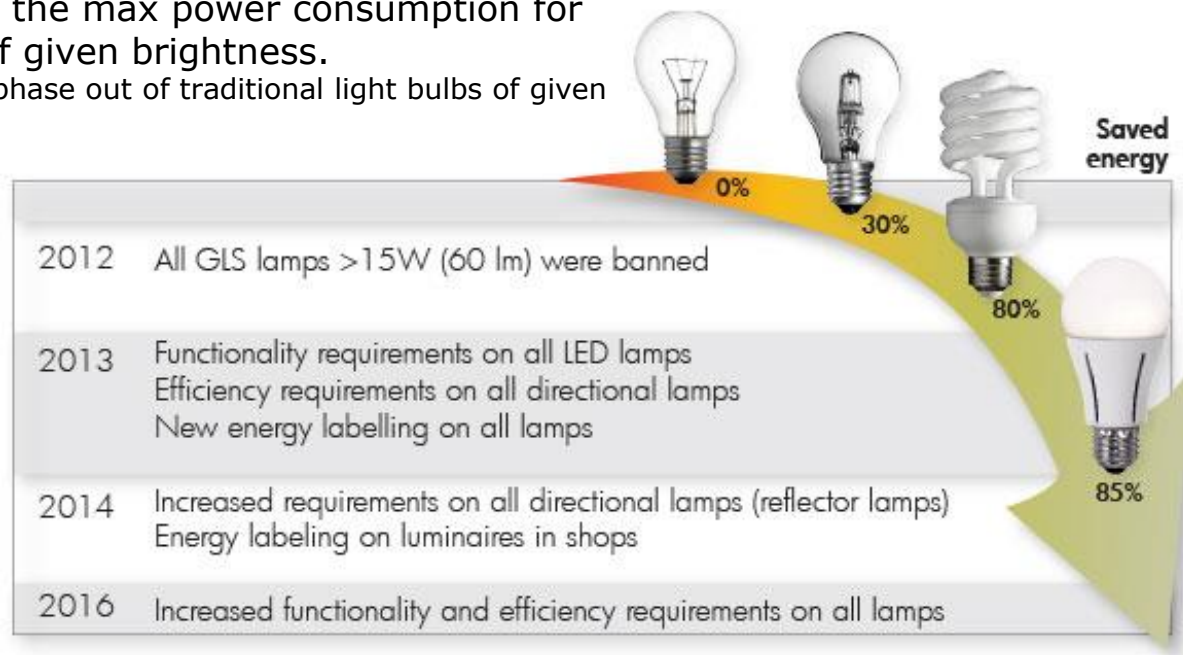
Motivation : avoid increase in energy consumption for light bulbs.

was 112 TWh in 2007 (45 Mt CO₂), would increase to 135 TWh in 2020 if no measures are taken.

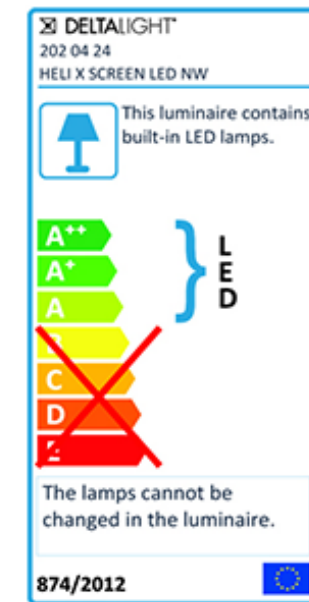
Target: Create savings of 39 TWh in 2020.

This was done by

Limiting the max power consumption for lamps of given brightness.
stepwise phase out of traditional light bulbs of given wattage.



Introducing an Energy label for lamps.



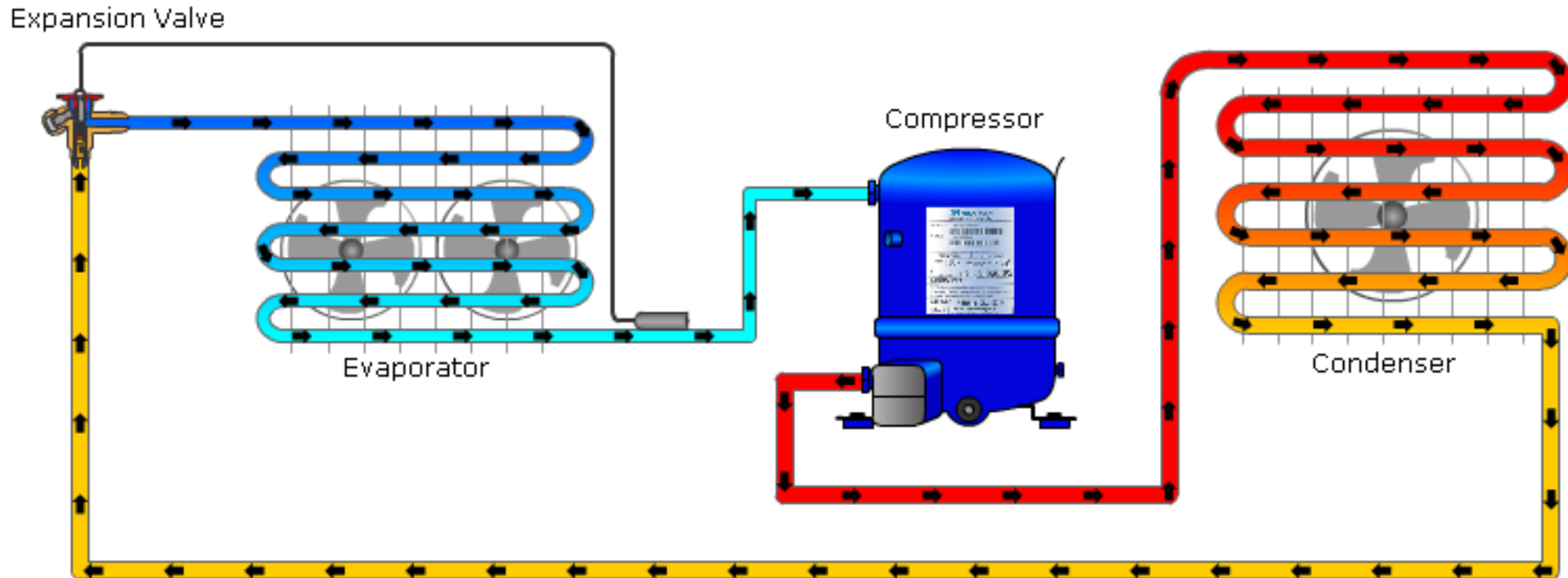
Eco Design Directive

Talk green.
Walk green.



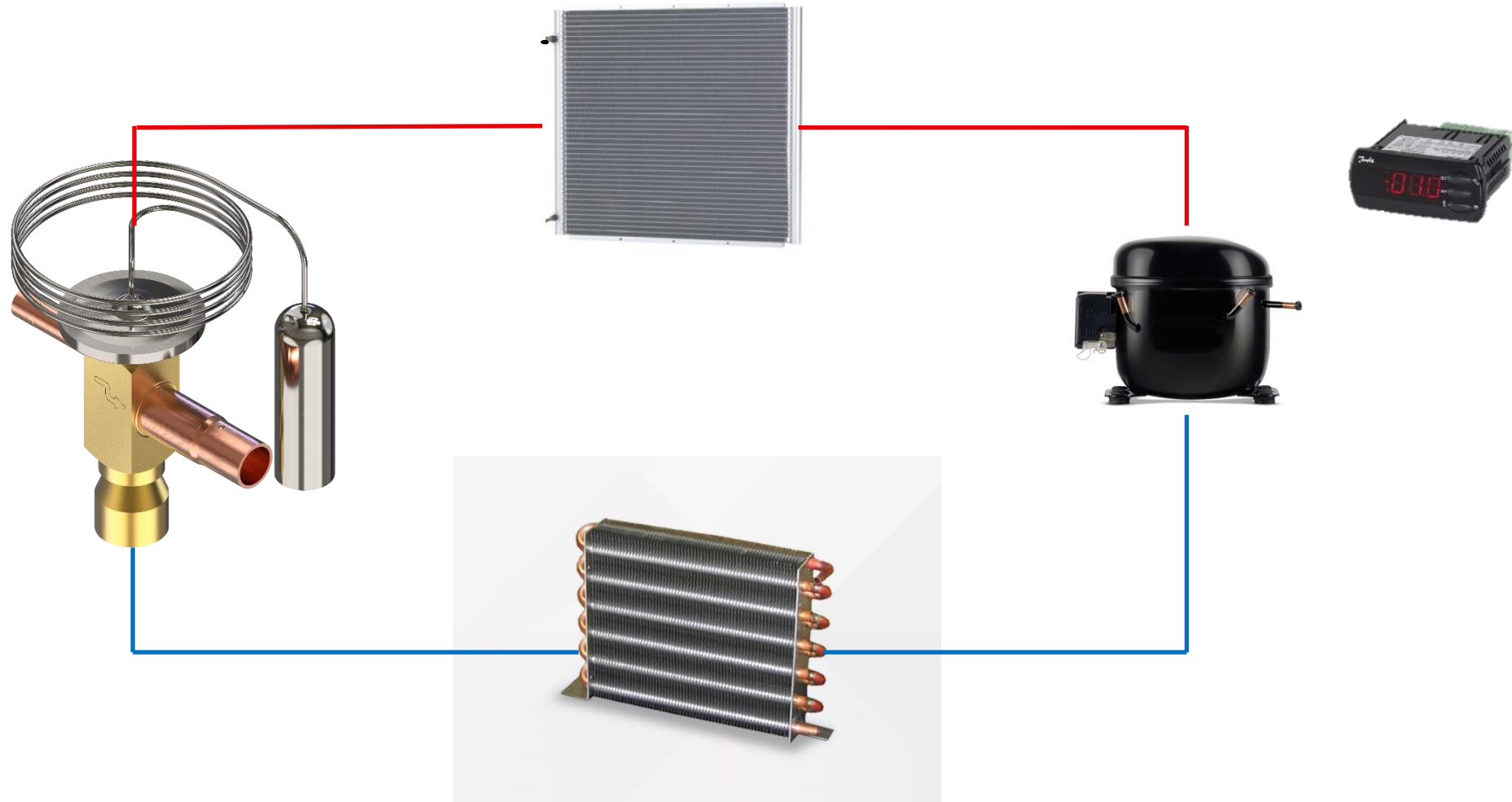
Refrigeration Circuit

Talk green.
Walk green.



Refrigeration Circuit

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Application Development Centers

For customers and Danfoss engineers

Talk green.
Walk green.

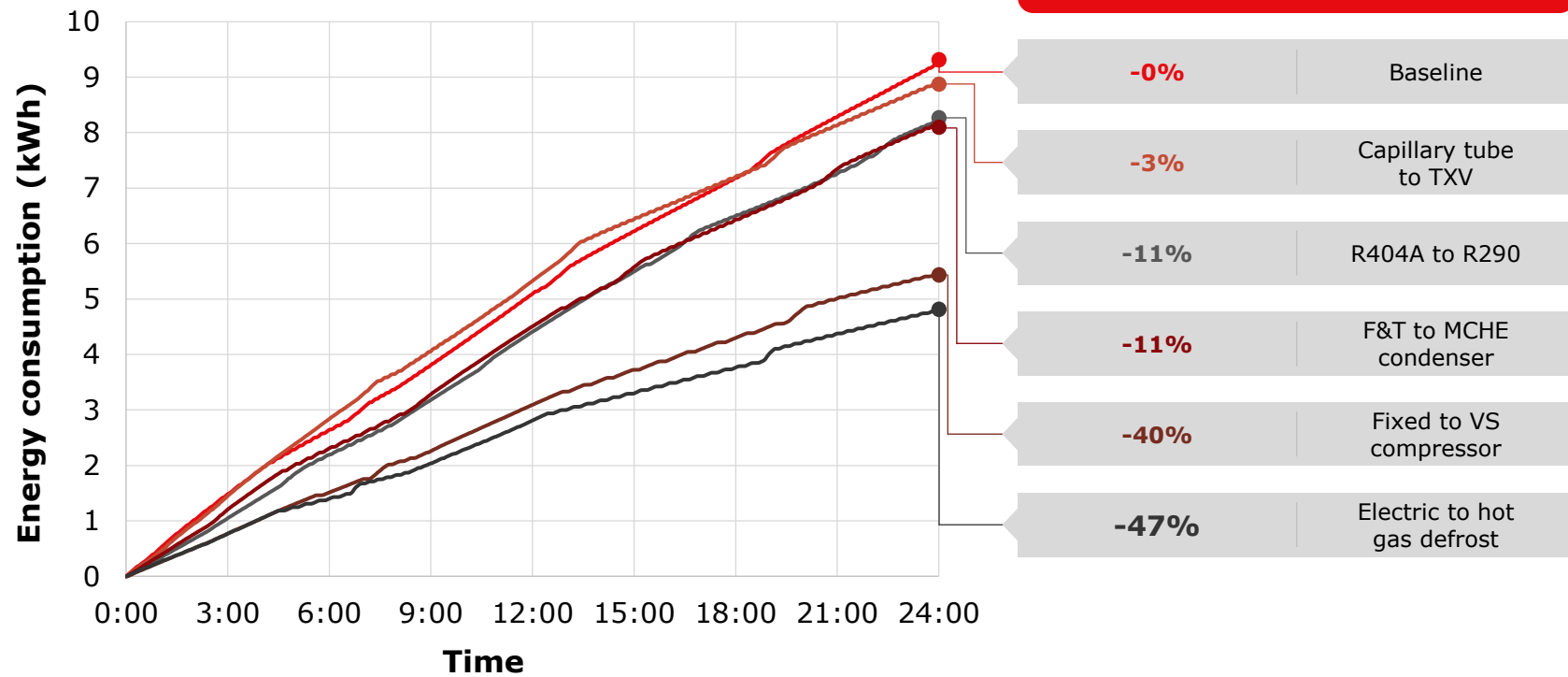


- Equipped for testing units up to a size of ~25 kW in psychrometric chambers.
- Specialized in experimental test set up
- 4 global Danfoss Cooling Application Development Centers across the world
- Laboratory capacity and industry-leading application knowledge
- Refrigeration and Air conditioning products, components and applications
- All Application Development Centers are equipped to test units with flammable refrigerants

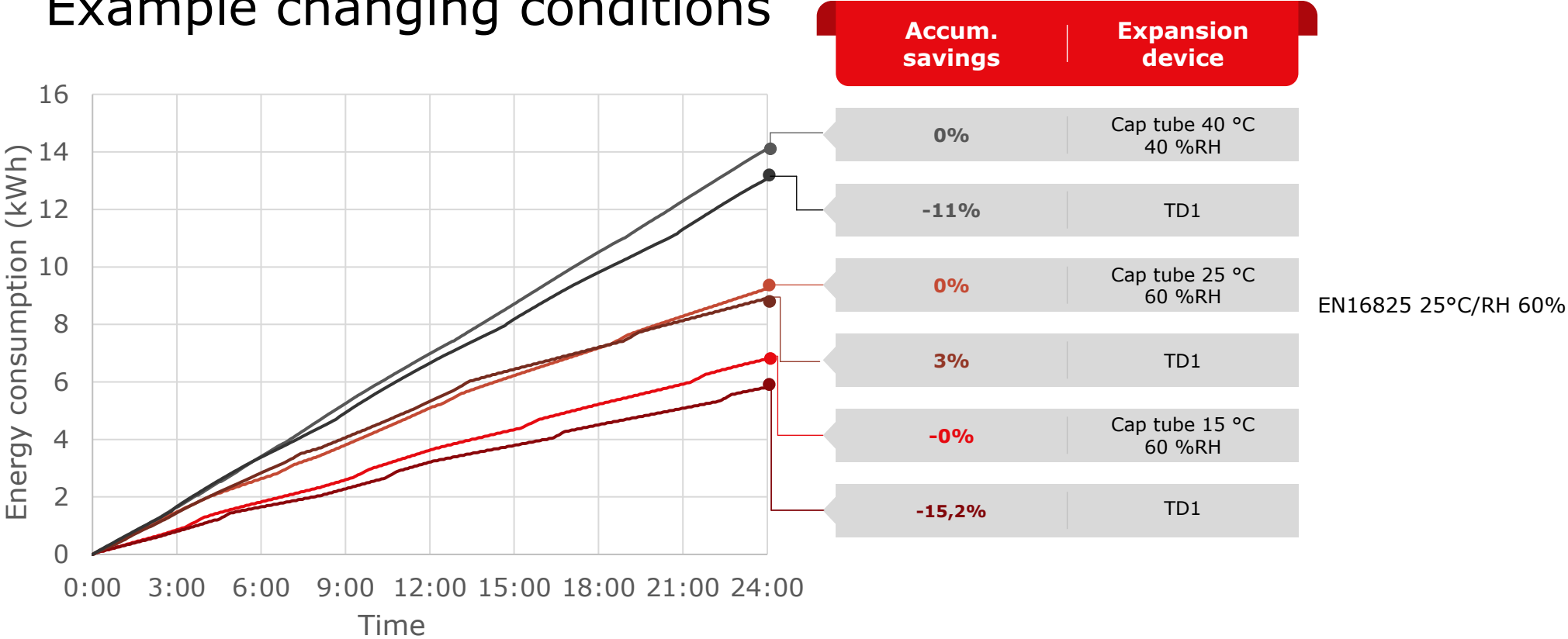
Test results

Talk green.
Walk green.

EN16825 25°C/RH 60%

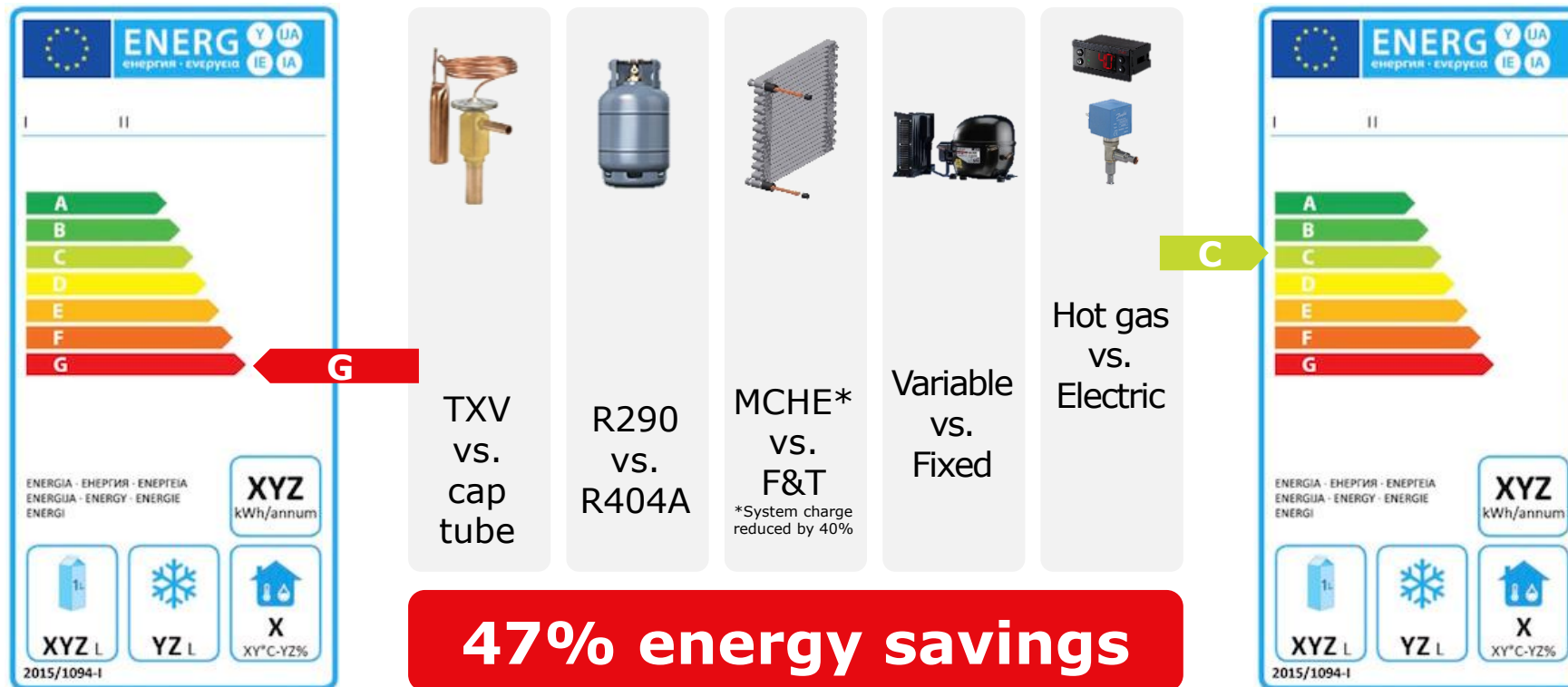


Example changing conditions



Energy efficiency

Talk green.
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Thank you for your attention

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