

Who is EPEE?



EPEE is a broad based HVACR industry association supporting the promotion of energy efficiency and the freedom of refrigerant choice



27 member companies, **12** member associations

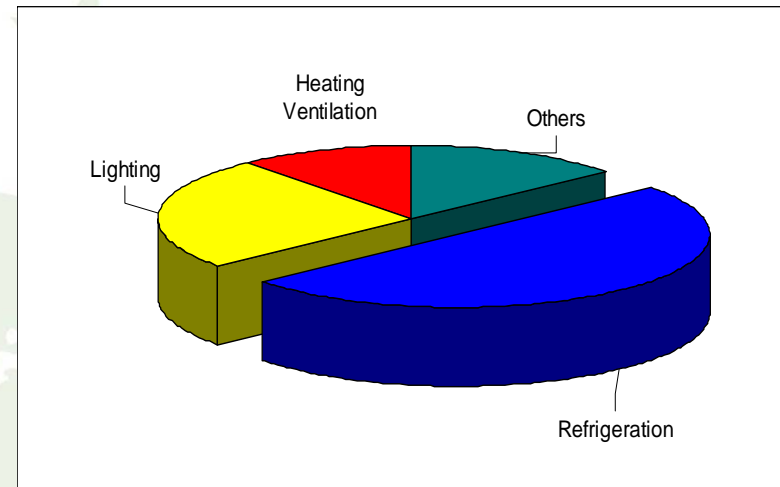
... **producing a/c equipment, components, refrigeration systems, heat pumps, refrigerants**

... employing more than **200,000** people in Europe

... And realising a turnover of more than **€30 billion** in Europe

Eco-efficiency : the key to minimize the climate impact of refrigeration

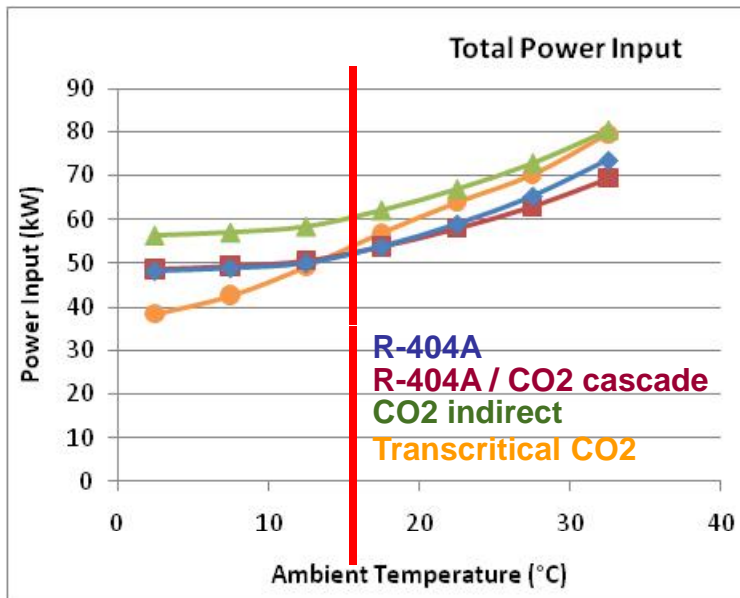
- Eco-efficiency evaluates and compares *case by case* the current and future relative performance and impact of technologies in terms of both **financial and environmental impact** on a global life cycle basis :



A typical split of energy use in a supermarket

- Today, refrigeration typically represents at least 50% of a supermarket's climate impact :
Energy consumption + GHG emissions
(up to 80 %) (up to 20%)
- **Significant reduction potential**
- **Eco-efficiency and reliability** should drive the choice of technology adapted to each application

A holistic and realistic approach to reach the ultimate goal : reducing *global* GHG emissions



Always remember the ultimate goal: To reduce the GLOBAL climate impact of installations !



1. Energy efficiency

- ➔ Don't sacrifice energy efficiency to save direct emissions
- ➔ These are addressed through leakage control and lower GWP refrigerants
- ➔ CO2 only performs best at $< 15^{\circ}\text{C}$

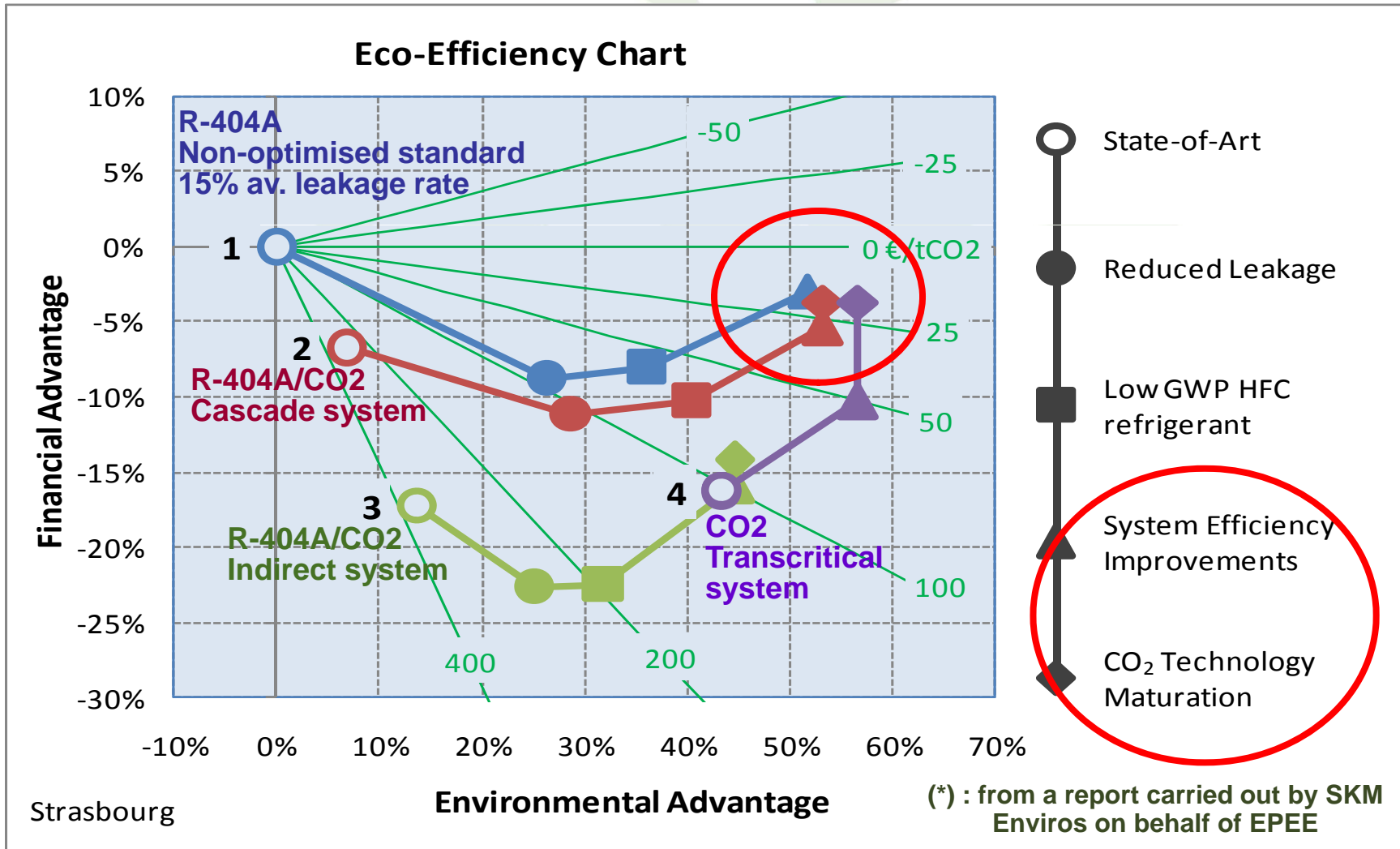
2. GHG emission reductions

- ➔ Don't sacrifice **immediate reductions**: Lower GWP solutions are available immediately.
- ➔ Avoid forcing technology down the wrong path

3. Safety, reliability, operating conditions and cost

- ➔ There is no "universal refrigerant"
- ➔ Don't jeopardize HCFC phase-out, retrofit and refurbishment projects

CO2 technologies : the barriers to overcome to make them globally efficient and competitive (*)



Thank you for your attention!

The conclusions from the SKM Enviros study apply to the types of **supermarket refrigeration systems and conditions of use** investigated. It should not be assumed that these conclusions can be directly applied to other types of refrigeration or air-conditioning systems.

More information:

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European Partnership for Energy
and the Environment