

**Market trends
Advansor
2015**

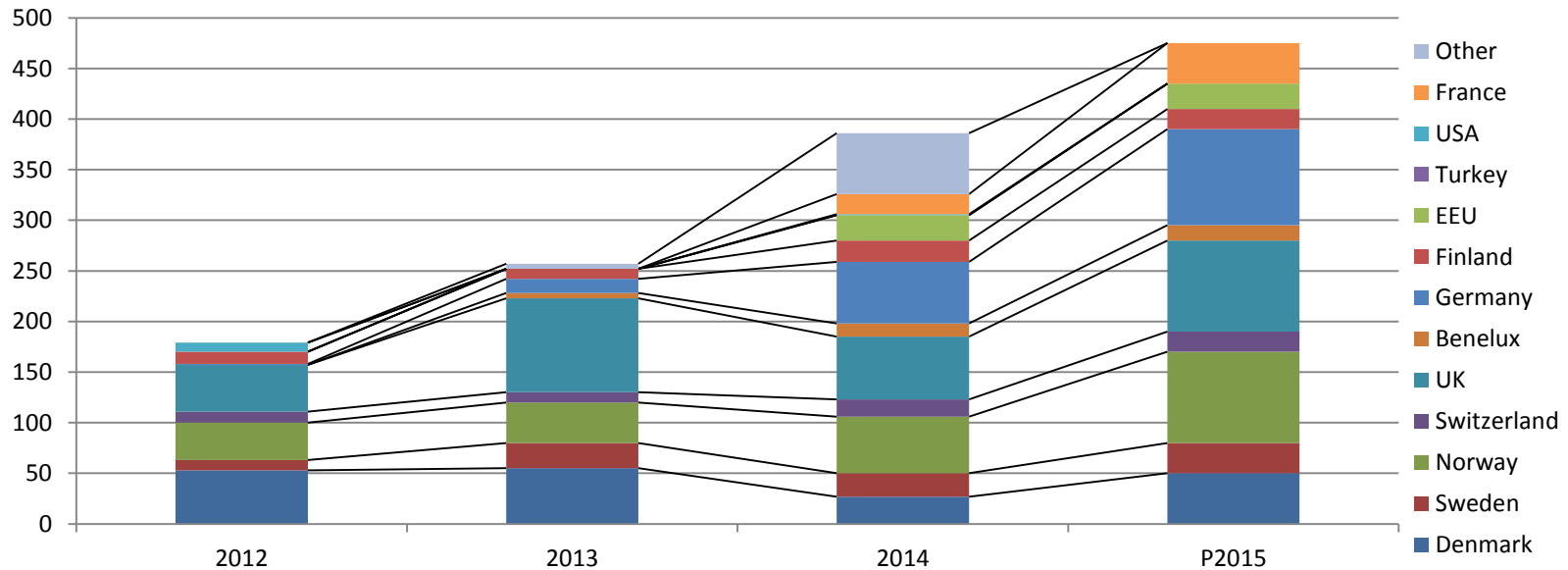
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ADVANSOR  TM
by Hillphoenix



Extended Geographic Stretch of Supply and trends

- End of 2014 : Over 1.300 transcritical CO2 systems in more than 17 countries from Advansor
- Growing interest in Central Europe: France, Belgium, Germany, Poland, Italy and Romania
- 10 of Europe's TOP 15 Retailers are installing transcritical CO2 systems from Advansor
- UK, CH and Scandinavia: Transcritical CO2 systems are becoming the preferred technology
- Strong continued growth in TC CO2
- 4 strong trends:
 1. Compliance with the EU Fgas (low GWP solutions required)
 2. Focus of energy cost and energy consumption in warm climate: increasing application in SE and EE.
 3. Focus on 1st cost and small footprint stores and standard solutions!
 4. More technology on board (one Environmentally Sustainable system does all) - Sigma



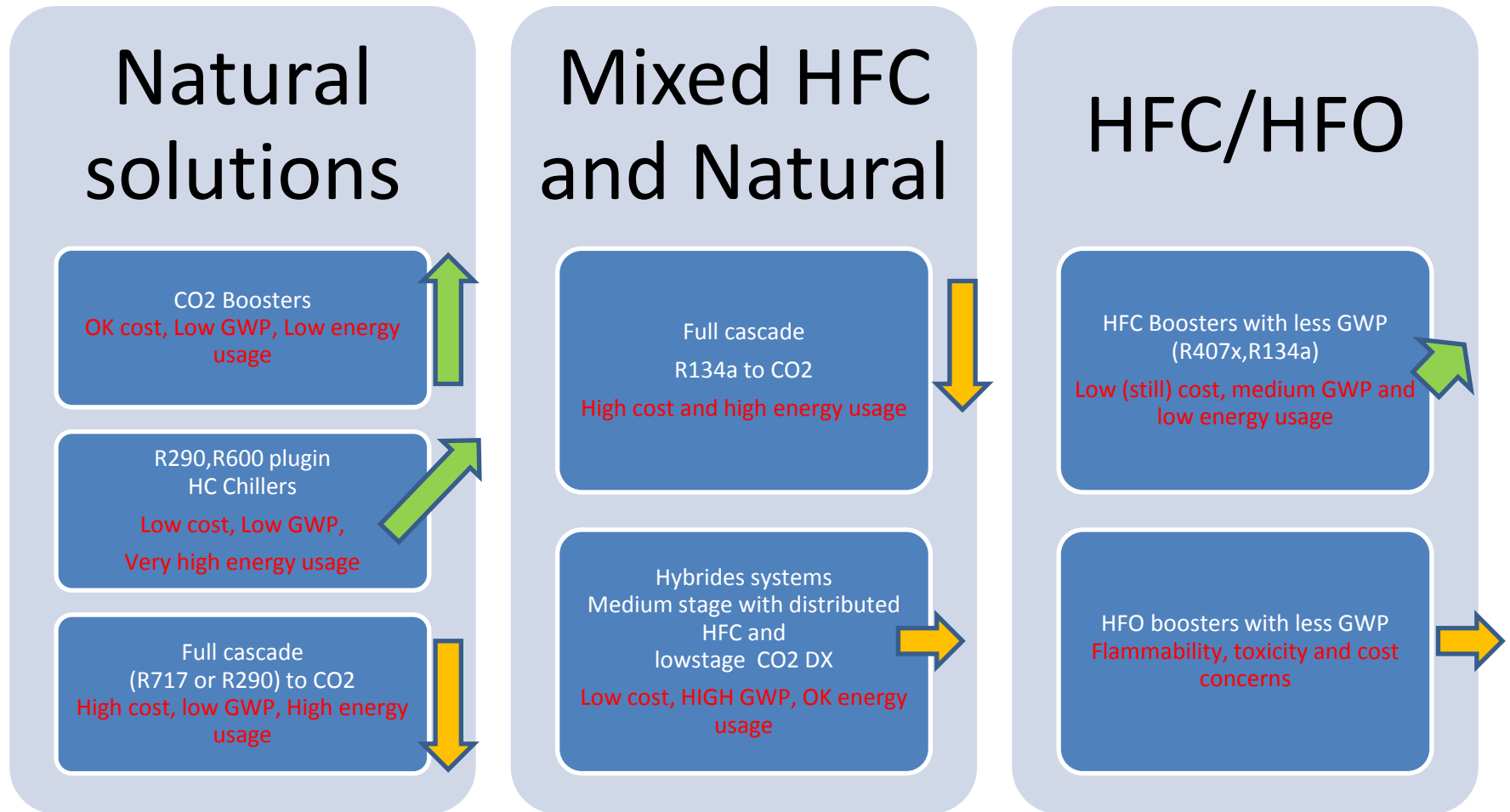
Trend 1 - F-gas directive

1. Avoid leakages and emissions (Containment)
 1. Leak checks
 2. Education, qualification, certification of people
 3. Service of equipment
 4. Control, auditing
 5. Tax

2. Avoid use of HFC (Phase down/out)
 1. Phase-down target by 2015-2030
Gradually declining “cap” on bulk HFCs
 2. Bans

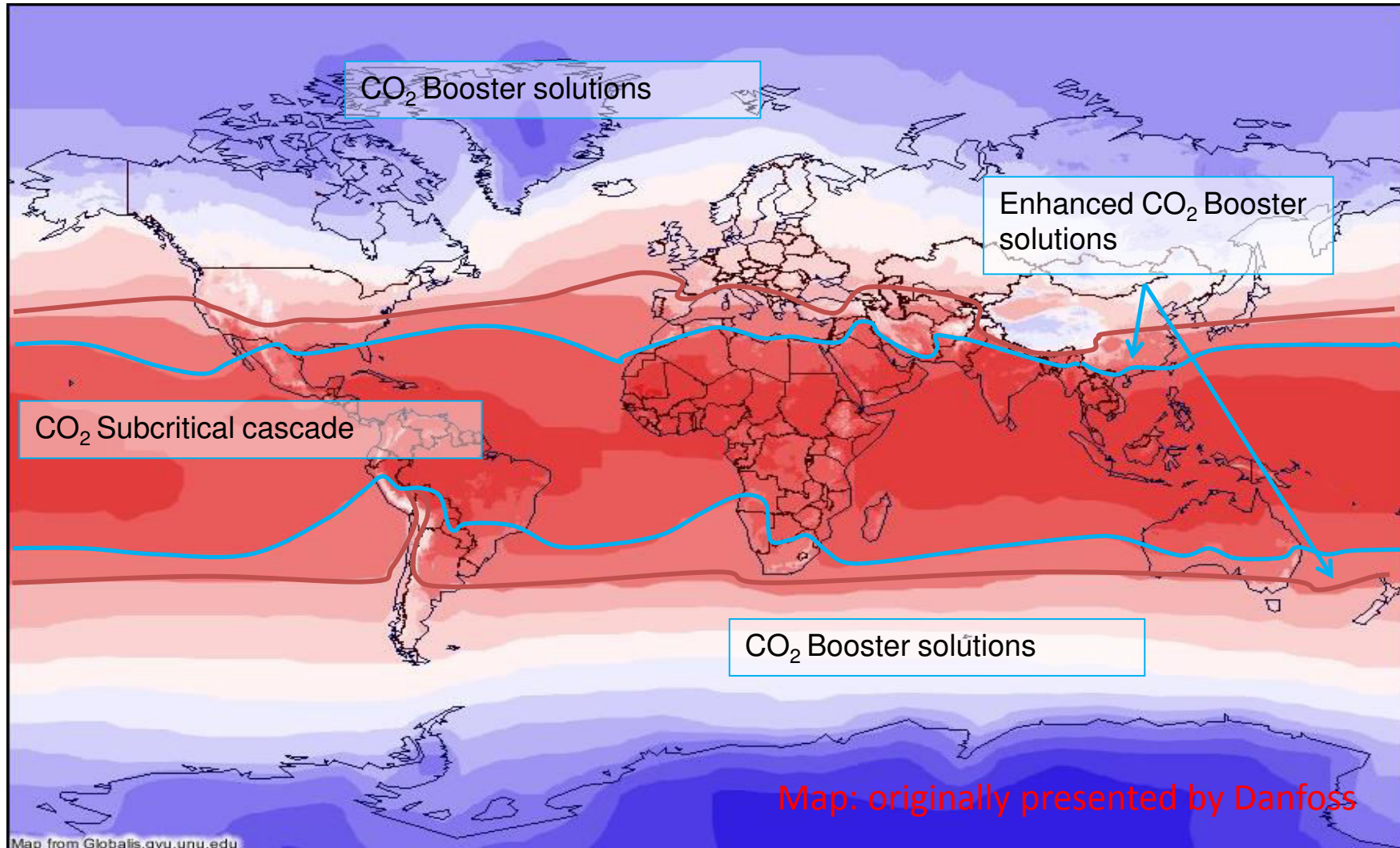


Trend 1) European Refrigeration Technologies Supermarkets towards F-gas compliance



Trend 2: Energy and hot climate tech

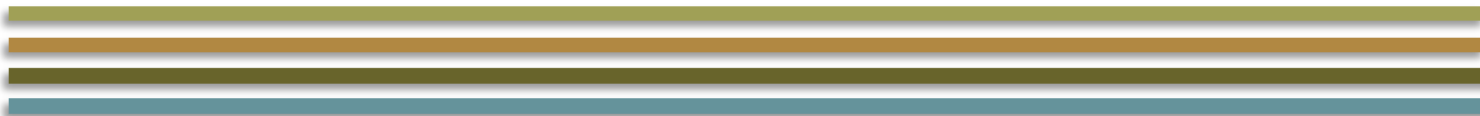
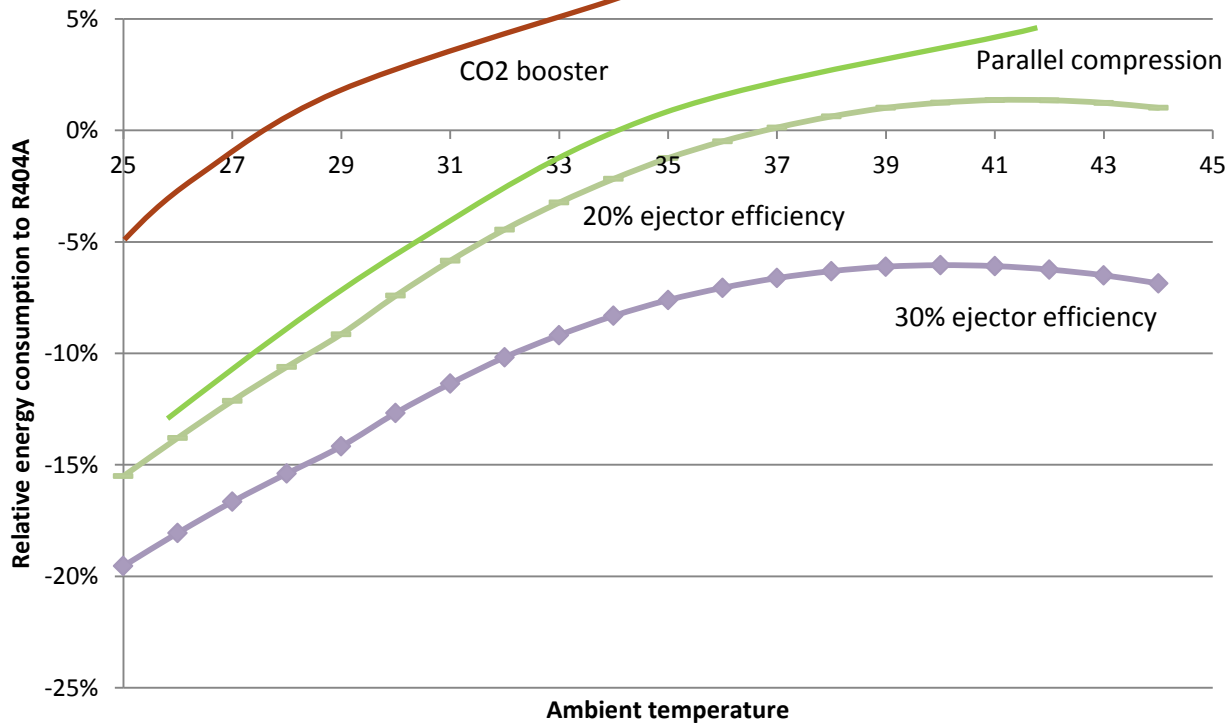
Parallel compression, adiabatic, sub-cooling, (ejector is not included in enhanced solutions)



Trend 2: Ejector – improvement in hot climate

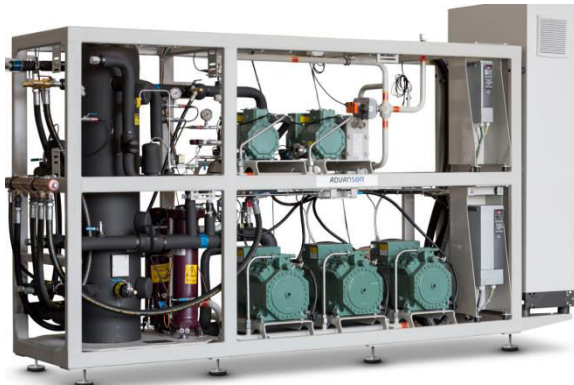
- Danfoss Ejector (see the picture) combined with parallel compression
- Testing phase Q1 2015

Energy consumption compared to R404A



Trend 3) Lower 1st with standard solution products

compSUPER



ValuePack



CDU



Packs



Trend 4: More technology and best in class performance on board

SIGMA – all in one Advanced technology for better total performance

- Plug & Play Total Energy Management System
 - MT & LT
 - AC
 - Full heat reovery with A2W heat pump
- Best in Class Energy Performance with Parallel Compression and in the future developments also ejector.

