

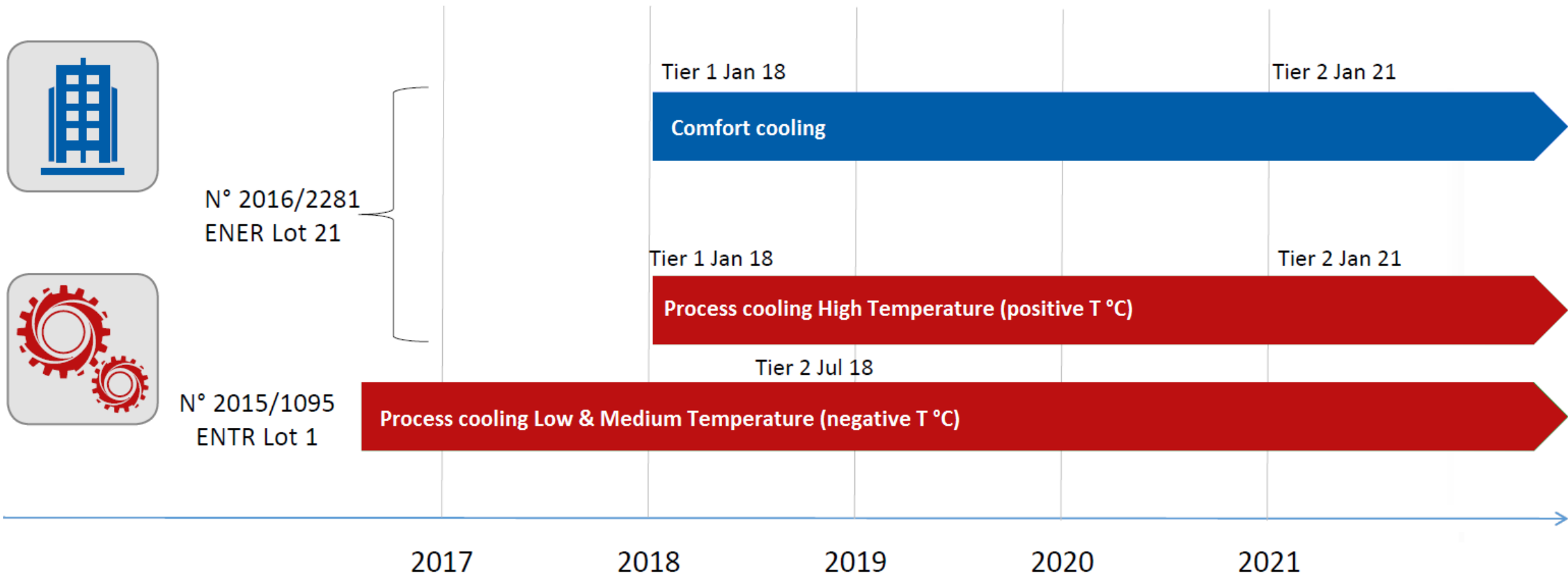


EUROKLIMAT[®]
Cooling System Solutions



European Directive 2009/125/EU - Ecodesign

Regulations for Liquid Chillers

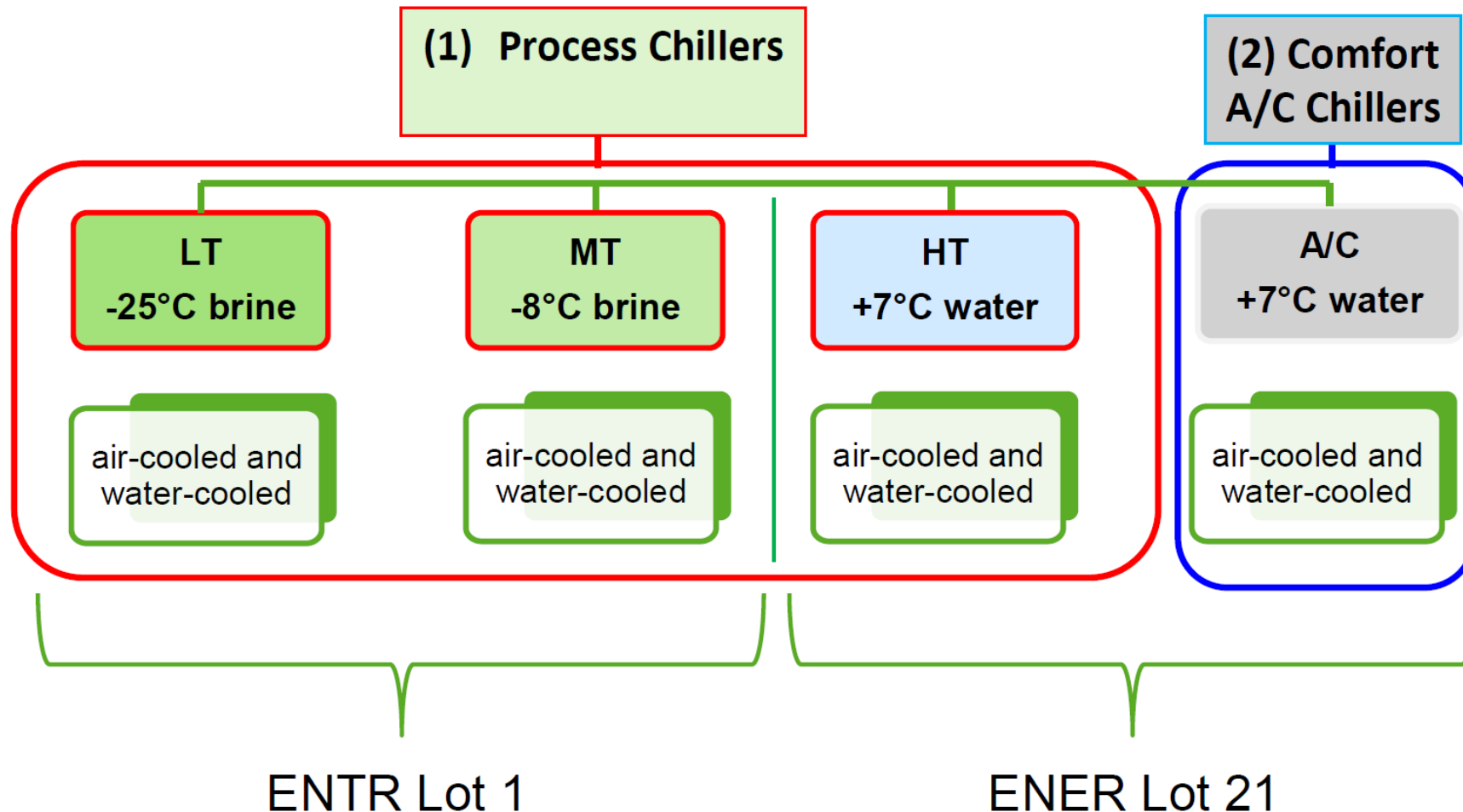
Depending on cooling application



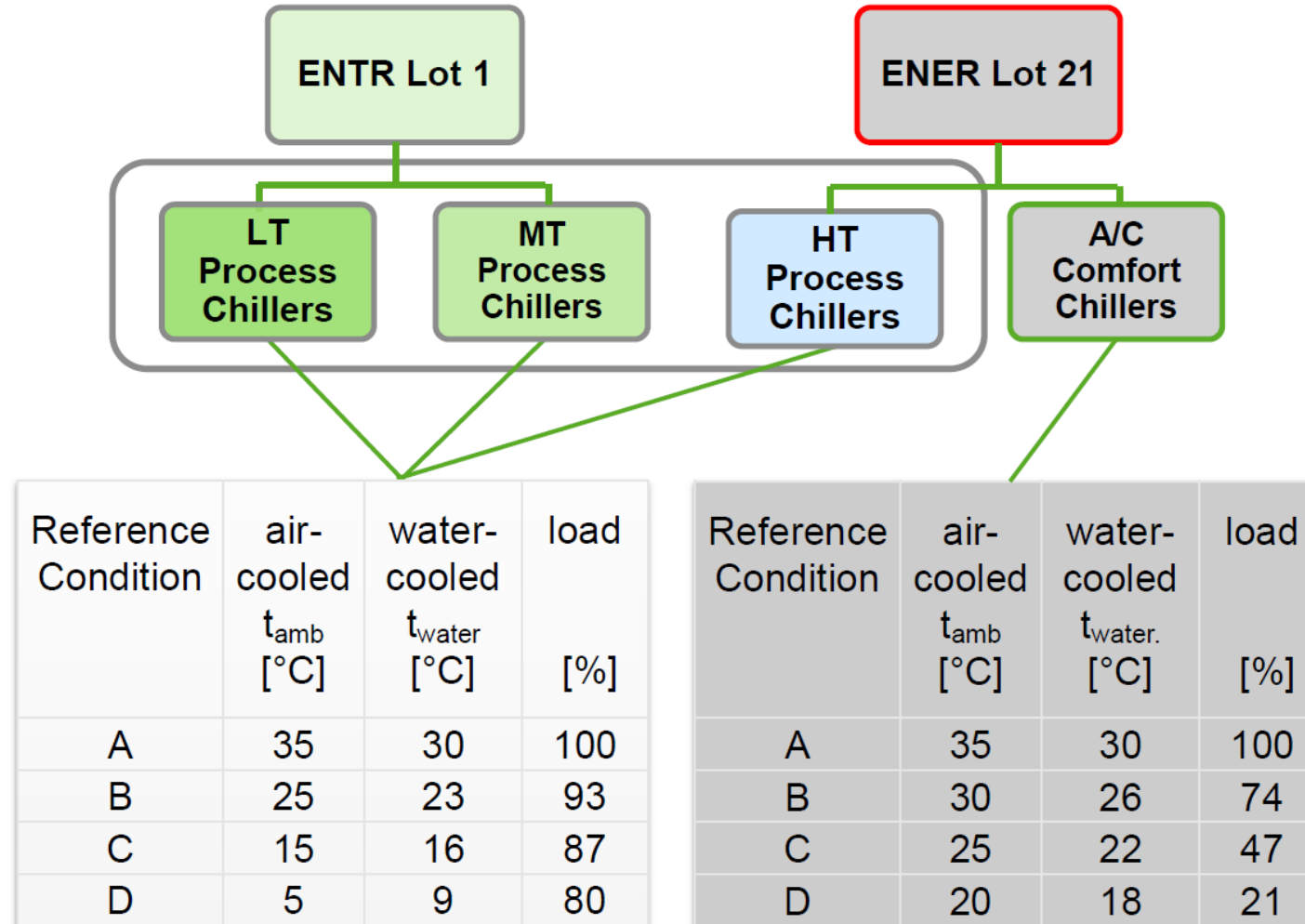
Efficiency requirements by cooling application

| |  COMFORT COOLING |  PROCESS COOLING |
|---------------------------------|---|---|
| Seasonal Efficiency requirement | SEER = Seasonal Energy Efficiency Ratio or $\eta_{s\ cool}$ (primary energy) | SEPR = Seasonal Energy Performance Ratio |
| Regulation scope | Up to 2000 kW | |
| | Outlet $\geq 2^\circ$ | High Temp, ≥ 2 Outlet $\leq 12^\circ$ Med Temp, Outlet -8° Low Temp, Outlet -25° |
| Measurement standards | EN 14511 EN 14825 | |

Application ranges for chillers



Load and Temperature profiles for chillers



Reference Standards

- [European Directive 2009/125/EU](#) - Ecodesign requirements for energy-related products
 EUR Lex
- [Commission Regulation \(EU\) 2016/2281](#) - Ecodesign requirements for design of units
 EUR Lex
- [European Standard EN 14825:2016](#) - Testing and rating at part load conditions and calculation of seasonal performance
 UNI
- [Commission Regulation \(EU\) 2015/1095](#) - Ecodesign requirements for design of process chillers
 EUR Lex
- [Commission communication 2017/C 229/01](#) - Implementation of Commission Regulation (EU) 2016/2281
 EUR Lex



Thank you.