
Energy savings and HFC reduction

Datacenters can achieve double green benefits

Fifth International Symposium on Non-CO2 Greenhouse Gases (NCGG-5)

Peter Uges (StatiqCooling)

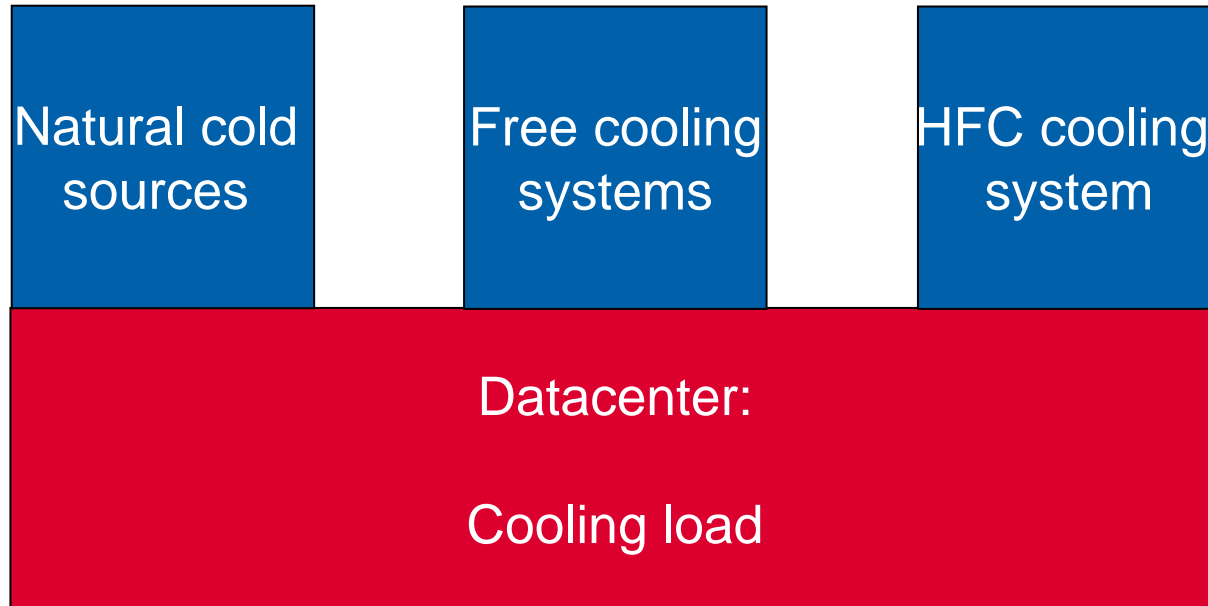
Maus Dieleman (SenterNovem)

Wageningen, June 30 2009

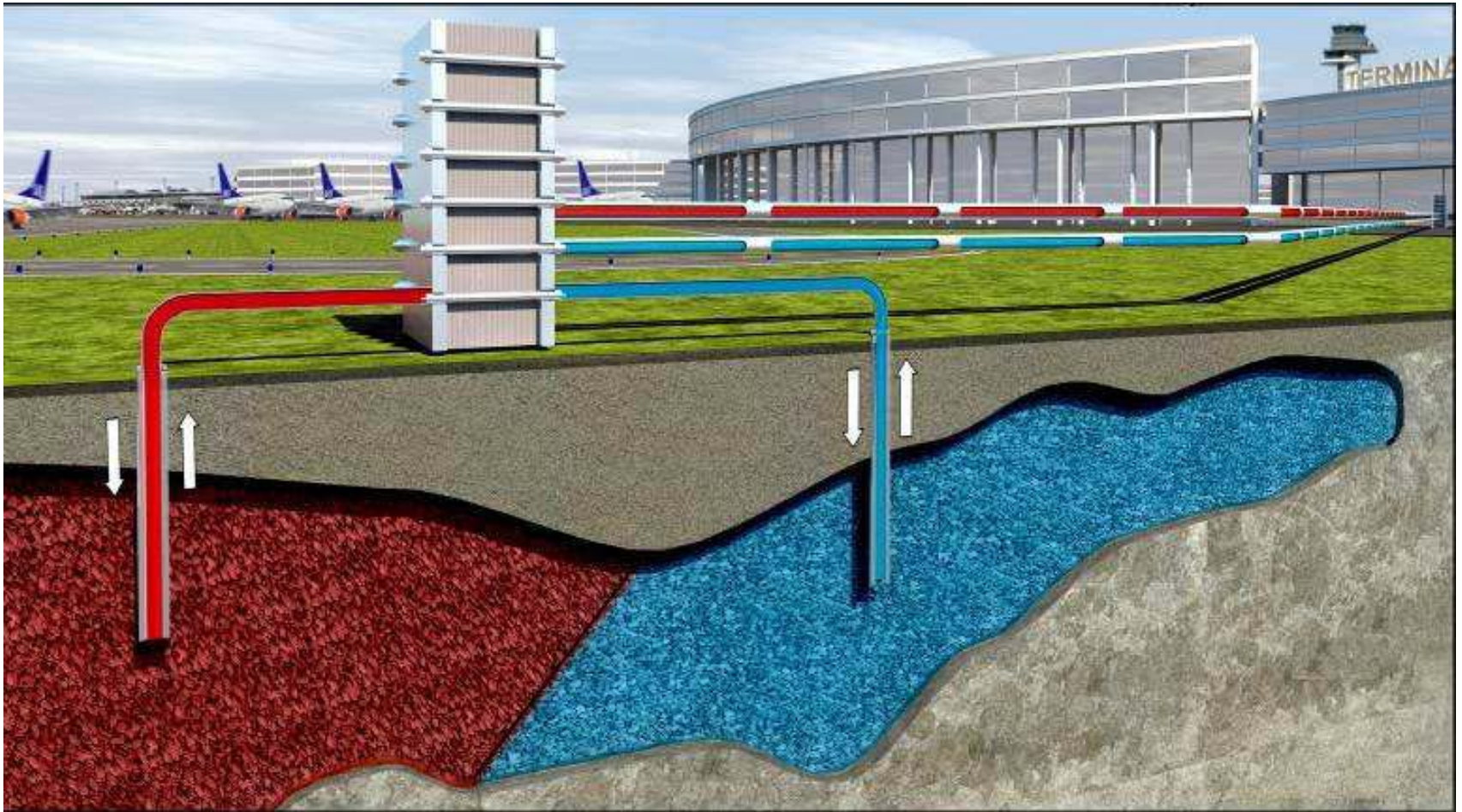
The benefits for datacenter cooling lined up

- How to cut greenhouse gases in datacenters (good-better-best)
- Energy savings
- HFC reductions
- New: Water as refrigerant
- Demonstration project: datacenter Local Host in Amsterdam

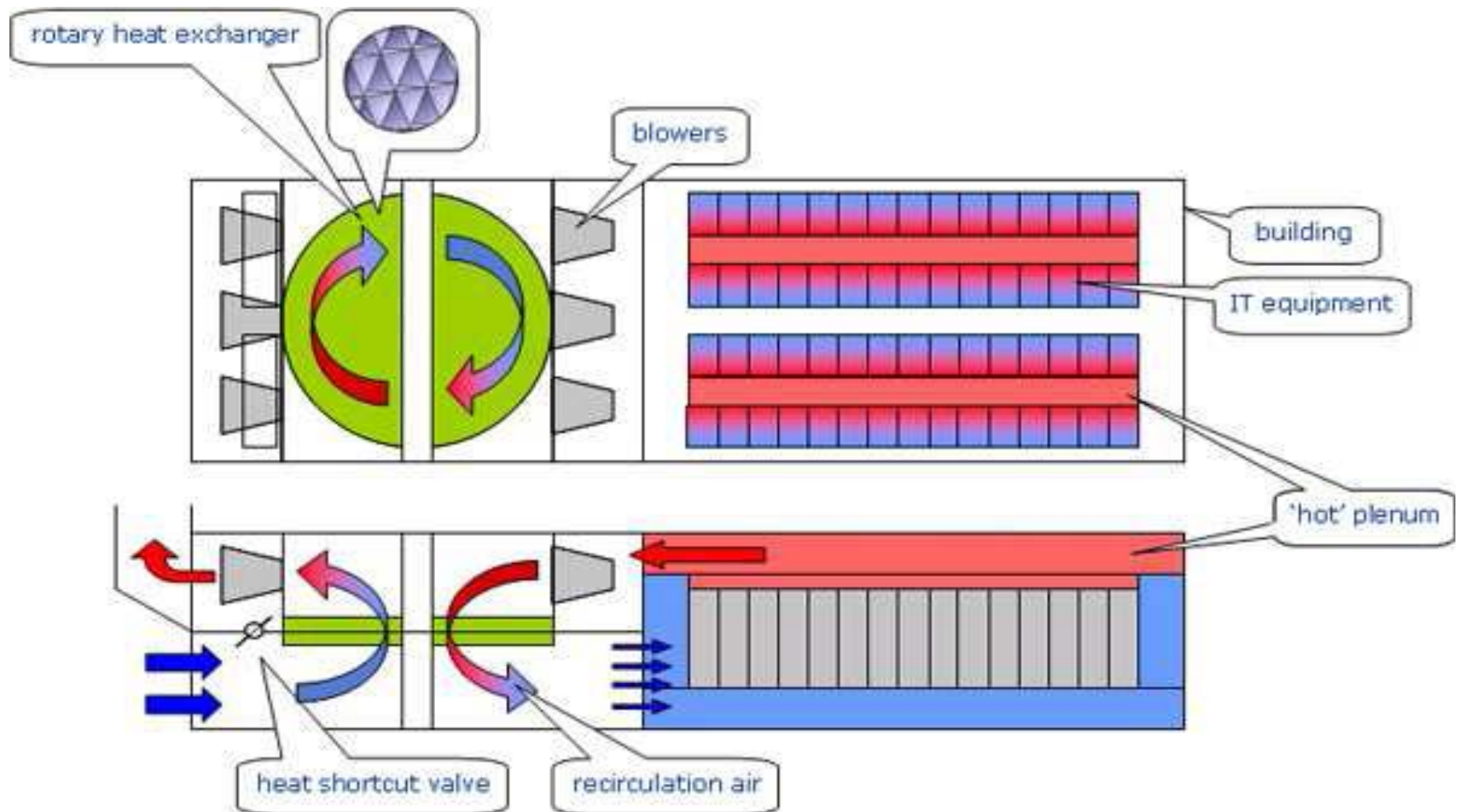
HFC reduction: by free cooling systems and natural cold sources



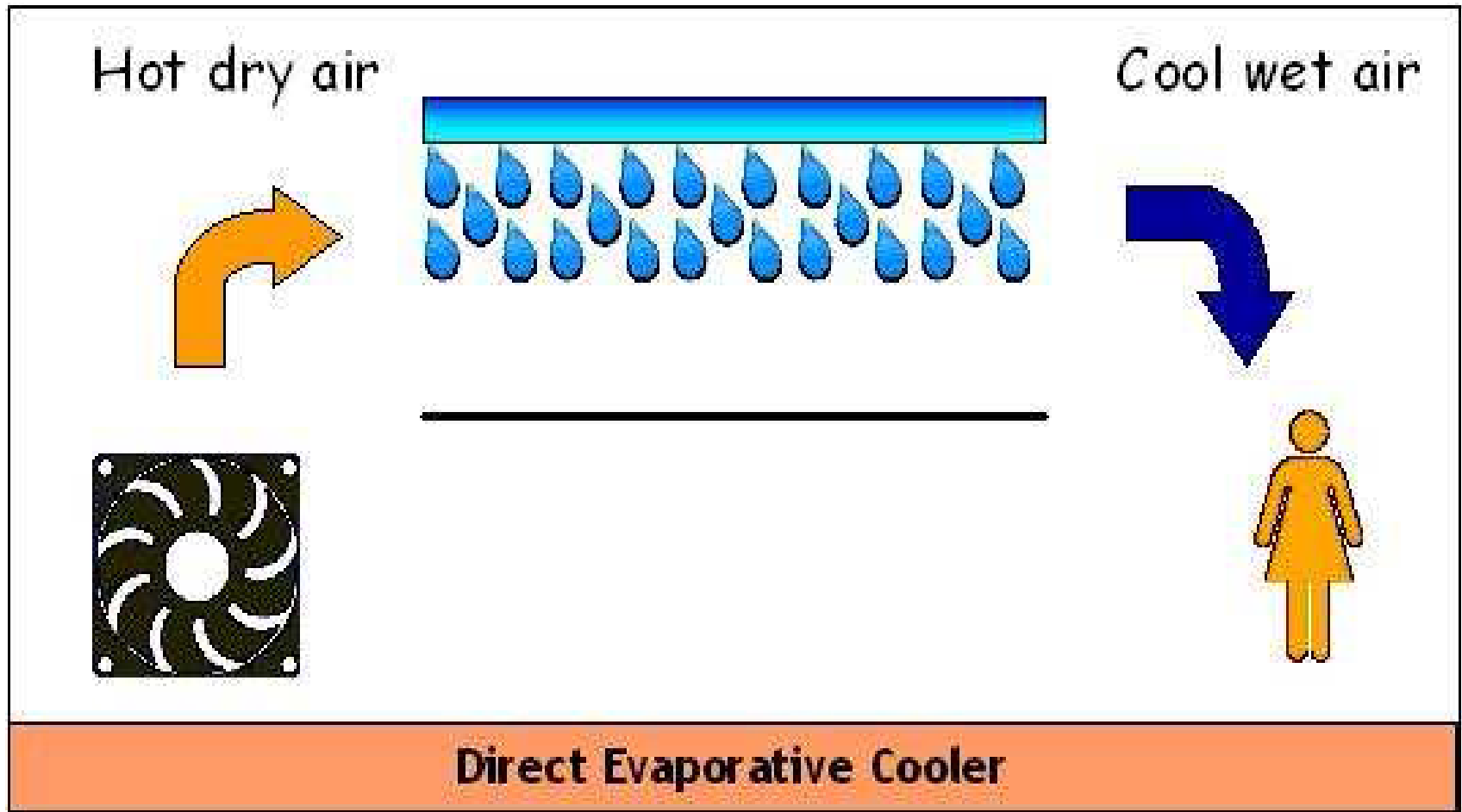
GOOD: natural sources: heat and cold storage, but energy balance?



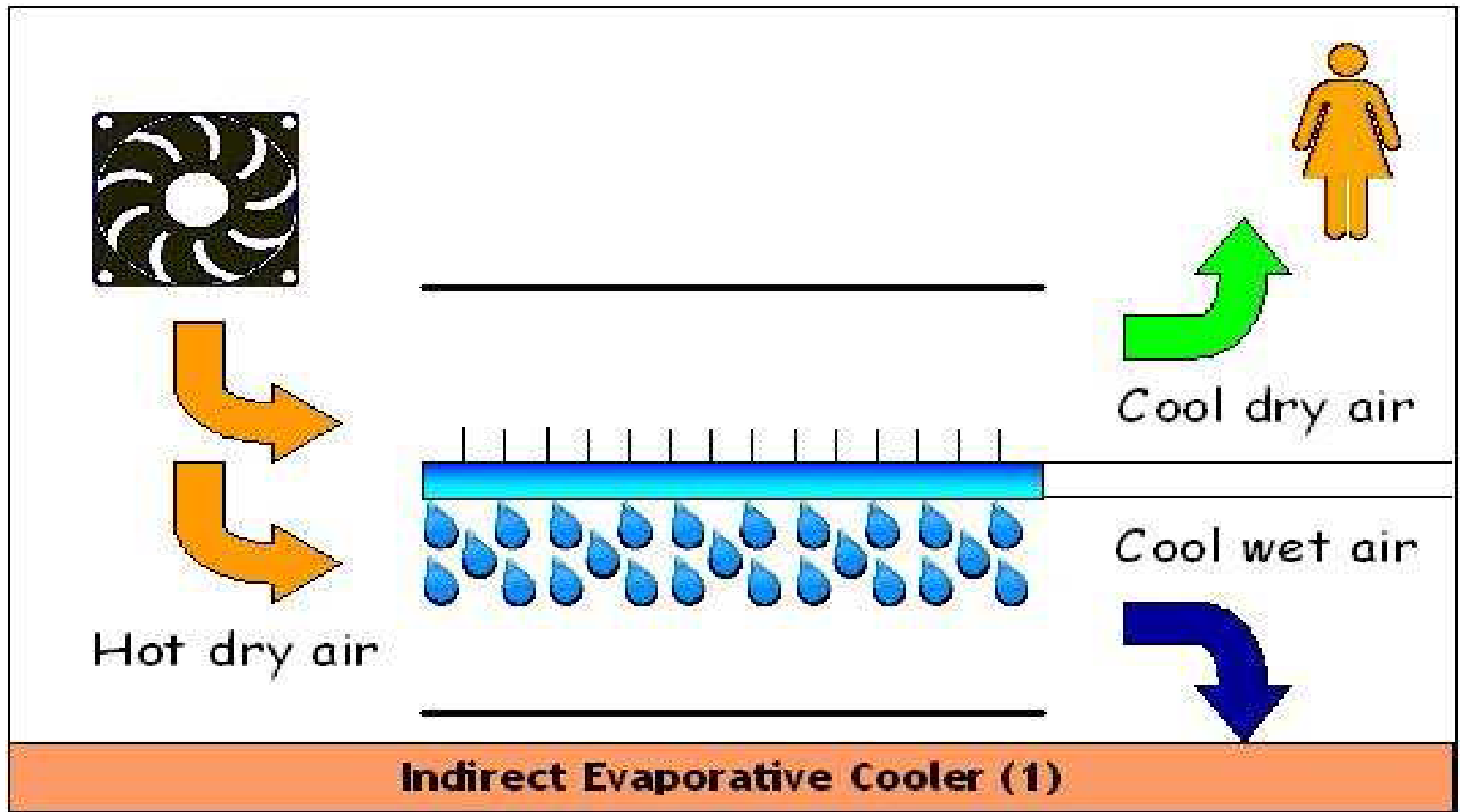
BETTER: renewable cooling in ('KyotoCooling') datacenters



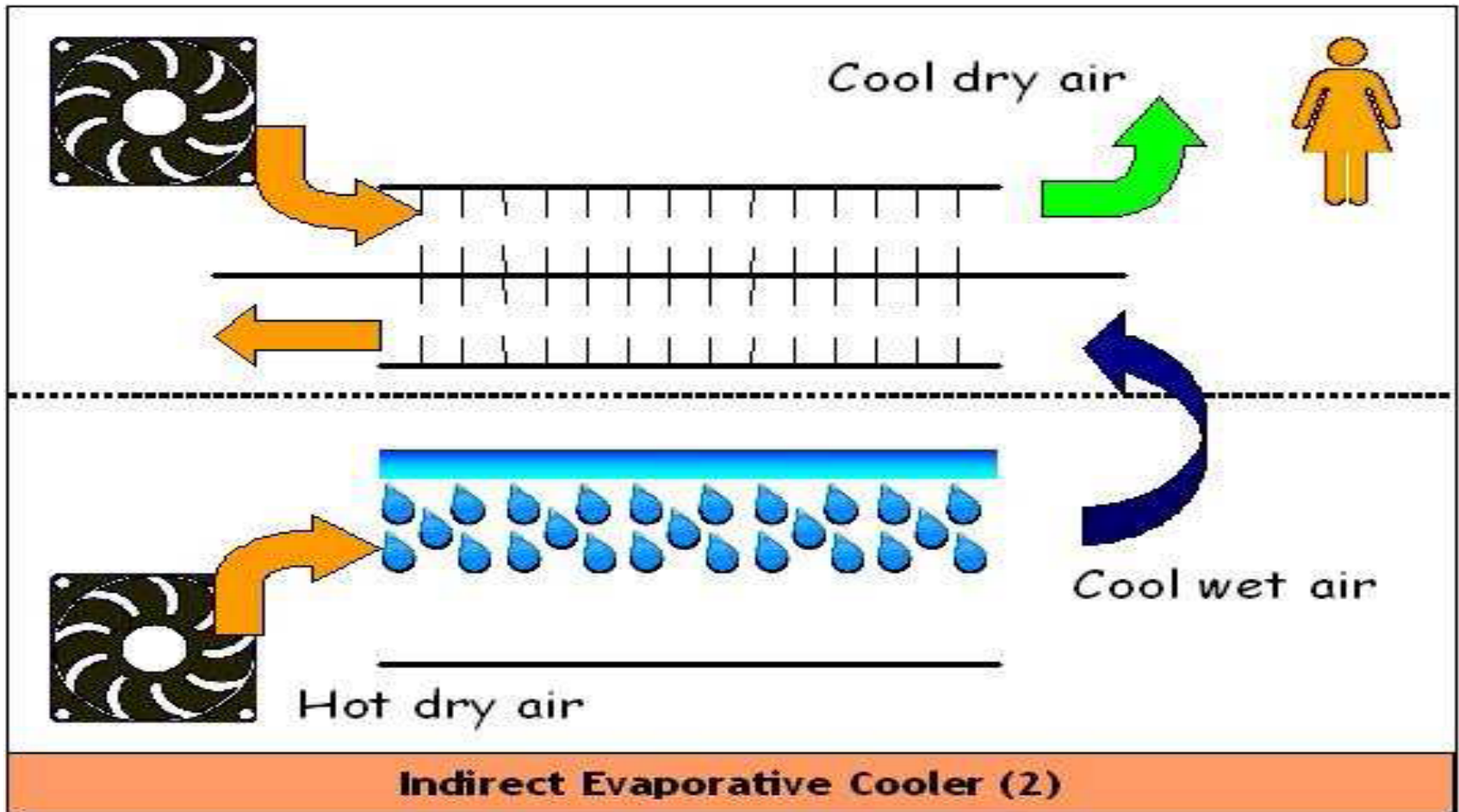
Skipping the HFC cooling system by direct Wet Bulb Cooling



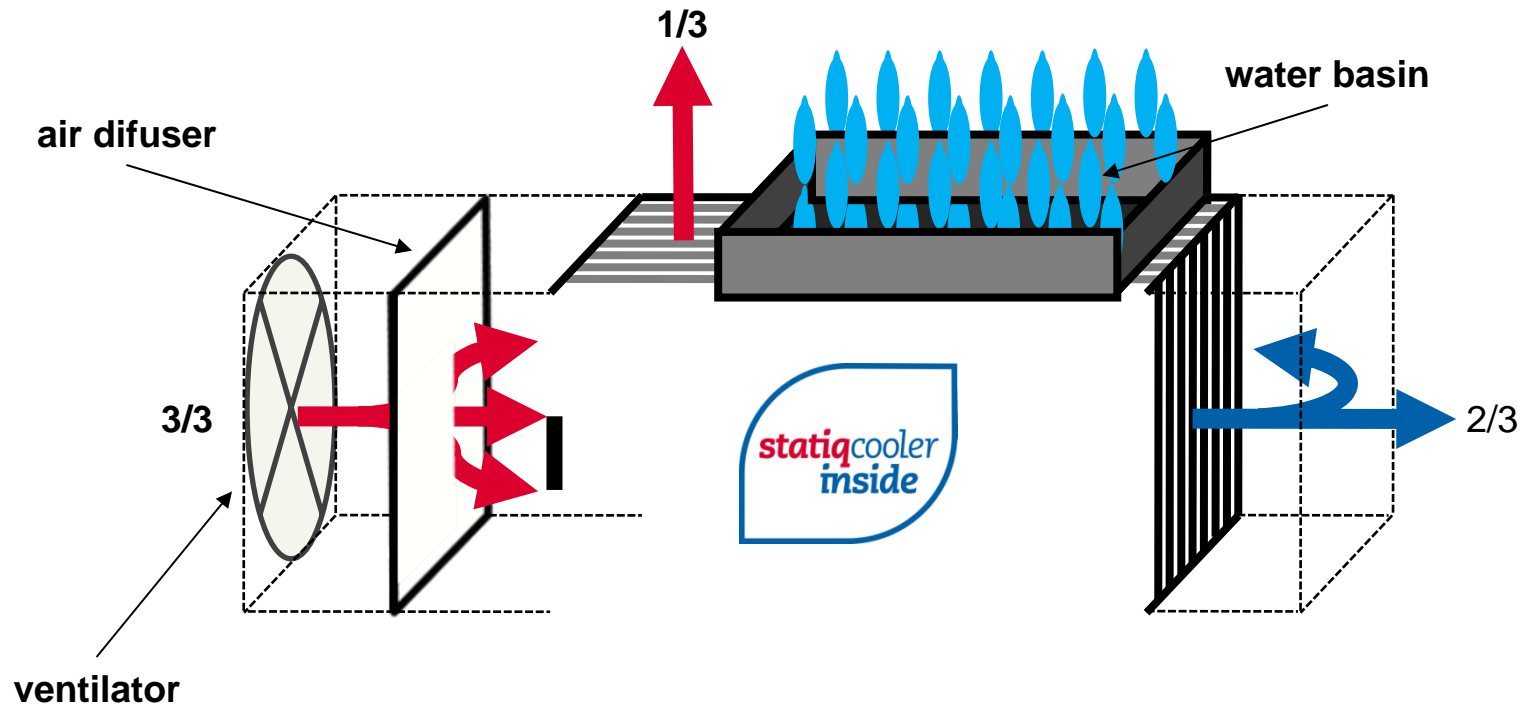
Skipping the HFC cooling system by Indirect Wet Bulb Cooling



BEST: skipping the HFC cooling system by Indirect Dew Point Cooling



The StatiqCooling technology



The StatiqCooling technology in the Mollier diagram

