

HEAT PUMPS FOR STEAM GENERATION

Annex 19 Workshop | Industrial Electrification
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INDUSTRIAL HEAT DEMAND IN THE EU

EU 28:

~ 1950 TWh of process heating in industry

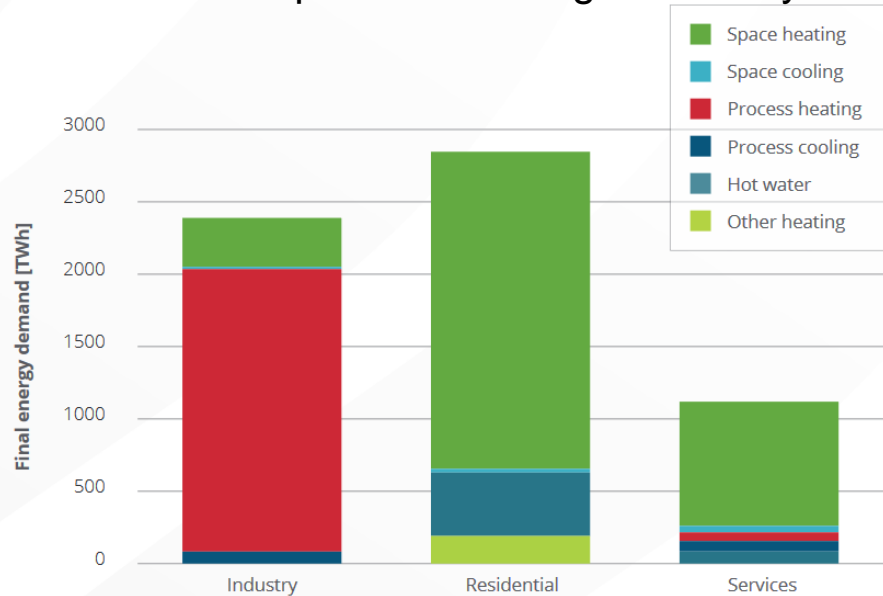
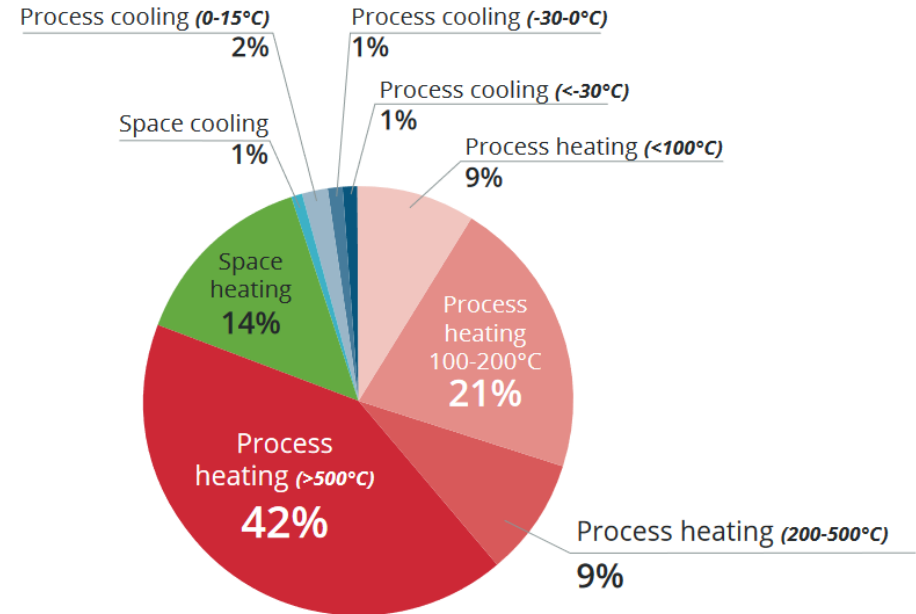


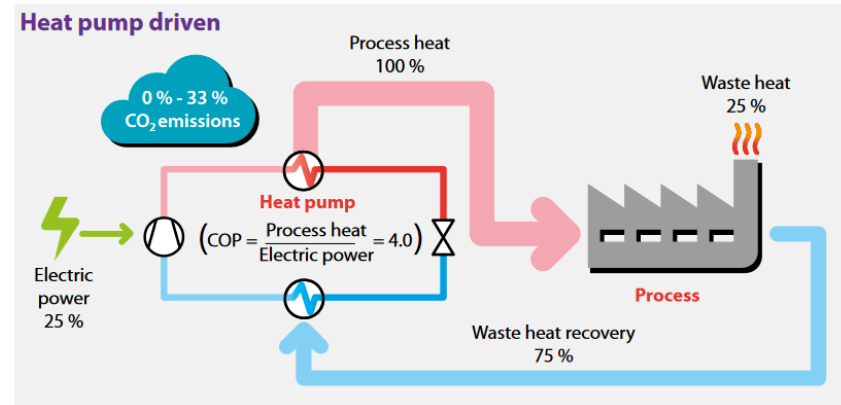
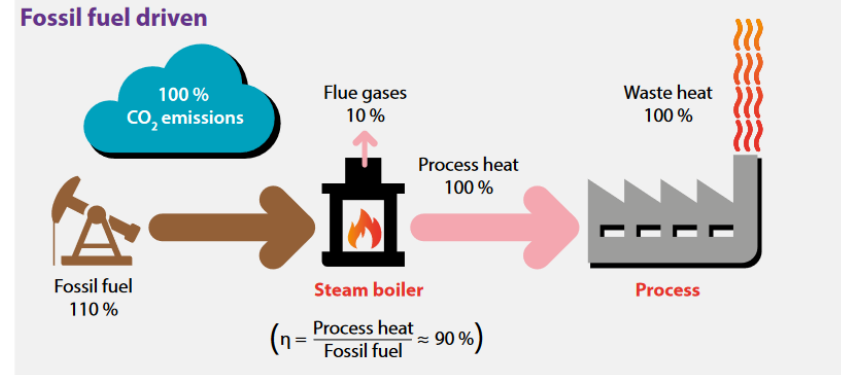
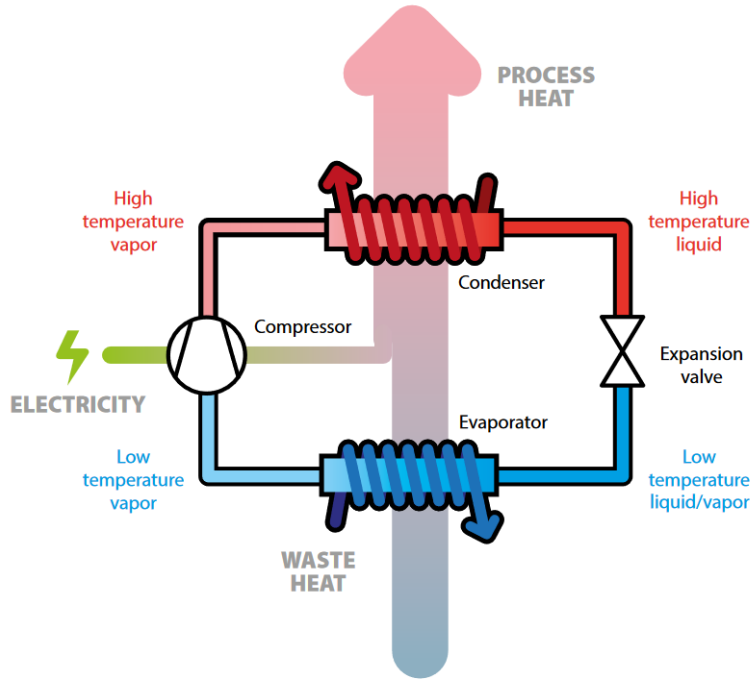
Figure 5: Sectors: final energy demand overview (EU28, 2015)

~ 30% of process heat at up to 200°C



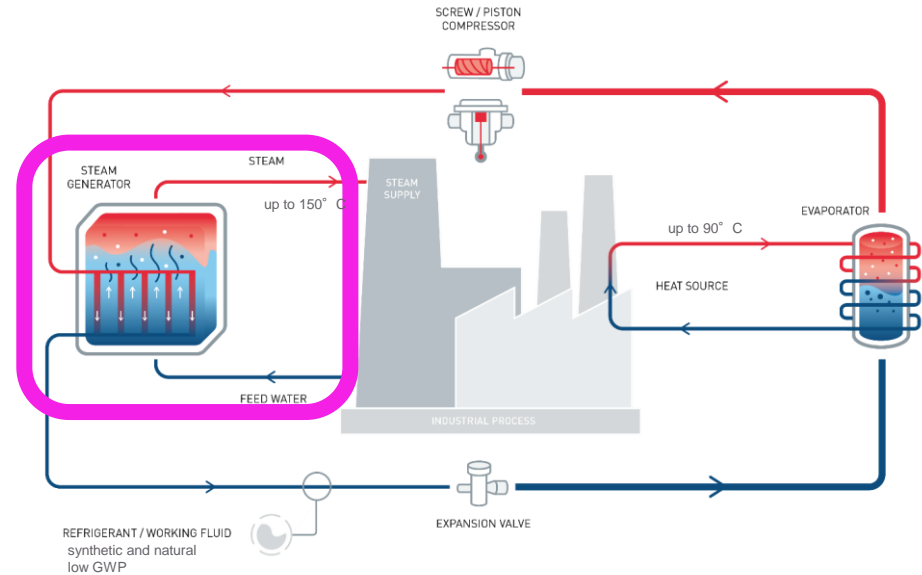
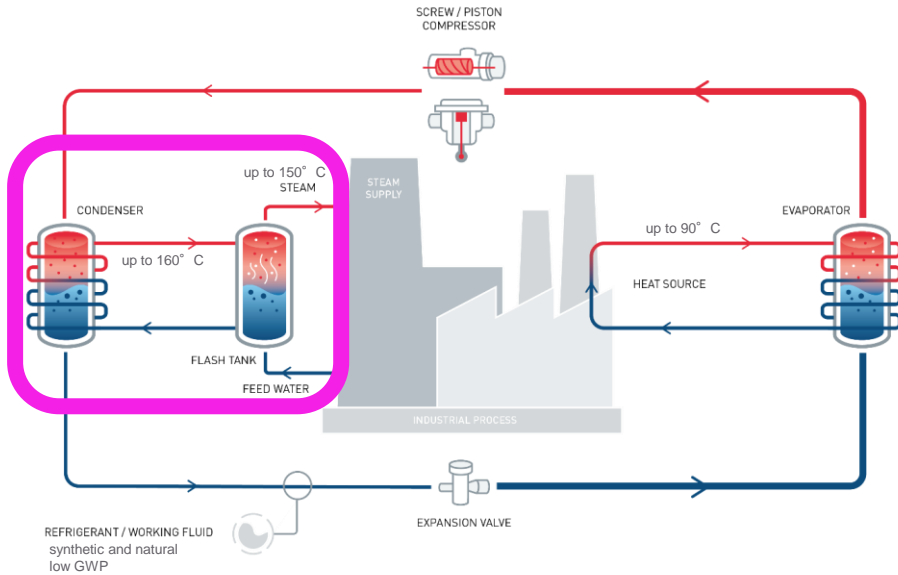
BASICS OF INDUSTRIAL HEAT PUMPS

CLOSED LOOP HEAT PUMP



TYPES OF STEAM GENERATING HEAT PUMPS

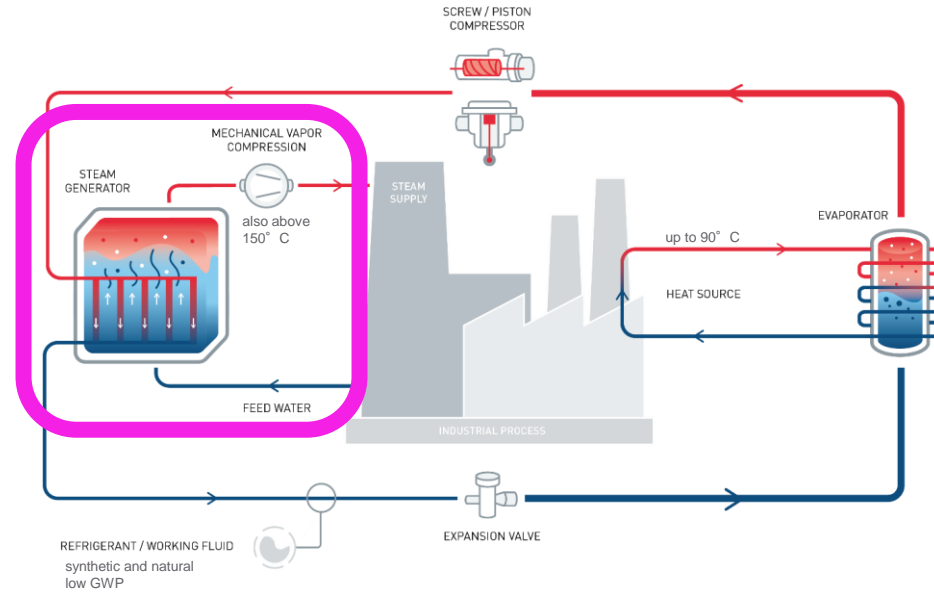
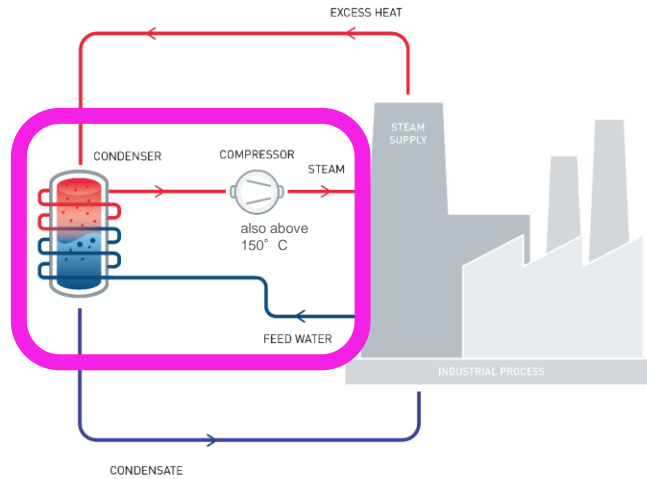
Closed loop steam generating heat pumps



TYPES OF STEAM GENERATING HEAT PUMPS

Open loop steam generating = MVR

Combination of types



THANK YOU!

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