



Solar Heat
Europe
ESTIF

Smart Sector Integration & the European Perspective

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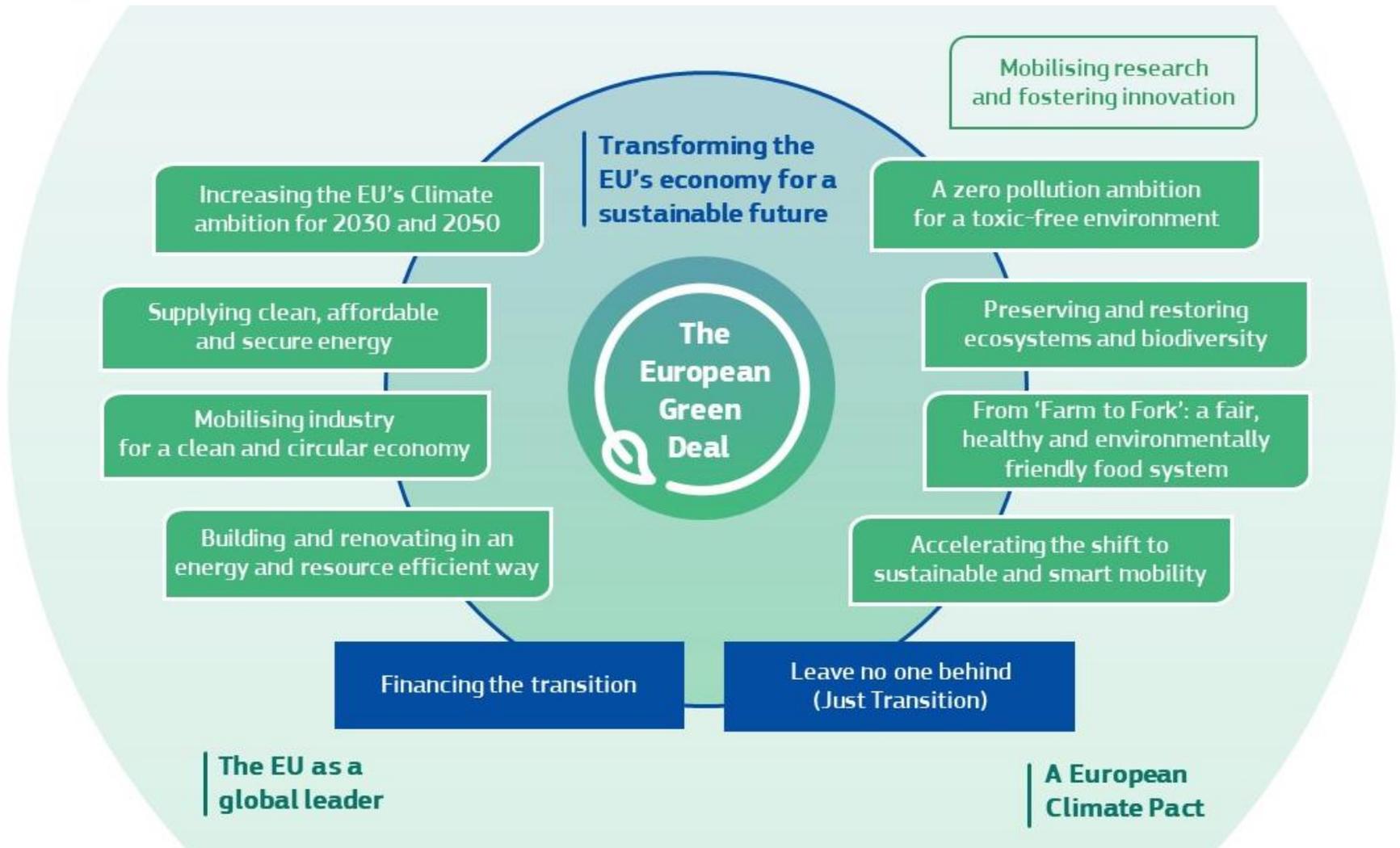


About Solar Heat Europe





European Policy Context – the Green Deal





What is “Smart sector integration“?

- Strategy for a fully integrated energy system
- Goal of climate neutrality and further renewables integration

The European debate

- Online consultation (08/06)
- Communication expected in June 2020
- Co-decision process and EP resolution

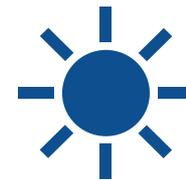




A real integration must be RES-based

What solar thermal can do?

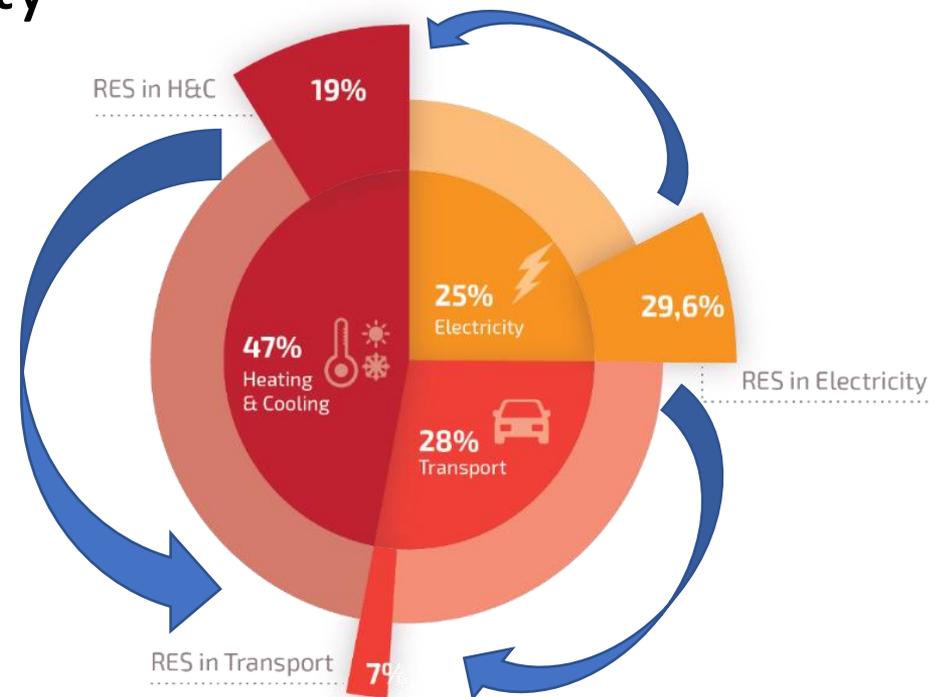
- Produce direct renewable H&C
- Provide flexibility to the electrical grid
- Be a catalyser for different RES integration





Challenges for the sector

- Risk of an integration limited to gas & electricity
- Exploiting the existing potential





The size of the challenge

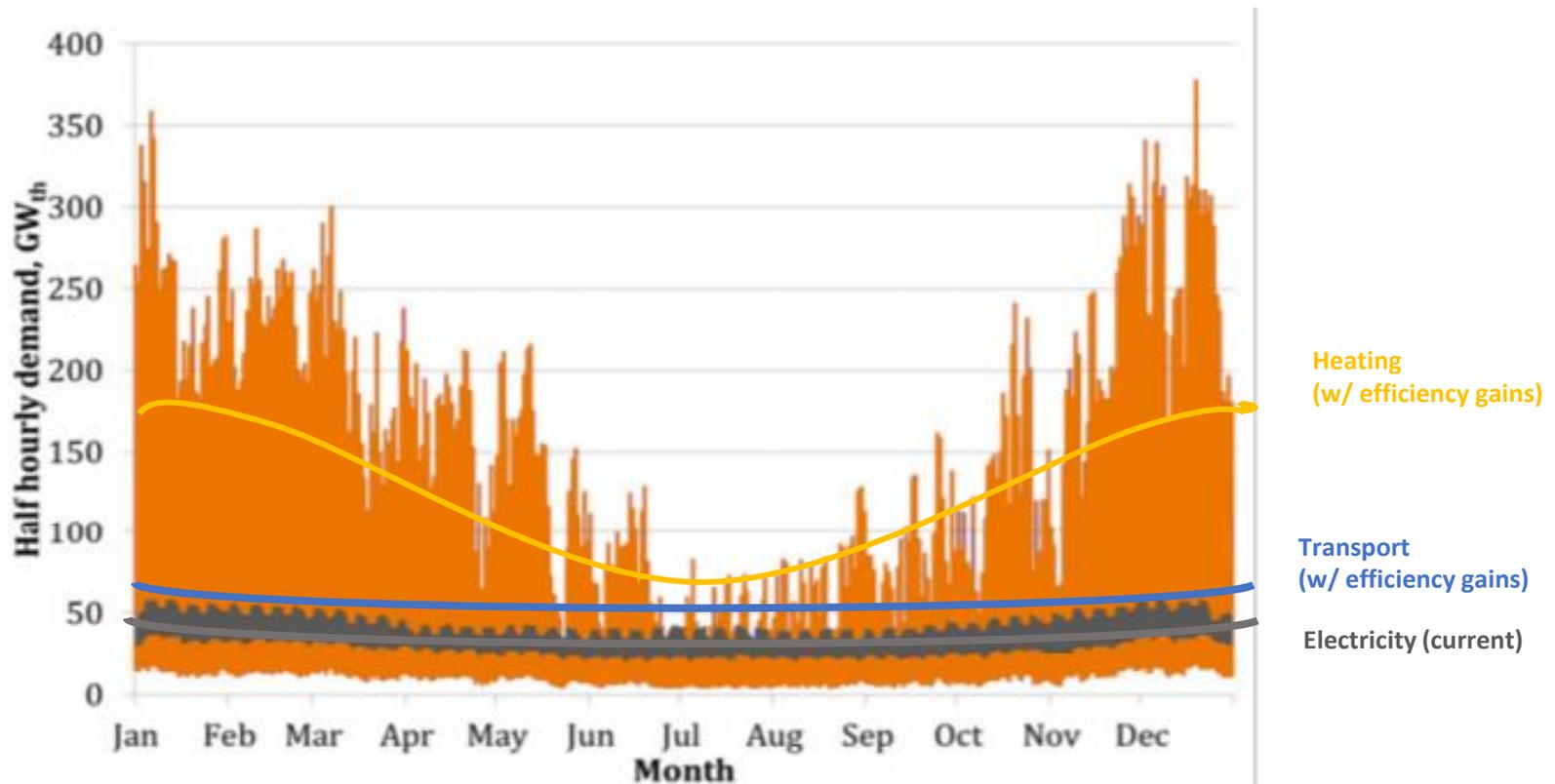


Figure 20: Synthesised national half hourly heat demand (red) for 2010

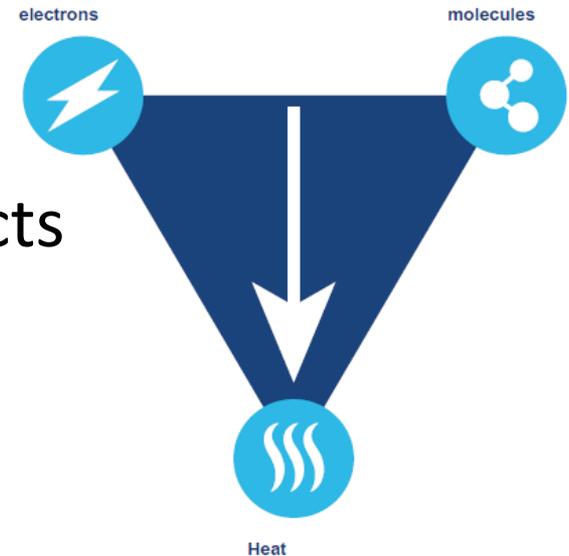
UK's calculated heat demand versus electricity demand over a year

Source: Sansom, Robert *Decarbonising low-grade heat for a low carbon future*. London 2014



Opportunities and benefits

- New digital tools
- Integration in industries and districts
- A third way between gas and electricity



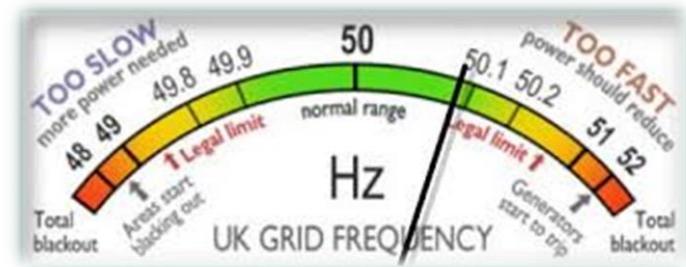
The “heat scenario” is more than merely a mid-way solution between electrons and molecules; it brings added value.

Source: Berenschot, *The “heat scenario”: Projections of a heat-oriented energy supply in 2030 and 2050*, September 2019

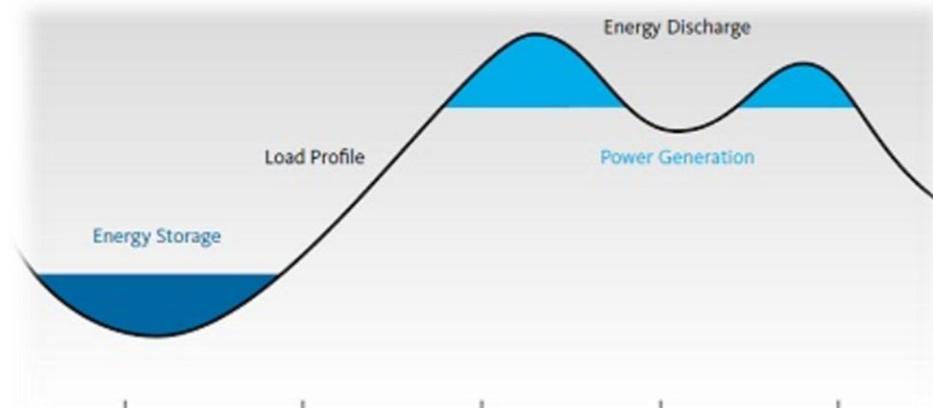


- Thermal storage as key enabler

- Balancing the grid



- Shave peak demand

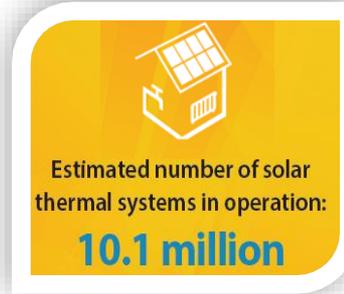
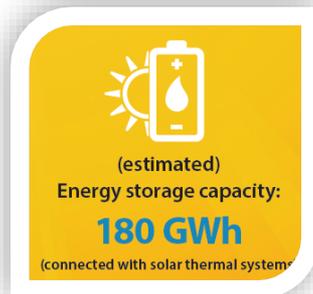
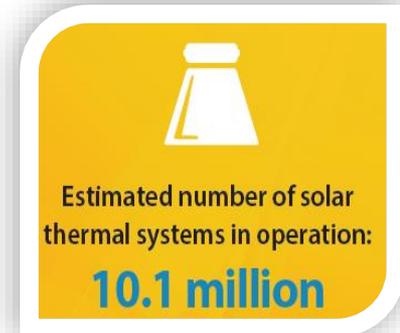




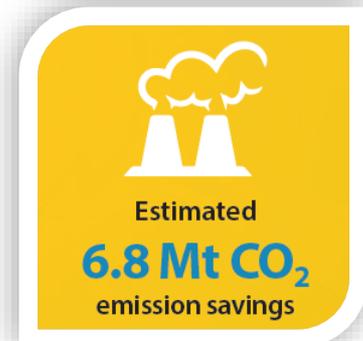
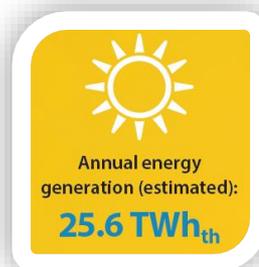
Solar Thermal and sector integration

- Thermal storage as key enabler
(Solar thermal always includes it)

- Balancing the grid



- Shave peak demand





What is needed for a real integration?

- All RES solutions must be considered
- Need to raise awareness
- Combine centralised & decentralised
- “Efficiency first” – not just large infrastructure but the most efficient solution



Thank you for your attention!

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