

Decarbonising EU heat: Our Paris Agreement compatible scenario

Jörg Mühlenhoff 7 June 2021

Building a civil society scenario compatible with Paris

- Collective research process of >150 members & experts
- Starting point: 1.5°C translates into 65% emission cuts by 2030 and net zero by 2040 = climate neutrality
- Scrutinise existing studies and models, opt for mature solutions





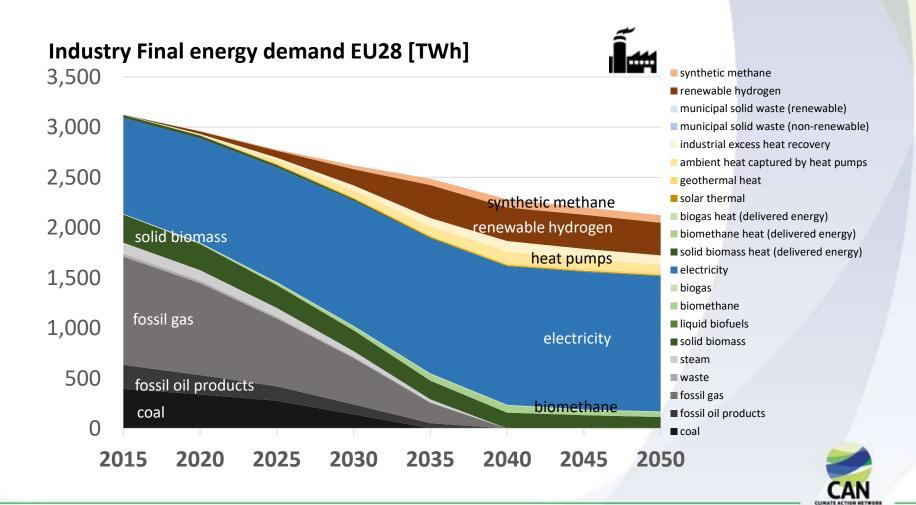








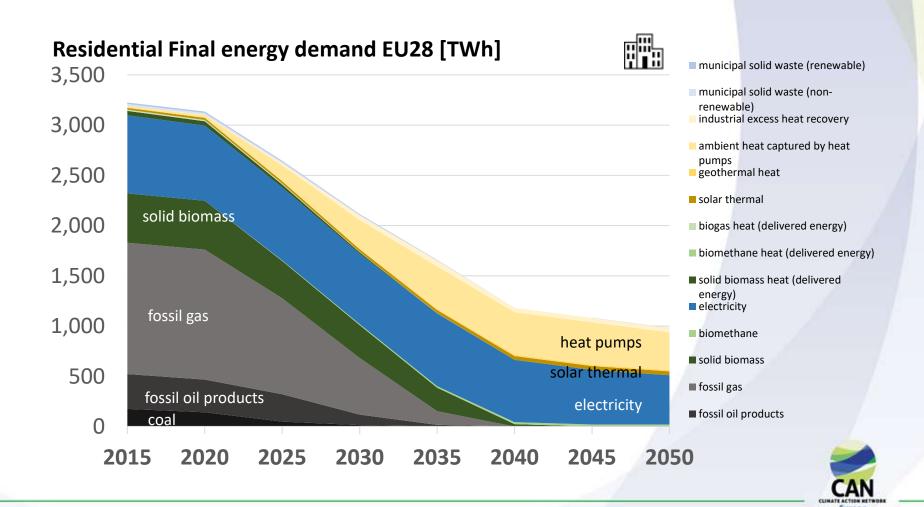
Industry sector



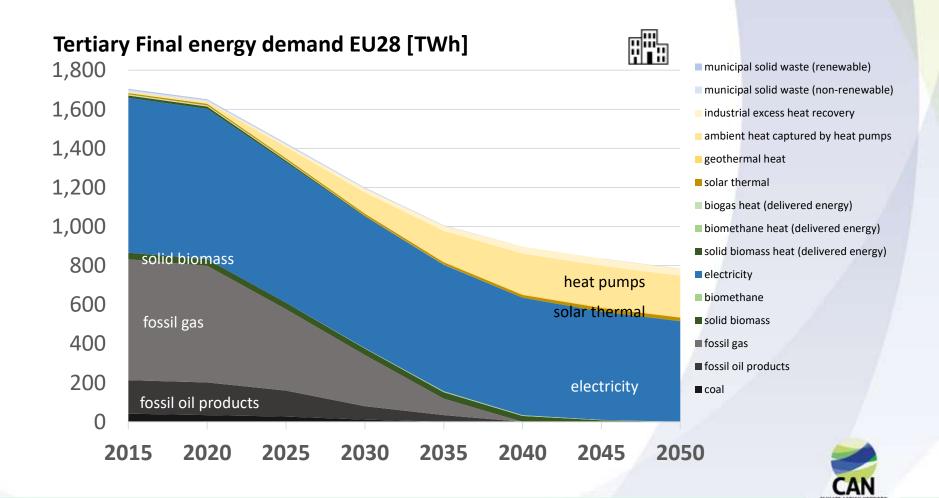




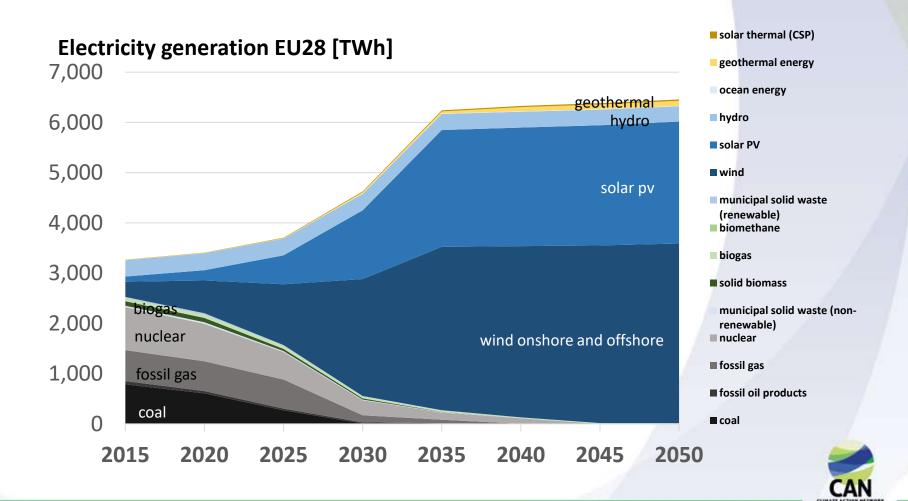
Residential sector



Tertiary sector

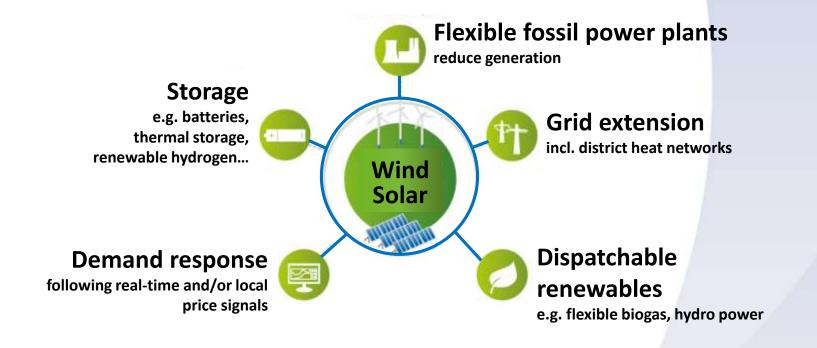


Uptake of solar and wind is key





How to keep the lights on and our houses warm





Contact



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https://caneurope.org/energy_transition_buildings_factsheet/ https://www.pac-scenarios.eu/scenario-development.html





How we built our scenario

- ✓ Analysis of energy demand of each sector
- ✓ Matching the yearly demand with supply
- ✓ Emission reductions, energy efficiency and renewable shares

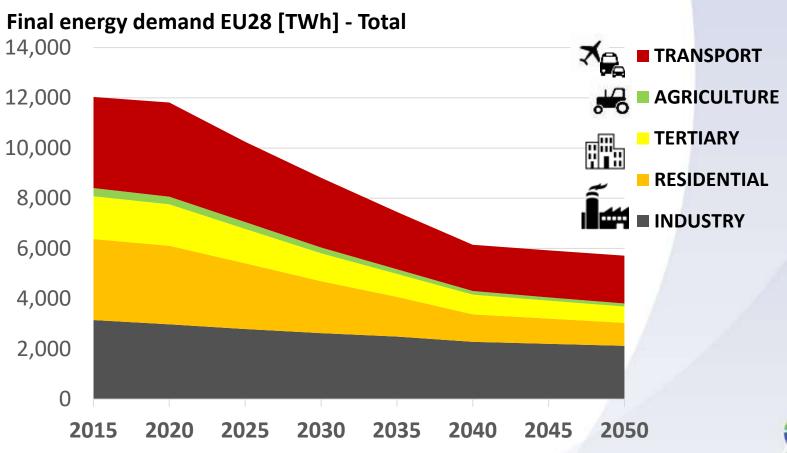
iterative approach

✓ Hourly modelling (Öko-Institut PowerFlex)





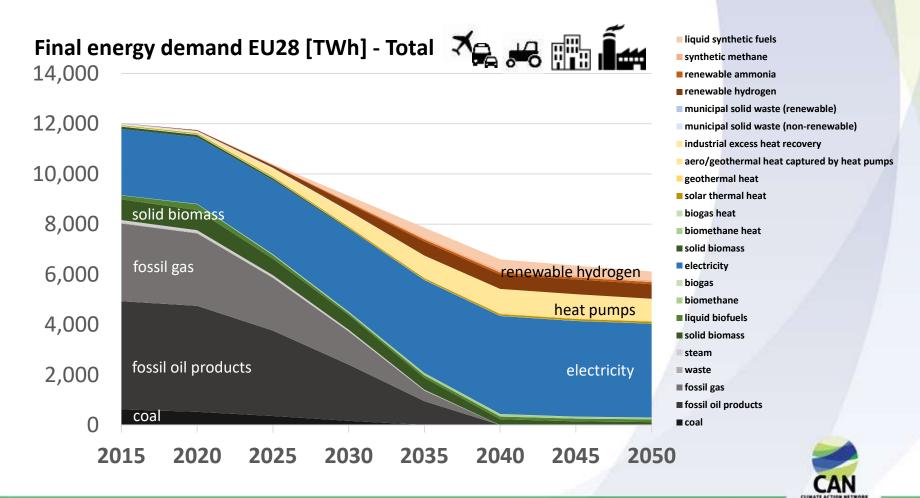
Energy demand: how much will we consume?





Energy demand: where does the energy come from?

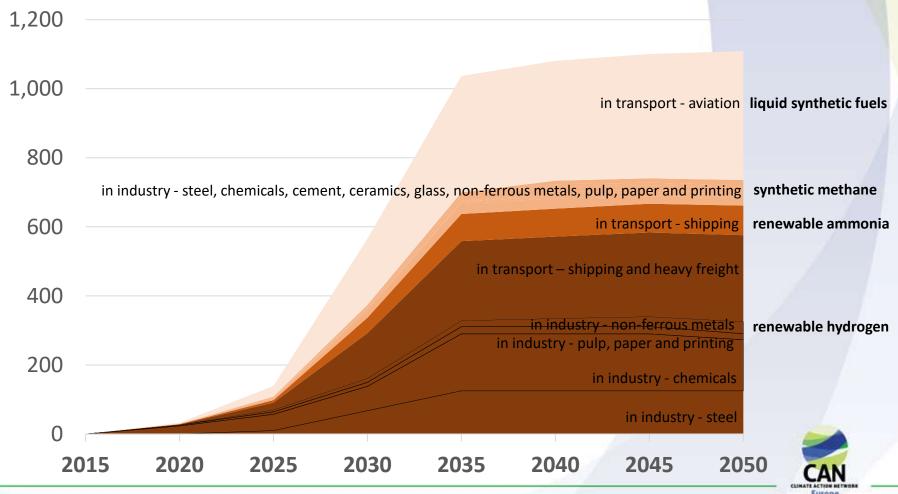
Paris Agreement Compatible





Hydrogen only in transport and industry

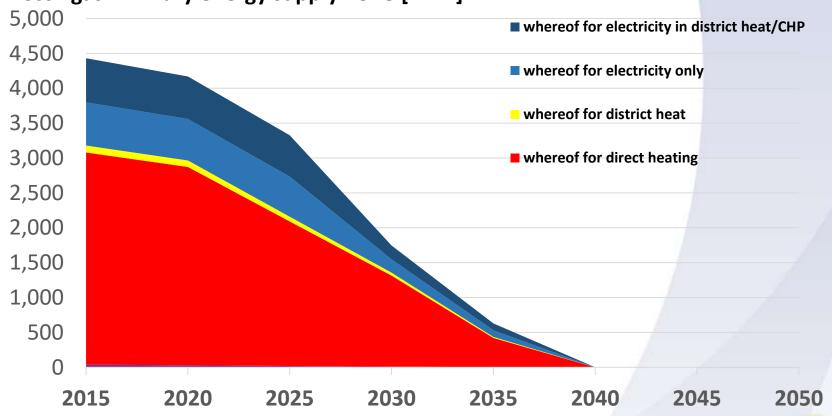
Non-fossil gases + fuels demand EU28 [TWh]





...while phasing out fossil gas

Fossil gas: Primary energy supply EU28 [TWh]







PAC scenario in a nutshell

Civil society's scenario for

- reaching net-zero emissions by 2040
 - = 65% emission cuts by 2030
 - = 50% renewables and 45% efficiency by 2030
- investing into the Green Recovery
- guiding EU infrastructure planning

