

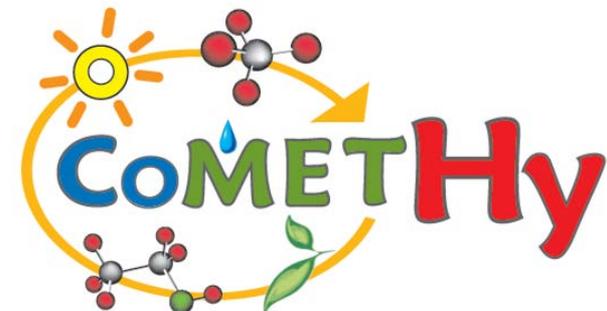


Joint Workshop on Scale-up of Pd Membrane Technology
From Fundamental Understanding to Pilot Demonstration
ECN, Petten (The Netherlands) 20-21 November 2014

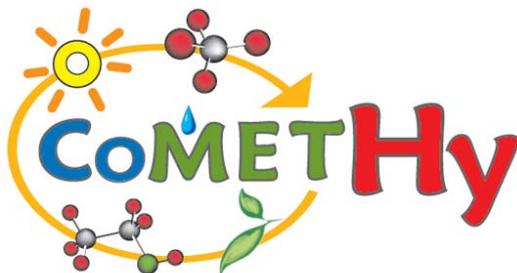
Introduction to **CoMETHy**

“Compact Multifuel-Energy To Hydrogen converter”

Alberto Giaconia, ENEA



CoMETHy = “Compact Multifuel-Energy To Hydrogen converter”



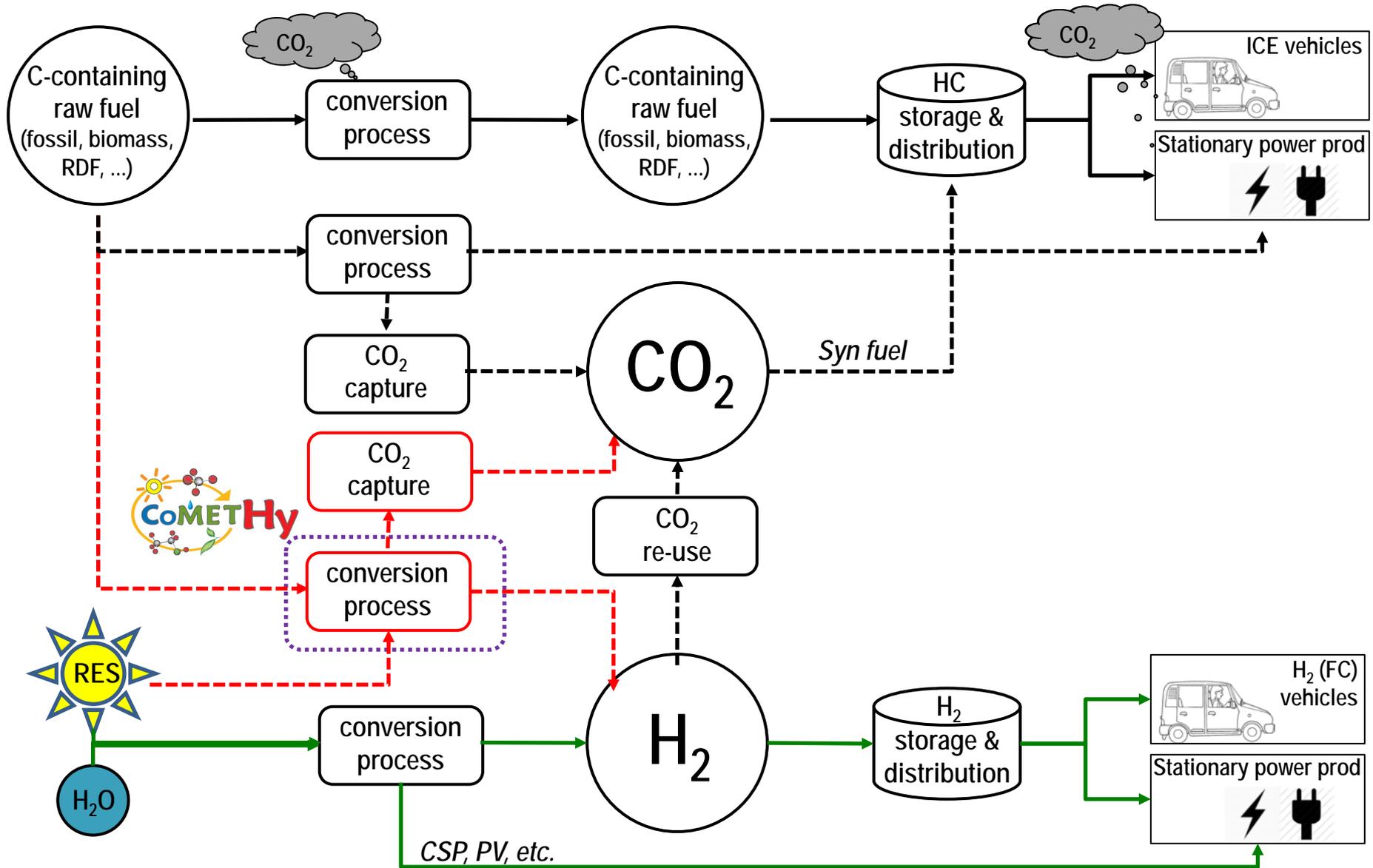
“a EC-7FP Collaborative Project co-funded by the Fuel Cells and Hydrogen Joint Undertaking (FCH JU)”

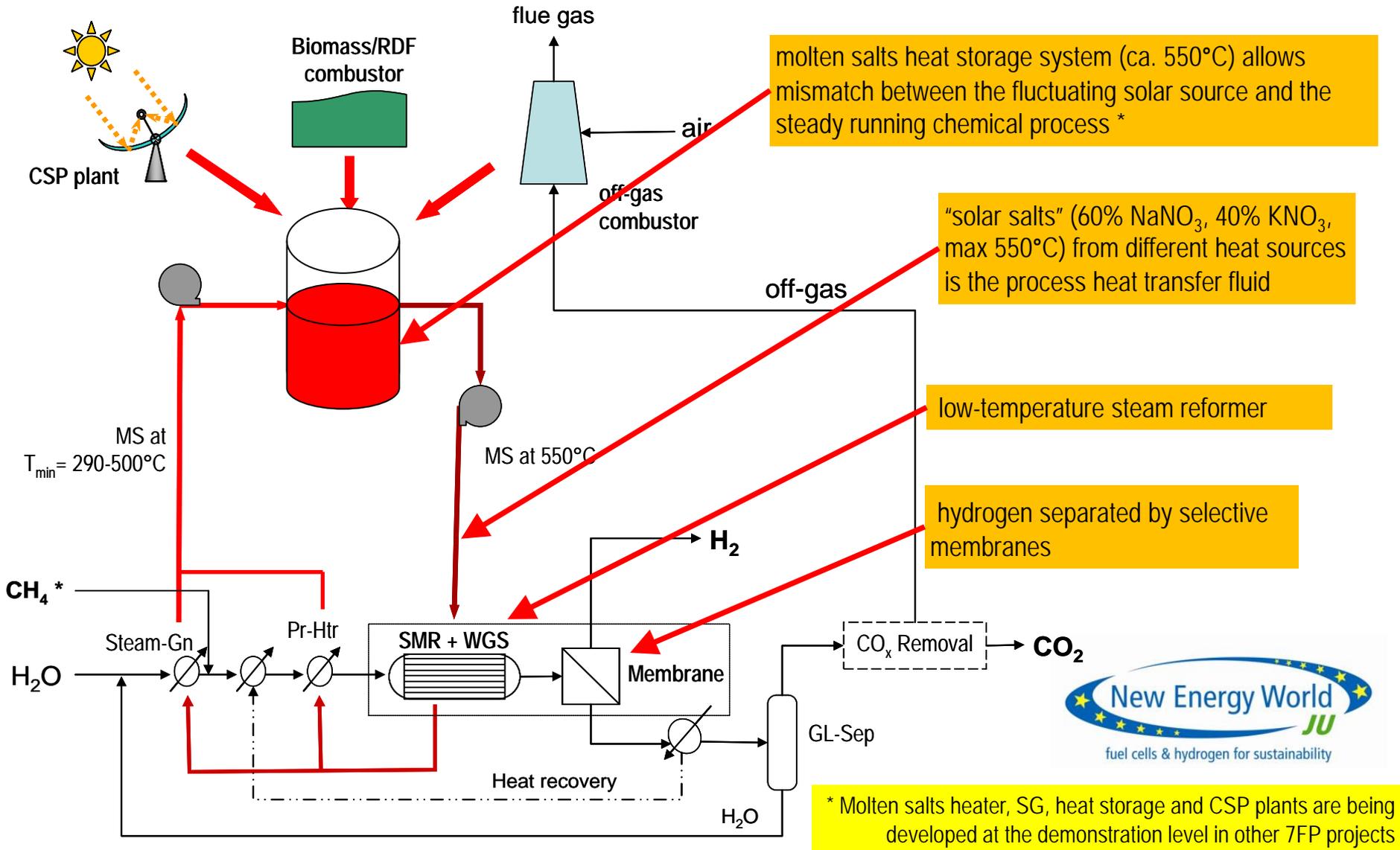


CoMETHy aims at the intensification of hydrogen production processes, developing an innovative compact and modular steam reformer to convert reformable fuels (methane, ethanol, etc.) to pure hydrogen, adaptable to several heat sources (solar, biomass, fossil, etc.), depending on the locally available energy mix.

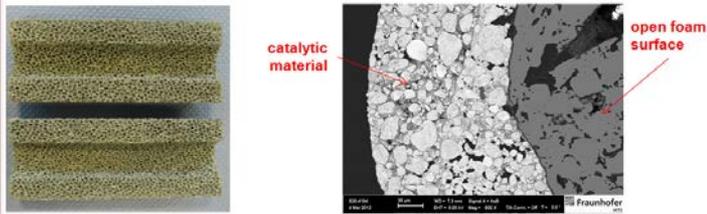
12 project partners (Coordinator: ENEA) from 5 countries (D, GR, I, IL, NL - 3 Industries, 4 Research Organizations, 5 Universities)







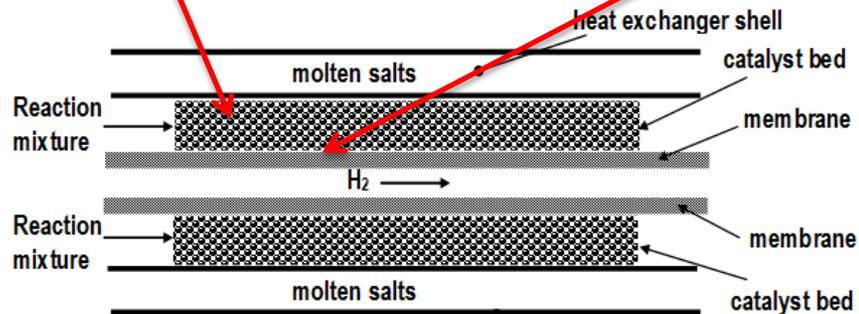
Advanced catalysts for low-temperature steam reforming (NG, biogas, ethanol)



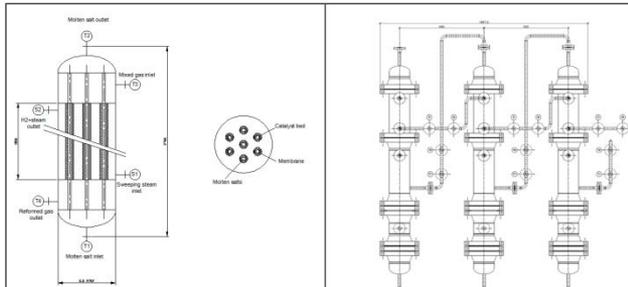
Selective membranes for hydrogen separation



Membrane reformer



Reformer design



Coupling with CSP plants



Session 2a:

Optimization of porous metal support for Pd deposition

Processi Innovativi

Session 2b:

Reactor modelling, simulation and operating parameters optimization

Technion

Session 3a:

Solar assisted reforming and CCS in novel process schemes for H₂ production-techno economic assessment

Processi Innovativi

Session 3b:

Integrated membrane reactor testing and modeling

CERTH

CoMETHy project has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) for the Fuel Cells and Hydrogen Joint Technology Initiative under grant agreement n. 279075.



Thank you for your attention!

All the 12 CoMETHy project partners for their significant contributions and excellent collaboration in the research work done so far and forthcoming

