

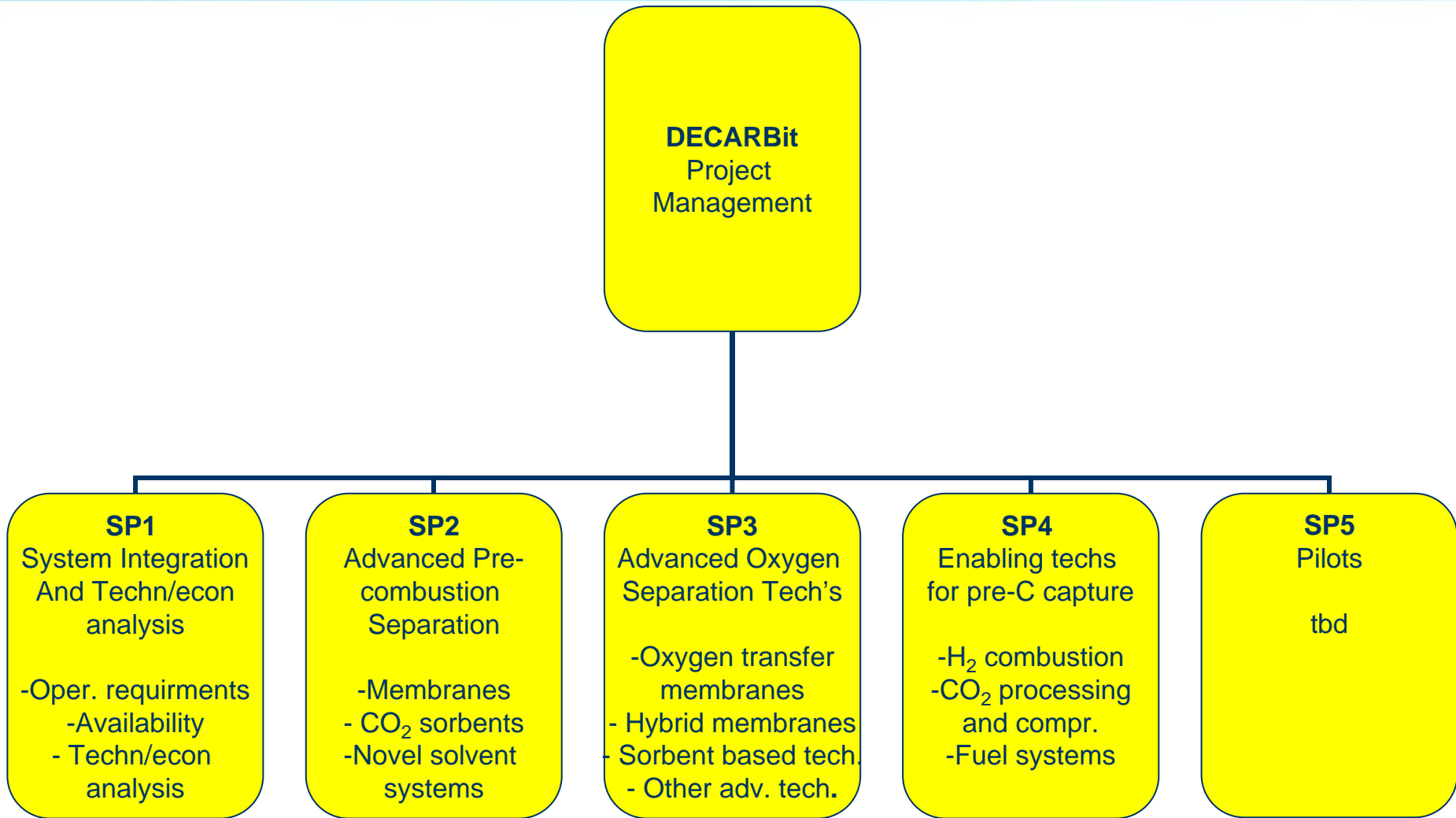
# DECARBit!

## De carbonise it!

**Responding to FP7 5.1.1 Advanced pre-combustion capture techniques**

- Nils Røkke ([Nils.A.Rokke@sintef.no](mailto:Nils.A.Rokke@sintef.no))
- Richard Blom ([Richard.Blom@sintef.no](mailto:Richard.Blom@sintef.no))

# Tentative project structure:

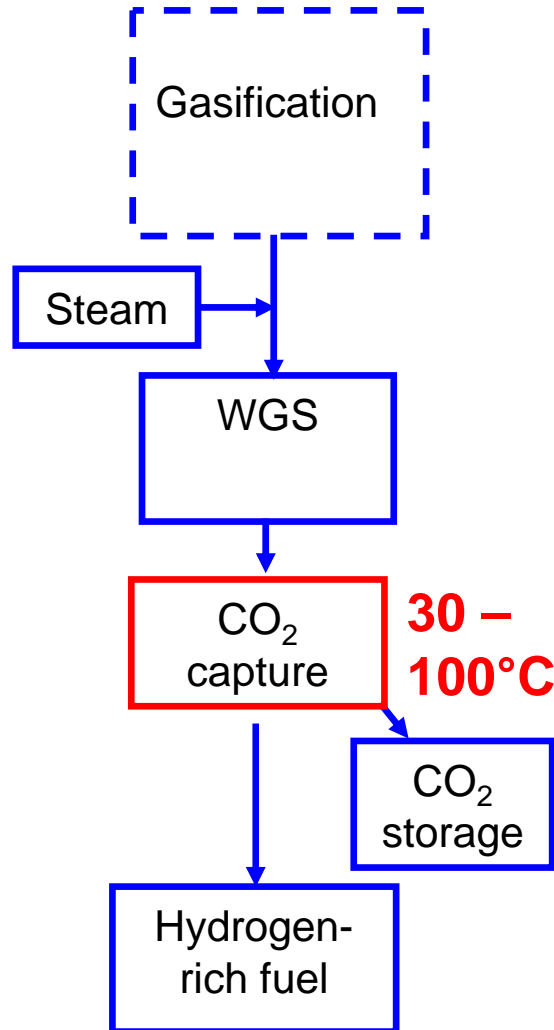


# Partners

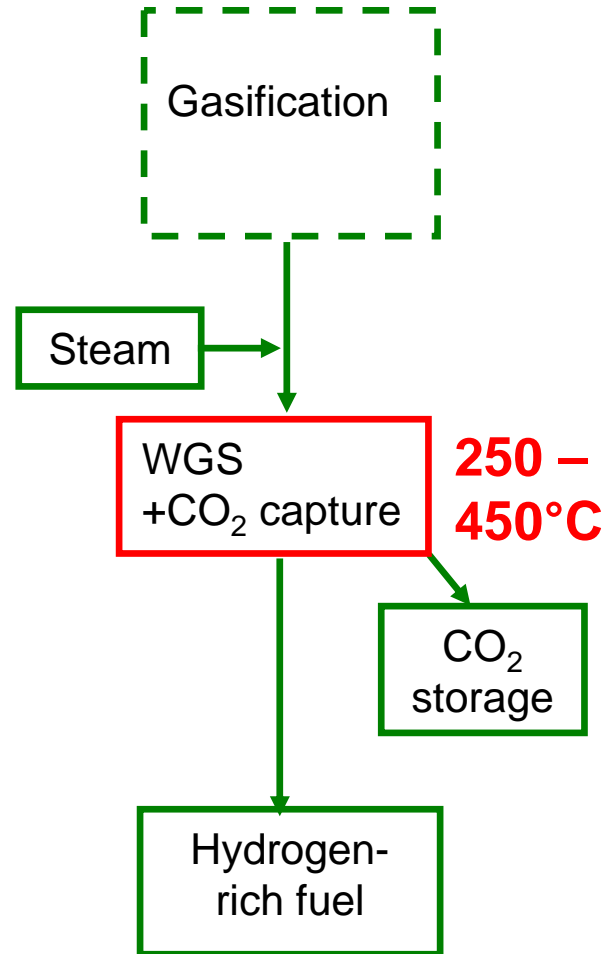
By sector:	conf.	total	
Oil,Gas,Coal:	4	4	(OK)
Power Comp.:	1	3	(Polish/eastern Europe power comp? )
R&D	3	4	(OK)
Universities	2	3	(+(south)eastern European group?)
Manufacturers	4	4	(OK)
SME	0	1	(SME on Techn/econ evaluation?)
<hr/>			
Total	14	19	

# SP2:

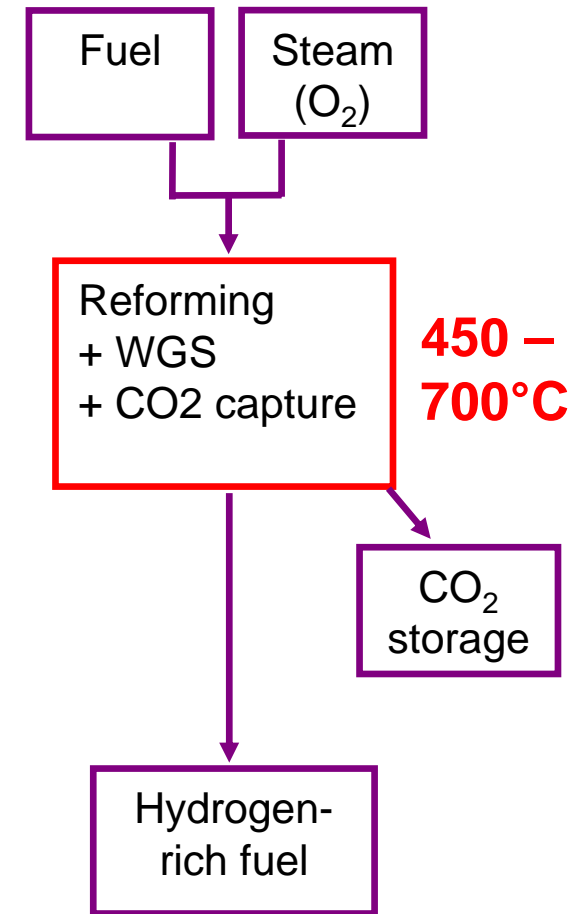
## Conv. scheme:



## WGS scheme:



## SER scheme:



# SP4: DECARBit Hydrogen Combustion

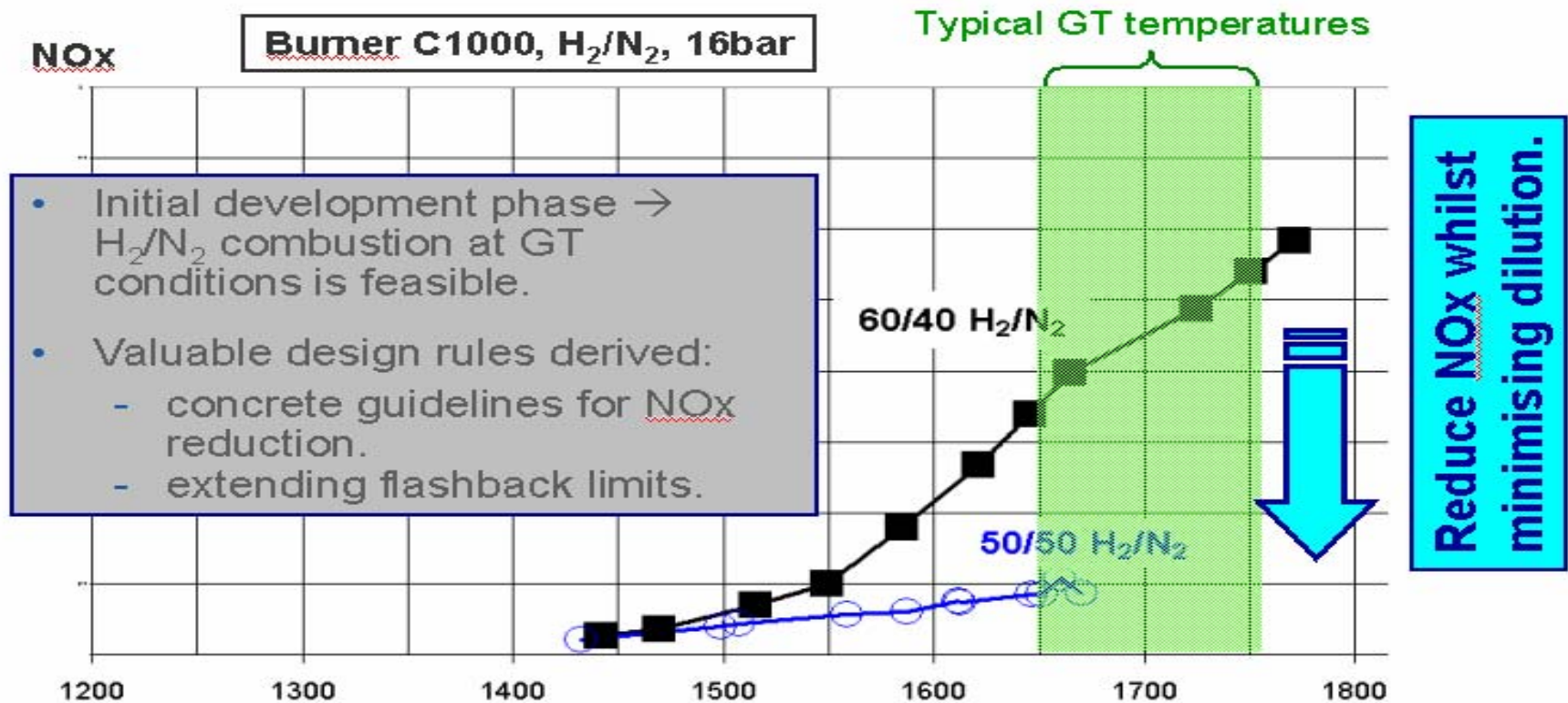
Allen Pfeffer  
09/02/2007

POWER SYSTEMS |

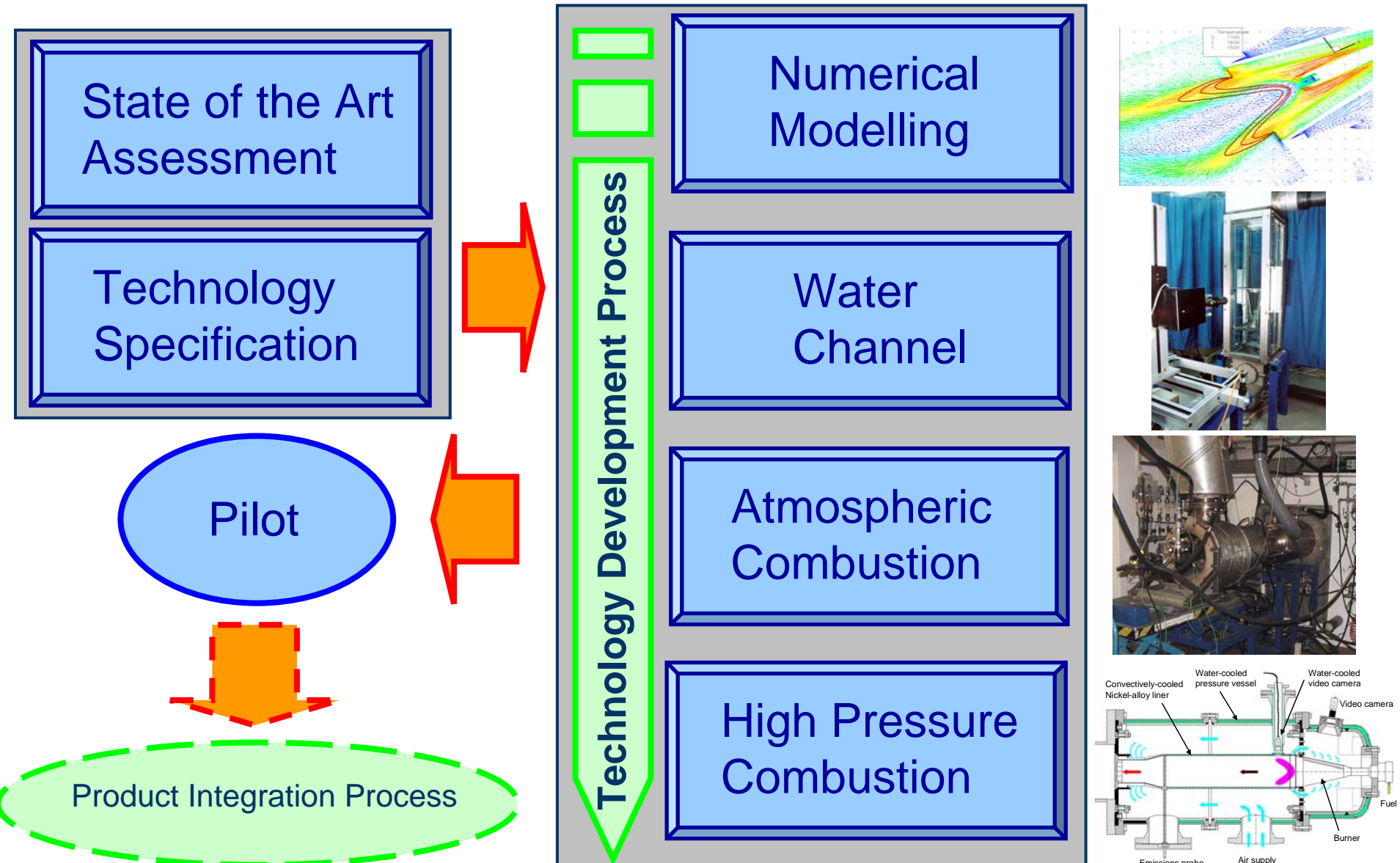
**ALSTOM**

# Handling and Combusting Hydrogen Rich Fuels is the Key to Zero Emissions IGCCs

## FP 6 ENCAP Tests



# DECARBit: Combustion Development Alstom and Sintef for high efficiency gas turbine



# Combustion of hydrogen leads to special design and safety requirements

- Team leader Siemens with Air Liquide
- Definition of H<sub>2</sub> rich fuels and process conditions
- Ignition limits and auto-oxidation effects in fuel system
- Selection of materials
- Safety aspects
- Optimized design of H<sub>2</sub> fuel system