





HYDROGEN EDUCATION – PRODUCTION LEVEL 1

2015











COMMON PRODUCTION

- Steam reforming of natural gas
- Electrolysis of water



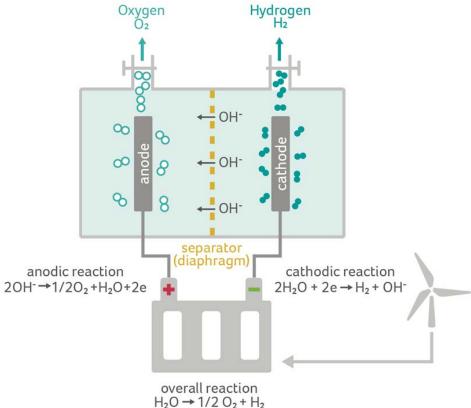






RENEWABLE HYDROGEN - ELECTROLYSIS













RENEWABLE HYDROGEN - REFORMED BIOGAS







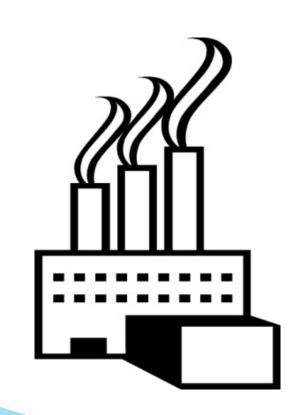






RENEWABLE HYDROGEN - LEFT-OVER HYDROGEN*













CARBON CAPTURE STORAGE (CCS) ...A FUTURE POSSIBILITY?



- Reformed natural gas + CCS = CO₂-neutral system
- Reformed biogas + CCS = CO₂-reducing system











PRODUCTION OF HYDROGEN – SEVERAL DIFFERENT POSSIBILITIES



- Thermolysis from water
- Photocatalytic water splitting
- Photobiological water splitting
- Biohydrogen production from water
- Other production from fossil fuels gasification











GAS PURITY AND QUALITY













PRICE



1€/10 km







