COAL HYDROGASIFICATION FROM RENEWABLES

Innovations and Benefits - The process allows to store renewable energy in the form of hydrogen and to use coal reserves in a sustainable way. Actually, the process has a reduced environmental impact since the synthetic natural gas (SNG) so produced is a mixture of a fossil fuel (coal) and renewable energy sources (wind, solar).

Uses - Production of synthetic natural gas (SNG) by coal hydrogasification using hydrogen preferably produced from renewables.

Past and Present Activities - A preliminary technical and economic analysis has demonstrated the applicability of the hydrogasification process to the coal field of Sulcis (Sardinia, Italy).

A new study considering the European coal and renewable energy sources has demonstrated that the process can strengthen the European Union's energy security.



	RESEARCH TO PROVE FEASIBILITY			TECHNOLOGY DEMONSTRATION			SYSTEM TEST, LAUNCH & OPERATIONS	
BASIC TECHNOLO	OGY RESEARCH TECHN				SYSTEM/SUBSYSTEM DEVEL		ELOPMENT	
TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9
TECHNOLOGY READINESS LEVEL								
Italian National agency for new technologies, Energy and sustainable economic development www.enea.it Fusion and Technology for Nuclear Safety and Security Department (FSN) Nuclear Fusion Technologies Division (FSN/FUSTEC) Nuclear Technologies Laboratory (FSN/FUSTEC/TEN)								

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