REFORMING OF OLIVE MILL WASTEWATER

Innovations and Benefits - The organic content of olive mill wastewater (OMW), which is responsible for its pollution potential, is converted into syngas by reforming. In this way, the cost of the OMW treatment, today mainly based on land disposal, can be significantly reduced.

Uses - Olive mill wastewater is treated via thermo-chemical processes (reforming, pyrolysis, etc.) in order to produce syngas (a gas mixture consisting of CO2, hydrogen and methane) and abate its pollution content (i.e. polyphenols).

Past and Present Activities - The reforming of olive mill wastewater has been tested at ENEA Frascati laboratories. The design and the business plan have been carried out in order to make the plant suitable for a small- medium-size olive mill. In the framework of the Microgen30 project (Industria 2015 call), a pilot plant capable of producing 1 m3/h of pure hydrogen has been built and successfully tested.



Membrane reactor tested for the treatment of olive mill wastewater via steam reforming

	RESEARCH TO PROVE FEASIBILITY			TECHNOLOGY DEMONSTRATION			SYSTEM TEST, LAUNCH & OPERATIONS	
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TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9
ETERS 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) Contact: Silvano Tosti, silvano.tosti@enea.it								