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ENERGETIC SUSTAINABILITY AT THE SUDOE

REGION: PEMFC-SUDOE NETWORK

(July 2016 – June 2019)

ASSOCIATED PARTNERS



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The "ENERGY SUSTAINABILITY AT THE SUDOE REGION: RED PEMFC-SUDOE" project responds to the challenge of ensuring **sustainable energy supply** at the SUDOE region through the development of


PEMFC technology with the integration of **renewable sources of H₂**. **4 PEMFC innovative prototypes** for use in **transport** (Automobiles and bicycles), **stationary sources** (Stack of > 250W power supply of buildings or public lighting) and **portable** (Compact system with a capacity of > 400WH and a minimum of 50W for use in computers, mobile phones etc.) constitute the End products that integrate the results of scientific-technical project activities.

PROJECT OVERVIEW

The PEMFC-SUDOE project will address the:

 **Production of hydrogen from industrial waste sources in the SUDOE area**


 **Development of new materials and advanced configurations PEMFC cells**

 **Evaluation environmental sustainability and creating tools for optimal design of PEMFC devices.**







The project will give a **BIG BOOST FOR INSTITUTIONAL RELATIONS IN THE SUDOE** area between research institutions, knowledge

generators, and the business sector (responsible for facilitating transfer and commercialization), and governments and social partners (responsible for integrating scientific advances in the policies and strategic plans involving citizens through strategic dissemination plans).

 The main objective of the project is to establish a transnational network of excellence for R&D&I development of hydrogen fuel cells in the SUDOE region, which promotes sustainable energy supply in strategic sectors of the region such as transport, and/or portable and stationary devices. This objective is in line with the specific objective of the program to "reinforce" the synergetic and networked operation of R&D&I at the transnational level in the specific sectors of SUDOE based on "smart" specialization.

PROJECT STRUCTURE

Beside transversal activities (WP-T1 on Project Management, WP-T2 on Project Communications and WP-T3 on Project Evaluation), PEMFC-SUDOE is organized in 4 technical workpackages:

-  **WP1:** The efficient use of resources for renewable fuel production at the SUDOE region.
-  **WP2:** Development of innovative and smart PEM Fuel Cell Technology
-  **WP3:** Modelling and sustainability assessment of the developed PEMFC technology in the SUDOE region
-  **WP4:** Competitive implementation and marketing strategy.

Interactions between workpackages are illustrated in the scheme:

