







IMDEA Energy Institute



- Legally founded in 2006 by Madrid's Government.
- Mission: promote and conduct R&D&i on sustainable energy technologies.
- Organized into eight research units.
- Accreditation of 'María de Maeztu' Unit of Excellence, granted by the Spanish State Research Agency.

Research topics

- Production of sustainable fuels: hydrogen, biofuels and advanced fuels from wastes
- Solar power
- **Energy storage**: electrochemical, thermal and thermochemical systems
- Energy systems with enhanced efficiency
- Power systems and demand management
- Valorization of CO₂ emissions
- Analysis and assessment of energy systems













Hydrogen activities

- Process design, simulation and optimisation
- Techno-economics assessment
- LCA harmonisation protocols
- Prospective life-cycle assessment (SO technologies)
- Eco-efficiency assessment (ISO 14045:2012)
- Social-LCA
- Life cycle sustainability assessment
- Eco-design: PEMFC stack and SOE
- Roadmapping: Spain and Community of Madrid

- New high conductive materials for PEM technologies
- Hydrogen from wastes
- Microbial electrolysis cells
- Biogas dry-reforming
- Biomethane pyrolysis

Hybridization with CSP





