

CAETS Meeting 2021 - Buenos Aires The Future of Energy Lectures

The renewables energies: Their evolution in the future

Solar energy: Heat; Photovoltaic
Energía Solar: Calefacción; Fotovoltaica
Wind Power Generation
Energía Eólica
Waste energy; Biomass
Combustión de Residuos; Biomasa
Hydroelectricity
Hidroelectricidad
Tidal and wave
Mareas y Olas
Geothermal

The future of Nuclear energy

El futuro de la Energía Nuclear

Compare nuclear vs combined cycle gas plants
Comparación de Energía Nuclear versus Plantas de Gas de Ciclo Combinado
Safety conditions for nuclear power plants.
Condiciones de seguridad de las plantas de generación nuclear
New developments and research.

Biofuel: The use for feed versus energy applications

Ethanol
Biodiesel

Coal

Reserves; costs; countries. Environmental restrictions.

Oil & Gas

Conventional and unconventional perspective
Gas to power
LNG: Liquefaction & Regasification
Operations, maintenance & integrity management in Oil & Gas

Changes in energy demand and modes of use

Energy saving. Programs. Results
Electric cars
Demand Response, Distributed Energy Resources
Environmental restrictions
Grid-wide Renewable Energy Integration (Large Scale and Distributed Resources). Smart Grids

Ensure access to affordable, reliable, sustainable and modern energy for all (SDG 7-Sustainable Development Goals –UN).

Competition among energy sources, impact on climate change

International agreements of responsibility and commitment to reduce CO2 emissions, present and past contribution to environmental damage

Energy transition that secures the benefits of sustainable energy for all. Environmental impact of energy transition

Energy access and affordability, security and reliability, sustainability and cost.

Synergies across power, gas, transport, heating/cooling, and new energy carriers, in order to optimize overall decarbonisation efficiency whilst supporting local development.

Energy conversion and storage, technical and economic sector interfaces. Lithium

Training of human resources for new energy challenges and for the next energy revolution

Workforce Engagement

Youth and Talent Development

Leadership & Career Development