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Certificate of Achievement

Carles Lara

has completed the following course:

NEW ENERGY TECHNOLOGIES: ENERGY TRANSITION AND SUSTAINABLE DEVELOPMENT
GRENOBLE ECOLE DE MANAGEMENT

Created by Grenoble Ecole de Management in partnership with Tenerrdis, Air Liquide, GE Renewable Energy, CNR, Think Smartgrids, Yélé, Schneider Electric and Grenoble Institute of Technology, this online course explored the development of new energy technologies and related key energy challenges.

6 weeks, 2 hours per week

Loïck Roche
Dean and Director
Grenoble Ecole de Management

Fabrice Arroyo
Associate Professor of Management
Grenoble Ecole de Management

GRENOBLE ECOLE DE MANAGEMENT

The person named on this certificate has completed the activities in the attached transcript. For more information about Certificates of Achievement and the effort required to become eligible, visit futurelearn.com/proof-of-learning/certificate-of-achievement.

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TRANSCRIPT

GRENOBLE ECOLE DE MANAGEMENT

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95% AVERAGE TEST SCORE

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STUDY REQUIREMENT

6 weeks, 2 hours per week

LEARNING OUTCOMES

- Analyse and evaluate the different new technologies and innovations
- Explore new technologies impact in the energy sector
- Discover the market organisation and the main actors in: energy efficiency, energy from biogas, hydropower, solar energy, hydrogen energy and smart grids.
- Contribute to social exchange and global awareness of the "energy transition" and each new energy technologies' impact.

SYLLABUS

Energy Efficiency

- Global energy challenges
- Policy fostering energy efficiency
- Key energy efficiency markets and trends
- Prosumers' concept
- Digital revolution
- Projects in energy efficiency in Europe

Solar Energy

- Converting solar energy
- Solar PV market
- Economics and competitive field
- Market and stage of development in France and Europe
- Main industrial actors and key markets
- Trends and innovations for the future

Hydropower

- Definition of hydropower. The different kinds of hydropower turbine and dam
- Challenges of hydropower development
- New energy markets, storage & flexibility
- Facts, figures and main actors
- Impact and development of ocean and tidal energy
- Innovation in hydropower

Biogas

- Biomass energy & why biogas
- Anaerobic digestion (methanisation)
- Different usages/applications of biogas
- Biogas market in France and in Europe
- Main actors in this market
- Innovation projects in this field

Hydrogen

- Definitions of hydrogen and hydrogen-energy
- Development/production from renewables
- Hydrogen as an energy storage solution
- Hydrogen for energy applications
- Main actors in France and Europe
- Innovation projects, road-maps and trends.

Smart Grids

- Definition of a smart grid
- Smart grid as key element of the future electricity system
- Smart grids connected with Smart buildings and Smart cities
- Links between Smart Grids and Storage
- Main actors in France and Europe
- Trends and innovation projects in the smart grids field

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