



image: Federico Beccari/ unsplash



Università
Ca' Foscari
Venezia

Dipartimento di
Scienze Molecolari
e Nanosistemi

The great energy transformation

31 marzo 2025, 12.15

Aula Delta 0A

Nicola Armaroli, Istituto per la Sintesi Organica e la Fotoreattività Consiglio Nazionale delle Ricerche (CNR-ISOF)

A deep energy transformation of the global energy system to be possibly accomplished within mid-century is a gigantic technological, economic and social challenge. This process will be characterized by an increasing electrification of energy end uses, with solar and wind electricity – in combination with storage technologies – playing a dominant role thanks to a unique combination of technical and economic features. Topics discussed

during the seminar include, among others, the intrinsic enhancement of energy security with renewables, the decarbonization of the transportation system, the electrification of residential heating, the specific challenges of the hard-to-abate sectors and chemical industry, and the availability of mineral resources for the manufacturing of renewable technologies.