The energy transition – E. Rossi di Schio

The aim of the course is to provide the PhD students the key concepts of the energy transition and methods concerning the analysis of energy problems and energy efficiency.

Particular attention will be paid to the connection with exergetic-economic-environmental aspects and to the related costs and benefits. At the end of the course the student will have acquired a good command of the energy issues.

Agenda.

18 May 2022 – 3 hours

Introduction: unit of measurement of energy, definition of energy transition. Resources and reserves. The time of exhaustion and innovative models of resource evaluation.

25 may 2022 – 3 hours

The energy consumption and demand: focus on the European energy balance. Energy and climate change: ICCP actual forecasts.

1 june 2022 – 4 hours

Energy assessment methods. Introduction to exergy. Energy efficiency and exergy efficiency.

16 june 2022 – 4 hours

Methods of economic evaluation. Methods of evaluating energy investments. Economic choices in a risk regime.

23 june 2022 – 4 hours

The price of energy raw materials and its evolution in the various competition regimes. Focus on the electricity tariffs. Exercises.