CBS M DEPARTMENT OF ECONOMICS

MINOR IN Energy economics & Policy

MSc. Economics and Business Administration



Minor in Energy Economics & Policy

On Track for a Renewable World

You will

- Learn how the energy sector works and who is involved.
- Discuss pathways to decarbonise the way in which we supply energy.
- Understand the regulation and business aspects of the energy sector.
- Meet experts and practitioners from the energy sector in guest lectures.
- Have the option to participate in field trips to energy sites.

Purpose

The European Green Deal has established the objective of making Europe the first climate-neutral continent by 2050. At the same time, Denmark has decided to be at the frontline targeting a 70% reduction in greenhouse gas emissions by 2030, before climate neutrality is achieved by 2050. Reaching these objectives imply massive transformations in the energy sector.

Content

Energy is essential to the functioning of the modern economy, but we must switch from the current use of fossil fuels towards renewable energy sources such as wind, solar, and hydropower. This massive undertaking requires investments in new infrastructure reaching from heating and powering our homes and commercial buildings, to transportation of goods and people, industrial production, or agriculture and forestry. Bloomberg NEF estimates that USD 78 to 130 trillion will be required until 2050 for clean energy investments. At the same time, the energy system is highly complex and characterised by physical and technical relationships that need to be considered in economic analysis.

Goal

This minor provides you with the tools, concepts, principles, and theories needed to analyse the functioning of the energy system. The education is research-based and covers economics, system modelling, and business perspectives which can inform regulatory policy as well as individual business strategies and investments.



Students at a site visit, Fall 2023.

⁴⁴ Reflecting on it now, the minor in Energy proved to be a crucial milestone in my journey into the renewable energy sector. While my primary field of study was business, with only limited exposure to technical subjects like programming, the Energy minor introduced me to new and interesting perspectives. Not only did I choose to write my master's thesis in this area, but this newfound interest also prompted me to apply to several companies in the field. Ultimately, the knowledge I acquired through this minor played a central role in my success during job interviews and assessment days, leading me to get an exciting graduate position at Vestas.

Hanne Boettcher Vestas Germany GmbH Graduate from the minor in 2023

The energy sector needs skilled professionals to overcome the current security, sustainability, and affordability challenges. The minor in Energy Economics and Policy gives the students an excellent training on strategy, modelling, and policy. The graduates from this minor are perfectly equipped to pursue a successful career in the sector and contribute to the green transition.

Andreas Metschke

Head of Power, VP Copenhagen Infrastructure Partners



Visit of Avedøre power station, Fall 2023.

Career Options

The energy transition induces vast changes in the energy industry and calls for bright minds to contribute to developing a sustainable energy supply system. Globally, there is a strong and growing need for graduates who can master the analytical skills and business perspectives needed for success in this evolving landscape. Consultancies, businesses, policy makers, and industry increasingly focus on the transition to a sustainable energy sector. Together with the knowledge from your specialisation, the content of the minor will greatly strengthen your profile and will serve you to foster your professional career.

Job prospects

The skills that you will acquire during the minor will allow you to work in diverse roles within the energy sector (e.g., consultant, business analyst, strategy advisor, asset manager or researcher)

Where to work

You will be qualified to work both at the private and public sector. Some examples of organisations in which you will be able to develop you career are energy companies, regulators, network operators, energy agencies and ministries, intergovernmental organisations, consulting and investment companies, or research and education institutions, among others.

Partners in the industry

Endorsed by the industry supported Copenhagen School of Energy Infrastructure.



Structure

This minor gives you the opportunity to have a second specialisation in your degree. It is designed to prepare you to understand the main energy and related environmental challenges for the economy and business. This minor is a bundle of three electives (7.5 ECTS each) that can be chosen separately, but if taken together, reward the minor. The course descriptions can be found online in the course catalogue.

The three courses of the minor together form a comprehensive set of perspectives and methods, with an emphasis on quantitative analysis and a thorough understanding of the complex structure of the energy industry.

ENERGY ECONOMICS, MARKETS, AND POLICY

- Dive deep into energy economics for a sustainable future.
- Discover the driving forces of the energy sector transformation.
- Master economic tools for energy business and policy.

ENERGY SYSTEM ECONOMICS AND MODELLING

- Uncover the main component of a low-carbon energy system.
- Develop analytical skills for energy system challenges.
- Quantify solutions for the energy transformation and assess them critically.

THE ENERGY INDUSTRY IN TRANSITION: MARKETS, INNOVATION AND STRATEGIES

- Delve into sustainable energy challenges, economics, and regulation.
- Navigate the complexities of energy innovations and theories.
- Apply theoretical insights to real-world innovation strategies.

How to sign up

If you want to sign up for the Minor in Energy Economics & Policy, you have to select the minor when signing up for electives. You will subsequently be signed up for all three courses.

FOR MORE INFORMATION, PLEASE CONTACT MANUEL LLORCA (COORDINATOR) MLL.ECO@CBS.DK