

# JUR-3619 Energy and Climate Change Law – 15 ECTS

## **The course is administered by**

Faculty of Law

## **Place of study**

Tromsø

## **Type of course**

Master level. The course is given during fall term.

## **Admission requirements**

The course is mandatory for students on the NOMPEL programme.

Only students admitted to the Master of Laws programme in Environmental Law (NOMPEL) may register for the exam of this course.

## **Course content**

Climate change, caused by anthropogenic greenhouse gas emissions (GHGs), is one of the greatest threats for humankind. Failure to mitigate GHG emissions not only compounds the effects of climate change that are already being felt, but can also lead to catastrophic consequences. Melting of sea ice and glaciers, ocean acidification, destruction of ecosystems and species, extreme weather events, drought, famine, diseases, forced migration, and even war are cases in point. It must be underlined that the high levels of anthropogenic GHGs are inextricably linked to unsustainable patterns of energy production and consumption. Consequently, in the carbon-constrained world of climate change mitigation, serious efforts must be made to curb the demand for energy, to use energy more efficiently, and to develop and use cleaner forms of energy. Renewable energy, energy efficiency, emissions trading, and carbon capture and storage are, therefore, key topics in this context. At the same time, given that energy is paramount for the socio-economic development of countries and for the welfare of their citizens, the regulation of the energy sector to meet the challenge of climate change must be done sensibly. That is, it must also strike a balance with sustainable development and energy security concerns.

This course provides students with a comprehensive understanding of the policy context and of the key legal framework that underpins the intricate relationship between climate change and energy. On the back of an overview of policy concerns and of the international climate change regime (UNFCCC, Kyoto Protocol, Paris Agreement), this course focuses particularly on selected energy law topics of relevance in the context of climate change: renewable energy, energy efficiency and micro and distributed generation, emissions trading, and carbon capture and storage/carbon capture usage and storage. Within the context of these topics, this course also delves into the policies and key examples of the legal framework and other instruments adopted by selected Arctic and Nordic States. This course therefore provides students an understanding of the overarching international and EU/EEA legal framework for energy and climate change, and of how selected Arctic and Nordic States implement said framework.

A detailed list of the topics covered by the course is available hereunder:

### **1. Introduction to Energy and Climate Change:**

- Nature of energy markets and the structure of the energy industry;
- Energy production and consumption and GHG emissions in general;
- Energy production and consumption and GHG emissions in the Arctic;
- Energy mix of selected Arctic and Nordic States;
- The links between climate change, sustainable development, and energy.

## **2. The Relationship between Energy and Climate Change Policies:**

- Balancing energy security, competitiveness, and climate change goals;
- Energy and climate change policies of selected Arctic and Nordic States;
- Nationally determined contributions of selected Arctic and Nordic States;
- Energy and climate change policy of the EU;
- The International Energy Charter.

## **3. The Climate Change Legal Regime and its Implications for the Energy Sector:**

- UNFCCC, Kyoto Protocol, Paris Agreement and their implications for the energy sector;
- Offset mechanisms: Clean Development Mechanism, Joint Implementation, and Emissions Trading;
- Nationally determined contributions of selected Arctic and Nordic States;
- Application of principles of international climate change law of relevance to selected energy related activities (sustainable development, precautionary principle, polluter pays principle, common but differentiated responsibility and respective capabilities, sovereignty over natural resources, environmental impact assessment).

## **4. Renewable Energy:**

- Sources of renewable energy (including the nuclear power dilemma);
- The role of renewable energy in energy transition towards a decarbonized economy;
- Integration of renewable energy into the energy market;
- Legal and regulatory aspects related to the development of renewable energy;
- Barriers to the development of renewable energy;
- Financial support schemes and cooperation mechanisms for the promotion and development of renewable energy (with examples of support schemes used by selected Arctic and Nordic States);
- Relationship between support schemes for renewables and competition law;
- Regulation of renewable energy under EU/EEA law and implementation by Nordic States;
- Renewable energy related disputes under the Energy Charter Treaty and the WTO;
- The role of the International Renewable Energy Agency (IRENA).

## **5. Energy Efficiency and Micro and Distributed Generation:**

- The role of energy efficiency and micro and distributed generation in energy transition towards a decarbonized economy;
- Incentives for the adoption of energy savings;

- Regulation of energy efficiency under EU/EEA law;
- Energy efficiency rules of selected Arctic and Nordic states;
- Regulation of energy efficiency under the Energy Charter Treaty – Protocol on Energy Efficiency and Related Environmental Aspects;
- Microgrids, smart grids and meters, and energy “prosumers”.

## **6. Emissions Trading:**

- The role of emissions trading for the reduction of emissions;
- The design of emissions trading schemes (‘cap and trade’, emission permits, management of allowances, monitoring and reporting of emissions, verification and accreditation, and enforcement);
- EU emissions trading scheme (the largest and first cross-border greenhouse gas emissions trading system);
- Emission trading schemes of selected Arctic and Nordic States;
- International emission trading schemes and possible conflicts with WTO law.

## **7. Carbon Capture and Storage/Carbon Capture Usage and Storage:**

- The role of carbon capture and storage (CCS) and carbon capture usage and storage (CCUS) for the reduction of emissions;
- The role of CCS in negative emissions scenarios (e.g. BECCS, bio-energy with CCS)
- Public perceptions of CCS
- Legal and regulatory aspects related to carbon capture and storage (property, regulatory, and liability rules and GHG accounting);
- EU Directive on carbon capture and storage;
- Treatment of CCS in EU emissions trading directive;
- Experience of selected Arctic and Nordic States with carbon capture and storage.

## **Objectives of the course**

### *Knowledge:*

A student who successfully completes the course shall have acquired:

- advanced knowledge of the interdependence between climate change and energy; of the international climate change legal regime and its implications for the energy sector; and of the legal and regulatory regimes for renewable energy, energy efficiency, emissions trading, and carbon capture and storage/carbon capture usage and storage;
- knowledge of Nordic States’ implementation of relevant international and EU/EEA climate change and energy legal framework, as well as of main instruments used in the Nordic States for the purposes of energy transition;
- knowledge of climate change and energy policies of selected Arctic and Nordic States and of the EU;
- knowledge in relation to other aspects of the course.

### *Skills:*

A student who successfully completes the course is able to:

- identify and analyze legal problems of both theoretical and practical character related to energy and climate change, both in international and specific Arctic and Nordic contexts;
- apply knowledge gained of energy law, climate change law, and regulatory concepts in a critical and independent way;
- identify and discuss limitations of the current law;
- Identify solutions fostering energy transition into a sustainable, low carbon and resource efficient economy;
- construct and communicate legal reasoning, orally and in writing, in a clear and precise manner;
- have some appreciation for comparative method as a means for examining the legal regulation of a particular industrial sector.

### *General competence:*

A student who successfully completes the course will be able to:

- Apply the knowledge and skills obtained in the field of Energy and Climate Change Law individually and in cooperation with others;
- Communicate reasoning within the field of Energy and Climate Change Law in a clear and precise manner, orally and in writing to the academic community and the general public;
- Apply knowledge and skills acquired within Energy and Climate Change Law in all jurisdictions and for all tasks and projects where relevant;
- Identify and reflect on ethical dilemmas that may arise within the Energy and Climate Change Law area in particular and deal with these in a responsible manner.

## **Language of instruction**

English

## **Teaching methods**

This course uses interactive and dynamic teaching methods. The course will consist of both lectures and seminars comprising a total of 30 hours. Guest lectures may be included as an addition. The seminars are primarily based on a set of problem-based practical cases. In addition, students can also be requested to present a given topic.

## **Work Requirements**

Students are encouraged to participate actively during the lectures and seminars. Students are expected to be prepared for lectures and seminars by studying the corresponding literature of the curriculum. Students should study independently in periods when there are no lectures or seminars.

The students admitted to the NOMPEL programme are required to complete a project assignment on 'energy and climate change regulation and policy in a Nordic context', and have it accepted as adequate before they can take the exam. This project assignment has two mandatory components: *i*) group work with a final group oral presentation; and *ii*) an individual report of maximum 5 pages with the student's reflections on the assignment and regulatory and policy recommendations. The purpose of this project assignment is to encourage the students to think critically; to find solutions to challenging problems related to balancing energy and climate change considerations; and to develop skills in planning,

research, oral and written communication, and individual and group work ethic. This assignment also intends to prepare the students for the final exam.

In assessing whether the work requirement is approved, the following criteria will be used:

- Identification, formulation and discussion of legal and policy questions;
- Application of the knowledge gained in the different topics of the course to practical problems raised in the project assignment;
- Ability to devise regulatory and policy solutions for energy and climate change related problems;
- Presentation and communication of legal and policy arguments in a clear and precise manner both orally and in writing.

The evaluation of whether the work requirement is approved is based on an overall assessment of these criteria. The assessment consists of an integrated evaluation of the group work with oral presentation, and the individual report.

## Assessment

### Mandatory work requirements:

The students admitted to the NOMPEL programme are required to complete the project assignment and have it accepted as adequate before they can take the exam. This assignment has two mandatory components:

1. Group assignment and oral presentation.
2. Individual take home assignment of maximum 5 pages.

### Assessment

The course is assessed through a six hours ~~closed-book~~ written home exam. The exam may include theoretical and/or practical scenario questions.

~~Students are allowed to bring into the examination room a specific treaty collection identified in advance by the Faculty of Law. The treaty collection may only contain underlining etc. in accordance with the Faculty's regulations on that matter.~~

~~Students may also bring a dictionary, as long as it merely provides translations and no definitions. The Faculty must approve each student's examination supports (treaty collection and dictionary) prior to the examination.~~

The grading scale of A to F is applied, where F constitutes fail.

Students who fail their examination are entitled to re-sit the examination, cf. Regulations for examinations at the University of Tromsø Sec.22.

### Date of examination

The exam is held at the end of the semester.

### Schedule

See [timeplan.uit.no](http://timeplan.uit.no)