



APPLIES TO ACADEMIC YEAR 2016/2017

GRA 8187 Green Growth in the Energy Sector (2016/2017)

Programme

Executive MBA 2016/2017 - Energy track

Responsible for the course

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Department

Department of Law

Term

According to study plan

ECTS Credits

4

Language of instruction

English

Introduction

The goal of sustainable development has emerged over the last forty years as an increasingly important guide to policy formulation - both at the global, national and corporate level. This trend is likely to continue over the next generation, as human activity levels will press increasingly hard against the limitations of the planet. The emphasis in the sustainability journey does change over time, and currently the threat of global warming and the move towards renewable energy are central. Corporations are already facing the need to formulate their own climate and energy policies, and increasingly will have to formulate strategies for their general "greening" – that is strategies for green growth. To do so effectively, managers need to understand the full (sustainability) picture, the present situation, the likely societal response, and the opportunities this opens.

Learning outcome

The intent of this course is to give the student an understanding of how climate change and growth in renewable energy are likely to evolve over the next several decades at the global and national level, and how this will influence business threats and opportunities.

Acquired knowledge:

Understand the role of climate change and more renewable energy on business environment of the future
Know the spectrum of possible responses to the dual challenge – know the possible "solutions to the problem".

Acquired skills:

Ability to foresee likely developments in the climate and energy arena.
Ability to develop an energy and climate strategy.

Reflection:

Understand how the societal response to climate change and more renewables is the result of global players pursuing their short-term interest in a physically constrained world.
Understand why green growth is a desirable outcome.
Understand the weakness of equilibrium thinking in a dynamic non-linear world.

Prerequisites

Granted admission to the EMBA programme.

Compulsory reading

Books:

BP. 2014. BP Energy Outlook 2035. (96 p). http://www.bp.com/content/dam/bp/pdf/Energy-economics/Energy-Outlook/Energy_Outlook_2035_booklet.pdf
Commission on The new climate economy. 2014. Better Climate. Better Growth - Synthesis Report. (72 p). <http://newclimateeconomy.report/TheNewClimateEconomyReport.pdf>
Kane, Gareth. 2011. The Green Executive, Corporate leadership in a low carbon economy. arthscan Ltd. 288
Randers, Jorgen. 2012. 2052 – A Global Forecast for the Next Forty Years. Chelsea Green Publishing, White River Junction, Vermont. (59 of 392 p)

Articles:

IEA. 2014. World Energy Outlook 2014. Vienna. Executive summary (11 p). <http://www.worldenergyoutlook.org/publications/weo-2013/>

McKinsey & Company. 2009. Pathways to a Low-Carbon Economy. (20 p).
<http://www.mckinsey.com/globalGHGcostcurve>

Collection of articles:

Collection of short papers (100 p)

Other:

IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC. 151

Recommended reading

Books:

Ralf Fücks. 2015. Green Growth Smart Growth. Anthem Press

Course outline

The course spends one day on each of the following topics:

Day 1: The climate problem – mainly caused by the use of fossil fuels
Day 2: Green growth as a solution – more wealth with less footprint
Day 3: Action at the corporate level – innovation and green strategy
Day 4: The big global picture – the business environment to 2052

The course includes the following topics followed classroom discussion:

The climate problem

- causes and effects
- solutions at the global and national level
- the role of the energy sector

Green growth as a solution

- the global response until now
- why things are slow
- green growth – theory and practice

Action at the corporate level

- green strategy in the corporation
- how to get started
- how to maintain momentum

The big global picture to 2052

- the future of global climate and energy policy
- the 2052 forecast and its implications for business

During the program the students are split in small groups to develop a green strategy for an energy company. This includes answering the question:

- Why should a leading energy company have a strategy for green growth?
- What would such a strategy look like? (goal, actions, implementation)

Computer-based tools

It's Learning

Learning process and workload

1 ECTS credit corresponds to a workload of 26-30 hours.

Attendance to all sessions in the course is compulsory. If you have to miss part(s) of the course you must ask in advance for leave of absence. More than 20% absence in a course will require retaking the entire course. It's the student's own responsibility to obtain any information provided in class that is not included on the course homepage/ It's learning or other course materials

Lectures and sessions of student work will be intermixed to create variation and improve learning. During the course the students get the opportunity to make the first draft of their term paper, under guidance and with the possibility of advice from lectures and classroom discussion. Each group of students will be asked to give a short presentation of their work at the end of the course.

Examination

The students will be evaluated based on two papers:

- Term paper

(max 25 pages) written in groups of 4 students (will count 50 % of grade):

"An energy and climate strategy for a chosen company."

- A well formulated essay

(max 5 pages) written individually (will count 50 % of grade):
“Why should a leading company have an energy and climate strategy?”

This is a course with continuous assessment (several exam elements) and one final exam code. Each exam element will be graded using points on a scale (e.g. 0-100). The elements will be weighted together according to the information in the course description in order to calculate the final letter grade for the course.

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for term papers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation

Examination code(s)

GRA 81871 - Continuous assessment; accounts for 100 % of the final grade in the course GRA 8187; 4 ECTS credits

The course is a part of a full Executive MBA and all evaluations must be passed to obtain a certificate for the degree.

Examination support materials

Re-sit examination

Re-takes are only possible at the next time a course will be held. When course evaluation consists of class participation or continuous assessment, the whole course must be re-evaluated when a student wants to retake a exam. Retake examinations entail an extra examination fee.

Additional information