

Master in Global Energy Transition and Governance

Academic Year 2016/2017



I. Academic year 2016-2017

The programme took place in two locations (Berlin and Nice). The programme is composed of 340.5 hours of teaching and a series of workshops, visits, field trips and other events.

First term in Nice, from October 17, 2016 to January 2, 2017 at the Institut Européen · European Institute, CIFE;

Second term in Berlin, from January 3, 2017 to March 31, 2017 at the Studentendorf Schlachtensee, in Berlin;

Third term in Nice, from April 1 to June 30, 2017 at the Institut Européen · European Institute, CIFE;

The fourth term, from July 1 to September 4 is dedicated to the writing of the thesis.

The defence of the thesis took place at the Fondation Universitaire in Brussels.

The objective of the Master is to enable the students to comprehend and analyse 1. The international energy governance, the various political changes in different states and the numerous conflicts addressing energy management, supply, and distribution 2. The EU energy challenges and governance both in terms of fossil and renewable energies, 3. The transformations of the national energy strategies towards low carbon economies, 4. The energy market evolutions, and 5. The regional and local low carbon energy strategies. These issues are at the cross-roads of different disciplines of social sciences: political economy, economy, sociology and geography.

The overall understanding of the complexity of the current energy transformations in the world requires a multidisciplinary approach. It will be complemented by seminars, workshops and field visits with academic and professional experts. The Master will be concluded by two simulation games: the first one will deal with negotiations between local actors to decide on a local energy strategy, the second one will bring students together to negotiate the settlement of an international energy conflict. The conclusion of the programme is based on the defence of a Master's thesis in September.

II. Organisation of the programme

The curriculum has been composed of five obligatory modules. University teachers, namely from French, German and British universities, experts from International and European organisations as well as researchers contributed to our programme.

1. International Energy governance and conflicts, directed by Prof. François Bafail, CNRS Head of Research (73 hours)

Energy management, its availability, transport and distribution raise the core question of the role and importance of the nation state in relationship with its economic, political or social partners, be they public or private, at the national or the international level. The concern is indeed about the security of supply and to this extent, the core question addresses the nature of the rule: one single rule, rule by law and rule of law. Is one type of rule more efficient than another one to manage the energy sector? To organise the firms? To develop the market? To distribute the resulting profits? And finally to solve the conflicts? In other words, in order to manage the conflicts which are all resulting from issues linked with national sovereignty, we will question to what extent democratic regimes are more efficient than the authoritarian regimes. Is the nationalisation policy more efficient than the privatisation one? Are the supranational regulations more efficient than the national ones? These different questions legitimate the approach in terms of political economy which questions the economic interests of different social groups which support or challenge different political regimes.

Prof. François Bafail, CNRS Head of Research
“Energy geopolitics and conflicts”

Theories: neo-institutionalism, the “resource curse”, “rule of/by law”

Jean-François Di Meglio, Director Asia Center

Asian energy challenges

Prof. Sébastien Velut, Professor at the University Paris 3 Sorbonne Nouvelle, Director of the Institute of Latin American Studies

South American energy challenges

Dr Marc-Antoine Eyl-Mezzega, Russian director, IEA

Historical overview and present energy challenges in Russia, Ukraine, Central Asia and Caucasus in their relationships with the EU

Prof. Eric Verdeil, Professor at Sciences Po, Senior Research Fellow, CERI-Sciences Po

Energy challenges at urban level in the Middle East

Dr Bernd Weber, Director Industry, Energy, Environment, Wirtschaftsrat der CDU e.V.

EU Neighbourhood Policy - East and South of the EU

Dr Marc Valéri, Associate Professor, University of Exeter

Energy challenges in the Middle East

2. **Economic governance of energy**, Dr Laurent BAECHLER, CIFE, Director of the MAEIS (Master), Anglophone branch and Editor-in-chief of “*L’Europe En Formation*” (48 hours)

The aim of this course is to help students understand the logics at work in energy markets, involving demand, supply and price determinants, as well as market structures, so that they can figure out the conditions in which energy transitions such as a switch from fossil fuels to renewables can take place. Another fundamental dimension of this course is the analysis of the objectives and instruments of energy policies aiming at the regulation of energy markets, with a view to understand how governments try to control or orientate market trends in order to facilitate transitions from fossil fuels to renewables, from protected to liberalized markets, from centralized to decentralized markets. All these points will be illustrated by current examples of energy trends and policies at national and international levels. Finally, a focus will be put on the articulation between energy and climate policies, as one of the ultimate goals of energy transition strategies, above energy security and competitiveness, is climate protection.

Dr Laurent Baechler, CIFE, Director of the MAEIS (Master), Anglophone branch

Energy in an Economy: Markets and Regulation

The Economics of Energy Transition

The Energy/Climate Change Nexus

Mr. Alexander Gusev, Project scientist at the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Germany

Transforming the EU electricity market (emobility, digitalisation, renewables)

Mr. Philippe Charlez, Energy Expert, Total

Shale gas and oil

Ms Lina Li, Project Manager at adelphi

Carbon markets

3. **European Energy Governance**, directed by Dr Gilles Lepasant, Senior researcher at CNRS, Géographie-Cités (Paris) (39 hours)

Energy has been among the most rapidly developing EU areas in recent years, with crucial impacts on utilities, cities, regions, networks and national regulations. The course will debate the factors that drive energy policy decisions in Europe and how security as well as economic and environmental challenges are intertwined in the fabric of the EU energy policy. It will focus on the support provided by the European Union to the clean energy transition. It will highlight factors that influence the definition and the implementation of EU priorities regarding energy transition, thus helping to understand political economy factors that both inhibit and accelerate clean energy transitions in Europe. It will discuss the drivers of the EU's sustainability agenda as well as the political, economic, social and technological challenges that need to be tackled in the course towards a low-carbon energy sector in Europe.

Dr Gilles Lepasant, Senior researcher at CNRS, Géographie-Cités (Paris)

“One Energy Union, 28 energy policies”

“Challenges and conflicts in renewable energy development”

“Technological innovations and new business models: the role of the private sector?”

“Europe in the World: leading or lagging behind?”

Dr Matthias Waechter, General Director of CIFE

The political system of the EU

Mr Joachim Balke, Official at European Commission

Clean energy for all EU citizens

Mr Gaspard Demur, DG Energy, Coordination of the EU Energy security strategy

The External dimension of the EU energy policy

4. **Local energy governance**, directed by Dr Rachel Guyet, Research fellow at CERI-SciencesPo
(63 hours)

Energy transition means deep social, political and economic transformations that affect local territories in Europe. The role they can play highly depends on the sectoral and political governance system of each European country. The course will deal with the new challenges faced by the local actors to deliver a range of adequate services in the framework of energy transition. It will also address the way decision processes are made at different levels of governance. Finally energy transition also questions the capacity of local actors to find a way to share the benefits of energy transition with all the communities, including the fuel poor people. This question is also a key to understand how energy transition enables poor remote populations to get access to electricity in emerging countries. Therefore the course will be divided into three parts. The first one focuses on the history of energy transitions and the role local actors have played over the years, the second one will deal with the governance system of the energy transition in Europe, the third one will address the issue of how energy transition can represent a solution to fight against energy poverty both in Europe and in emerging countries.

Dr Rachel Guyet, Research fellow at CERI-SciencesPo

Energy transition: history matters

The energy transition in the EU territories: the multi-level and horizontal governance

Energy transition as a social inclusion tool in Europe

Energy access and transition in territories in emerging countries

Dr Felix Groba, Director of Department of Energy and Climate Policy, Berlin Senate

The development of energy transition strategy in Berlin

Dr Victor Osu, Researcher Robert Gordon University, Aberdeen

Local energy transition: perspective in Nigeria

Anaïs Guerry, PhD Sciences Po, Law School

Local energy self-sufficiency in Germany

Ms Amy Gray, Senior Sustainable Development Officer
Creation of a local sustainable energy strategy – Aberdeen

Mr Guillaume De Laboulaye, Expert, Association ENERGIES 2050
Urban realities and dynamics facing climate change and the energy transition challenges - International initiatives and planning tools

5. Project Cycle Management, directed by Mr Emre Gür, CIFE representative in Istanbul (20 hours)

The Project Cycle Management Course is designed to provide students with a practical knowledge of the management methods, skills and tools for projects and programmes of International Institutions, NGOs or similar bodies. We will mainly focus on Project Cycle Management and Logical Framework Approach which is one of the management methods widely used at the planning, implementing and evaluating stages of most of projects. Some important concepts for project formulation such as participatory development, ownership by stakeholders, institutional development, gender issue, environmental aspects and appropriate technology will be discussed.

Mr Emre Gür, CIFE representative in Istanbul

Getting to EU and international funding
Principles from Project Management
Case study implementation

6. Simulation games, directed by Prof. François Bafoil, CNRS Senior Research Fellow, Dr Rachel Guyet, Research fellow, CERI-SciencesPo, Mark Young, President of Rational Games

First simulation: South China Sea conflict (5 hours)



The simulation was about different conflicts, which are taking place within the South China Sea. In the South China Sea, the majority of bordering countries - China, and the Philippines, Vietnam, Taiwan, Brunei to which should be added Malaysia and Indonesia - face claims for the possession of islands and atolls scattered over a vast maritime territory. The reason is that this territory is plenty of fishery and

energy resources – although nobody is able to precisely define the right value of these resources. Therefore the central challenge is to ensure that a single individual actor - China - does not have exclusive property rights, what would have the effect of excluding all other maritime trade and beyond. A balance is necessary in order to come to a balanced and fair distribution of resources possible, but that can also shelve any hegemonic claim. The energy issue is a convenient excuse to hide a much larger geopolitical issue where the U.S. but also Japan and India are involved. Within such a context, ASEAN, far from being an impotent organization, can play the role of a broker between different opposed geopolitical interests and Great Powers.

Mark Young, President of Rational Games

Introduction to the negotiation techniques

Prof. François Bafail, CNRS Senior Research Fellow, Dr Rachel Guyet, Research fellow, CERI-SciencesPo, Mark Young, President of Rational Games

Leading the simulation game and evaluation

Second simulation game: creation of a game on a local energy strategy by the students (12 hours)

After the requirements and conditions of the game were presented, students had to organize themselves in order to collectively create a simulation on the elaboration of a local energy strategy.

This simulation game aims at producing

- The concept of a simulation game with all the deliverables required so that the simulation game could be tested with professionals.
- A methodological tool to carry out negotiations on local energy strategies

Dr Rachel Guyet, Research fellow, CERI-SciencesPo

Introduction and evaluation

7. Methodological workshops, directed by Prof. François Bafail, CNRS Senior Research Fellow, Dr Rachel Guyet, Research fellow, CERI-SciencesPo (58 hours)

The individual research work is a highly important element of the Master's programme. Students should devote the time which is free of classes to their research. The research for the Master theses is coordinated by the supervisors. At the beginning of the year the students receive a list with topics proposed by the faculty from which they can choose their topic. The students can also propose a subject of their own choice to the teachers, who then decide whether they can advise the student on the topic or not. As soon as the subject is defined, each student gets assigned to a supervisor, who accompanies the work throughout the year and regularly on the basis of collective workshops and individual meetings. Supervisors will be at the disposal of the students during the writing of the thesis in the summer.

The methodological part of the course will be organised in workshops 1. For the supervisors to deliver the methodological tools necessary 2. For the students to present the progress they made on their work on The thesis must have a length of around **17,000 words** (excluding the bibliography and the appendixes). The working language allowed is English. It was delivered by email to the supervisors on **September 4**. The theses were defended on **September 21 and 22, 2017**.

8. Languages courses with other Master programmes

French (Nice) (12 hours for each level)

Anne Topenot, Alumna, promotion 2004/2005

German (Nice) (10.5 hours for each level)

Katja Terhechte, German teacher

III. Other workshops, events and field visits

Workshops

Mr Regis Martin, Project manager, Agency for energy efficiency, Nice (May 10)
Energy efficiency projects in Nice

Mr Xavier Carlioz, Director of the energy branch, Chamber of commerce and industry, Nice Côte d'Azur (May 11)
The investment potential in PACA region

Mr Jean-Christophe Clément, Project manager, Capenergies (June 8)
Smart Grids in PACA

Field visits and study trips



Visit of Feldheim, a 100% renewable energy village (March 15, 2017)

Visit of the German federation of cooperatives and meeting with **Dr Wieg** (March 19)
The role of cooperatives in the German energy transition

Visit of the German Parliament and meetings with Annalena Baerbock, (Green party) (March 23) and with Dr. Gabriele Werner (SPD Party) and Dr. Michael Kuxenko (CDU/CSU Party)

One study trip to the EEX in Leipzig, March 21-22

One study trip to Marseille (May 15-16)

- visit of the Regional Observatory of Energy (ORECA),
- visit of the French Solar Federation
- visit of EDF

Visit of the positive energy site Les Aqueducs Sophia Antipolis and meeting Mr Christophe Brun, Development Director, Valenergies (June 12)

Events

Forum Energie in Nice, February 24-26, 2017

Seminar by Tim Gould, Head of Energy Supply Division, World Energy Outlook, International Energy Agency, in cooperation with CERI-Sciences Po
Presentation of WEO results (January 25, 2017)

Federal Congress of the cooperatives in the energy transition, Berlin, March 14, 2017

