Interdisciplinary Bilateral Summer School on Energy Systems in Austria and the Czech Republic 2019

Final Report

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Aim and content of the (Winter and) Summer School 2019

The Czech-Austrian Energy Expert Group (CZ-AT EEG) was established in 2002 by the Austrian and Czech Governments to jointly study the issues of energy systems in both countries. The members of this group, appointed by their governments, are affiliated with Czech and Austrian universities and institutions. The Czech-Austrian Energy Expert Group is based on bilateral cooperation on sensitive issues in the field of energy contributing to shaping future energy policies in both countries and across the EU.

The established partnership and cooperation between Czech and Austrian energy academic experts led to the idea to organize the Winter and Summer School on Energy Systems in Austria and Czech Republic. Because of the administrative problems the costs for the winter part of the course has been covered by external and university internal sources and the proposal was created for the summer part of the school.

Since 2013 the Winter and Summer School has been formally organized by Jan Evangelista Purkyně University in Ústí nad Labem and Vienna University of Technology. The whole concept of the event remained the same as the network of collaborating experts.

The course is designed for 20 students from universities with the interest in energy topics. This year, unfortunately, there were less students because of school exams in same dates. The participating Czech and Austrian students should find a partner from the other country during the Winter School in Prague to start working on their bilateral seminar papers. Seminar papers were presented during the summer part of the course in Vienna and evaluated by supervisors who led the students through the course and joint work.

Students

The participating students came from different specializations and universities (in CZ – University of Economics, Czech Technical University, Jan Evangelista Purkyne University and CERGE EI – for the first time), which provides the heterogeneous mixture of approaches to the energy issues and brings the open board for interesting multi approach discussion.

Students were chosen through the application form with the personal information and experiences in the energy and economics field (application form can be seen in Annex 1 of this document). The list of participants (meaning all students, lecturers and organization team) can be seen in Annex 2.

Organization and program of the Summer School 2019

The whole project was proposed and carried out by:

Amela Ajanovic from Vienna University of Technology, Austria

Jiřina Jílková from Jan Evangelista Purkyně University in Ústí nad Labem, Czech republic

Together in the cooperation with their project partners:

Wolfgang Streicher from Innsbruck University, Austria, Reinhard Haas from Vienna University of Technology, Austria and Jaroslav Knápek from Czech Technical University in Prague, Czech Republic.

The program and all the activities were organized by the teams of the home universities. Jiří Louda (in behalf of Jiřina Jílková - UJEP), Šimon Přecechtěl (participant of the previous year course) and Jaroslav Knápek, Michaela Lachmanová (CTU) were the coordinators of the Winter School in Prague, Amela Ajanovic in cooperation with Reinhard Haas and Jasmine Ramsebner were the coordinators of the Summer School in Vienna. The program of the Summer School 2019 can be found in Annex 3.

There was a theoretical part lectured in Vienna University of Technology, this part was enriched by excursions where students may gain the practical view. During the Summer School in Vienna, participants had the possibility to visit: the waste incinerator in Spittelau, Austrian Power Grid and a solar building - passive apartment house with the architect's commentary.

During the Winter School in Prague students created teams of two (or three in special case) people to start working on the topics which they could choose upon the agreement with supervisors (Amela Ajanovic, Jirina Jilkova, Reinhard Haas, Jaroslav Knapek) and six bilateral teams were created. During the time between the Winter and Summer School students were working in Czech-Austrian teams on their seminar papers. The aim of all of the topics was to analyse the current situation in both countries, find up-to-date data and compare it (also on the EU level). Students presented their seminar papers and results of the comparison during Summer School in Vienna (see in program). The list of all seminar papers presented in Vienna can be found in Annex 4.

As mentioned above, due to the administrative mistake the winter part of the course has been covered by external and internal sources and the project proposal was created for costs of the summer course. Remuneration for lecturers in Vienna, transport to Vienna and back for lecturers and students were covered by the AKTION fund. We thank to Austrian Embassy for arranging the accommodation for Czech students also for this year which brought an absolutely significant help and savings to the budget.

We guarantee that there was no overlapping of the financing from AKTION and this extra support was absolutely necessary to realize this successful project.

Prof. Ing. Jiřina Jílková, CSc.

Annex 1

Application for the Interdisciplinary Bilateral Winter and Summer School of the Czech-Austrian Energy Expert Group

(Winter School: February 3 – 8, 2019 in Prague Summer School: June 16 – 21, 2019 in Vienna)

Application deadline: January 15, 2019. E-mail address for sending this application is: precechtel@ieep.cz

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|--------|--------------------------|----|--|
| Contac | ct details | | |
| Name: | | | |

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Address: E-mail: Tel:

Education Field of study:

University:

Number of semesters at the University:

Achieved academic title:

- Bakk /when (year):
- Master/Magister/ when (year):
- Doktor/PhD/ when (year):

Successful attended university classes/courses on: (which)

when (year)

- Energy policy:
- Energy economics:
- Energy technologies: (renewables, efficiency)
- Other energy relevant topic:

Other experiences in the energy field

- work experience:
- intership/workshop:
- seminar papers:
- other:

Experience with/in the Austria

- language courses:
- seminar papers:
- work experience:
- university exchange programme in the Austria:

Please summarize your motivation to participate in this Winter and Summer School (2-3 sentences)

Annex 2 List of participants

| List of participants for the Winter/Summer School, February/June 2019, Prague/Vienna | | | | | | |
|---|---|--|--|--|--|--|
| Surname | Name | University | | | | |
| | | | | | | |
| Austrian Deleg | ation | | | | | |
| Prof. Dr. Haas | Reinhard | TU Vienna | | | | |
| Prof. Dr. Streicher | Wolfgang | UIBK | | | | |
| Prof. Dr. Schleicher | Stefan | KFUG | | | | |
| Dr. Ajanovic | Amela | TU Vienna | | | | |
| DiplIng. Gruenner | Roman | воки | | | | |
| Austrian Stude | 1 | | | | | |
| Topic | Antonia | TU Vienna | | | | |
| • | Bernhard | TU Vienna | | | | |
| Groiss | | | | | | |
| Kleinl | Andreas | TU Vienna | | | | |
| Birett | Christina | TU Vienna | | | | |
| Wejwithan | Amphai | TU Vienna | | | | |
| Ebrahimi | Sayed Mustafa | TU Vienna | | | | |
| Nikoufar | Mohamadali | TU Vienna | | | | |
| Maierhofer | Daniel | TU Vienna | | | | |
| Austrian Team | In | | | | | |
| Prof. Dr. Haas Dr. Ajanovic | Reinhard | TU Vienna | | | | |
| Ramsebner | Amela Jasmine | TU Vienna TU Vienna | | | | |
| | | Vinter/Summer School , Prague/Vienna University | | | | |
| Czach Dalawati | | | | | | |
| Czech Delegati Prof. Jílková | Jiřina | UJEP | | | | |
| Prof. Janouch | František | Royal Academy Stockholm | | | | |
| D (1/ / 1 | Jaroslav | CVUT | | | | |
| Prof. Knapek | Jourosiav | 0001 | | | | |
| | | CVOI | | | | |
| Czech Students Vajlichová | | UJEP | | | | |
| Czech Students Vajlichová Knápek | Adéla Martin | UJEP CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek | Adéla Martin Petr | UJEP CVUT CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech | Adéla Martin Petr Prokop | UJEP CVUT CVUT VSE | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko | Adéla Martin Petr Prokop Ola-Sumbo | UJEP CVUT CVUT VSE CERGE-EI | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko | Adéla Martin Petr Prokop Ola-Sumbo Radim | UJEP CVUT CVUT VSE CERGE-EI CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla | UJEP CVUT CVUT VSE CERGE-EI CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová Matouš | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla Vojtěch | UJEP CVUT CVUT VSE CERGE-EI CVUT CVUT CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová Matouš | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla | UJEP CVUT CVUT VSE CERGE-EI CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová Matouš Laxton | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla Vojtěch | UJEP CVUT CVUT VSE CERGE-EI CVUT CVUT CVUT | | | | |
| Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová Matouš Laxton Czech Team | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla Vojtěch Dali | UJEP CVUT CVUT VSE CERGE-EI CVUT CVUT CVUT CVUT CERGE-EI | | | | |
| Prof. Knápek Czech Students Vajlichová Knápek Jílek Čech Bajnoko Štolfa Pavlová Matouš Laxton Czech Team Louda Přecechtěl | Adéla Martin Petr Prokop Ola-Sumbo Radim Adéla Vojtěch | UJEP CVUT CVUT VSE CERGE-EI CVUT CVUT CVUT | | | | |

Annex 3 Programme of the Summer School 2019

| Sunday | Sunday, June 23rd 2019 Tuesday, June 25 th 2019 | Tuesday, | Tuesday, June 25 th 2019 Thu | Thursday, June 27th 2019 |
|-----------|--|------------|---|--|
| | Accomodation for Czech students: | Dekanatzin | Dekanatzimmer CF Z217 | Dekanatzimmer CF Z217 |
| | Accomodation at Czech Embassy | 9:30 | New challenges in Electricity markets | 9:00 Presentations of seminar namers by students |
| | Penzinger Str. 114, 1140 Wien | | Prof. Reinhard Haas (TU WIEN) | and discussion |
| | | Dekanatzin | Dekanatzimmer CF Z217 | with R. Haas, J.Knapek, J. Ramsebner, Ajanovic, J.Jilko |
| 18:24 | Arrival of Czech students in WienMeidling | 10:30 | Coffee break | 11:00 Coffee break |
| 19:30 | Dinner for Czech students | 11:00 | Recent developments of biomass technologies | |
| | | | Prof. Michael Harasek | Prof. Dr. J. Knapek (Technical University of Prague) |
| Lectures: | S: | 12:30 | Lunch break at Mensa | 13:00 Lunch break at Mensa |
| Dekanat | Dekanatzimmer CF Z217, Gusshausstrasse 25, 2-3. Stock, Stiege 7 | 13:45 | Energy and mobility | |
| | | | Amela Ajanovic | |
| | | 15:15 | Presentations of seminar papers by students | 17:00 End of day |
| | | | with A.Ajanovic, R. Haas, J.Knapek, J. Jilkova, M. Lachmanova | ıchmanova |
| | | 19:00 | Social event for all students and lecturers | |
| Monda | Monday, June 24th 2019 | Wednesda | Wednesday, June 26th 2019 | Friday, June 28th 2019 |
| Dekanat | Dekanatzimmer CF Z216 | Dekanatzin | Dekanatzimmer CF Z217 | Dekanatzimmer CF 7217 |
| 9:00 | Registration | 9:30 | Energy and Environment: Cost of the Regulation | 9:00 Sustainable Buildings |
| 9:15 | Introduction | | Prof. Dr. Jilkova | Dipl. Ing. Roman Grünner (BOKU Vienna) |
| | PD Dr. A. Ajanovic and Prof. Dr. R. Haas, TU Wien | 11:00 | Coffee break & lunch | 11:15 Lunch break at Mensa |
| 9:30 | Recent developments on EU electricity markets | 12:00 | Technical Tour | 12:30 Technical Tour |
| | Prof. Dr. J. Knapek (Technical University of Prague) | | Austrian Power Grid | Solar buildings |
| 11:00 | Coffee break | | | 15:00 End of day |
| 11:30 | Work on seminar papers/presentations by students | 17:00 | End of day | |
| | (with J. Knapek, M. Lachmanova, J.Jilkova, A. Ajanovic, R. Haas) | | | |
| 12:30 | Lunch break at Mensa | | | はからから、で |
| 13:45 | The tragedy of the commons | | | A STATE OF S |
| | Alois Tost | | | transmires III |
| 15:00 | Coffe break | | | |
| 15:30 | The tragedy of the commons (continuation) | | | |
| | Alois Tost | | | |
| | | | | |

Annex 4 List of the seminar paper groups with topic and advisor

| Austrian student | Czech student | TOPIC OF SEMINAR PAPER | Supervisor |
|---------------------|----------------------------------|--|-----------------|
| Bernhard Groiss | Adéla Vajlichová | Wholesale electricity market | Reinhard Haas |
| Andreas Kleinl | Vojtěch Matouš | International electricity exchange in central and werstern europe: problems and challenges | Jaroslav Knápek |
| · | Martin Knápek | E-mobility economics | Amela Ajanovic |
| Amphai Wejwithan | | E-mobility in urban area : comparison of policies and lesson learned | Amela Ajanovic |
| | Štolfa Radim | Decentralized small pv systems | Jaroslav Knápek |
| | Ola-Sumbo Bajnoko | Biomass Potential | Jaroslav Knápek |
| Petr Jílek | Thomas Kotzent Florian Rinser | Promoting renewable electricity: Targets, Strategies, by Technology (2005-2018) | Reinhard Haas |