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Joint Summer School on Modelling Tools for Sustainable Development - OpTIMUS | (smr 3299)

Monday 10 June 2019

notitle - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (08:30-09:15)

time	title	presenter
08:30	Registration and administration formalities	

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:15-17:00)

time	title	presenter
09:15	Welcoming and Opening	
10:15	Coffee break	
10:45	Lecture 1. Introduction and objectives of the training	
11:15	Introduction by the participants: short presentation about their background of experiences, the situation of their countries and expectations of their learning outcomes.	
12:00	Lunch break	
13:00	Introduction to energy systems modelling	
15:15	Coffee break	
15:45	Work session: Installation of MoManI and other questions	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:15-17:00)

time	title	presenter
09:15	Welcoming and Opening	
09:45	Introduction of participants and trainers	
10:15	Coffee break	
10:45	Lecture 1. Introduction to geospatial electrification modelling	
12:00	Lunch break	
13:00	Exercise 1. Exploring electrification investment scenarios using the GEP Explorer	

15:15	Coffee break	
15:45	Exercise 1. Exploring electrification investment scenarios using the GEP Explorer	

Opening event - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (18:00-20:00)

Tuesday 11 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Designing a representative Reference Energy System	
10:15	Coffee break	
10:45	Time representation in OSeMOSYS / Hands on session: time representation in OSeMOSYS	
12:00	Lunch break	
13:00	Work session: Drawing a Reference Energy System of your Country	
15:15	Coffee break	
15:45	Work session: Time representation for your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 2 (Part 1 and 2). Introduction to the theory and application of GIS	
10:15	Coffee break	
10:45	Exercise 2: Working with Vector data : Data types, format, basic functions	
12:00	Lunch break	
13:00	Exercise 2: Working with Vector data : Data types, format, basic functions	
15:15	Coffee break	
15:45	Exercise 2: Working with Vector data : Data types, format, basic functions	

Wednesday 12 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Defining energy demands in OSeMOSYS / Hands on session: Defining energy demands in OSeMOSYS	
10:15	Coffee break	
10:45	Representing primary energy supply in OSeMOSYS / Hands on session: Defining primary energy supply in OSeMOSYS	
12:00	Lunch break	
13:00	Work session: Defining energy demands for your country model	
15:15	Coffee break	
15:45	Work session: Representing primary energy supply in your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:05)

time	title	presenter
09:00	Lecture 2 (Part 3). Introduction to the theory and application of GIS	
10:15	Coffee break	
10:45	Exercise 3: Working with raster data : Data types, format, basic functions	
12:00	Lunch break	
13:00	Exercise 3: Working with raster data : Data types, format, basic functions	
15:15	Coffee break	
15:45	Lecture 3. Application of GIS in electrification analysis and the GEP Scenario Generator	

Thursday 13 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Electricity supply system in OSeMOSYS part 1 (Thermal power plants & T&D)	
10:15	Coffee break	
10:45	Hands on session: Defining the electricity supply in OSeMOSYS (part 1)	
12:00	Lunch break	
13:00	Work session: Developing your country model	
15:15	Coffee break	
15:45	Work session: Developing your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 4. Energydata.info, Global Wind Atlas & Global Solar Atlas	
10:15	Coffee break	
10:45	Exercise 4. Data collection and database development for GIS	
12:00	Lunch break	
13:00	Exercise 5: Data extraction to CSV	
15:15	Coffee break	
15:45	Exercise 5: Data extraction to CSV	

Friday 14 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Electricity supply system in OSeMOSYS part 2 (Hydropower and Storage options) / Hands on session: Defining the electricity supply in OSeMOSYS (part 2)	
10:15	Coffee break	
10:45	Electricity supply system in OSeMOSYS part 3 (Wind and solar) / Hands on session: Defining the electricity supply in OSeMOSYS (part 3)	
12:00	Lunch break	
13:00	Work session: Developing your country model	
15:15	Coffee break	
15:45	Work session: Developing your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 5. How the GEP Scenario Generator functions – Introduction to Python and the processes behind GEP Scenario Generator (OnSSET)	
10:15	Coffee break	
10:45	Exercise 6. How to run an electrification analysis using GEP scenario generator	
12:00	Lunch break	
13:00	Exercise 6. How to run an electrification analysis using GEP scenario generator	
15:15	Coffee break	
15:45	Exercise 6. How to run an electrification analysis using GEP scenario generator	

Monday 17 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Emissions representation in OSeMOSYS / Hands on session: Emissions representation in OSeMOSYS	
10:15	Coffee break	
10:45	Implementing capacity reserve in OSeMOSYS / Hands on session: implementing capacity reserve in OSeMOSYS	
12:00	Lunch break	
13:00	Work session: Developing your country model	
15:15	Coffee break	
15:45	Work session: Developing your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 6. Energy modelling, scenario development and sensitivity analysis	
10:15	Coffee break	
10:45	Exercise 7: Assessing the investment cost required to meet SDG7	
12:00	Lunch break	
13:00	Exercise 7: Assessing the investment cost required to meet SDG7	
15:15	Coffee break	
15:45	Exercise 7: Assessing the investment cost required to meet SDG7	

Tuesday 18 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Defining scenarios and implementation in OSeMOSYS/ Hands on session: Defining scenarios and implementation in OSeMOSYS	
10:15	Coffee break	
10:45	Work session: Developing your country model	
12:00	Lunch break	
13:00	Work session: Developing your country model	
15:15	Coffee break	
15:45	Work session: Developing your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 7. Advanced theory of GEP Scenario Generator (OnSSET)	
10:15	Coffee break	
10:45	Lecture 7. Advanced theory of GEP Scenario Generator (OnSSET)	
12:00	Lunch break	
13:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
15:15	Coffee break	
15:45	Exercise 8: Setting up and exploring electrification scenarios for a country	

Wednesday 19 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Building Elements of Climate, Land-use, Energy and Water strategies (CLEWs) in OSeMOSYS: Introduction to water and land systems	
10:15	Coffee break	
10:45	Building Elements of Climate, Land-use, Energy and Water strategies (CLEWs) in OSeMOSYS: Introduction to water and land systems	
12:00	Lunch break	
13:00	Work session: Developing your country model	VIJAY MODI
15:15	Coffee break	
15:45	Work session: Developing your country model	VIJAY MODI

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Lecture 8. Communicating electrification model results	
10:15	Coffee break	
10:45	Exercise 8: Setting up and exploring electrification scenarios for a country	
12:00	Lunch break	
13:00	Lecture 9: An overview of GIS planning for electrification and different modeling tools	
15:15	Coffee break	
15:45	Lecture 9: An overview of GIS planning for electrification and different modeling tools	

Thursday 20 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Work session: Developing your country model	
10:15	Coffee break	
10:45	Work session: Developing your country model	
12:00	Lunch break	
13:00	Work session: Developing your country model	NICHOLAS ALLEN
15:15	Coffee break	
15:45	Work session: Developing your country model	NICHOLAS ALLEN

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
10:15	Coffee break	
10:45	Exercise 8: Setting up and exploring electrification scenarios for a country	
12:00	Lunch break	
13:00	Lecture 10. NRECA's model for geospatial platform development and electrification analysis	NICHOLAS ALLEN
15:15	Coffee break	
15:45	Lecture 10. NRECA's model for geospatial platform development and electrification analysis	NICHOLAS ALLEN

Friday 21 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Wrap-up and next steps	
10:15	Coffee break	
10:45	Work session: Developing your country model	
12:00	Lunch break	
13:00	Work session: Developing your country model	
15:15	Coffee break	
15:45	Work session: Developing your country model	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
10:15	Coffee break	
10:45	Exercise 8: Setting up and exploring electrification scenarios for a country	
12:00	Lunch break	
13:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
15:15	Coffee break	
15:45	Exercise 8: Setting up and exploring electrification scenarios for a country	

Monday 24 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Work session: Developing your country model	
10:15	Coffee break	
10:45	Work session: Developing your country model / Preparation of the final PowerPoint presentations	
12:00	Lunch break	
13:00	Work session: Preparation of the final PowerPoint presentations	
15:15	Coffee break	
15:45	Work session: Preparation of the final PowerPoint presentations	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
10:15	Coffee break	
10:45	Exercise 8: Setting up and exploring electrification scenarios for a country	
12:00	Lunch break	
13:00	Exercise 8: Setting up and exploring electrification scenarios for a country	
15:15	Coffee break	
15:45	Exercise 8: Setting up and exploring electrification scenarios for a country	

Tuesday 25 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Presentation of country studies	
10:15	Coffee break	
10:45	Presentation of country studies	
12:00	Lunch break	
13:00	Presentation of country studies	
15:15	Coffee break	
15:45	Presentation of country studies	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-17:00)

time	title	presenter
09:00	Presentation of country studies	
10:15	Coffee break	
10:45	Presentation of country studies	
12:00	Lunch break	
13:00	Presentation of country studies	
15:15	Coffee break	
15:45	Presentation of country studies	

Wednesday 26 June 2019

OSeMOSYS track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-13:00)

time	title	presenter
09:00	To be confirmed / Feedback session and final remarks on the training activities, the OSeMOSYS model and its applications	
10:15	Coffee break	
10:45	To be confirmed / Feedback session and final remarks on the training activities, the OSeMOSYS model and its applications	
12:00	Lunch break	

OnSSET Track - Week 1 and 2: Giambiagi;

Week 3: day 4 and 5 Budinich;

Week 1, 2 and partial of 3 (from 10 to 26 June): Lundqvist (09:00-13:00)

time	title	presenter
09:00	Lecture 10. The REM model	FERNANDO DE CUADRA
10:15	Coffee break	
10:45	Lecture 10. The REM model	FERNANDO DE CUADRA
12:00	Lunch break	

The open source interoperable Global Electrification Platform (GEP) Technical and operational partnerships - Adriatico Guest House - Lundqvist Lecture Hall (14:30-17:00)

TBD

time	title	presenter
14:30	Focus group 1: Technical advances - interoperability, data and model sharing	
15:30	Coffee break	
16:00	Focus group 2: Outreach activities - annual outlooks and country engagement	

Drinks and Reception, start of the HLM - wrap up of the Summer School Component - Adriatico Guesthouse Terrace (18:30-20:00)

Adrian Tompkins, Research Scientist, Earth System Physics, International Centre for Theoretical Physics (ICTP)

Chiara Rogate, Energy Specialist, ESMAP World Bank Group

Uyanga Gankhuyag, United Nations Development Program (UNDP)

Certificate ceremony

Holger Rogner, Director, the OpTIMUS community

- ***Close of the SD Summer School component***

Thomas Alfstad, Adviser for Sustainable Development Strategies, United Nations Department of Economic and Social Affairs (UNDESA)

- ***Opening of the High Level Meeting and Strategic Dialogue***

Thursday 27 June 2019

notitle - Leonardo Building - Budinich Lecture Hall (08:30-17:30)

time	title	presenter
08:30	Registration formalities	
09:00	Welcoming and Opening Remarks	
09:10	Communities, tools, co-creation and capacity building	
10:00	Coffee break	
10:30	Global Modelling and regional investment needs for Sustainable Development	
11:10	Improving the efficacy sustainable development planning and partnerships	
11:50	Outcomes of the 2019 Summer School: Selected presentations from participants	
13:00	Lunch break	
14:30	Providing analysis and evidence in support of sustainable development policies: MENA and central Asia perspectives	
15:00	Providing analysis and evidence in support of sustainable development policies: African perspectives	
15:30	Coffee break	
16:00	Providing analysis and evidence in support of sustainable development policies: Insights from Asia	
16:30	Providing analysis and evidence in support of sustainable development policies: Insights from Latin America	
17:00	Providing analysis and evidence in support of sustainable development policies: Insights from North America and Europe	

Friday 28 June 2019

notitle - Leonardo Building - Budinich Lecture Hall (08:30-12:20)

time	title	presenter
08:30	Real world relevance and academic excellence of open toolkits and methods: Developing a global curricula	
09:10	Participant Reflection: what was good and what is still needed in the summer school	
10:00	Coffee break	
10:30	Donor, organiser and UN Reflection: how to make the effort sustainable	
11:10	An environment that enables a community of practitioners for evidence-based policy making?	
12:10	Closing remarks and follow up actions	