

BASIC TRAINING COURSE ON VEDA-TIMES

13th - 15th December 2017, Zurich, Switzerland

Duration:	3 days
References	See list in the Appendix
Venue:	tbc
Participation fee:	Each course is free of charge for ETSAP Contracting Parties. A participation fee for the training will be charged to participants from University (300 Euros), Institutions (1000 Euros) and Companies (1200 Euros).
Registration:	http://iea-etsap.org/index.php/training

Base level

Trainer:	Maurizio Gargiulo; gargiulo.maurizio@gmail.com ; skype: gargiulomau
Note:	VEDA-TIMES has to be installed prior to the training course on your laptop, following the instruction available at www.kanors.com/vedasupport/

Day 1 Introduction and base elements

9.00-9.15	All participants	Presentation of the program and round table
9.15-10.30	Presentation:	Elements of Energy Technology Systems Analyses Linear Economic Models
10.45-11.00	Morning break	
11.00-13.00	Presentation:	Overview of VEDA-FE
	Hands-on:	Building a simple TIMES model from scratch with VEDA-FE
13.00-14.00	Lunch break	
14.00-14.45	Presentation:	Overview of VEDA-BE
14.45-15.30	Hands-on:	Results analysis with VEDA-Back End
15.30-15.45	Afternoon break	
15.45-16.30	Hands-on:	Building alternative scenarios and results analysis
16.30-17.00	Open questions	

Day 2 The DemoS models – Part 1

9.00-9.30	Presentation:	The VEDA-TIMES DemoS philosophy
9.30-10.30	Hands-on:	Analysis of the basic DemoS templates Supply curve and simple demand
10.45-11.00	Morning break	
11.00-13.00	Hands-on:	How to run the DemoS, results analysis and scenarios set up
13.00-14.00	Lunch	
14.00-15.30	Hands-on:	The VEDA-TIMES DEMOS: electricity generation
15.30-15.45	Afternoon break	
15.45-16.30	Hands-on:	The VEDA-TIMES DEMOS: electricity sophistication
16.30-17.00	Open questions	

Day 3 How to use the DemoS models – Part 2

9.00-10.45	Hands-on:	The VEDA-TIMES DEMOS: multi-regional approach
10.45-11.00	Morning break	
11.00-13.00	Hands-on:	The VEDA-TIMES DEMOS: sectors and SubRes
13.00-14.00	Lunch	
14.00-15.30	Presentation:	User constraints in TIMES
	Hands-on:	The VEDA-TIMES DEMOS: user constraints
15.30-16.00	Open questions and modelling tips for your own model with VEDA-FE and VEDA-BE	

REFERENCES

TIMES Demo Models

VEDA-TIMES Demo Models and TIMES documentation part IV and V

This is a set of VEDA-TIMES models that start from an energy balance of EU27 and focuses on building a model incrementally employing a standard approach to describing the underlying Reference Energy System (RES) and careful naming conventions. The model starts with a simple supply curve feeding a single demand and grows step by step to build out the RES adding new commodities, technologies and regions; introducing new parameters and more advanced TIMES modelling features along the way. There are twelve steps with some variants in this set of basic and intermediate [demo models](#).

Part IV: [Building a TIMES model using VEDA-FE](#)

Part IV provides a step-by- step introduction to building a TIMES model in the VEDA-Front End (VEDA-FE) model management software. It first offers an orientation to the basic features of VEDA-FE, including software layout, data files and tables, and model management features. It then describes in detail twelve Demo models that progressively introduce VEDA-TIMES principles and modeling techniques.

Part V: [Analysing results from TIMES models using VEDA-BE](#)

Part V describes the VEDA Back-End (VEDA-BE) software, which is widely used for analyzing results from TIMES models. It provides a complete guide to using VEDA-BE, including how to get started, import model results, create and view tables, create and modify user sets, and step through results in the model Reference Energy System. It also describes advanced features and provides suggestions for best practices.