



ENERGY CENTER LAB

Transport Sector Modelling in TIMES Energy System Models

Lunch Seminar #1

June 13, 2018

12.00 – 13.00

Energy Center -
Auditorium

Via Borsellino 38/16,
Torino

Short CV for Raffaele Salvucci (*1986)

Positions and degrees

2016 – Present , PhD Student
Department of Management Engineering, DTU
2015 – 2016, Research Assistant
Department of Management Engineering, DTU
2014 – 2015, Research Assistant
Department of Environmental Engineering, DTU
2011 – 2013, M. Sc. in Sustainable Energy –
Hydrogen & Fuel Cells, DTU
2006 – 2010, B. Sc. in Physics, Università degli
Studi di Firenze

Ph.D. study title

Energy system modelling and integrated
future scenario analysis of the Nordic energy
and transport system through the holistic
energy system tool TIMES

Research area

Raffaele Salvucci is a PhD student at DTU
Management, his research field is Energy
System Analysis and Modelling. Raffaele's
research has so far focused on developing
innovative methodologies to include the
transport sector into energy system models.
The main goal is to be able to better capture
transport dynamics, which traditionally are
not integrated part of the analysis carried out
with optimization energy system models,
such as modal shift. The final goal of the
research is to possibly apply the developed
tool for future scenario analysis of transport
policies in the Nordic region

Moderator:

Romano Borchiellini



12.00 Seminar:

Transport Sector Modelling
in TIMES Energy System Models

Presenter: Raffaele Salvucci

Description

Raffaele is a PhD student at the Energy System Analysis group of
the Technical University of Denmark (DTU). He is joining DENERG
as a visiting scholar for a period of four months, until the end of June.

Raffaele will present his PhD research, which deals with modelling
the transport sector within energy system models. Energy system
models are useful for assessing alternative pathways to decarbonise
the energy sector while considering whole energy system dynamics
and cross-sectoral synergies. However, the nature of the transport
sector in reality is not driven only by cost optimization dynamics, but
rather presents several behavioural aspects that pose challenges in
being included in optimization models such as TIMES models.
Raffaele's research aims at including part of these dynamics into
energy system models. In particular, a specific focus has been
currently put on modelling passenger modal shift into TIMES models
using elastic demand functions.

In the presentation, after a short overview of the Nordic/Danish
transportation sector, he will describe TIMES models and their
"traditional" description of the transportation sector, concluding with a
short introduction on his most recent research activity related to
modal shift inclusion in TIMES models.

12.40 Q&A

13.00 Light Lunch



INFO & ISCRIZIONI ENTRO il 8.06.18 a
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