

# THE TALENT CHALLENGE IN ELECTRO MOBILITY

*e-gō* motion

[www.e-gomotion.eu](http://www.e-gomotion.eu)

# Agenda

- Project Overview
- Framework Conditions
- Project Activities

# Project Overview

## Key Information

### ► Project Goal:

*Raising awareness of job opportunities  
and education paths within electro mobility*

### ► Project Facts:

- Coordination and Support Action (CSA) in FP7
- Duration: 36 months (01/2011-12/2013)
- Total Budget: € 1.406.046 €
- Consortium: Five leading Universities
- Advisory Board: 10 leading automotive actors
- Target Groups: High school students (15-18),  
University students  
Young Professionals

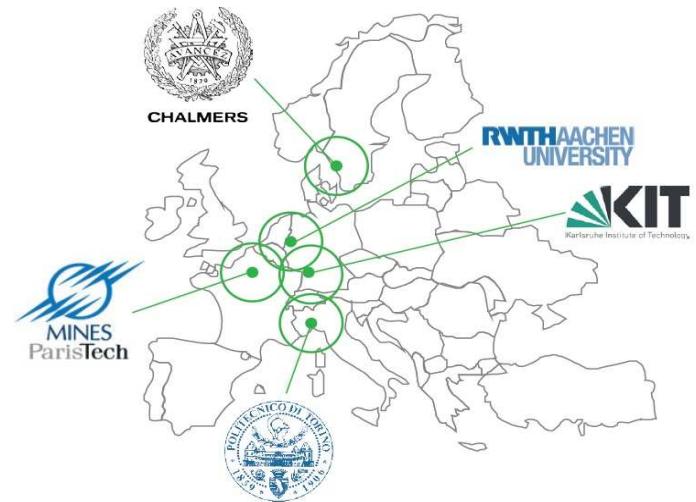


# Project Overview

## Project Partners

### ► University Core Team Partners

- Chalmers University of Technology 
- ARMINES, École des Mines de Paris 
- Karlsruhe Institute of Technology 
- Politecnico di Torino 
- RWTH Aachen University 



### ► Industry Advisory Board

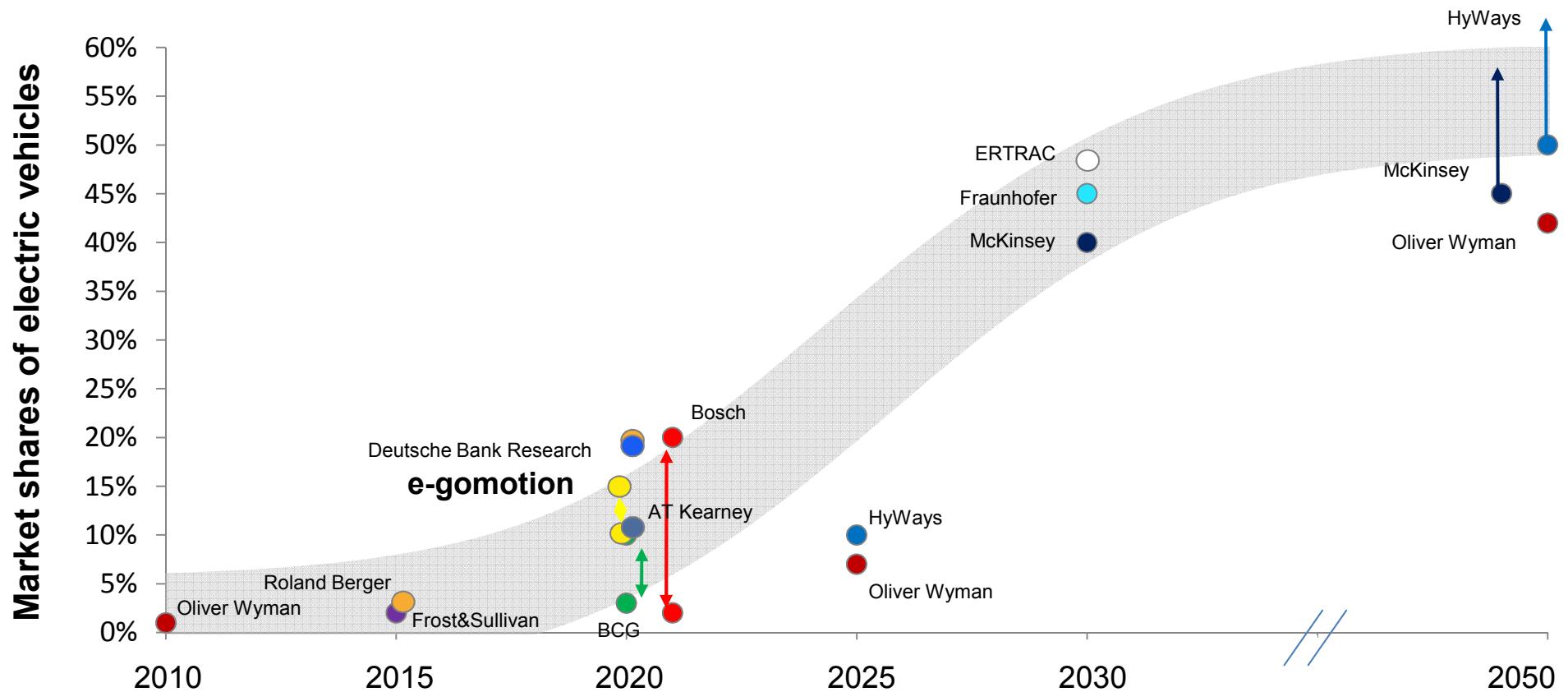


# Agenda

- Project Overview
- Framework Conditions
- Project Activities

# Framework Conditions

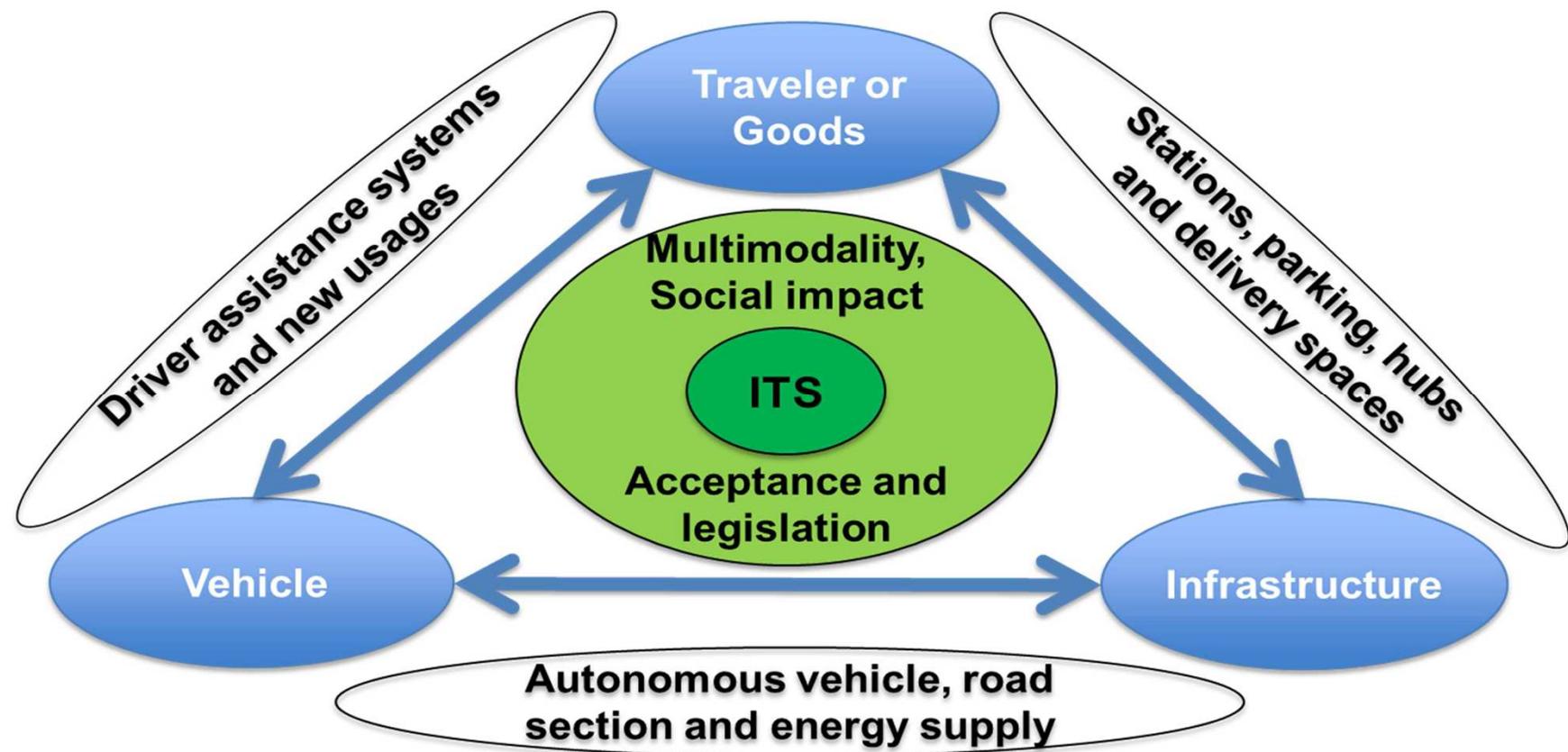
## Market Share Projections for EVs



Sources: ika/fka analysis, BCG, Roland Berger, McKinsey, Oliver Wyman, Bosch, Fraunhofer, HyWays, AT Kearney, Frost & Sullivan, Deutsche Bank Research, ERTRAC

# Framework Conditions

## But ... not only Green & Safe Vehicles



# Framework Conditions

## What about the end-users and the citizens?



### Challenge:

*Change and transformation towards a smarter mobility system and smart cities, which are more participative, inclusive and empowering.*

*This concept bring forward the quadruple helix model, where the citizens have a strong say in the innovation process.*



### E-gomotion goals

- *creating a smart community informed about mobility:*
  - Main target groups: young people, all citizens.
  - Tool: student challenges and competitions; road show; arrange public demonstration of new mobility concepts
- *raising awareness of the future jobs and educational paths in the automotive sector (arranging seminars and orientation days)*

# Agenda

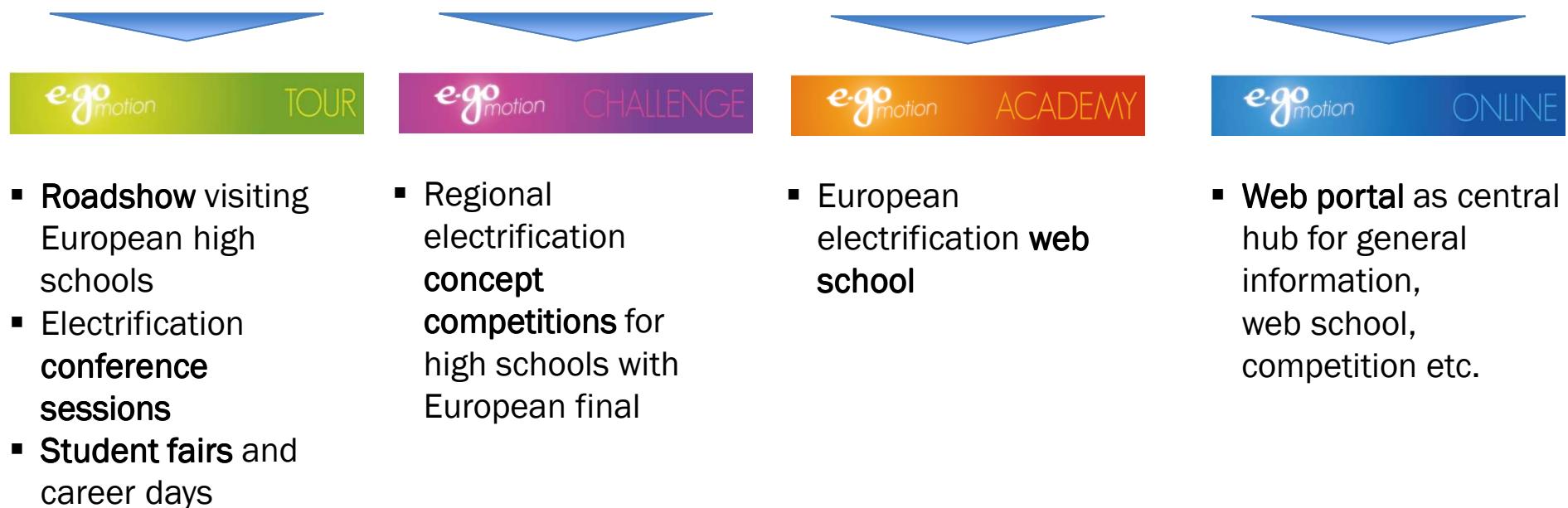
- Project Overview
- Framework Conditions
- Project Activities

# Project Activities

## Project Structure



Identify and analyse the future job profiles and career trends in the electrification industry



# Project Activities

## Tour



During the e-gomotion Roadshow, high school students can meet their local universities and industries and learn more about electro mobility



### Tour Key Facts

- Visit of high schools all over partner regions in 2012 and 2013
- Presentation of educational paths in electro mobility , university student experiences and professional experiences of industrial partners
- Demonstration of electric or hybrid vehicles



# Project Activities

## Road show structure



e-gomotion Roadshows (2012-2013) in all partner regions: organized to reach high-school students and raise their awareness of vehicle electrification



High-school students visit the University

Introduction (all) – 45 Min

Break (~15 Min)

**Group A**

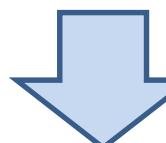
Education offer  
Student Experience  
(30 Min)



Industry Experience  
(30 Min.)

**Group B**

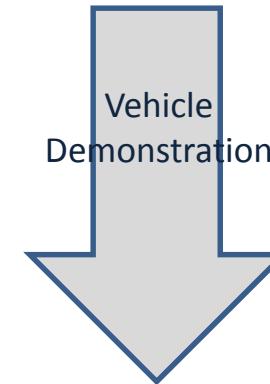
Industry Experience  
(30 Min.)



Education offer  
Student Experience  
(30 Min)

**Groups C+D**

Vehicle  
Demonstration



Break (~10 Min)

# Project Activities

## Road Show structure



e-gomotion Roadshows (2012-2013) in all partner regions: organized to reach high-school students and raise their awareness of vehicle electrification



### Inside the high-schools

- Four events in selected classes (groups of about 20 students)
- Mobility carbon footprint
- Overview of vehicle technologies
- Energy and environmental motivation for new vehicle technologies and new mobility systems
- How to improve your mobility carbon footprint?



### Selection of the teams participating in the e-gomotion challenge

# Project Activities

## Challenge



Regional electrification concept competitions for high schools with European final



### Challenge Key Facts

- Student competition for high school pupils
- Regional competitions in France, Germany, and Italy
- European final at EVS27 conference in Barcelona
- Challenge: future scenarios and best solutions to solve the challenges within sustainable mobility.

# Project Activities

## Challenge Structure



Regional electrification concept competition (2012-2103)



### At university

- Three preparatory events:
  - Explanation of competition rules
  - Meeting with public authorities (municipalities, regional authorities)
  - Meeting with experts



### Through e-gomotion Webportal

- Phase 1 and 2 of the competition (under tutor and expert supervision)



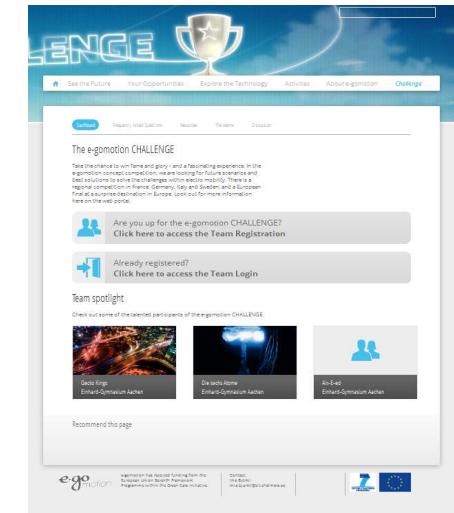
### At university

- Regional finals, with involvement of advisory board and public authorities



### At high school

- Event in each school, where the teams discuss with the other students about their experience of e-gomotion challenge



# Project Activities

## Challenge Structure



Final EU competition (18-20/11/2013): Barcelona



### At UPC

- Final competition, with involvement of advisory board and public authorities



### At EVS 27/Smart City Expo

- Conference sessions in which the results of the project are presented

# Project Activities

## Academy



Web school - Online education offer with web-based lectures in specific technical topics of electro mobility as a general information basis



### Academy Key Facts

- Information regarding technical challenges and research activities in electro mobility
- Lecturers from academia and industry
- Participation is free of charge
- No accredited degree
- Target groups: high-school teachers, educators (electrification ambassadors)
  
- Available online from July 2013

# Project Activities Online



State-of-the-art, interactive information portal offering information regarding electro mobility



## Web Portal Content

- General information about e-mobility
- Information about Education Opportunities
- Information about ongoing project events like Roadshow or Challenge
- Provision of e-learning material
- Platform to manage all project activities



[www.e-gomotion.eu](http://www.e-gomotion.eu)



# Project Activities

## How are they linked?



# E-gomotion & Long-term Impact

## Some key numbers



2012-2013: 1000 students reached in 5 regions



2013: 30 teams (about 200 high school students) in 4 regions.  
Each team has to define a communication strategy (for instance through social networks) and reach a large number of contacts. Some teams have reached about 2000 contacts (each!) in their social network pages.

- ▶ A community of young people with strong awareness of smart-mobility is growing: e-gomotion new-born facebook page has already gained more than 1000 likes in a few weeks.
- ▶ e-gomotion Webforum is ready for:
  - supporting next editions of Road Show & e-gomotion challenge
  - hosting a new challenge to University students
  - hosting the e-gomotion Academy
  - stimulating the awareness of our growing community of young people

# Project Communication

## Some key numbers

- ▶ **PRESS**  
E-gomotion was mentioned on 90 websites, specialized blogs and local newspapers in Italy, Germany, France, Spain + tv service within the Piedmont Regional TV
- ▶ **SOCIAL MEDIA**  
Facebook: 1.035 Likes on the official FB e-gomotion page. Constant sharing of news and videos from the world of sustainable and electric mobility  
  
Twitter: 109 Followers
- ▶ **YOUTUBE**  
More or less 50 videos uploaded on the e-gomotion youtube channel (more or less 6000 visualisations)

# Project Communication

## Some key numbers

### ► **COMMUNICATION COMPETITION**

The competition was launched to stimulate students to communicate and disseminate their concepts. On November 17th more than 1.250 people had voted

### ► **CREDITS IN MOTION**

The competition was carried out inside the Turin high school Albert Steiner to develop a jingle for the e-gomotion videos. The winning team is here in Barcelona with us and is shooting the e-gomotion news

### ► **WEBSITE**

An online platform for all those who want to discover more about sustainable mobility. Academy, information and promotional materials, news, info on education patterns available in Europe, all the projects of the e-gomotion challenge.

# E-gomotion & Long-term Impact

## What is needed to continue the adventure?

- ▶ Long term impact can be achieved only with the endorsement/commitment of municipalities, local authorities and industrial advisory board in order to maintain the web platform and support the educators.
- ▶ DO WE HAVE THIS ENDORSEMENT?

# E-gomotion & Long-term Impact

## The experts that joined us in Barcelona ...



Manel Villalante  
Barcelona Regional



Jan-Wellem Biermann  
Ika - RWTH Aachen



Michael Bücheler  
Gymnasium Neureut



Claudio Lubatti  
City of Torino



Veit Echterhoff  
ThyssenKrupp Steel  
Europe AG



Ruben Canovas  
Everis



Angel Lopez  
City of Barcelona



Klaus Neb  
Michelin / Automotive  
Engineering Network Südwest



Annette Klinkert  
EUSEA/city2science



Anna Donati  
City of Napoli



Rody El Chammas Toyota



Regina Poth  
City of Aachen



Federico Galliano  
GMPT-E



Megan Ahearn  
EcoUnion



Francesco Petracchini  
CNR Italy

# E-gomotion & Long-term Impact

## From where do we start ?

- ▶ Endorsement of stakeholders from triple-helix in several EU cities
- ▶ Expertise of 4 leading university in EU
- ▶ A community of young people with strong awareness of smart-mobility
- ▶ Some of the project ideas developed by the teams are already under implementation
- ▶ E-gomotion webtools

# E-gomotion & Long-term Impact

## What is our idea for e-gomotion beyond 2013?

- ▶ Start a new edition of the e-gomotion challenge every year
- ▶ Extend the challenge to university BSC/MSC students
- ▶ Support public administrations in the development of their strategic plans for sustainable mobility
- ▶ Offer training activities to public administrations (arranging dissemination and training events for mobility managers, ...)

# E-gomotion & Long-term Impact

## What is our idea for e-gomotion beyond 2013?



# E-gomotion & Long-term Impact

## What do we need?

- ▶ New e-gomotion partners to enlarge the consortium
- ▶ Sponsorships to maintain the web platform and support the educators
- ▶ Cultural and financial support from EU

**Thank you for your attention**

# Contact

Micol Biscotto  
Researcher

Dipartimento Energia – Politecnico di Torino  
c.so Duca degli Abruzzi, 24  
10129 Torino – Italy  
Phone: +39-011-0904482  
Fax: +39-011-0904599  
Mobile: +39-335-660.42.76  
e-mail: [micol.biscotto@polito.it](mailto:micol.biscotto@polito.it)