



InnoEnergy  
Knowledge Innovation Community

# InnoEnergy Innovative Doctorate

**Carlos Santos Silva. Lisbon, 2017**

# What is InnoEnergy PhD School?

## A programme with advantages...



Complementary education in innovation and entrepreneurship that can be studied as an **add-on to ongoing PhD research**.



**Flexible curriculum** that can be tailored to the needs of the candidates.



Includes courses in **entrepreneurship, innovation and business** connected to sustainable energy.



**Mobility stay** for between 4-12 months.



**Funding** of mobility stay and courses.

## ... and opportunities for growth



From the  
**Idea**  
to the  
**product**



From the  
**Lab**  
to the  
**market**



From the  
**doctoral candidate**  
to the  
Entrepreneur/intrapreneur



## ... and mobility

4 to 12 month expenses  
paid for project at a  
foreign university  
or company.

Possibility to connect  
the innovation process  
between different parts of  
an international  
organisation.



Can be spent at different  
facilities of the same  
organisation or in  
different organisations  
across Europe.

Financial support  
for trainings  
and mobility.

# PhD candidates

***Wishing to add skills in innovation and entrepreneurship to their ongoing PhD research.***



## Benefits for the candidates

Learn how energy businesses are created and run.

Stay one step ahead when developing new products and services for the market.

Get multi-national perspective thanks to the international mobility across Europe.

Access to a Pan-European network in academia and industry with useful contacts for your future career.

# Supervisor in labs

***Wishing to boost their innovation capacity by having a PhD candidate committed to innovation in their universities or research institutes labs.***



## Benefits for the supervisors

The PhD candidates entrepreneurial spirit will catalyse your lab's power of innovation.

The PhD candidates will also act as a catalyst for additional funding, collaborative research and international collaboration, especially regarding mobility.

The candidates work in turning research results into products and services can generate revenue.

KIC InnoEnergy innovation projects that even extend beyond the end of the collaboration.

# Companies in energy industry

***Wishing to recruit highly-skilled energy engineers to increase their innovation capacity and thus their competitive advantage.***



## Benefits for companies

In company PhD training for a lower cost than normal thanks to mobility between facilities in different countries

It will be easier for your company to recruit top talent combining a high level of expertise with an interest in the industrial market.

Competitive advantage in bringing new products and services to the market thanks to entrepreneurially-minded research staff.



# Courses and syllabus



Courses in Entrepreneurship, innovation and business connected to sustainable energy.



Flexible Syllabus that can be tailored to each PhD candidate's needs.



Both in-place and online learning.



Courses and seminars in different locations across Europe.

# Energy Economics

## Content

Energy geopolitics, nuclear economics, climate policy, new energy markets.

This course presents the ongoing energy revolution by discussing how energy markets are evolving. The objective of this interactive course is to present the deep transformation that the energy sector is going through, explain its roots and discuss the challenges that are resulting from it.



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## Structure

The course combines lectures with testimonials and company visit.

## Location

Grenoble Ecole de Management, Grenoble, France.

## ECTS

3 points

# Entrepreneurship Summer School

## **Content**

A program for Business Model Evaluation and Business Model Preparation.

Creative thinking, entrepreneurial finances, marketing for entrepreneurs, intellectual property rights, leading teams, public presentation and pitching.



## **Structure**

Four weeks Summer school with a total of 108h.

## **Location**

*ESADE Business School,*  
Barcelona, Spain.

## **ECTS**

7 points

## *Position doctoral education upstream of innovation strategy*



- ✓ Proposing a challenge-driven doctoral education to learn how to transfer the knowledge and technologies from the lab to the industry: to build a (draft) **proposal for an innovation project**
- ✓ Feeding the strategy of innovation with more/more robust innovation projects or business creation, securing financial sustainability

125 PhD candidates at the end of 2016 (+24 selected 29-30/03/2017)

36 Graduates at the end of 2016

28 Universities, 3 RTO, 2 business schools, 6 InnoEnergy start-ups

12 European countries

+ 20 other host organizations for mobility

### Activities based on 3 pillars:



**Course offering:** 1200 person.days of training in S&T and EIB\* in 2016



**International mobility** stay: 150 funded months in 2016



Access to the KIC InnoEnergy **network**

# What is KID? InnoEnergy Innovative Doctorate

- ✓ A **joint doctoral training project** involving InnoEnergy, a company, a university or RTO, etc.) and, optionally, a local institution promoting the Industrial Doctorate.
- ✓ The PhD candidate is employed by the company.
- ✓ PhD dissertation addressing one of the InnoEnergy [Energy Challenges](#)
- ✓ The PhD candidate is enrolled in the InnoEnergy [PhD School Programme](#):
  - Training in entrepreneurship, innovation, and business
  - Support for mobility within Europe
  - Access to Europe's largest energy-sector network
- ✓ InnoEnergy funds up to 20 k€ / year

*Upon completion of the InnoEnergy Innovative Doctorate and the PhD dissertation, the PhD candidate will have acquired all the skills and knowledge required to steer the project partners to constitute the relevant consortium in order to submit an [Innovation Project](#) to InnoEnergy*

## Benefits of Innovative Doctorate Projects

### For universities, research organizations, and PhD dissertation supervisors

- ◆ A PhD candidate assigned to an innovation- and entrepreneurship-focused project.
- ◆ Access to our pan-European network for more international research partnerships
- ◆ From your Innovative Doctorate Project a well prepared [Innovation Project](#) to answer the InnoEnergy Investment Rounds

### For companies

- ◆ Increase your innovation capacity and competitive advantage.
- ◆ Recruit top talents combining a high level of expertise with deep market knowledge.
- ◆ From your Innovative Doctorate Project a well prepared [Innovation Project](#) to answer the InnoEnergy Investment Rounds

### For PhD candidates

- ◆ Develop an innovation- and entrepreneurship-driven mind set, Learn how energy businesses are started and run.
- ◆ Acquire hands-on innovation experience at all stages from lab to manufacturing plant.
- ◆ Get a multinational perspective through European mobility support.
- ◆ Build a pan-European professional network spanning academia and industry.



***“PhD School has changed  
my point of view”***

Henrique Pombeiro

***“A new perspective  
on engineering”***

Mauricio Gutierrez Salas

***“A huge step towards  
reducing CO2 emissions”***

Khadija Benis

***“See the bigger impact  
of your research”***

Gourav Sen



## Carlos Santos Silva

Carlosaugusto.santossilva@innoenergy.com

+33 6 74 74 53 69



[www.innoenergy.com](http://www.innoenergy.com)



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