



## Climate-KIC PhD Summer School 2015

### On the way to a low-carbon city - The case of Valencia

Valencia, Spain 20 September – 2 October 2015

**Register now before 15 July 2015 for this year's two-week Climate-KIC PhD Summer School and learn about greenhouse gas emissions, sustainable city systems and energy efficiency applied to the city of Valencia.**

The city of Valencia is the third largest city in Spain with a large metropolitan area of over one million and a half inhabitants. Like many other Mediterranean coastal cities is facing relevant climate change problems. In its concern for innovation, sustainability and environmental quality has developed the "Valencia 2020 Strategy", which aims to boost city socio-economic development over the forthcoming years by taking on urban sustainable strategic challenges, such as reducing the impact of carbon footprint as an outstanding port and tourist city.

There is no doubt that the port of Valencia has an important role to play at the city level. It has transformed itself into a first level logistics, industrial and business centre with also an important commitment to meet the rapidly growing tourism demand of the cruise industry. The port has become a high energy user within the urban set and therefore is not only influencing Valencia city socio-economic development but also contributing to reducing GHG emissions for the purpose of becoming a Green Smart City.

#### **Aim of the Summer School**

The purpose of the Valencia PhD Summer School is to explore and test creative solutions for Valencia urban problems in order to move to a smart green city becoming more efficient, liveable, and sustainable in both the short and long term. Specific topics will be focused in how to address barriers to implement innovative solutions in the multi-stakeholder environment of the City of Valencia, analysing the status quo and challenges of measurement and assessment of greenhouse gas emissions; explore niche solutions/experiments on the micro level (buildings) and integrated systemic approaches.

The programme offers a "learning by doing" experience including theoretical and practice-oriented elements together with project work using different techniques in

creativity, innovation, research & development processes. Sessions will not only cover knowledge aspects but also address the development of specific competences to better understand how to apply and transfer the knowledge to the real market and the business world.

Participants will be equipped with tools and innovative methodologies to encourage creativity, interaction and group work forcing them to think out of box. For example, at the outset of the summer school participants will use the creative tool “the Binnacle game to innovate”, and will work in small groups on specific city challenges in order to find out different ways to come up with a large list of new, creative and, sometimes - why not! - crazy ideas.

### **Assignment/Project Work**

As a Summer School Assignment, participants will develop (in groups) concepts/ideas/solutions for reducing the impact of carbon footprint in Valencia City. The outcome of the assignment will be presented and discussed in a workshop on the final day of the Summer School. As part of a small competition, the best outcomes will be rewarded. The Summer School will be accompanied by coaches who shall provide guidance for the students in terms of the assignment and learning outcomes of the school. A framework for the development of the project plan will be provided by lecturers/ coaches.

### **Learning objectives:**

- PhD Students will connect their research with the urban challenges proposed to foster innovation promoting zero emissions solutions in different urban areas such as port districts, the historical city centre, and other tourist areas facing climate problems due to tourism seasonality.
- PhD students will apply a systemic approach to the built environment and will understand how the application of innovative solutions affects different city systems. They will combine technologies/services applicable to districts and will be able to test their implementation.
- Students will have the opportunity to deploy their smart city services or building technologies focused in mobility, energy efficiency in the built environment and environmental urban services, using the FI-WARE open source platform that the City Council of Valencia will put at their disposal.
- Students will work on new financial and sociotechnical models to promote smart sustainable mobility, innovative building technologies, energy refurbishment in buildings or urban facilities and assessment of GHG emissions in the city of Valencia.

## **Real-life challenges**

Students will work on real city challenges that are proposed by hosting entities, particularly from the City Council aiming at developing the Valencia 2020 Strategy for smart and sustainable growth. They will have the chance to reformulate and brainstorming around these challenges using creative tools and methods that will be provided at the beginning of the first week.

Students will have the opportunity to test and improve their ideas out of the academic world in real local contexts of the City of Valencia and linked to flagship projects of the three Climate KIC platforms: Low Carbon City Lab (Green House Gas Monitoring, Reporting and Verification platform); Smart Sustainable Districts (Sustainable City Systems platform) and Building Technologies Accelerator (Transforming the Built Environment platform).

## **Practical elements and excursions**

Practical application of concepts will be showcased in excursions and site visits such as green infrastructures and corridors of Valencia City (River bed Turia, “the Huerta” of Alboraya district), the historical city centre district, and the Port of Valencia, where participants will see in place the low carbon initiatives and projects to mitigate climate change affecting the city.

Additionally the programme will provide enough space to interact with practitioners and main local stakeholders (public and private) to grasp key learning elements during the visits and discussions.

## **Opportunities**

This is an opportunity for you to strengthen your talent and knowledge and attract new ideas and opportunities for deepen in your research. You will get away from your regular work environment, meet people from other disciplines and cultures, engage in international networking opportunities, link with overseas partner institutions, and enjoy a warm and lively city of Valencia!

## **Daily Outline**

|                                |   |
|--------------------------------|---|
| Day 0:<br>Sunday, Sep.<br>20th | Arrival day, voluntary welcome dinner                     |
| Day 1:                         | Welcome & introduction: the key challenges of sustainable |

|                                |  |
|--------------------------------|--|
| Monday, Sep. 21th              | solutions in Valencia. Presentation of involved platforms flagships. Presentation of 'Valencia 2020 Strategy' (CO2 reduction targets, strategic priorities) and Smart City Valencia Platform. Roundtable with platform representatives and Valencia city representatives   |
| Day 2:<br>Tuesday, Sep. 22th   | Creative session: "the Binnacle game to innovate" learn how to address city challenges, suggest ideas/solutions and select the best ones.<br>Group assignments: forming the teams, explore topics, expected outputs and plan processes.  |
| Day 3:<br>Wednesday, Sep. 23th | Academic & coach training sessions on challenges and opportunities related to the built environment (building technologies, socio-technical barriers, business model and feasibility aspects). Group Work.   |
| Day 4:<br>Thursday, Sep. 24th  | Academic & coach training sessions on sustainable city solutions. Group work. Case study visit: Valencia Port  |
| Day 5: Friday, Sep. 25th       | Academic & coach training sessions on GHG measurement and assessment of Greenhouse Gas emissions. Green infrastructures of Valencia City: the green corridor of the riverbed, techniques and tools to integrate urban and rural spaces (case study visit "the huerta" in Alboraya district as the green traditional and cultural element integrated into the border city). |
| WEEK END                       | Time for group work, free time, excursions, etc.   |
| Day 8: Monday, Sep. 28th       | Coaching session and reflection about the first week of the Summer School, work group and plans.<br>Business and Start-up evening: business cases presentation and time to interact and discuss with entrepreneurs and start-ups.  |
| Day 9: Tuesday, Sep. 29th      | Coach training: public debate, public speaking, key mode of communication, key concept of the project.   |
| Day 10: Wednesday,             | Competence session "Build your competences to reach the market": business acumen and customer focus, drive for results, leadership skills, communication skills, approachability   |

|                                  |  |
|----------------------------------|--|
| Sep. 30th                        | and Interpersonal savvy.<br>Group assignment work.   |
| Day 11:<br>Thursday, Oct.<br>1st | Coaching sessions and access to business and scientific experts supporting the groups. Time for project development and finalization considering suggestions, feedback and acquired experiences. |
| Day 12: Friday,<br>Oct. 2nd      | Reflection on the experience and preparation for final presentation.<br>Final presentation to expert jury.<br>Debriefing Session. Announcement of jury decision. Goodbye party                   |

### Venue

The main venue of the summer school will be in one of the campuses of the University of Valencia (Campus Burjassot-Paterna) on the outskirts of the city, very well linked and not far away from the city centre where students will be accommodated.

### Who can participate?

The participation in a PhD thematic summer school is part of the Climate-KIC PhD programme. All Climate-KIC PhD students should take part in a thematic summer school in their second or third year.

Furthermore we are happy to welcome students pursuing their PhD outside of Climate-KIC and who are interested in climate change topics. Post-graduates with outstanding skills and motivation to participate are also invited to apply.

The summer school will be held in English, in order to participate, students should have sufficient language skills. Therefore, short interviews might be conducted with the applicants to test their English skills and their motivation.

### How to apply?

All details can be found here:

<http://http://www.climate-kic.org/programmes/phd-summer-schools/>

The Summer School is now open for applications. Application deadline is **15. July 2015**. Any applications submitted after the deadline will be marked late and will be considered only after the review of applications received on or before July 15th. Letters of acceptance will be sent out in late July. Please provide as an attachment to your application a copy of your passport

## Costs

As the PhD Summer School is an integral part of Climate-KIC's PhD programme, costs are fully covered for Climate-KIC labelled students.

- 500,- EUR for PhDs from partner universities and EU citizens
- 2.000,- EUR for non-EU passport holders

The costs of the programme include accommodation (in double rooms), breakfast and lunch, approx. five dinners per week, as well as local transportation. Participants need to cover the travel costs to/from Valencia themselves. After the confirmation of acceptance, invoices will be sent out to participants. Course fees need to be paid three weeks before the start of the programme.

## Organised by

The Summer School is organized by The University of Valencia in cooperation with other the Climate-KIC local partners as Valencian Institute of Buildings (IVE), Inndea-Valencia City Council, The Valencia Port Foundation and ToBeinn The Innovation Network.





## **Contact**

In case of any questions concerning this PhD Summer school, feel free to contact Paz Ruiz

[paz.ruiz@climate-kic.org](mailto:paz.ruiz@climate-kic.org)

+44 963544100

## **Climate-KIC**

Climate-KIC is Europe's largest public-private innovation partnership, working together to address the challenge of climate change. The KIC is one of three Knowledge and Innovation Communities (KICs) created in 2010 by the European Institute of Innovation and Technology (EIT). The EIT is an EU body whose mission is to create sustainable growth. Climate-KIC supports this mission by addressing climate change mitigation and adaptation. The KIC integrates education, entrepreneurship and innovation resulting in connected, creative transformation of knowledge and ideas into economically viable products or services that help to mitigate climate change.