

## Sustainable Housing from a European Perspective

This summer, 2-13 July, 2018, 29 students from all over the world (photo to the right) met up in the Netherlands to participate in a summer school program, Sustainable Housing from a European Perspective, at the Faculty of Architecture and the Built Environment, Delft University of Technology, Delft, The Netherlands.

Only one PhD student participated from Sweden, Sofia Långström. Sofia is enrolled as a PhD student at the Industrial Doctoral School, a collaboration between the municipal public housing company AB Bostaden, Umeå University and Umeå School of Business, Economics and Statistics, Umeå, Sweden. Sofia also participates in a parallel project, Circular Economy – A Game Changer for the Wood Building Industry, an Interreg, Botnia-Atlantica project, funded partly by the EU. These projects benefit greatly from one another.



The summer school is promoted as follows:

“Housing is of key importance for societies. It drives the economy and is a key for sustainable urban and regional development in growing as well as declining areas. This course focuses on sustainable housing development and deals with environmental as well as economic and social sustainability. How do housing markets work and how do governments intervene? How can the affordability, quality and energy efficiency of the housing stock be improved? The course will give insight in the European perspective on the development of a sustainable housing stock by presenting European and national goals, policies, regulations, assessment tools, process innovations and management approaches.” Source: Invitation and program, Summer School, Sustainable Housing from a European Perspective, 2-13 July, 2018.

The program mixes lectures, with seminars, study visits, games, field trips, workshops, individual work, simulations and even role plays. These activities are most often led by renowned academics in the field of Housing and related areas. The following are examples of topics covered in seminars and lectures: The changing role of housing in societies; Sustainable housing for carbon-neutral cities; Housing economics and market dynamics in Europe; Energy efficiency in housing; Business models for sustainable private sector renovations; European and Dutch policies and regulations for energy efficient policies; Sustainable neighborhood rehabilitation in Europe; Sustainable architectural design management; Assessing sustainability; What is the New Urban Agenda and how can it help us deliver fair sustainable and inclusive cities; Sustainable housing management; Delivering green buildings: assessing barriers and transactions costs; and Collaborative and sustainable housing approaches in Europe;

The Summer School provided four study visits. The first study visit was to Rotterdam where the site for the tender game was visited and also a visit to the concept house village which provided further insights into different sustainability measures that initiated by homeowners as well as landlords. They also had a real-life example of the Wikihouse (photo to the left) (for more information, please see: <http://concepthousevillage.nl/concept-houses.html>). The tender game focused on doing a case on refurbishing an actual apartment complex in Rotterdam. The goal was that students should design a more sustainable living space using architecture, energy calculations and market strategy. During the week actors got in touch with student groups with special requests in order to make it more similar to a real construction process.



The second study visit was to Prêt-à-Loger house (photo to the right) where information was given on refurbishment of a classical house type in the Netherlands and how this smart house was functioning. Further there were many other interesting sustainable solutions to look upon (for more information, please see: <https://www.thegreenvillage.org/projects/prêt-à-loger>). The third study visit went to Poptahof, which is a refurbished area of apartments in Delft. (for more information, please see:

<https://www.urbangreenbluegrids.com/projects/poptahof-delft-the-netherlands/>).

The fourth study visit was to Amsterdam where focus was on different measures taken in order to get more people to live in the city of Amsterdam. Where some people have been able to get ahead of land free from building restriction in order to create a good home environment. There were also visits to old industry areas which has now been refurbished into apartments especially popular in the younger crowd.

(for more information, please see: <http://concepthousevillage.nl/concept-houses.html>)



Insights from participating in the summer school:

- It is remarkable how differently the participants looked upon sustainability and circular economy, especially at the beginning of the summer school.
- Transaction costs have also been given significant consideration during the discussions – both transactions costs directly related to sustainability but also various cooperations.
- Different regions in the world wrestle with their specific issues. One issue that the Netherlands is wrestling with is earth quakes, yes earth quakes, often due to fracking. Fracking is the process of under high pressure pump primarily water (but also chemicals) down into the earth in order to extract fossil fuels such as natural gas and shale oil, resulting in sinkholes that causes earth quakes of various dignity that buildings need to withstand.
- Gas is another significant issue for the Netherlands. The problem being what affect gas has on the environment if it is spread.
- The lack of sites in crowded areas have led especially families, larger families to move outwards from the city centers. But, in Amsterdam, new areas have been made available by transform for example ship yards into new residential areas while also increasing the degree of freedom to develop new housing, for example in Buiksloterham.
- The need for neutral test beds. Neutral meaning that there is no one setting the agenda for what is supposed to be researched, tested and produced, of course within reasonable boundaries. This results in an immense engagement and urge to develop ideas.



These lectures, seminars, simulations and study visits have all contributed to identify, understand, gain and prepare to share knowledge on best practices in connection to sustainability and circular economy as expected in accordance to the two related projects as mentioned above.



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