

Workshop EMVT: van inspiratie tot innovatie: consumentenenergie & teruglevering van energie

The first i2i meeting by the EMVT association took place at HAN University of Applied Science, in Arnhem. Two experts, Aart-Jan de Graaf (HAN) and Laura Ramirez (TU Delft), made insightful presentation consumer energy and new creative technological innovations needed in this area..

The topic of Aart-Jan focused on the role of customers in the energy transition. He highlighted the substantial increase in residential customers' energy consumption was based on the switch to central heating system stimulated by the cheap and abundant natural gas. He then stimulated questions regarding government policies, energy companies' offers and prosumers (consumers with local distributed generation who are also able to delivery energy back to the grid). It was noted that though customers are often heralded as key stakeholders in the energy transition, however, their involvement, concerns and participation in the transition process is very limited.

Laura presented an overview of the research activities in the Electrical & Sustainable Energy Group of TU Delft. She also highlighted the emergence of DC systems in the residential area. The key limitations to DC such as protection and standardization were also outlined. Further, it was noted that residential devices have different operational characteristics though they might have the same name. The customer should therefore be involved in the choice of new technologies such as heat pumps, micro heat and power units to suit their specific needs.

After the presentations, there were open discussions where the participants challenged themselves to think about what guides the customer in this energy transition. Key factors that were outlined include: technology push by energy retail or service companies, energy and cost savings to the customer, early-bird effects (where customers benefits for being early to embrace new technologies) and environmentalism (desire to be green). One key conclusion was that in this energy situation customers are mostly like "sheep" that need to be guided.

