MORE-CONNECT project results are widely presented during peer-reviewed international conferences. All publication are open source and available on-line.

1. **Peter Op ‘t Veld, MORE-CONNECT: Development and Advanced Prefabrication of Innovative, Multifunctional Building Envelope Elements for Modular Retrofitting and Smart Connections, Energy Procedia, Volume 78, November 2015, Pages 1057-1062, ISSN 1876-6102,** [**http://dx.doi.org/10.1016/j.egypro.2015.11.026**](http://dx.doi.org/10.1016/j.egypro.2015.11.026)**.**
2. **Kuusk K., Kalamees T., Pihelo P. Experiences from Design Process of Renovation of Existing Apartment Building to nZEB. CLIMA 2016 - proceedings of the 12th REHVA World Congress: volume 1. Aalborg: Aalborg University, Department of Civil Engineering, May 2016, p. 10.**

***Abstract:***

Toughening requirements for energy efficiency of buildings sets the new challenges to thebuilding owners, designers and contractors. Although nZEB requirements will apply only to the new buildings, Tallinn University of Technology decided to renovate existing student hostel building to nZEB building. Building has same typical problems as many other existing buildings: high energy consumption, insufficient ventilation, overheating during winter, insufficient thermal comfort. Need for major renovation is evident but goal to renovate this building to nZEB building have raised many new challenges. Somewhat surprisingly chose challenges were not so much related to the specific technical problems but more to the overall understanding of the concept of nZEB and managing the design process in order to guarantee that the end result is nZEB building. In general, building owner is in favour of the nZEB, but nZEB renovation should not mean excessive investment costs. Therefore, designers have new challenge to devise nZEB renovation in such way that it is not significantly more expensive than standard major renovation. Our experience revealed that designers have not yet fully understood the whole concept of nZEB buildings and have some difficulties managing the design process in parallel with the energy calculations and cost optimality calculations. The solution which is often used that energy calculations just one solitary part of the design process is no longer suitable in concept of nZEB renovation. Energy calculations and cost optimality calculations must be used in parallel with designing the technical solutions already in the early stage of design.

**Full text is available here:**

<http://vbn.aau.dk/files/233707163/paper_591.pdf>

1. **Op’t Veld P., Kalamees T., Rovers R. MORE-CONNECT: New developments in prefabricated multifunctional building envelope elements and installation platforms for NZE renovation. CLIMA 2016 - proceedings of the 12th REHVA World Congress: volume 1. Aalborg: Aalborg University, Department of Civil Engineering, May 2016, p. 10**

Abstract:

Objective of the H2020 project ‘MORE-CONNECT’ is to develop and to demonstrate technologies and components for prefabricated modular renovation elements in five geo-clusters in Europe (The Netherlands, Denmark, Estonia/Latvia, Czech Republic, Portugal). MORE-CONNECT is based on three main innovations: product, process and market innovation. Product innovation includes prefabricated innovative, modular composed building envelope elements, including the integration of multifunctional components for climate control, energy saving, building physics and aesthetics, with advanced plug & play connections (mechanical, hydraulic, air, electric, prefab airtight joints) for ultrafast installing, limiting the total renovation time of 5 to 2 days. Process innovation includes a fully automated productions process, starting with digital imaging using advanced geomatics, on-line configuration of the renovation concepts by end-users and a fully automated BIM controlled production process. This process offers the possibility to produce ‘series of one’ in a mass production process. Market innovation includes the offering of a one-shop-stop concept to the end-user, i.e. the end-user deals with only one responsible party organizing the design, production, installing, financing, performance contracting and after care. A performance guarantee is offered for individual energy use and the quality of the indoor environment. Web based tools will link building characteristics, building energy potential and end-users demands

**Full text is available here:**

<http://vbn.aau.dk/files/233707117/paper_419.pdf>