

MMIP 3

Acceleration of energy renovations in the built environment

This MMIP contributes to the mission ‘a CO₂ free built environment in 2050’, settling into a rhythm of renovating 200,000 homes per year in 2030. The ambition is to heat approximately 1.5 million homes and 15% of the non-residential buildings in a natural gas-free (and sustainable) way by 2030. MMIP 3 stimulates technical, process and social innovations that can accelerate the energy transition in the built environment.

The Climate Agreement states that the CO₂ emissions from the built environment should be reduced by 3,4 Mton by 2030, compared to 1990. The challenge is to transform over 7 million homes and 570,000 utility buildings into well-insulated buildings that are heated with sustainable heat while using clean electricity. In order to realize this mission, technical, process and social innovations are required. Therefore, Multi-Year Mission-Driven Innovation Programs (MMIPs) are formulated to connect different parties in the innovation chain. The main goal of this MMIP is to develop innovations that prepare homes and utility buildings for a natural gas-free heat supply or innovations that facilitate the scaling-up of energy renovations. The implementation of this program provides valuable insights that can lead to improvements in future products, processes or services.

MMIP 3 focuses on the realization of integrated solutions, in which the following aspects are reflected: (1) development of integral renovation concepts, (2) industrialization and digitization of the renovation process, and (3) building owners and users at the center of energy renovations. Affordable and attractive renovation concepts (or arrangements) are developed for important building types, with a focus on common types where major energetic improvements are possible. The industrialization and digitization of the production, (re)construction and installation process is needed to realize the desired execution capacity and achieve further cost reduction. The technical and process innovations must also meet the latent needs of owners and end users. Primarily, they eventually decide to carry out a renovation. With these arrangements, the possibility for scaling-up, and the focus on the end user, a considerable efficiency improvement can be achieved, which will lead to lower systems costs in 2030 (depending on the type of renovation package). This results in cheaper, easier and more attractive renovations within a short time-period.

Your TKI Urban Energy advisor

Rogier Groeneveld, program manager accelerating energy renovations (MMIP 3)