

J.J.N. LICHTENBERG. *House of Tomorrow Today (HoTT)*. *Gerontechnology* 2012;11(2):254; doi:10.4017/gt.2012.11.02.578.00 **Purpose** The House of Tomorrow Today (HoTT) is a pilot project focussing on a healthy, energy producing homes to be realized combining new individually proven technology, among others home automation, without making any concession to the indoor comfort. The project is going to be realized soon and aims at an energy surplus level, based on the principles as formulated in Slimbouwen<sup>1,6</sup>, ActiveHouse<sup>2,5</sup>, and HoTT<sup>3</sup>. The purpose of this case study is to enlarge knowledge in the field of indoor comfort related to light, ventilation, and energy, to develop new building technology for energy surplus housing, and to set a monitoring standard for similar projects. The aim is also to achieve a limited ecological footprint and to provide flexibility including home automation to support aging in place. **Method** This case study (Figure 1) deals with the design, the Slimbouwen building and utility process regarding disintegration of services and obtaining a high level of flexibility, the 'active house' principles elaborated as an energy surplus version. The project is going to be build in the municipality of Heeze-Leende. The measurements and registration can be divided into four groups: (i) process, (ii) building technology, (iii) energy, and (iv) comfort. The project is currently fully prepared. The licenses, also part of the process assessment, have been obtained and the first part of the research, focussing on the process efficiency, is ongoing and already brings us to some interesting insights about Slimbouwen. Apart from the current status of the project, we will also elucidate the implementation of HoTT including next projects and the research plan. **Results & Discussion** The pilot can be considered to be the successor of the once realized technology driven Danish-Canadian Zero Energy House<sup>4</sup>. After some 35 years, HoTT focuses above all on a healthy indoor climate based on a high human comfort level based on natural ventilation, low temperature heating and daylight penetration and other factors. The extra loss of energy is regulated by active technology and over-compensation (energy surplus) by the production of sustainable energy using PV-panels and solar collectors. In particular using the energy surplus as a starting point provides a breakthrough in the conceptual user-based approach. In this presentation the design will be specified on an energy balance sheet. The actual process results, analysed on basis of a project administration, will be presented, the first research set up for the utility phase (comfort and energy), also in the broader framework of Active Houses, will be discussed.

### References

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Figure 1. Cross section of the HoTT project showing day light penetration, ventilation principle and the aorta regarding services in the centre of the house facilitating Slimbouwen process