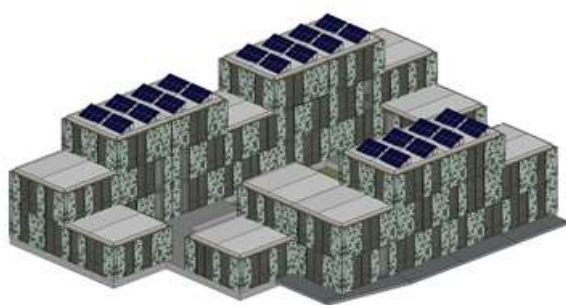


Factsheet

Woonbedrijf: 15 new construction dwellings

The demonstration exemplar of Woonbedrijf will showcase 15 newly build social houses aiming at maximising re-use of components and materials from demolition and renovation projects preferably in the region of Eindhoven and enable testing of regional material exchange as a step towards creating a regional market for used materials. The circular houses will be based on the principles of **Redesign, Re-use** and **Re-cycle**. The focus will be on the site where the houses will be developed, the skin and structure of the houses. Furthermore, Woonbedrijf will also implement circular kitchens in a renovation project (kitchens that have been designed for reuse).

The demo exemplar of Woonbedrijf is called 'Glaskring'. Woonbedrijf creates fifteen circular dwellings, partly out of their own resources, in co-creation with tenants. They will develop 3 different floor plans. Floor plan Small will be developed for single-person households, floor plan Medium will be developed for two-person households and floor plan Large will be developed for three- or four-person-households.





Woonbedrijf wants to learn what circularity for social housing means: for the tenant, the management of Woonbedrijf, the architect and builder, and also for the government. Woonbedrijf has set up a tenant community that participates in the design and evaluation of the demonstration exemplar Glaskring. Woonbedrijf wants to involve the tenants and neighbourhood during the whole process, starting with the design. The acceptance of reused materials in new construction is a key activity of this work package and one of the reasons why a lot of effort is put on tenant involvement in this investment package.

There are currently no social circular dwellings in North-West Europe designed hand-in-hand with tenants of these dwellings. These circular dwellings will consist of 35% of recycled construction materials taken from demolition and renovation projects (preferably) in the vicinity of Eindhoven, to reduce transportation costs and emissions. The demonstration exemplar will showcase how new constructed dwellings can also make use of used materials and components whilst still having satisfied tenants as a result. Transnational cooperation allows for developing a circular building strategy, that is also applicable in other European contexts, which, if successful, can give a real impetus to the European construction sector to adopt reuse of materials in new construction.

The demonstration exemplar of Woonbedrijf uses at least 35% recycled materials and components thus preventing 65 tonnes per dwelling of raw material use. Furthermore, 2 tonnes of the other materials and component are specifically designed to facilitate easy reuse. In total, compared to a standard dwelling, 59 tonnes per dwelling more is being reused.



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