

# HOME IMPROVEMENT



Over the last ten seasons, the Princess Elisabeth Antarctica research station has seen a lot more visitors than originally expected. The popularity of the world's first zero-emission polar research station with the scientific community has been a welcome surprise.

Originally the Princess Elisabeth station was designed to host about 20 scientists and staff at a time. During a few weeks the peak of the 2018-2019 season, the station was hosting nearly 50 people at once! In order to welcome such a large number of guests and handle increased activity around the station, a number of “home improvements” have been undertaken at the station over the last few seasons.

## The station is growing

During the 2017-2018 and 2018-2019 seasons, an extension to the station was constructed. With 16 new bedrooms, and a double bunk bed in each, this means 32 more beds at the station. And with two additional toilets, an area to store equipment, plus an indoor space to house the snow melter (which makes drinking water at the station), the new annex is certainly a welcome additional comfort. When there are a lot of people at the station, it's now possible for everyone who wants to sleep in a bed to do so!

However, increased occupancy puts a higher demand on the station's water treatment system. This is why during the 2018-2019 season, [young Belgian engineer Aymar de Lichtervelde worked on improving the efficiency and doubled the capacity of the station's water treatment system](#). The system has never worked better!

More people at the station also means a higher demand for that lovely renewable energy that the station produces. This is why [Belgian engineer Guus Luppens has been given the task to design ways to increase the station's energy production and storage capacity](#). As someone who built his own zero-emission house in Belgium and has lived completely off-grid for three years, he's the ideal candidate for the job - plus he practices what he preaches!

## **Making life easier**

A big help to all who are working at the station has been the construction of a new hangar at the Winter park 2 km from the station. The purpose is to shelter vehicles and equipment from the harsh Antarctic climate during overwintering, when the station isn't occupied. It means a lot less time clearing away snow and more time devoted to helping scientists conduct their research.

There's always work to be done to keep PEA a great place to do research!