



Award for the “Nutrient Harvester” of the “Autarky” toilet

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The Autarky Nutrient Harvester is one of three modules of a self-sufficient sanitation system and recovers fertiliser from urine. This is particularly interesting for areas with little infrastructure, as was demonstrated by a successful field test in South Africa. Now the Nutrient Harvester has been awarded the Energy Globe Award South Africa.

The Energy Globe Award is a prestigious environmental prize that is awarded every year at both international and national level in more than 140 participating countries. In 2022, more than 2500 innovative projects were submitted for the protection of the environment. Michel Riechmann from the Process Engineering department received the Energy Globe Award South Africa for the Nutrient Harvester from the Blue Diversion Autarky project at the end of 2022.

In Durban, South Africa, the Nutrient Harvester was successfully tested in the household of an extended family as part of the 2019 Autarky toilet house. The Autarky toilet, as the “smallest room” that functions independently of the water, sewage and electricity grids, can on the one hand help to provide safe and decent sanitation devices in regions with poor infrastructure. At the same time, thanks to the Nutrient Harvester, it recycles nutrients from urine in the form of dry fertiliser, which helps to meet the growing demand for fertiliser for food production. To do this, the volatile components of the urine are first stabilised to prevent odours and the loss of nutrients. The water it contains is then evaporated to produce a concentrated dry fertiliser.

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