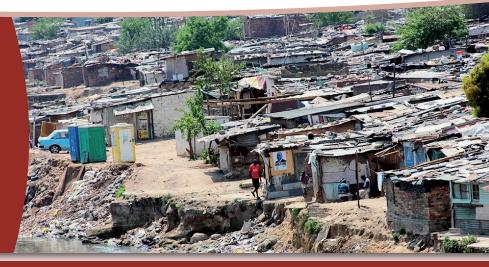




SOUTH AFRICA WINNER 2015

SavvyLoo combines a waterless toilet with a low-tech solution to generate energy from human waste. The system is designed to separate liquids from solids using solar heat and dehydration, thus reducing harmful pathogens.



SavvyLoo, South Africa

BUSINESS MODEL

SavvyLoo is piloting a waterless sanitation solution for rural communities and temporary settlements, potentially across Africa. It separates urine and desiccate faeces in three to five days to a dry bio-waste, which is easy to transport and convert to energy using gasifier systems.

SavvyLoo affords users with a hygienic alternative to pit latrines, chemical and composting toilets, eliminating compost and sludge. It is easy to use and maintain and protects users from pathogens and odours.

ENTERPRISE FAST FACTS:

Location	Johannesburg, South Africa
Year founded	2011
Sector	Waste & Sanitation
Product/Service	Waterless toilets

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Social impacts:

- Improving health and hygiene by providing accessible sanitation options for rural communities.
- Reducing risks such as sexual harassment for women and girls looking for privacy when in need for toilets.

Environmental impacts:

- Preventing contamination of underground water, with no pollution from seepage when compared to alternative sanitation.
- Generating clean energy and/or natural compost from human wastes.

Economic impacts:

- Significantly reducing the life-cycle cost of sanitation from installation to maintenance, and eliminating water cost.
- Creating seven permanent jobs to install and service each tranche of 900 toilets, potentially establishing a significant "sanitation industry" in Africa.
- Closing the loop by safely processing human waste into an energy-generating resource.

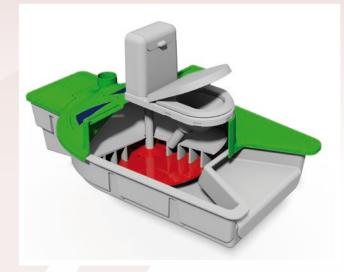
D Eight million toilets flush away 300 billion litres of water each year, wasting water and leading to overburdened processing plants and raw sewage dumped into rivers, dams and sea.

Scaling up activities:

- Extend field trials to different live environments and obtain an SABS and Agrément Certificate – an innovative construction product assessment.
- Finalise a sustainable financing model with two income streams: manufacturing royalties, and micro-franchising royalties.
- Look for development funding to purchase moulds tooling and operating costs, and start manufacturing in serial production.
- Establish micro-franchising networks to install SavvyLoo toilets in households, to service them and provide electricity and related products to local communities.



77 SavvyLoo's innovative design significantly reduces sanitation life-cycle costs, protects users from pathogens and odours, and does not contaminate the environment.



Partnership

• SavvyLoo Close Corporation owns the SavvyLoo patent rights and facilitates toilet production and sales.

• Pennine Energy Innovation (Pty) Ltd holds the usufruct rights to the SavvyLoo patents, and will manufacture and trade the units.

• Vaal University of Technology (VUT) develops the SavvyLoo waterless toilet from concept stage (patent) through models and prototypes to field trials.

Industrial Development Corporation (IDC) and SAB
Foundation have contributed development funding.

• The Innovation Hub has contributed an environmental specialist and mentor.



The 2015 SEED Awards in South Africa are largely supported by the European Union, which is made up of 28 Member States who have decided to gradually link together their know-how, resources and destinies. Additional support is from **Hisense**

About SEED

SEED identifies and supports promising small scale social and environmental enterprises around the globe, enterprises who while working towards a greener economy also tackle poverty, marginalisation and social exclusion. SEED provides these enterprises with know-how and networks, taking the lessons learnt at local level up to decision-makers to promote evidence-based policy making. For more information please write to info@seed.uno or visit:

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