



SEED Initiative

supporting entrepreneurs for sustainable development

Founding Partners



SOUTH AFRICA WINNER 2013

5 Star Stoves creates a local bio-energy value chain out of waste biomass. It produces biomass pellets that are then used in updraft gasification stoves for cooking and heating. Stoves are assembled locally and distributed in the community via a franchise model.



5 Star Stoves, South Africa

BUSINESS MODEL

The enterprise purchases biomass from pre-vetted and trained harvesters at a fixed price. The biomass is then pulverised, dried and densified into pellets and sold to stove users at a mark-up. Stoves are assembled locally and distributed in the community via a franchise model.


Payment for the pellets is facilitated by a local service provider. This makes it possible to track and manage the business per stove user and so record carbon savings and business revenue per unit.


ENTERPRISE FAST FACTS

Location	Cape Town
Year founded	2011
Sector	Energy/renewables
Product/Service	Cookstoves, biomass pellets

CONTACT

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Social impacts:

- Empowering the community by cutting monthly energy costs from ZAR 360 to ZAR 180 per household
- Providing affordable energy solutions to 10,000 low-income users and encouraging more efficient use of natural resources.

Environmental impacts:

- Providing eco-friendly energy solutions, saving up to three tons of carbon emissions per stove each year on average.
- Improving household air quality by reducing short-lived climate pollutants.
- Improving energy security by using local biomass that would otherwise contribute to methane emissions.

Economic impacts:

- Generating income for the local community by creating employment, including 80 jobs selling biomass and subsidising household energy use and 40 jobs marketing the biomass pellets.
- Stimulating the economy by supplying energy-saving products and setting up five sustainable eco-enterprises.

5 Star Stoves packaged and positioned the small-scale biomass development market into a new business opportunity for the benefit of local entrepreneurs and energy-poor families.

Scaling up activities:

- Achieve a commercially viable scale with the help of development funding after completing the first demonstration facility and achieving user acceptance.
- Establish franchises for 2,000 stoves and generate revenues of ZAR 4 million, including ZAR 2 million in net profit; achieve ZAR 4 million of energy savings and save 6,000 tons of carbon emissions each year.
- Expand into one new developing county each year.
- Set up five sustainable eco-enterprises or produce 10,000 stoves a year in each country to ensure safer, equally efficient, environmental friendly alternatives, create jobs and promote new businesses.



5 Star Stoves is the first clean cookstove business that has mapped and developed the entire value chain into a single business model.



Partnership

Usizo Thuso is the first beneficiary of the 5 Star Stove demonstration facility. It supports the enterprise through bio-energy farming. 5 Star Stove is the farm's first agro-processing venture.

The Small Enterprise Development Agency provides business training and mentoring and helps streamline the enterprise on the basis of the government support directive.

Energy and Environment Partnership Southern & East Africa promotes renewable energy, energy efficiency and clean technology investments. The organisation co-funded 5 Star Stove's first demonstration facility and the following roll-out.



The 2013 SEED Awards in South Africa are 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.

About the SEED Initiative

The SEED Initiative identifies and supports promising small scale social and environmental entrepreneurs around the globe, entrepreneurs who while working towards a greener economy also tackle poverty, marginalisation and social exclusion. SEED provides these entrepreneurs 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@seedinit.org or visit:

www.seedinit.org

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