

# UJ PEETS' AIR QUALITY & the Mobile Lab

## Background

[The University of Johannesburg's Process, Energy and Environmental Technology Station \(UJ PEETS\)](#) was established in 2010 under the support of the University of Johannesburg. UJ PEETS is funded by the [Technology Innovation Agency \(TIA\)](#), which is an agency of the Department of Science and Innovation (DSI). UJ PEETS' mission is to provide technical oriented enterprise development support in the water, energy and environmental sector through appropriate technological innovation to grow South Africa's socio-economy in a sustainable manner.

The Air Quality & the Mobile Laboratory uses the Sustainable Energy Technology and Research Centre (SeTAR Centre) Heterogeneous Testing Protocols (HTP) 33.03.01 2013-08-20, recognised by the SABS, and Global Alliance of Clean Cook Stoves. The SeTAR Centre focusses on the domestic energy requirements of developing countries including lighting, cooking and space heating.



Stove Gallery.

#### UJ PEETS' Air Quality & the Mobile Laboratory Aim and Results:

The UJ PEETS' Air Quality & the Mobile Laboratory promotes improved energy solutions through market development and policy support. The Air Quality & the Mobile Laboratory aims to ensure that low-income population groups satisfy their energy requirements in a socially and environmentally sustainable manner. The Air Quality & the Mobile Laboratory targets thermal energy needs of rural and urban households, as well as small business and institutions using biomass energy for thermal processes.

The results of the UJ PEETS' Air Quality & the Mobile Laboratory interventions undertaken thus far have shown that with a comprehensive package of solutions, it is feasible to attain multiple, long-lasting, environmental, economic, and social benefits. Families and small businesses benefit financially from savings, health is improved through minimised indoor air pollution, nationally there are savings of foreign exchange for energy imports, and globally, the use of biofuels instead of fossil fuels, reduces net emissions of greenhouse gases, as well as optimising timber and non-timber forest products.

The UJ PEETS' Air Quality & the Mobile Laboratory interventions focus on the demand side and include the use of energy efficient devices, profitable production and marketing of these devices, efficient wood fuel use and kitchen management, and substitution with renewable energy sources.

#### Focus Areas

Development, testing and certification procedures for renewable and alternative energy technologies:

- Indoor and outdoor air quality monitoring applications,
- Including filter testing,
- Aerosol research,
- Workplace occupational health & safety monitoring,
- Process analysis,
- Safe and efficient domestic energy from combustion devices and fuels,
- Energy efficiency in low-cost housing,
- Smart technologies for energy efficiency in buildings and cities,
- Spatial planning, energy efficiency and sustainability,
- Transportation energy,
- Solar and renewable energy applications for poverty relief, and
- Rural biomass energy use.

#### Clients:

UJ PEETS' clients include the World Bank, South African Bureau of Standards, Global Alliance of Clean Cook Stoves, and The University of the Witwatersrand.





Testing Equipment.

To learn more and gain access to UJ PEETS' services, kindly contact us [here](#).