



**EMEASEC 2014: 27 - 30 October 2014**  
Cape Town, South Africa

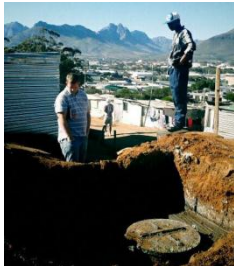
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**INCOSE EMEA SECTOR SYSTEMS ENGINEERING CONFERENCE**  
"SYSTEMS ENGINEERING: EXPLORING NEW HORIZONS"

## **EDUCATIONAL TOUR TO ENKANINI TOWNSHIP UPGRADING PROJECTS**



A group of postgraduate students from the University of Stellenbosch have concerned themselves with the practical implications of the Upgrading of Informal Settlements Programme (UISP), specifically *in situ* upgrading from the shackdweller's perspective. In 2011 A transdisciplinary research team was created based in an illegal informal settlement known as Enkanini (which means 'Take by Force') where about 2400 households reside. Enkanini has very few amenities and services and virtually no infrastructure. The +- 8000 residents are serviced by 70 toilets, 28 taps, 7 rubbish skips and no formal electricity grid



With the aid of a research grant from the National Research Foundation and donations from the Bill and Melinda Gates Foundation and the Green Fund, initial infrastructure research was conducted and a participatory model derived for scaling the results and impacts of the co-produced interventions.

Three infrastructure projects were piloted in Enkanini with close involvement of the residents. These are related to Waste Management, Sanitation and Energy (iShack).



The Enkanini Research Centre of the University of Stellenbosch was established and under its auspices these and other initiatives and projects are run to improve and uplift the living standards of the Enkanini community.

The Enkanini Educational Tour will offer delegates an opportunity to experience first-hand the successes and difficulties of transdisciplinary research and an insight into an innovate way in which systems engineering principles, although not formally applied, plays a role in in the success of this initiative.



## 1. Overview

- Tour: Enkanini Township Upgrading Projects.
- Date: 30 October 2014.
- Departure: 09:00 SHARP from Lord Charles Hotel Foyer.
- Cost: R 350-00 (incl. VAT) per person, payable in advance upon registration.
- Lunch included.
- Website: N/A.
- Notes: The cost includes a donation which is fed directly into the Enkanini Research Centre Association in order to provide for the on-going upgrading of the settlement.

## 2. The Tour at a Glance

- 09:00 Depart from Lord Charles Hotel Foyer.
- 10h00 Meet at the bottom of Enkanini hill. Introductions. Walk up to ERC (Enkanini Research Centre).
- Start tour at ERC: introductions to Enkanini, Sustainability Institute researchers and Enkanini co-researchers.
- Visit/speak about the Bokashi project.
- Visit/speak about the Sanitation project.
- Visit the Enkanini iShack Hub an existing example of an “improving shack” in action.
- 12:00 Lunch at Research Centre provided by Yondela (local gentleman) - finish at around 12:00-12:30.
- 13:00 Return to Hotel.

## 3. Copyright

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Swilling, M., Tavener-Smith, L., Keller, A., von der Heyde, V. & Wessels, B. 2013. *Rethinking Incremental Urbanism: co-production of incremental informal settlement upgrading strategies*. [Online]. Available: [www.sustainabilityinstitute.net/.../623-mark-swilling-et-al-rethinking-incremental-urbanism](http://www.sustainabilityinstitute.net/.../623-mark-swilling-et-al-rethinking-incremental-urbanism). [17 November 2013].

