

CAMPUS GREENING INITIATIVES IN UNIVERSITIES: THE CASE OF RHODES UNIVERSITY IN SOUTH AFRICA

WEEC 2015

Dr Mucha Togo

Unisa

togom@unisa.ac.za/Muchatogo@gmail.com

Introduction

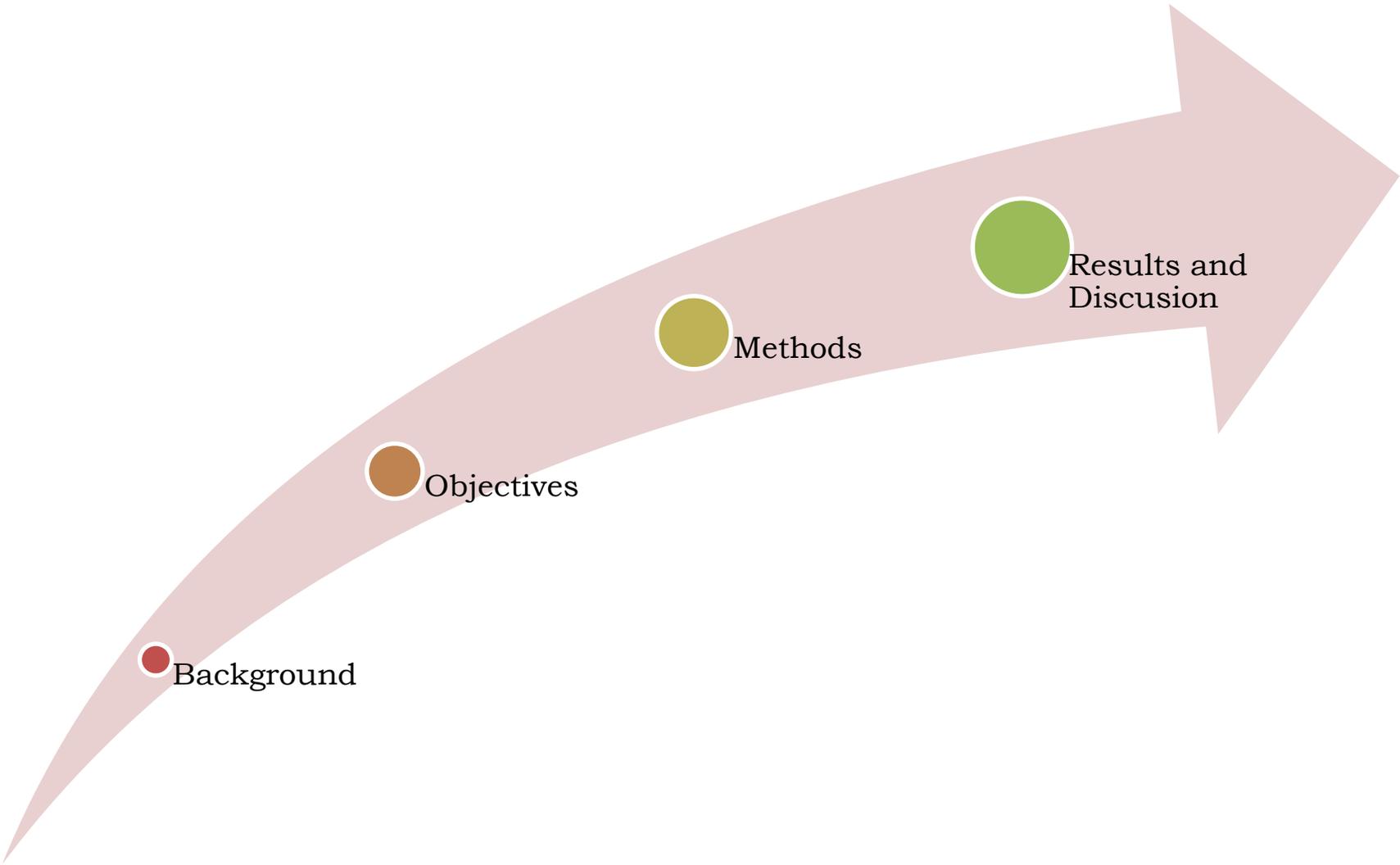
Unisa



Rhodes University



Presentation outline



Background



Global context

- DESD (2005 to 2014)
- Green economy – UNEP 2009 (global green new deal)
- Rio + 20 sustainability initiative



- reducing carbon footprint
- sustainable procurement practices;
- sustainable mobility options for students and faculty;
- effective programmes for waste minimization, recycling and reuse
- encouraging more sustainable lifestyles

South Africa

- **Apartheid history**
- **Education**
 - Transformation focus
 - Community engagement
- **Environment**
 - Biggest GHG emitter – emissions comparable to top global emitters
 - Committed to Green Economy agenda
 - Involvement in climate negotiation structures
 - Climate Policy
 - Green economy accord
 - Climate financing (including research-e.g. Green fund)

Campus greening



The role of education:
Green skills

Rhodes University

Background

- Established 1904
- Initially acquiescent to apartheid policies of segregation

Location

- Grahamstown:
- Small (91548 people in 2010)
 - Rural

Participation mainstreaming environmental issues

- Signatory to Talloires Declaration
- Environmental policy
- CE policy with transformation objectives

View over Campus towards 1820 Settler's Monument

Research questions/ aims

Identify green economy practices at RU

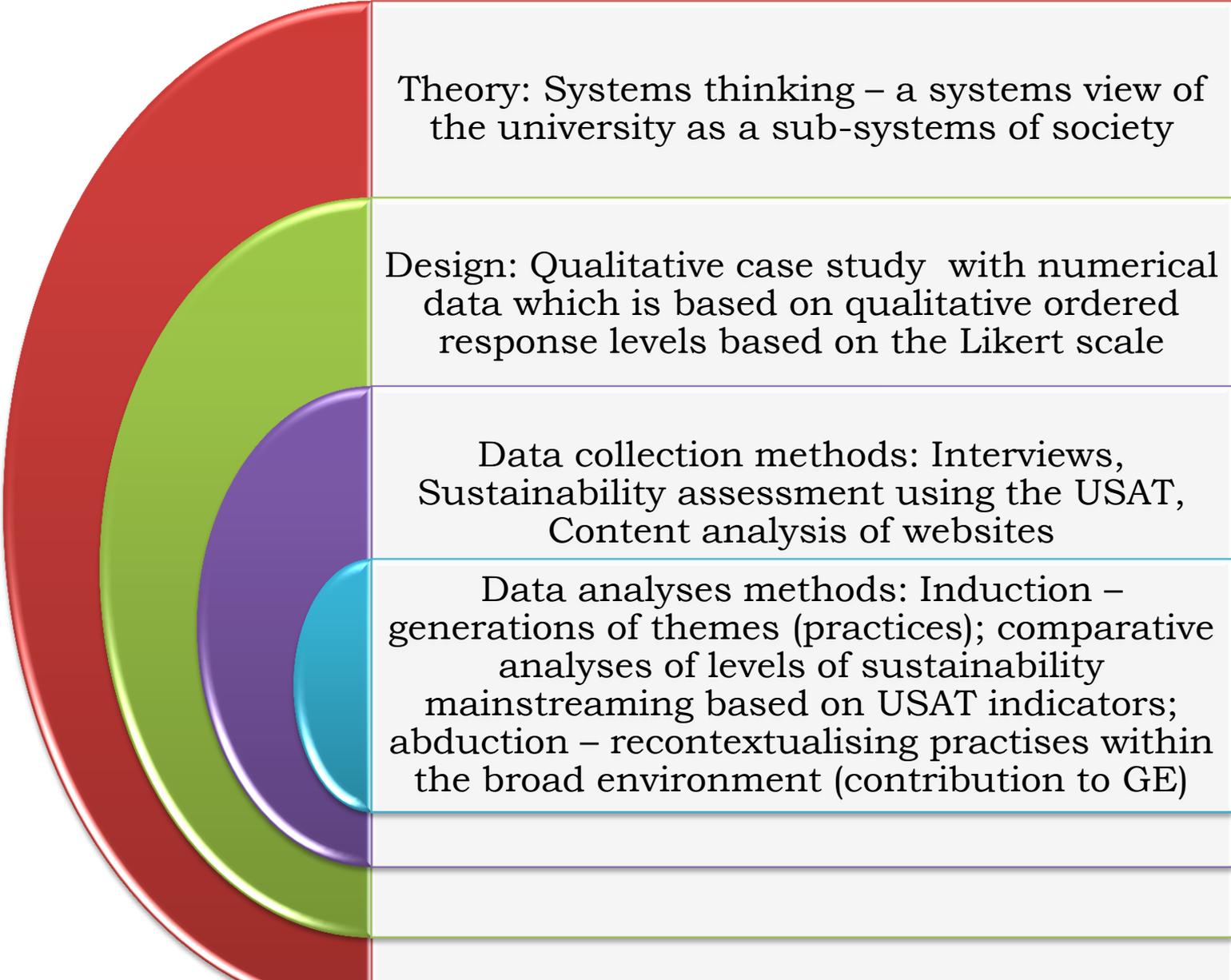
Compare the level of involvement in such practices: 2008 *versus* 2014

Involvement in green practices (what, to what extend, how)

Develop an understanding of how the practices contribute to GE [Rio + 20 sustainability initiative (campus greening)]

Discuss how the university is contributing to a low carbon economy in general (broad environment)

Research methods



Theory: Systems thinking – a systems view of the university as a sub-systems of society

Design: Qualitative case study with numerical data which is based on qualitative ordered response levels based on the Likert scale

Data collection methods: Interviews, Sustainability assessment using the USAT, Content analysis of websites

Data analyses methods: Induction – generations of themes (practices); comparative analyses of levels of sustainability mainstreaming based on USAT indicators; abduction – recontextualising practises within the broad environment (contribution to GE)



USAT

Results

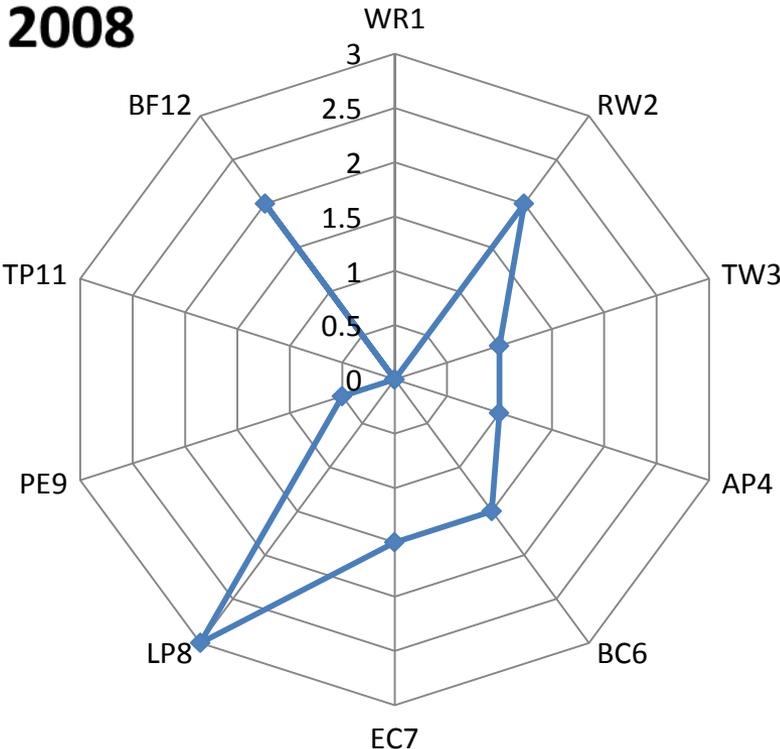
Practices

- WR 1 - Waste reduction practices
- RW 2- Recycling of solid waste
- TW 3 – Source reduction of toxic waste
- AP 4 - CO₂ and air pollution reduction practices (including alternative fuel use, renewable energy sources, emission control, etc.)
- BC 6 - Building construction and renovation based on ecological design principles
- EC 7- Energy conservation practices (in offices, laboratories, libraries, classrooms and dormitories)
- LP 8 - Local food purchasing programme
- PE 9 - Purchasing from environmentally and socially responsible companies
- TP 11- Transportation programme (including bicycle/ pedestrian friendly systems, car pools, bus pass programmes, electric/natural gas campus vehicles)
- BF 12 - Use of bio-fuel

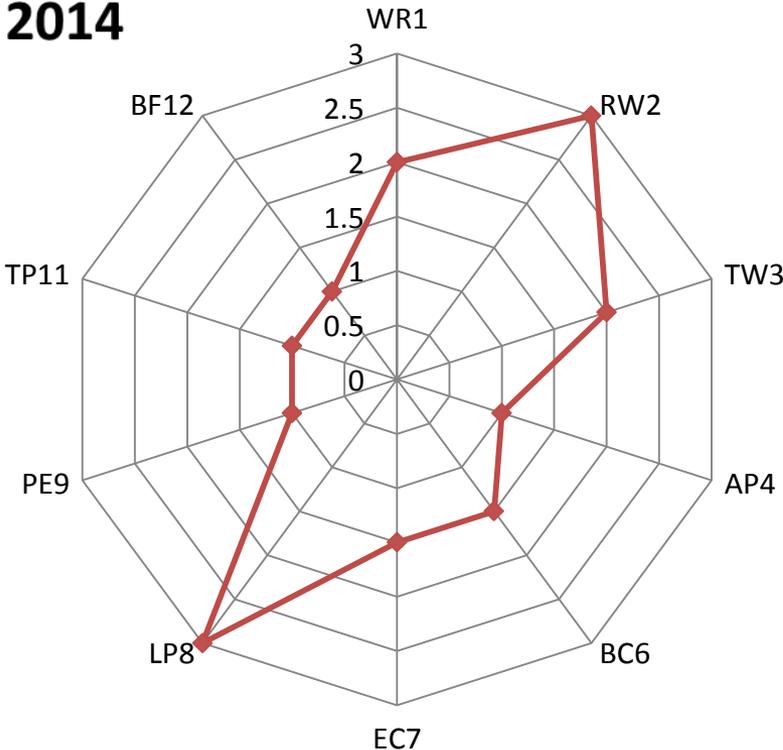
Results

The level of involvement

2008



2014



Results

Comparative analysis

Changes

- **Improvements**

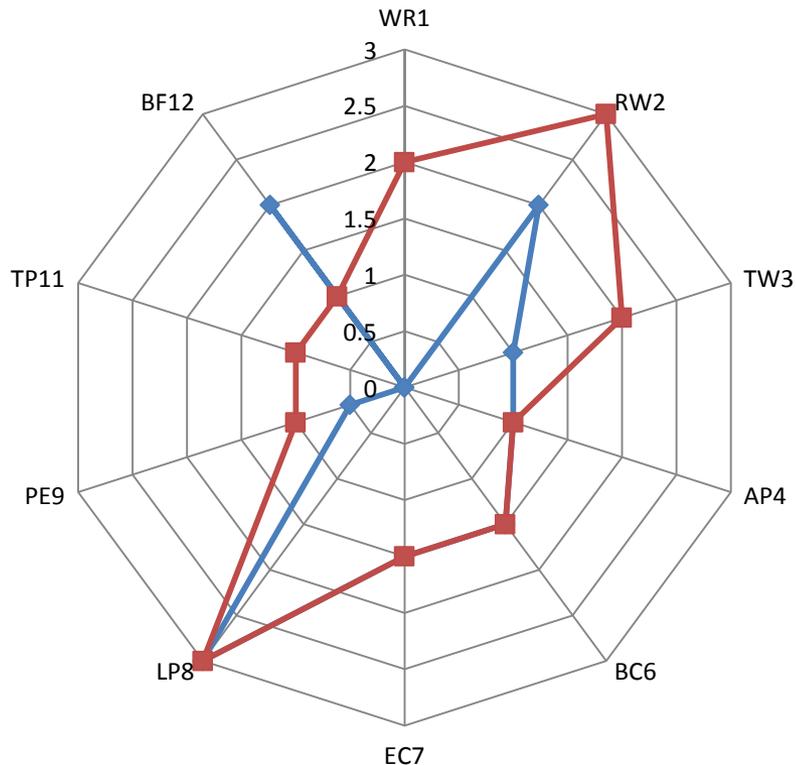
- Waste reduction practices
- Recycling of waste
- Source reduction of toxic waste material
- Purchasing from environmentally and socially responsible companies
- Transportation programme

- **Decline**

- Use of biofuel

- **Constant**

- AP4; BC6; EC7



— 2008
— 2014

Approach: Incremental rather than rethinking!! – Prof Wals today

Discussion

Responding to Rio + 20

reducing carbon footprint

- energy savings (low energy consumption fittings, renovations and new buildings based on ecological design)
- less paper demand
- Campus greening
- Tree planting incl. in the community

sustainable procurement practices

- Local purchasing
- Purchasing from environmentally and socially responsible companies
- Asking suppliers to take back their waste

sustainable mobility options

- Pedestrian campus design (except priority parking)
- Peripheral parking for students
- Student car pooling initiative – green wheels
- Creation of more bicycle & motor-cycle bays

effective programmes for waste minimization, recycling and reuse

- Printing on both sides of paper
- Limiting printing of memos and hand-outs for students
- Paper recycling
- Composting of kitchen and garden waste

encouraging more sustainable lifestyles

- Environmental awareness
- Environmental policy audits by Environmental Science students
- Environmental website: energy saving guidelines, electricity monitor guidelines; sustainable energy options

Contribution to broad GE agenda

- Reduction of direct emissions
- Reduction of indirect emissions
- Value addition through practices that enhance environmental well-being
- Influencing student behaviour – *the campus as a learning environment*

**When You Talk, You Are Only
Repeating What You Already Know.
But If You Listen, You May
Learn Something New.**

~ Dalai Lama

Thank you

