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South Africa – Denmark Urban Environmental Management Programme (UEMP)



Cape Town - Energy and Climate Change: Environmental Education and Communications interventions

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Environmental Resource Management Department

Date: Wednesday, May 20, 2009

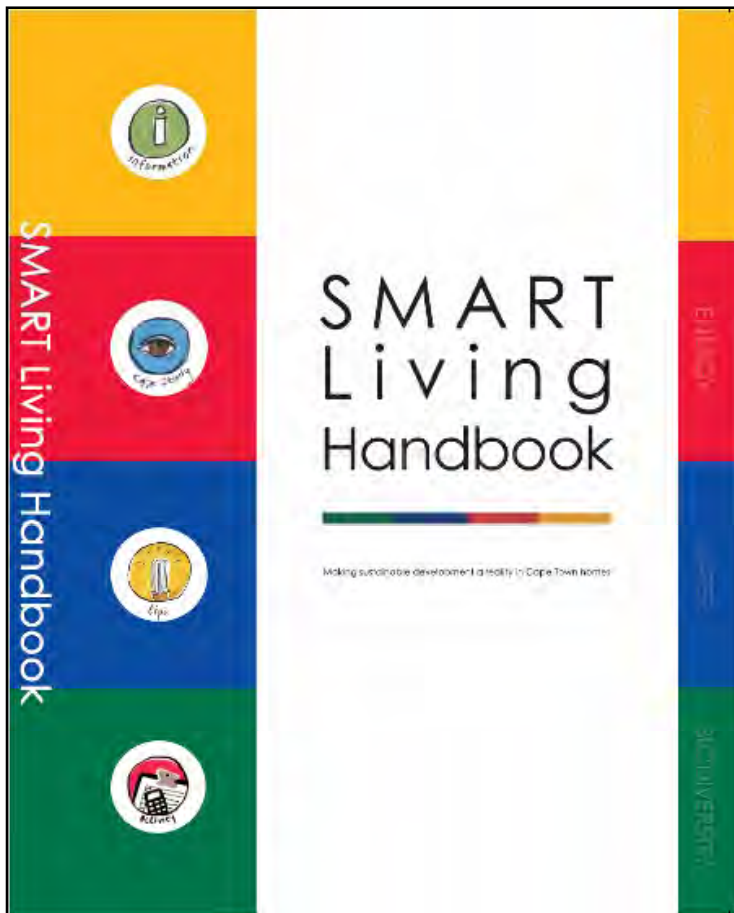
Energy and Climate Change Communications

The City of Cape Town currently implements various communications and education initiatives around energy efficiency and sustainability, but these are not integrated under a single campaign and are not reaching a wide enough audience.

The majority of the education initiatives fall under the City's Youth Environmental School (YES) Programme. The Smart Living Handbook, published in 2007, is being used successfully as a tool to educate and raise awareness on sustainable living. The City is also rolling out a Green Goal 2010 Action Plan.

The City of Cape Town is therefore preparing a comprehensive, integrated and dynamic communication action plan that will communicate how the City is responding to the immediate and long-term challenges of making Cape Town a sustainable energy city.

Some examples of Energy and Climate Change Communications initiatives are shown in following slides.



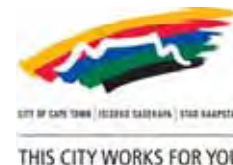
The **SMART Living Handbook** provides us with the tools to do something about our threatened environment.

The handbook is divided into four sections:

1. **Waste**
2. **Energy**
3. **Water**
4. **Biodiversity**

Pages are colour coded for easy reference.

Icons provide a key to the different kinds of information.



Initiatives targeting City staff

Weekly energy savings tips on e-nform



The screenshot shows an email client window titled "e-nform: Staff Newsletter - Message (HTML)". The window has a menu bar with "File", "Edit", "View", "Insert", "Format", "Tools", "Actions", and "Help". Below the menu bar is a toolbar with icons for "Reply", "Reply to All", "Forward", and other email functions. The email header shows "From: Staff Newsletter", "To: Staff Newsletter", "Cc:", and "Subject: e-nform: Staff Newsletter". The "Sent" date is "Thu 2008/08/14 02:09 PM".

The main content of the email features the City of Cape Town logo on the left, which includes the text "CITY OF CAPE TOWN | ISIBUKU SASEKAPU | SIQA KAAPSTAD" and "THIS CITY WORKS FOR YOU". In the center is the "e-nform" logo, where the letters "e", "n", "f", and "o" are colored yellow, red, blue, and green respectively. To the right of the logo is a 2x2 grid of four small photos of diverse people. A vertical rainbow-colored bar is positioned to the right of the photos.

Below the logo and photos, there is a section titled "Energy saving tip for 14 August 2008". The text reads: "Did you know that a typical bath uses about 75 litres of hot water, whereas a shower with an efficient shower head uses about half of that amount?"

Below this text, it says: "To save hot water, choose the shower option over a bath."

Initiatives targeting residents and schools

Energy efficient household poster in all community newspapers – June 2008

1 000 additional posters printed for distribution to schools during YES Climate Change and Energy Weeks



Initiatives targeting residents



Energy efficiency web pages
www.capetown.gov.za/environment

Volume 1108 • May 2008

TRANSPORT

Bicycle Partnership Programme aims to get you on your bike

Cost-effective and low-pollution solution—well, not if the infrastructure is not there for getting there. It's not an accident that the City of Cape Town's Transport Department focuses on infrastructure (see also *Water Services Programme, Capetonians won't need loadshedding this summer* and *How to save the water*). The City's Transport Department and the National Association of Underpinning that brought two NEDP (National Development) cycling projects back to Cape Town to improve urban life, improve about planning and designing cycling facilities, and to review the City's bicycle traffic plan.



ABOVE: Samuel Hertz and Greg Hendricks (City of Cape Town) at the Bicycle Planning, Design and Policy Assessment Workshop in February. **MIDDLE:** Staff discuss and discuss loadshedding at the workshop. **LEFT:** Bike Week day.

"The new and improved Partnership Programme at the Transport Department will work on making urban development and transport policies, getting municipal, and therefore better able to address urban sprawl, climate and environmental and development issues."

But Hertz, who has noted that "although the funding plan is good, we need to get more people on their bikes."

Capetonians ride away

The City of Cape Town's Transport Department is looking for ways to improve its bicycle infrastructure. The City's Transport Department is looking for ways to improve its bicycle infrastructure. The City's Transport Department is looking for ways to improve its bicycle infrastructure.

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Energy and Climate Change-related articles in CityNews and Enviroworks

Shed costs with these electricity saving tips

- Currently, more than 90% of our energy in South Africa comes from non-renewable resources like coal, oil and gas that will eventually run out. The less energy we use, the longer these resources will last, not to mention the fact that a lower demand for energy will have beneficial effects on the environment.
- Energy-efficient compact fluorescent light bulbs (CFLs) use 80% less electricity than ordinary light bulbs and last up to eight times longer.
- The low-energy lamps and energy-efficient spotlights for exterior lighting.
- Buy a solar water heater and switch off your electric geyser for most of summer.
- Buy energy-efficient appliances or gas appliances.
- Physically turn off appliances switches at the wall instead of leaving them on standby.
- Make stop-go meals and keep dips on job.
- Bring books to the toilet quickly on the high setting, then turn the faucet down to conserve to flush.
- Keep the oven door completely closed until food is cooked (use the oven light to check food progress). Every time the door is opened, the temperature drops, and the heat must be replaced.
- Cold-water short wash cycles and rainwater system, no dishwashers and washing machines are designed for energy and water conservation.
- Think first, reduce a drip and freeze water, electricity. If you do not have a front-free model, defrost your fridge or freezer when frost is between 0.5 cm and 1.5 cm thick.
- Regularly switch off and clean your fridge before going on a long holiday.

Did you know?

- Leaving a computer monitor on overnight wastes as much energy as making 400 A4 photocopiers.
- Lighting an empty meeting room overnight can waste enough energy to make 100 cups of tea.
- TVs, DVDs and video machines left on standby consume in one at least half the amount of electricity they use when they are turned on.
- Overfilling an electric kettle can waste enough energy to run a TV set for 26 hours.
- Recycling 900 sheets of paper saves 10 trees, 25 barrels of oil, 622 kWh of electricity, 2.5 ton of landfill space, and prevents 30.8 kg of air pollutants from reaching the atmosphere.
- Making paper from recycled fibres saves 30% less energy than from virgin fibres.



Initiatives targeting residents



Smart Living mobile display at various Exhibitions, including Buildings and Finishings Expo, Homemakers Expo and Blue Route Mall Green Expo

Smart Living Corporate Campaign

- **This campaign aims to achieve the following:**
- Establish awareness amongst households on the issues of sustainable living through resource conservation.
- Encourage resource conservation patterns in commercial institutions.
- Evaluate and monitor the change in behaviour patterns.
- Evaluate the Smart Living Handbook as a tool to affect a change in behaviour patterns.

**Industrial Theatre group:
Sea Change very successfully
used as part of the training**



PILOT PHASE (1 July – 31 December 2008) CORPORATES/COMPANIES:

- Fairfield Tours (small)
- Handyman Milnerton (small)
- Spur (big)
- Vineyard Hotel and Spa (medium)

ROLL-OUT PHASE (1 Jan – 30 June 2009) CORPORATES/COMPANIES:

- ACSA (BIG)
- Colour Tone (small)
- CTICC (medium)
- Khayelithsa Cookies (small)
- Pick 'n Pay (big)
- Mars (medium)
- Santam (big) 50/50

EXTENTION OF ROLL-OUT (1 July 2009 – 30 June 2010) CORPORATES:

- Coca-Cola Cannery (big)
- Woolworths (big)
- Engen (big)
- Grant West Casino (medium)
- PetroSA (big)
- Investec (medium)
- British American Tobacco (big)

1. Delays & problems , lessons learned and barriers encountered
 - negotiating of meeting dates
 - to address the right people at the right level, internal corporate processes are time-consuming requiring the approval of different business units
 - high profile companies (like Woolworths and Engen for example) are cautious about raising expectations amongst their staff and consumer unless they are sure that they can deliver
 - Project time frames to tight for some big corporates
2. Recommendations for overcoming these and practical ways to proceed with effective implementation and lessons learnt.
 - It has been necessary to offer these companies a thorough opportunity to assess the value of the SMART Living concept and material, which does take considerable time
 - meet the requirements of the company concerned, especially aligning with their existing structures
 - Larger companies have also indicated that they are likely to implement and fund sustainability training over the long term
 - Appointment of a professional qualified team for a project like this is critical
3. Effect be on carbon offset of this project?
 - Unclear at this stage ?
 - The evaluation might help to establish this

4. How sustainable and replicable is this project

- Easy to replicate, Just need seed funding for the initial training but the sustainability depends on the corporates buy-in
- Quality training very important in early stages
- Corporates felt that the delivery of professional sustainability training workshops, and its endorsement and initial sponsorship by the City of Cape Town was critical. The latter, particularly, is a very important incentive for engaging companies and encouraging them to fund the campaign further
- Adopting a Sustainable Business Strategy in a South African context presents unique challenges, with many companies looking to government to provide guidelines and expected legislation towards more sustainable societies. Initiative such as the City's SMART Living Campaign is instilling much confidence in and respect from business and citizens that government is taking the lead towards Sustainability. The campaign is opening dialogue between business, community and government, creating a platform for partnerships critical to sustainable development
- A number of companies have already requested further SMART Living training at their own expense, as well as enquiring about the printing of a national or generic version of the handbook for distribution to their regional offices



YOUTH ENVIRONMENTAL SCHOOL (YES) PROGRAMME

The Vision of YES is that through Environmental Education we will form partnerships towards conserving, protecting, nurturing and caring for our environment and invoke in the youth community a sense of environmental pride and responsibility that promotes environmentally sustainable lifestyles, behavior and actions.

YES has traditionally been a week-long event during World Environment Week in June, but is now expanded to a year-long programme to include all environmental / special days and weeks of the year:

Wetlands, Air Quality, Water & Sanitation, Waste, GIS, Biodiversity, Energy & Climate Change, Arbor, Tourism, Heritage, Alien Invasive Species, Marine & Coast, Sustainable Transport, Birding and HIV/AIDS.

The programme reached about 65 000 learners from 450 schools in Cape Town.

YES Climate Change and Energy Week

Theme: *What we do makes a difference*

Programmes hosted during this week:

1. Cape Heart Community and Education Theatre Company
 - Climate Change and Energy awareness play
2. Centre for Conservation Education
 - A climate Change and Energy lesson presented to learners
3. Jungle Theatre
 - Interactive Climate Change Play and Workshop
4. SANBI, Goldfields EE Centre
 - Lesson on the effects of climate change on biodiversity and walk through the Kirstenbosch gardens
5. Irene Toerien
 - Effects of Climate Change on Marine Mammals

REACHED

Learners: 3486;

Teachers: 82;

Schools: 19

Cape Heart Community Theatre



Centre for Conservation Education



Learners at a Jungle Theatre Company Play



Jungle Theatre





**Effects of Climate
Change on Marine**

1. Delays & problems and barriers encountered
 - Booking of schools
 - Transport
 - Time consuming
 - Funding

2. Recommendations for overcoming these and practical ways to proceed with effective implementation and lessons learnt.
 - Dedicated team
 - Committed service providers
 - Partnerships with line function departments to share costs

3. Effect be on carbon offset of this project?
 - Unclear at this stage?

4. How sustainable and replicable is this project
 - Easy to replicate but need funding and a dedicated and committed team

YES EduNet web pages

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Wed, 27 Aug 2008

Environmental Resource Management

> [City of Cape Town](#) > [English](#) > [Environmental Resource Management](#) > [Youth Env. School](#) > [YES EduNet](#) > **About YES EduNet**

About YES EduNet

As part of the City of Cape Town's Youth Environmental School (YES) programme, EduNet has been established to provide a 'one-stop-shop' for environmental educators to:

- ▶ obtain resources such as posters, leaflets, lesson plans, books and information on environmental issues
- ▶ receive invitations to workshops and special outings
- ▶ get information on upcoming events, campaigns and competitions.
- ▶ share information with other educators
- ▶ showcase projects, and more.

Membership to EduNet is **FREE of charge**. To become a member, educators must please complete the [registration form](#) by hand and fax it to 021 487 2255. PLEASE NOTE: Only qualified WCED educators are permitted to apply for membership.

These EduNet web pages are to assist you as an educator to use and gain more information on environmental education as well as to contribute and share your

Local intranet

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> [City of Cape Town](#) > [English](#) > [Environmental Resource Management](#) > [Youth Env. School](#) > [YES EduNet](#) > **Resource materials**

Resource materials

Useful EE resources to download:

- [Conservation Education Resource Materials Available in the Cape Floristic Region](#) [PDF 415KB]
A comprehensive tabular list of resource materials supporting biodiversity conservation education and where one can obtain them from. The wide range of environmental topics are covered and each resource is described as follows: Title / Brief description, Content focus, Context of use, Main user group(s), Language(s), Availability / distribution.
- [C.A.P.E Local Action and Learning for Sustainable Living - brochure](#) [PDF 314KB]
A brochure briefly outlining the C.A.P.E. Conservation Education Programme's activities, including: Co-ordination and networking, Strategy development, Professional development, Materials development, School and education sector support.
- [C.A.P.E - Biodiversity in 'Life Sciences'](#) (PDF 1.2MB)
A handbook for educators to support biodiversity conservation education in the Cape Floristic Region (Grades 10-12 Life Sciences curriculum).

Local intranet

www.capetown.gov.za/environment



GLOBAL CHANGE AND GREEN AUDIT PROJECT



GLOBAL CHANGE AND GREEN AUDIT PROJECT

- The project aimed Grade 10 learners .
- The audits focus on the themes of waste, water, energy and biodiversity, with a special section on carbon foot printing. This enable schools to come up with a retrofit plan for their schools.

PHASE ONE: Development of the Green Audit Toolkit: **(October 2008 – February 2009)**

- Learners Information Booklet
- Educators Guide
- Audit Sheets
- Notes

PHASE TWO: Implementation in 8 Pilot Schools: **(February – September 2009)**

- Information gathering
- Twinning of schools
- Auditing of schools
- Verifying of data
- Compilation of a retrofit plan for each school
- Various workshops with educators and learners

Twinning:

- Of the eight selected schools four are from a disadvantaged and four from an advantaged background. **Two schools twin** in the project so that one advantaged and one disadvantaged school work together.
- The aim of the twinning program is to match under-resourced, with well-resourced schools. And give learners an opportunity to transfer skills, knowledge and peer understanding. The advantaged schools will be tasked with supporting the disadvantaged schools with their audit and with the development of materials and presentations as a result of the audit (and as part of the project).

1. Bishops Diocesan College - Rondebosch
2. Hector Peterson - Gugulethu
3. Somerset College – Somerset West
4. South Peninsula High – Diepriver
5. St Cyprians - Vredehoek
6. LEAP – Pinelands
7. Springfield College - Wynberg
8. Hout Bay Secondary School – Hout Bay

PHASE THREE: Retrofitting and Further Roll-out: (October 2009 – June 2010)

- Second audit to compare with initial audit
- Finalization of retrofit plans
- Retrofitting
- Roll-out to more schools

Learner workshop



Learners doing audits: looking at the worm bins



Learners doing audits: Looking at the kitchen



1. Delays & problems, lessons learned and barriers encountered
 - To get commitment and buy-in from High Schools
 - Time consuming project

2. Recommendations for overcoming these and practical ways to proceed with effective implementation and lessons learnt.
 - Several visits and meetings to get buy in
 - Appointment of more support people/mentors for the schools to help with audits
 - Appointment of professional experienced coordinating team

3. Effect be on carbon offset of this project?
 - Unclear at this stage?
 - Monitoring are happening and an evaluation will be done of the pilot phase to try and measure true impact.

4. How sustainable and replicable is this project
 - Easy to replicate but need a good support team to implement.
 - Need to find sponsors for retrofitting though



The City of Cape Town presents

YES Environmental Drama Festival

Theme: **Climate Change and Energy Efficiency -
through the actions of our youth**

ARTSCAPE



ARTSCAPE ARENA

4 - 6 June 2009





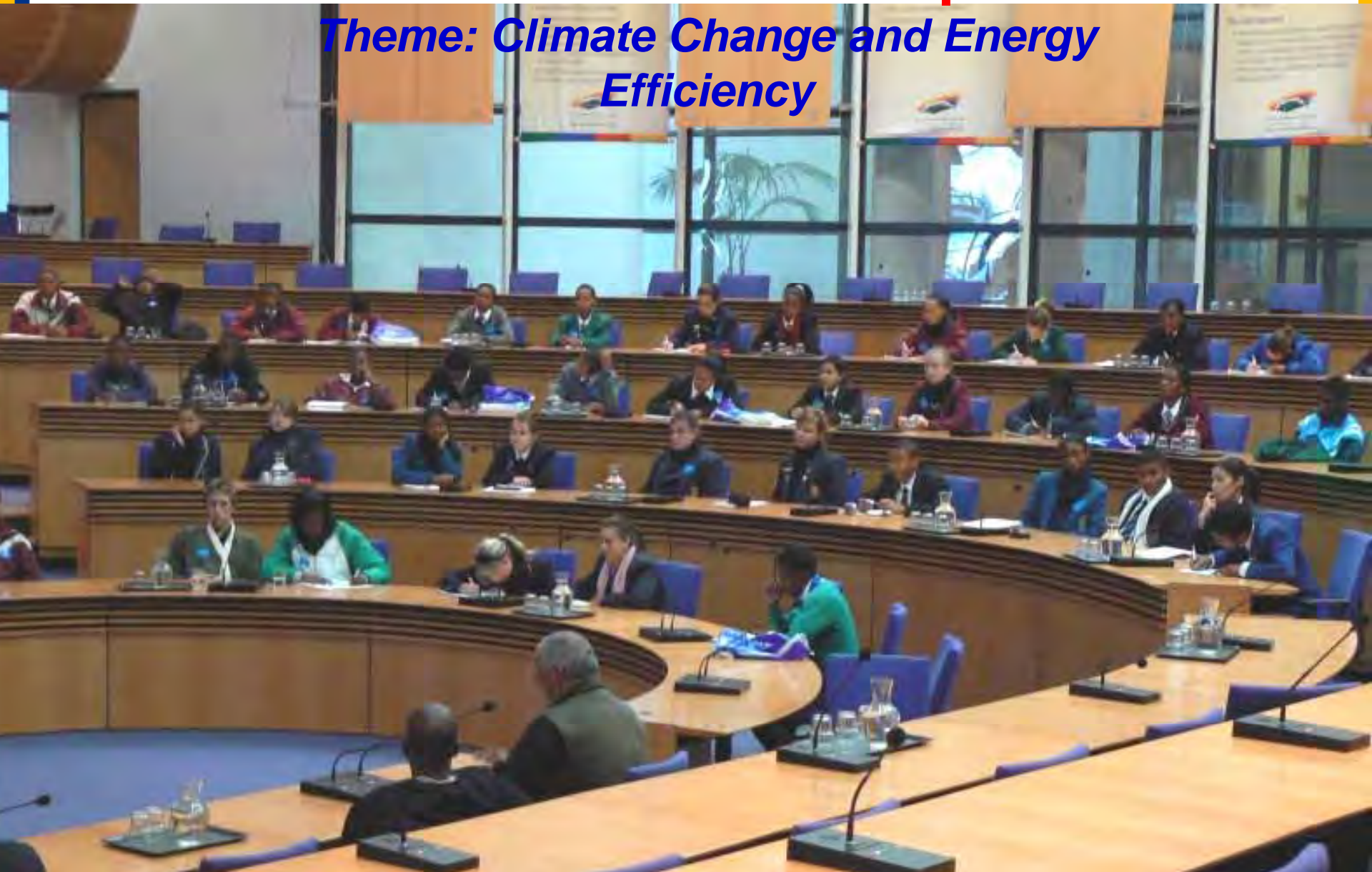




1. Delays & problems, lessons learned and barriers encountered
 - Transport
 - Communications with High Schools
 - To make more 'place' for the environmental learning criteria, and simultaneously the dramatic arts criteria
2. Recommendations for overcoming these and practical ways to proceed with effective implementation and lessons learnt
 - Big enough budget for transport
 - Hard work and commitment to communicate with High Schools
 - Find the right environmental service providers to partner with and get an drama company with an environmental background to work with the schools
 - Reinforce environmental message constantly
 - Appoint a coordinator with lots of experience working with schools, drama background, good administrative and communication skills and sound environmental knowledge
3. Effect be on carbon offset of this project?
 - Unclear at this stage ?
4. How sustainable and replicable is this project
 - Easy to replicate but need financial support to guarantee sustainability
 - Independent evaluation of the project to be conducted to measure true impact.

Youth Conference on Sustainable Development

*Theme: Climate Change and Energy
Efficiency*









- Save money
- Save resources
- Save our environment

SMART Living Handbook

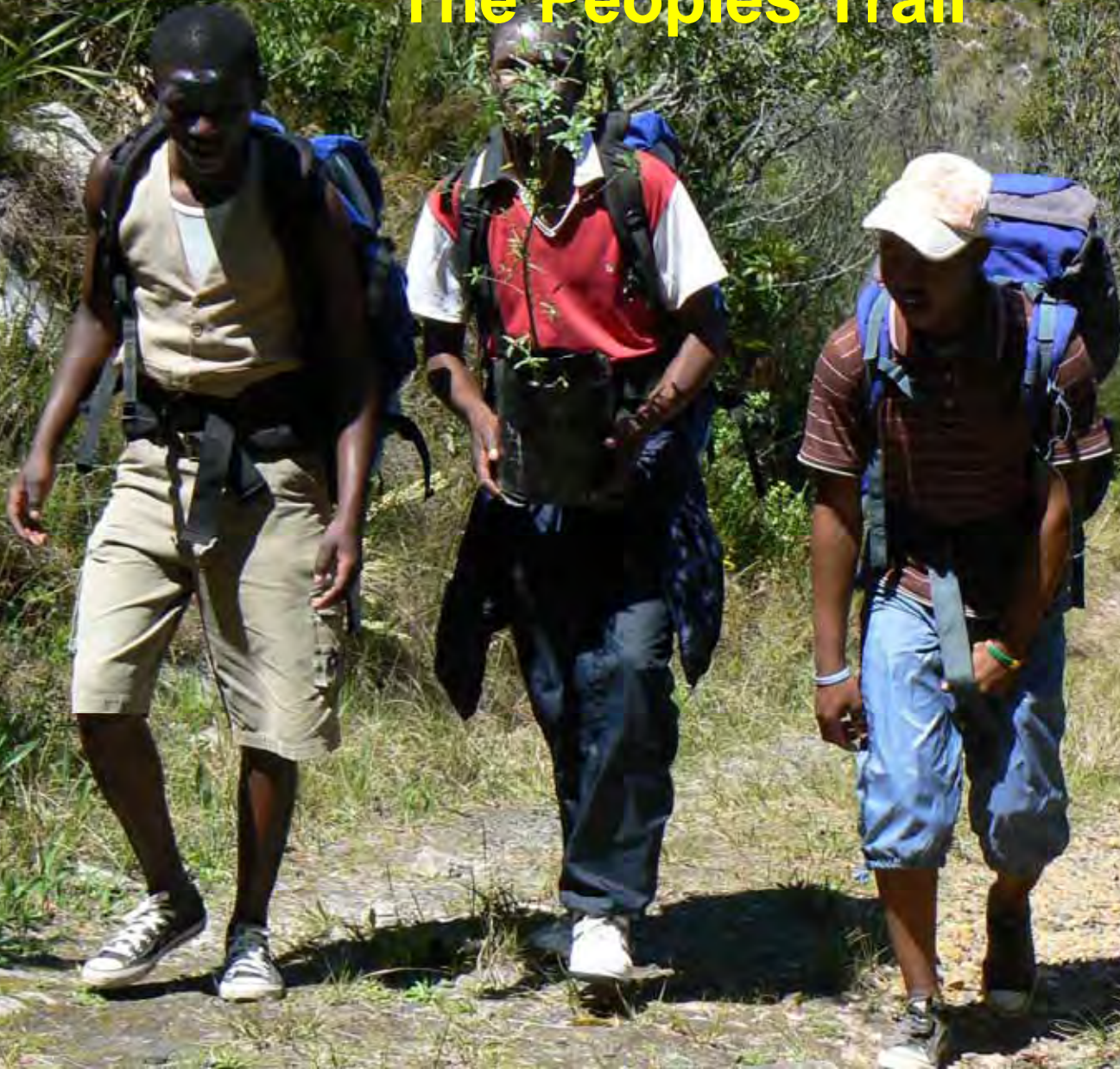
ENERGY

WASTE

download

TABLE MOUNTAIN NATIONAL PARK

The Peoples Trail





17 6:35PM

1. Delays & problems, lessons learned and barriers encountered
 - To get High Schools on board and to communicate with them
 - Appointment of an inexperienced project coordinator with limited environmental knowledge
 - Need to make a project interesting and exciting for high school learners
2. Recommendations for overcoming these and practical ways to proceed with effective implementation and lessons learnt.
 - Hard work and commitment to get High Schools to participate in projects
 - Allocated more staff members to the coordination and admin of the project
 - Appoint a coordinator with lots of experience working with schools, good administrative and communication skills and sound environmental knowledge
 - Taking learners up Table Mountain over night.
3. Effect be on carbon offset of this project?
 - Unclear at this stage ?
4. How sustainable and replicable is this project
 - Easy to replicate but need financial support to guarantee sustainability



Any questions?





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Thank You

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for a better city**