

GREENENERGY

greenenergy.edendm.gov.za



PROMOTING GREEN ENERGY INITIATIVES TOWARDS AN EVEN GREENER DISTRICT



Eden Energy Summit: Questions for Discussion

12 April 2018

Eden Energy Summit

- Why do some Local Municipalities in the Eden District not have their PV frameworks and tariffs in place?
 - Are Municipalities going to lose revenue if many businesses / households install PV?

Eden Energy Summit

- Electric Vehicles
 - Is there space for Eden District and its Municipalities to be part of the EV roll-out?
 - How can Municipalities put enabling frameworks for EV charging in place?
 - How can Municipalities drive the change by purchasing EVs for their fleets?

Eden Energy Summit

- Do we need an integrated District Energy Master Plan?
 - How can a district integrated master plan leverage the resources / strengths of the Local Municipalities?
 - Does each Local Municipality need to do its own energy master plan?

Eden Energy Summit

- How can we tap into our considerable solar / wind / biomass resources?
 - Should we influence whether new IPPs are located in Eden?
 - How can we ensure that the one proposed IPP project in George (MBHE / biomass) gets off the ground?
 - How can we ensure that the Dysselsdorp IPP project gets off the ground?
 - How can desalination be powered by renewable energy?

Eden Energy Summit

- How can Municipalities take control of their own electricity supply and respond to the changing energy landscape?
 - Build generation assets, e.g. wind or solar farms? Can we make use of Eden District's properties?
 - Energy trading?
 - Energy storage?
 - Provision of new grid services to customers?

Eden Energy Summit

- How can we ensure that all green initiatives in Eden District make use of “homegrown talent”, e.g. local technologies and skills?
- How can we ensure that green initiatives take account of biomimicry?

Eden Energy Summit

- What resources are available to Municipalities to take their energy goals forward?
 - SA LED?
 - SAGEN?

Municipal inputs: Oudtshoorn

- Interest in pursuing green energy issues – the space is there
- Solar panels installed in some informal areas
- Opportunities: Dysselsdorp IPP, install solar panels on municipal buildings, new buildings should be required to install more green energy systems, participate in EV process
- Human settlement at Spieskamp: looking at alternative means of sewage treatment, greywater use, and solar power
 - Tenders for new projects should include specifications on these issues
- Will pursue an integrated energy master plan and see how it links to economic development

Municipal inputs: Mossel Bay

- Supports Eden District municipalities working together

Municipal inputs: Knysna

- Local Municipalities caught up in practical issues on the ground, not always strategic champions on certain issues, e.g. on energy
 - In Knysna, will require 3 directorates to work together
 - Require a clearly identified champion per Municipality
- Fully integrated development is required in our new human settlements
- If a Municipality wants to run a power station, it is technically challenging, and the resources aren't there
- Can do LED lighting and solar geysers, but must assess benefits and costs

Municipal inputs: Kannaland

- Need to encourage people off the grid to integrate with the grid again
- Will take the positive messages of the Summit forward

Municipal inputs: Hessequa

- Hessequa has a policy approved, and submitted a draft tariff to NERSA
- Hessequa very positive about green energy
- Solar plant installed at water purification works, and want to extend the PV to other buildings
- With French government, will be installing a solar desalination plant at Witsand
- Support integrated master plan
- Wish to pursue biomass to energy project
- Need to monitor illegal installations....
- Hessequa is the third windiest Municipality in the country...

Municipal inputs: George

- Have a tariff but not a policy!
- Better town planning required to support better energy use
- Need to create liveable cities...
- Need a more diversified energy mix, e.g. greater use of gas
- Need technical capacity support
- Affordable energy services for the poor is very important
- LED is central to all of this

Municipal inputs: Bitou

- Proposal to put 750kWp floating PV plant on sewage plant, will power the desalination plant
- Can we dam the river and produce hydropower?
- Bitou will integrate green energy issues into their SDF
- Municipalities need to lead by example in creating municipal green buildings and precincts

Municipal inputs: Eden

- District and Local Municipalities need to work together
- Need integrated planning but also integrated execution, e.g. collaboration on procurement and skills
 - Need a champion at a strategic level
- Proposing a SALGA regional working group on energy
- Eden looking at organic waste project, partnering with US AID LED
 - Busy characterising and quantifying the waste, will then identify the opportunities

Stakeholder comments

- Bitou investment company: looking at waste issues – how can a waste to energy project get off the ground?
- Three constraints: funding, capacity, and procurement – capacity probably the most important
- Need to look at rail as an effective form of transport
- Establishing a training centre for engineers in George – should include green energy issues
- There is help available for free, such as GIZ support
- Our energy planning must take account of the needs of different income groups

Stakeholder comments cont'd

- George councillor will submit a report to Council to take these issues further
- There will be a seminar provided on grid-connected asset management
- How can we make use of the retired engineers in the district?
- Response to SANS 10400XA regulations has been lukewarm; need to look at this, and efficient town planning
- USAID LED provides technical and capacity-building support, which can lead to a plan and leverage investment

Proposed initiatives (Votes in brackets out of 37)

Base case is to implement SSEG

1. Develop an Eden integrated energy plan aligned with rawwater sources (e.g. groundwater pumping, desalination, pumped storage) (35) - **prioritised**
2. Ensure existing, planned IPPs (Dysselsdorp & George biomass plants) are actually implemented, and attract new IPPs to the District (6) (prioritise planning and permitting)
3. Explore and implement alternative transport fuel strategies, including the conversion of municipal fleets and alternative fuel charging / filling networks (6)
4. Establish a biomimicry research centre and discovery park (2)
5. Implement one new green energy project per municipality (e.g. Bitou: floating PV, Eden: organic waste, etc) (20) - **prioritised**
6. Ensure that “green” planning elements are fully reflected in each Municipality’s SDF and / or SDF implementation framework. (2)

Pledge from CSIR Energy Centre to vet projects – Dr Clinton Carter-Brown

Stellenbosch University will also support brief queries – Dr Karin Kritzinger

Greencape will channel queries and resolve where possible – Jack Radmore

Initiate a Green Energy Forum - Eduard Lotz