



Sustainable Energy and Climate Change Unit (SECCU)

PURPOSE OF DOCUMENT

1. To **reaffirm** the functions and objectives of Sustainable Energy and Climate Change Unit (SECCU).
2. To list the **activities** contained in the SPECCS which affect the office of the SECCU.
3. To present the **action plan** in the short, medium and longer term that the SECCU office is currently carrying out.

INTRODUCTION

The SECCU was formed in 2007 with the primary task of developing an energy and climate change strategy for SPM.

The task was undertaken with the aid of funding from the British High Commission and the Sol Plaatje Energy and Climate Change Strategy (SPECCS) was approved by the City Council in late 2009. This was a milestone achievement for the SECCU office. The SECCU was then tasked with the implementation and evolution of the (SPECCS).

The SPECCS consists of 6 main objectives and over 100 (action plans) and takes an extremely broad approach to address energy, taking into account transportation, residential, commerce and industry and the municipal sectors.

From its inception and in terms of its functions and objectives the Unit has grown in stature and has subsequently become institutionalized within the Sol Plaatje Municipality organizational structures and enjoys the support from both the administration, especially that of the Directorate Community and Social Services Development under which it presides, as well as the office of the MAYCO.

The SPM political structures and the SPM management are therefore to be commended for their foresight as SPM is one of the few medium sized cities in South Africa to mandate a specialized unit of this nature in a climate in South Africa where energy management and environmental protection are rapidly becoming matters of national importance and concern.

The Unit currently consists of a Coordinator Unit and an Energy Officer.

B Buchanan
SECCU Coordinator
3rd February 2011

1. REAFFIRMATION OF THE FUNCTIONS AND OBJECTIVES OF THE SECCU

These functions and objectives were approved of by Council during the formation of the SECCU in 2007, are still relevant today and are aligned with approved SPECCS.

Hereunder are the approved functions and objectives of the SECCU:

SUSTAINABLE ENERGY AND CLIMATE CHANGE UNIT (SECCU)

FUNCTION

TO ADDRESS ENERGY EFFICIENCY AND CLIMATE CHANGE MITIGATION AT A LOCAL AUTHORITY LEVEL BY FOCUSING ON DIMINISHING ENERGY RESOURCES AND GLOBAL WARMING.

TO UPHOLD AND COMPLEMENT THE CITY VISION, KEY PERFORMANCE AREAS, AND PROGRAMMES IDENTIFIED IN THE INTEGRATED DEVELOPMENT PLAN (IDP).

OBJECTIVES

TO DEVELOP, IMPLEMENT, MAINTAIN, EVALUATE AND EVOLVE THE SOL PLAATJE ENERGY AND CLIMATE CHANGE STRATEGY (SPECCS) WITHIN A FRAMEWORK THAT PROVIDES A CLEAR VISION AND DIRECTION FOR THE CITY AND ALL ITS COMMUNITIES.

TO STIMULATE SUSTAINABLE ENERGY APPROACHES AND PRACTICES WITHIN SPM AND INTEGRATE ENERGY EFFICIENCY OBJECTIVES THROUGHOUT ITS FUNCTIONING.

TO COMPLEMENT SERVICE DELIVERY AND FINANCIAL SUSTAINABILITY IN SPM'S OPERATIONS.

TO IMPROVE THE AIR QUALITY, HEALTH AND SAFETY IN COMMUNITIES BY INTRODUCING AND PROMOTING ECONOMIC AND INNOVATIVE PRACTICES.

TO ASSIST SPM TO SUPPORT THE NATIONAL AND INTERNATIONAL COMMITMENT TO ENERGY EFFICIENCY AND THE REDUCTION OF GREEN HOUSE GASES (GHG'S).

TO SYNERGIZE ENERGY RELATED TASKS AND INITIATIVES THAT ARE UNCOORDINATED, UNRECORDED, NOT EVALUATED AND APPRAISED, TOWARDS A COMMON ENERGY EFFICIENCY GOAL.

TO INITIATE STEPS TOWARDS DECLARING SPM A SOLAR CITY.

2. LIST OF ACTIVITIES CONTAINED IN THE SPECCS WHICH AFFECT THE OFFICE OF THE SECCU

Action	Responsibility	Partners	Completion Date as in SPECCS	Comments
Engage with industry on Energy Audit (EA) rollout	Electricity Department, SECCU	Private Sector, Northern Cape Chamber of Commerce, Eskom	April 2011	Currently busy with Twala Solutions re EA for SPM
Promote energy efficient buildings through green building rating system or SANS 204 standard	Electricity Department, SECCU , Building Inspectorate	Green Building Council of South Africa, SABS, Department of Public Works, Private Sector	April 2011	
Rollout of lower wattage street lights within pilot retrofit phase	Electricity Department	SECCU , ESCOs	April 2011	Busy with Electricity Department
Retrofit all incandescent lamps to LED lamps at all 60 traffic light intersections	Electricity Department	NERSA, ESCOs, SECCU	April 2011	
Investigate use of solar photovoltaic street and traffic lights at all traffic intersections	Electricity Department	NERSA, Eskom, CEF, SECCU	April 2011	Busy with Electricity Department
Municipal residents energy conservation awareness programme	Electricity Department, Communication Department	Libraries, IT Department, SECCU	April 2011	SPM and ESKOM Rollout of SWH's
Promote ongoing capacity building in energy management within the municipality	SECCU , Electricity Department	SEA, Training providers	April 2011	
Ensure that SDBIPs include budgeting for energy efficiency measures	All Departments	SECCU , Electricity Department, Finance Department	April 2011	
Incorporate energy efficiency measures and planning within IDP	IDP Department	SECCU , Electricity Department	April 2011	Under Construction Paperless Administration
Integrate energy efficiency into SDF	Town Planning	SECCU , SEA	April 2011	Completed
Integrated electricity planning to outline electricity demand and supply scenarios	Electricity Department	Finance Department, SECCU	April 2011	
Promote energy efficiency measures in the Galeshewe Urban Renewal Programme	GURP, SECCU , Electricity Department		April 2011	Completed
Integrate municipal energy conservation initiatives with business and industry association efforts in the province	Electricity Department, SECCU	Northern Cape Chamber of Commerce, Northern Cape Provincial Government, NBI	April 2014	
Develop by-law to ensure that all new buildings comply with SANS 204	Building Inspectorate, Electricity Department, SECCU	SABS, Green Building Council, SACN, SALGA	April 2014	
Develop local authority energy	Electricity	SECCU	April 2014	

Action	Responsibility	Partners	Completion Date as in SPECCS	Comments
conservation guidelines	Department			
Modify local authority procurement procedures to include energy efficiency criteria	Procurement Department	SECCU, Electricity Department	April 2014	Supply Chain Management Policy contains certain green clauses but there is still functionality criteria that must be approved
Implement short term energy efficiency measures via the Sol Plaatje Emergency Response Plan	Electricity Department	SECCU	April 2011	
Investigate safe disposal methods for CFLs, including partnering with retail stores, and incorporate this within integrated waste planning	Electricity Department, Cleansing Department, SECCU	Eskom, DEAT, Retail Stores	April 2011	
Indigenous and other tree planting	Parks and Recreation, Environmental Health	SECCU, Social Development	April 2011	
Lead engagements with provincial and national government on a partnership approach to addressing the building requirement in low cost housing	Building Inspectorate, Housing Department, Electricity Department	Social Development, SECCU, National and Provincial Government, GURP	April 2011	Contact with local housing departments
Facilitate the mass rollout of SWHs in SPM	SECCU	Electricity Department, Town Planning	June 2011	Facilitating rollout between SPM, ESKOM and Service Providers
25% of all government and municipal facilities to be fitted with a SWH	Building Inspectorate	SECCU, Electricity Department,	April 2011	Based on best practice models and approaches.
Dissemination of SWH user information	SECCU	Electricity Department, Town Planning	June 2011	Underway by SPM and ESKOM SWH Rollout
Investigate the feasibility of developing a biogas facility at the Homevale Sewage Treatment Works	LED Department	SECCU, Electricity Department, Environmental Health	April 2011	LED Department is currently investigating feasibility.
Investigate the feasibility of developing a biogas facility at the SPM landfill, or via an animal/human waste project	Cleansing Department, Waste Department	LED Department, Electricity Department, SECCU	April 2011	
Investigate the feasibility of establishing a large-scale recycling scheme	Cleansing Department, Waste Department	SECCU	April 2011	
Investigate use of solar photovoltaic traffic lights at all traffic intersections	Electricity Department	NERSA, Eskom, CEF, SECCU	April 2011	
Promote use of solar PV water pumping initiatives amongst surrounding farmers where feasible	SECCU	Department of Agriculture, Landbou	April 2011	
Establish a system for the measurement and monitoring of municipal greenhouse gas emissions	Environmental Health	SECCU	April 2013	Environmental Health is responsible for monitoring air quality and CO ₂ monitoring could be linked to this process. Waiting on SDC and SLGA re Energy monitoring project.
Identify and promote 2 priority emission reduction projects	SECCU	ESD, SEA Relevant	April 2011	

Action	Responsibility	Partners	Completion Date as in SPECCS	Comments
		Departments		
Internal training on carbon finance and other funding opportunities	SECCU	ESD, SEA, Finance Department, Relevant Departments	April 2011	
Promote development of alternative energy, including renewables, with emphasis on exploiting SPM's extensive solar resource	SECCU, Electricity Department	All Departments	April 2014	Promoted within LED and also contact with potential CSP investors.
At least 50% of all government and municipal facilities fitted with a SWH	Building Inspectorate	SECCU, Participating Departments	April 2014	Based on best practice models and approaches.
All new government and municipal facilities within SPM fitted with SWHs	Building Inspectorate	SECCU, Participating Departments	April 2014	Based on best practice models and approaches.
Support development of solar thermal technologies, such as large-scale concentrating solar, within SPM and surrounds	SECCU, IDP, LED	Communication Department, Northern Cape Provincial Government	April 2014	Busy with Meriting Investments and Mainstream Renewable
Explore the potential for electricity generation from micro hydropower along the Vaal and Riet/Modder rivers	Electricity Department, Water and Sanitation Department	SECCU	April 2014	
Engage effectively with business and industry regarding the promotion of alternative and renewable energy technologies	SECCU	Private Sector, NGOs	April 2014	Emphasis on the viability of solar power in the region
Assess the implications of climate change and its expected impacts for residents and local authority functioning	Environmental Health, SECCU, Disaster Management, Roads and Storm water	Northern Cape Provincial Government, NGOs	April 2014	ICLEI and UNFCCC
Ensure the efficient rollout of Free Basic Alternative Energy (FBAE) for all qualifying residents	SECCU, Social Development	Electricity Department	April 2013	To still be developed
Engage in paraffin safety awareness programme	Social Development	SECCU, Paraffin Safety Association	April 2011	For low income households.
Promote the use of solar cookers where appropriate	SECCU, Electricity Department	NGOs	April 2011	Need for municipal demonstration to illustrate benefits.
Facilitate the safe use of LPG for heating and cooking by households	Electricity Department	Eskom, SECCU	April 2014	A reliable network providing canisters ranging in size from 3-15kgs is ideal.
Promote SPM involvement in DME 'Basa njengo Magogo' low smoke fuels programme or equivalent	SECCU, LED Department, Environmental Health	DME, CEF	April 2014	
Investigate provision of micro finance and business management training for energy sector SMMEs	SECCU, LED, Social Development	Banks, NGOs, Training providers, Private Sector	April 2014	To promote employment and poverty alleviation as a result of energy related activities.
Ensure that GURP remains targeted for community development and urban regeneration linked to	GURP, SECCU, Electricity Department	LED, IDP, Social Development	April 2014	

Action	Responsibility	Partners	Completion Date as in SPECCS	Comments
sustainable energy planning				
Municipal residents energy conservation awareness programme	Electricity Department, Communication Department	Libraries, IT Department, SECCU	April 2011	
Energy conservation awareness programme amongst local authority staff	Electricity Department, SECCU, Communication Department	All Departments	April 2011	Programme to consider initiatives such as pamphlet distribution, communication of energy efficiency measures via payslips and an internal energy savings competition.
Facilitate energy audits for all key local authority facilities	Electricity Department	SECCU, participating Departments, ESCOs	April 2011	Under Construction with SDC and SALGA
Energy monitoring of key facilities to form part of municipal performance management indicators	Electricity Department	SECCU	April 2011	
SECCU unit and/or Electricity Department to receive energy audit training	Electricity Department, SECCU	Training providers	April 2011	Availability of suitable accredited provider is a concern.
Promote ongoing capacity building in energy management within the municipality	SECCU, Electricity Department	SEA, Training providers	April 2011	
Facilitate training on energy efficiency and climate change across municipality	SECCU, Electricity Department	SEA, SANEDI	April 2011	Consider use of structured SETA accredited courses.
Incorporate energy efficiency measures and planning within IDP	IDP Department	SECCU, Electricity Department	April 2014	Includes appropriate plans, incentives and financing for the rollout of energy efficiency measures within the municipality.
Develop an energy policy for SPM	SECCU	All Departments	April 2012	Under Construction
Conduct 5 year review and update of the SPM State of Energy Report	Electricity Department, SECCU	All Departments	April 2011	
Work with NGOs, CDWs and Ward Committees in mainstreaming sustainable energy principles	SECCU	Electricity Department, Town Planning, NGOs, CDWs, Ward Committees	April 2014	
Develop a municipal vehicle fleet management plan	Transport Department	SECCU, Environmental Health	April 2011	Includes a municipal vehicle tracking system, vehicle servicing schedule and driver training.
Include fuel economy as key criterion in procurement procedures for new vehicle purchases	Transport Department, Procurement Department	SECCU, Environmental Health	April 2011	
Retrofit all incandescent lamps to LED lamps at all 60 traffic light intersections	Electricity Department	NERSA, ESCOs, SECCU	April 2011	
Investigate use of solar photovoltaic traffic lights at all traffic intersections	Electricity Department	NERSA, Eskom, CEF, SECCU	April 2011	
Maintain support for staff public transport use	Transport Department, Administration	Finance Department, SECCU	April 2011	Including bi-annual subsidy of either a bicycle or yearly bus ticket for all A Band employees.
Promote employee carpooling schemes	Transport Department, Administration	SECCU	April 2011	
Promote user education on the benefits of using bicycle lanes	Transport Department,	NGOs	April 2011	

Action	Responsibility	Partners	Completion Date as in SPECCS	Comments
	SECCU			
Rollout bicycle/annual bus ticket subsidy to all local authority employee bands	Transport Department, Administration	Finance Department, SECCU	April 2014	
Develop non-motorised transport plan	Transport Department, Town Planning	SECCU, NGOs	April 2014	
Conduct bicycle awareness campaign outlining benefits of non motorised transport	Transport Department	SECCU, Environmental Health, Town Planning, NGOs	April 2014	
Integrate municipal sustainable energy initiatives with business in the region	SECCU, Electricity Department	Northern Cape Chamber of Commerce, Northern Cape Provincial Government, NGOs	April 2011	Link to business involvement in the National Energy Efficiency Accord where applicable.
Promote use of solar PV water pumping initiatives amongst surrounding farmers where feasible	SECCU	Department of Agriculture, Landbou	April 2011	
Engage with Northern Cape Tourism Authority and tourism industry in Sol Plaatje on use of SWHs for hotels, lodges and eco-tourism sites	SECCU	Sol Plaatje Tourism Authority, Northern Cape Tourism Authority Private Sector	April 2011	
Facilitate effective stakeholder engagement on local authority energy and climate change programme	SECCU	All relevant SPM Departments	April 2011	
Promote rollout of solar energy technologies for hotels, lodges and eco-tourism sites in the province	SECCU	Sol Plaatje Tourism Authority, Northern Cape Tourism Authority, Northern Cape Provincial Government	April 2014	
Promote inclusion of sustainable energy principles and planning within PGDS	SECCU	Northern Cape Provincial Government	April 2014	Includes energy efficiency, the development of solar energy technologies and climate change mitigation activities.
Investigate feasibility of establishing a Regional Energy Efficiency Accord to complement National EE Accord	Electricity Department, SECCU	Northern Cape Chamber of Commerce, Northern Cape Provincial Government, NBI	April 2014	
Encourage large-scale solar thermal or solar photovoltaic power generation development in municipality and province	Electricity Department, SECCU, LED, IDP	Northern Cape Chamber of Commerce, Northern Cape Provincial Government	April 2014	100MW Eskom concentrating solar power station is undergoing feasibility for construction in Northern Cape.
Engage with local institutions in identifying current efforts, best practices and models for the effective rollout of energy and climate change initiatives	SECCU, Transport Department, Electricity Department, Town Planning	SACN, SALGA, NGOs, Building Inspectorate	April 2014	

SPECCS: Monitoring and Evaluation Schedule.

Time Period	Monitoring	Evaluation
Bi-annually	Report to Council on progress of the SPECCS).	SPECCC
Annual	Report for the IDP on the progress of the SPECCS.	SPECCC
End of Year 2		SPECCC Review of achievement of all short term measures. Establishment of new short term measures and activities where necessary.
End of Year 5		SPECCC Full review, update and evaluation of SPECCS and SoER, including the achievement of medium term measures.

IEMP: In addition the Seccu office has also been tasked to facilitate the development and approval of an Integrated Environmental Management Plan (IEMP) for SPM.

Action	Responsibility	Consultants	Completion Date	Comments
Develop and approval of an IEMP in SPM	B Buchanan	Nemai Consulting	2012	Consultants appointed 13 Jan 2011

N.B. As can be observed these activities are too numerous to achieve within the parameters of the capacity of the Seccu office. During the compilation of the SPECCS it was advocated by the stakeholders attending the workshops that the SPECCS should be viewed as a guideline and that specific activities contained therein be transformed into projects as the tools to commence with them become available. It was also advised by the consultants who assisted in the compilation of the SPECCS that some of the time frames were unrealistic and this was to be expected as conditions and environments change and the document needed regular reviewing, with the emphasis of making the necessary adjustments.

In view of this the SECCU office has been working in various areas of the SPECCS in accordance with these principles and has formulated its action plans by taking into account these constraints.

4. SECCU ACTION PLANS IN THE SHORT, MEDIUM AND LONGER TERM.

Overall SECCU Objective	Activity	Responsibility	Timeframe	Budget
Implementation, facilitation and management of the activities of the Sol Plaatje Energy and Climate Change Strategy (SPECCS)	Identification and prioritization of activities for implementation in accordance with the availability of funding and capacity.	SECCU	unlimited	The availability of internal and external funding.
Action Plans	Activity	Responsibility	Timeframe	Budget
Development in communities	The mass rollout of 7837 SWHs in SPM	SPM MAYCO, SECCU, DoE, ESKOM	May 2010 to June 2011	DORA Funding allocated to ESKOM.
Approval of the SPM IEMP	Development of IEMP	B Buchanan	Feb 2011 to Nov 2011	R450,000 SPM
Continuation of EE monitoring programme in collaboration with SALGA and DoE for SPM	Development of EE monitoring programme for SPM for reporting to DoE	SECCU, SALGA, DoE, SDC	2010 to 2013	Awaiting response from SALGA to determine budgetary implications.
Development of an Energy Management Policy for SPM	Development of Energy Management Policy for SPM	SECCU, All Directorates	2011 to 2012	No budget allocation.
Facilitate the conducting of energy audits for all key local authority facilities	Procure the services of private sector who can possibly be financed as a DSM project with ESKOM or funding from SDC,	SECCU, Electricity Department Private sector.	April 2011	Under Construction.
Sol Plaatje Energy and Climate Change Committee (SPECCC)	Restructure committee and create functionality	SECCU, Exec Dir., EMT	Feb 2011	N/A
Registration of energy efficiency measures with IDP	SPM, ESKOM AWH project.	SECCU	February 2011	DORA Funding
Support development of solar thermal technologies, e.g CSP within SPM and surrounds	Keep abreast and promote EE initiatives and future development.	SECCU Meriting Investments Mainstream Renewable Power.	Ongoing	N/A
EE and its effect on munic's revenue streams	Arrange workshop/seminar with SEA and possible other stakeholders	SECCU, SEA,	Feb and Mar 2011	TBD
EE and CC capacity building for SPM staff.	Initiate internal courses for staff	D Lang and HR	Feb to May 2011	TBD

WESSA	EE and CC training at public libraries	D Lang WESSA	April 2011	
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