WEBINAR
BEA WEBINAR ON SUSTAINABLE PROCUREMENT TO ACHIEVE GREATER ENERGY PERFORMANCE IN BUILDING RETROFITS

LOW-CARBON, RESOURCE EFFICIENT AND CLIMATE RESILIENT CITY THROUGH SUSTAINABLE PUBLIC PROCUREMENT STRATEGY

Kedibone G Modiselle
WEBINAR

PRESENTATION OUTLINE

• Context
• Strategic Priority Alignment
• Policy, Planning and Actions
• Advocacy for Green Buildings & Retrofits
• Sustainable Public Procurement
CONTEXT FOR LOW-CARBON, RESOURCE EFFICIENT AND CLIMATE RESILIENT

- Rate of Urbanization
- Increased Housing Demand
- Poor Urban Environment
- Rising Unemployment
- Limited Available Land
- Urban Management
- Limited Available Funding
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CONTEXT

Scale  Speed  Scarce Resources
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CITY PRIORITY ALIGNMENT TO GREEN BUILDINGS & SUSTAINABLE PROCUREMENT

Deliver (sustainable services)

Reduce Energy related carbon emissions
Resource efficiency

New green buildings & retrofitting of municipal owned buildings
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POLICY ALIGNMENT FOR GREEN BUILDINGS

- Strategic Framework for a Green Economy Transition
- Climate Change Response Plan
- Sustainable Public Procurement Strategy
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CASE FOR RETROFITS & GREEN BUILDINGS

- State of Energy Study
- Greenhouse Gas Emissions Inventory
- Vulnerability Assessment
- Pilot Projects (BEA Projects with focus on SP)

Evidence-based Planning
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MITIGATION ACTIONS

GREEN BUILDING PROGRAMME

- Sustainable energy
- Sustainable Waste Management
- Sustainable Transport
- Sustainable water management
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PROMOTION OF LOW CARBON & RESOURCE EFFICIENCY IN COT

• Member of the Green Building Leadership Network
• Encourage Green Built Environment – e.g. Tshwane Headquarters – five star rated by Green Building Council for design
• **Sustainable Public Procurement Strategy**
• Review and Implementation of the Green Building by-law
SUSTAINABLE PROCUREMENT IN TSHWANE

PURPOSE & OBJECTIVES

Greening the economy to a low-carbon, resilient and resource efficient economy

- Enabler (SP and sustainable service delivery)
- SPS – Mainstreaming sustainability into citywide operations
SP FROM NATIONAL GOVERNMENT CONTEXT

• No single and dedicated SP Legislative Framework

• Green Paper on Public Sector Procurement in April 1997
  ▪ “For organs of state to develop policy to influence the behaviour of vendors to comply with all environmental legislation; offer less environmentally damaging products and services; and develop products from recycled materials”
<table>
<thead>
<tr>
<th>Environmental management</th>
<th>National Government Context</th>
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<tbody>
<tr>
<td>Integration of <strong>eco-labels</strong> (environmental performance of a product) in SP</td>
<td>NEMA viewed as the policy framework</td>
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<td><strong>Environmental related taxes and charges</strong> – To change consumption behaviour/revenue-raising measure</td>
<td>National Treasury environmental fiscal reform policy paper 2006</td>
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<td>Proposed <strong>carbon tax</strong> as a strategy to reduce GHG emissions</td>
<td>Environmental levies (Imposed within Customs and Excise Act 1994)</td>
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<td><strong>Reduction of dependency on fossil fuels</strong> and the enhancement of security of electricity supply</td>
<td>Green building rating tracks extraction of natural resources to monitoring the construction and disposal phases in the life cycle of a building</td>
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(2011 White Paper on National Climate Change)
Renewable energy independent power producer procurement programme (REIPPPP)

- To generate new power from renewables, to reduce emission by 34% by 2020, and 42% by 2055
- Most progressive programme; a model for South Africa and the rest of Africa
- Led to first commercial 4.5MW biogas plant in Bronkhorstspruit in Tshwane

DoE’s Municipal EEDSM Programme

DoE’s solar water heater programme launched in 2008

- Target of 1,75-million SWH installations and replacement of existing electric geysers by 2019; a cumulative target of 5-million SWHs by 2030
CITY OF TSHWANE ON SP

Tshwane Integrated Environmental Policy (2005)

Transition to a Green Economy Framework (2014)

Supply Chain Management Policy (2016)

7 elements of Supply chain management system consistent with SP cycle

Section 47(2) policy supports minimisation of risk through SCM that considers the environmental, economic and social consequences

*SCM policy lacks measurable SP environmental criteria and standards*
# CITY OF TSHWANE ON SP

<table>
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<tr>
<th>Some key sustainable initiatives</th>
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<tbody>
<tr>
<td>10 electric vehicles</td>
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<td>Multipurpose Kwaggasrand Material Recovery Facility – Waste separation and recycling</td>
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<td>Launched 40 Compressed Natural Gas (CNG)-run buses</td>
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<td>40 million Tshwane Food and Energy Centre launched in April 2016 in Bronkhorstspruit. (Livestock production; photo-voltaic solar power and biogas plant)</td>
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<td>Retrofitting public buildings; street/traffic lights</td>
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<td>Mini-hydro power pilot in partnership with University of Pretoria</td>
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<td>8 buy back centres</td>
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<td>Annual Tshwane Green Ride launched in 2014 (non-motorised transport)</td>
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<td>Mini-hydro power pilot in partnership with University of Pretoria</td>
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<td>TshWi-Fi (Wi-Fi) – 776 Free Wi-Fi zones</td>
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<td>5 permanent and 8 street boxes air quality monitoring stations</td>
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<td>Greening the EPWP &amp; co-operatives</td>
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<td>8 kilometres of bicycle constructed in Atteridgeville</td>
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<td>Key Spend Areas</td>
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<tr>
<td>Municipal services-</td>
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<td>Infrastructure projects</td>
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<th>15 Most procured SCM products</th>
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<td>Biggest spender- Energy (fuel and electricity)</td>
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<td>Energy biggest contributor to carbon emissions</td>
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<tr>
<td>Business case for green transport programmes and other low-carbon technologies</td>
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<td>Current &amp; future EEDSM initiatives to reduce energy demand and lower energy costs</td>
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### Application of SustainableProcurement

**SP must be incorporated into all 7 elements of SCM System**

- SCM system **integration with planning & budgeting, project Management, operations & maintenance.** (National Treasury MFMA Circular No 77)

- Consider **environmental certified supplier’s (EMS ISO 14001)** who satisfy environmental requirements and specification

- A move towards performance-based contracts for infrastructure delivery ensuring optimal use of resources over lifespan

- Low emissions, non polluting, energy and water efficient **at all stages of the life cycle** of a product or service

- Non-use of hazardous material content in purchases

- **End-of-life options**, including the reuse, repair, recycling and disposal options with minimum environmental impact
Determine green specification - (Source: SANS standards; ecolabels)

For example

-SANS 204 national standards for EE for buildings

-Department of Energy (DoE) appliance energy consumption & efficiency grading from A to G

-Green Building Council of SA green star rating system

Bid Documentation - Green requirements minimum criteria

Public invitation to bid - Environmentally-certified bidders (ISO 14001 certified)

- SMMEs that cannot justify cost of ISO 14001 registration and third party certification must declare voluntary activities (Responsible Care /Cleaner Production) in line ISO 14001

- Specify in bid documents EMS claims will be subject to verification

- Verification of EMS claims must ensure continuous management and improvement

- Certification of EMS by third party must be based on supplier/product segmentation
TSHWANE’S APPLICATION OF SUSTAINABLE PROCUREMENT TO ENERGY PERFORMANCE IN BUILDINGS

**Supplier segments**
- **Mandatory**
  - Original Equipment Manufacturer (OEM)
- **Mandatory**
  - Intermediary (depending on contract size or volumes)
- **Voluntary**
  - SMME vendors

**Product segments**
- **Mandatory**
  - Regular, off the shelf- Price and delivery should be the only variables once they have been specified
- **Mandatory**
  - STANDARD goods & services (critical)- Well defined and specified. Re-ordering based on the city’s stock level
- **Mandatory**
  - On-site contracts- Large capital plants and projects (Water, Sewage, Civil Work, Building, Power)

EMS ISO 14001 Certified Suppliers/Products Segmentation Model
TSHWANE’S APPLICATION OF SUSTAINABLE PROCUREMENT TO ENERGY PERFORMANCE IN BUILDINGS

**Tender Evaluation & Adjudication**

- Bids must be disqualified if they fail to meet the minimum environmental requirements.
- Qualifying bids must be evaluated in terms of price, BEE and other preferential procurement criteria.
- Bids may be evaluated on functionality if it was included in the “public invitation to bid”.
- Qualifying bids must be evaluated in terms of the 80/20 or 90/10 preferential point system.
- Suppliers meeting green requirements must be verified during the assessment process.
- Bidders complying with the minimum green requirements must be included in a comparative analysis for submission to the bid adjudication committee.
- Up to 10% functionality points may be awarded to green requirements for the purchase of green products and services.

**Contract Management**

- Environmental requirements must be included in the service level agreement.
## WEBINAR
### BARRIERS TO SP

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<tr>
<th>Barriers</th>
<th>Description</th>
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<tr>
<td><strong>Policy</strong></td>
<td>Different legal instruments create lack of clarity about SP practices. Unclear linkage between environmental requirements and socio-economic priorities.</td>
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<td>Low-level policy support</td>
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<td><strong>Financial</strong></td>
<td>Budget constraints</td>
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<td>Legislative requirement for fiscal sustainability in the short to medium term barrier to SP long-term lifecycles</td>
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<td><strong>Organisational</strong></td>
<td>Lack of coordination</td>
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<td>Inadequate capacity or resources</td>
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<td>Poor M &amp; E</td>
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<tr>
<td><strong>Procurement related</strong></td>
<td>Integrating sustainability and evaluating different verification systems  practicality of implementation at operational level</td>
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<td><strong>Market related</strong></td>
<td>Inadequate supply of environmentally friendly options enough to service the demand. e.g. biofuels</td>
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## Enablers of SP

### Policy instrument such as EMS ISO14001

Implementation of ISO 14001 EMS for streamlining environmental management programmes and practices

### Training and capacity-building in environmental procurement & the link with economic and political priorities

### Public and private initiatives

### Financial instruments role in fiscal sustainability

Subsidy-related incentives in the form of tax expenditures. (e.g. South African National Energy Development Institute’s (SANEDI's) 12ℓ incentive)

Catalytic finance to facilitate investment in green initiatives. (e.g. Department of Environmental Affairs Green Fund)

### Integration

Facilitate collaboration and information sharing in real time, critical for measuring SP progress
OPPORTUNITIES CREATED FOR SP

• Retrofits of city buildings – water, energy Performance & waste management
• Green Neighborhood Developments
• City building certifications – minimum target of 3 star rating
• Development and usage of Solar PV in City Buildings
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THANK YOU