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

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PRESENTATION OUTLINE

- Context
- Strategic Priority Alignment
- Policy, Planning and Actions
- Advocacy for Green Buildings & Retrofits
- Sustainable Public Procurement

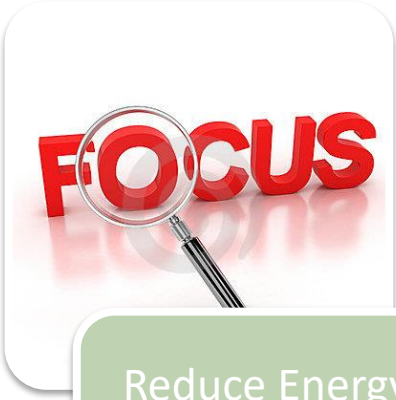
CONTEXT FOR LOW-CARBON, RESOURCE EFFICIENT AND CLIMATE RESILIENT

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

CONTEXT

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

POLICY ALIGNMENT FOR GREEN BUILDINGS

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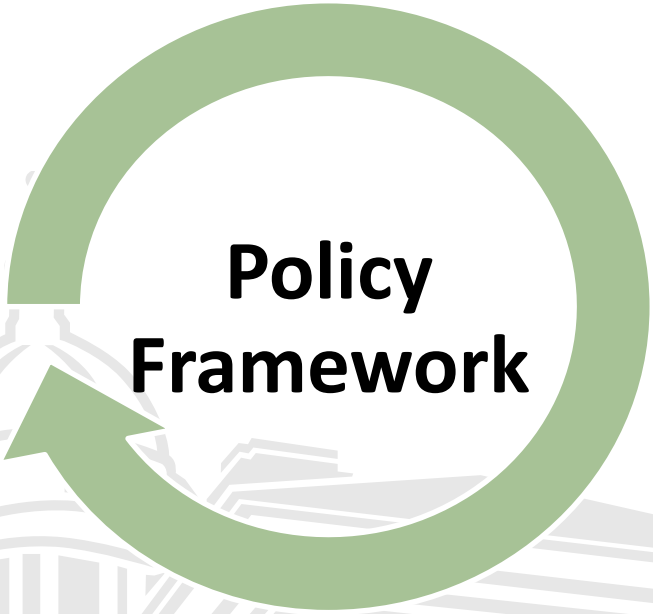

- Strategic Framework for a Green Economy Transition
- Climate Change Response Plan
- Sustainable Public Procurement Strategy

CASE FOR RETROFITS & GREEN BUILDINGS

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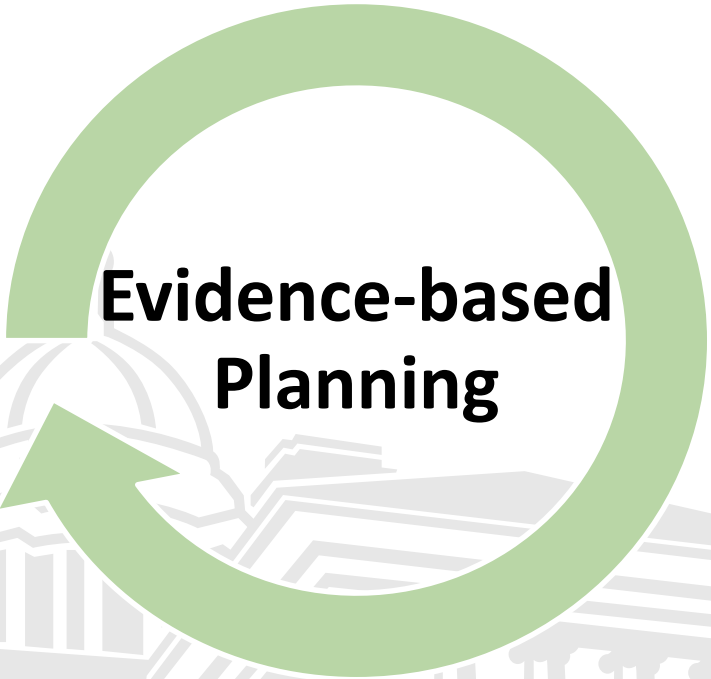

- State of Energy Study
- Greenhouse Gas Emissions Inventory
- Vulnerability Assessment
- Pilot Projects (BEA Projects with focus on SP)

MITIGATION ACTIONS

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

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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

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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''

NATIONAL GOVERNMENT CONTEXT

Environmental management

Integration of **eco-labels** (environmental performance of a product) in SP	NEMA viewed as the policy framework	
	National Eco-labelling Scheme (SANES) for the built environment	Green building rating tracks extraction of natural resources to monitoring the construction and disposal phases in the life cycle of a building
Environmental related taxes and charges – To change consumption behaviour/revenue-raising measure	National treasury environmental fiscal reform policy paper 2006	
	Environmental levies (Imposed within Customs and Excise Act 1994)	Current levies (plastic bags, local electricity, electric filament lamps and carbon dioxide emissions from motor vehicles)
Proposed **carbon tax** as a strategy to reduce GHG emissions		
Reduction of dependency on fossil fuels and the enhancement of security of electricity supply	(2011 White Paper on National Climate Change)	

National Initiatives

Renewable energy independent power producer procurement programme (REIPPPP)

- Foundation -The 1998 White Paper on energy policy; 2003 White Paper on RE; 2011 Climate Response White Paper. (Guided the 2010-2030 Integrated Resource Plan)
- 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

SP Foundation

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

- 10 electric vehicles
- Multipurpose Kwaggasrand Material Recovery Facility – Waste separation and recycling
- Launched 40 Compressed Natural Gas (CNG)-run buses
- 40 million Tshwane Food and Energy Centre launched in April 2016 in Bronkhorstspruit. (Livestock production; photo-voltaic solar power and biogas plant)
- Retrofitting public buildings; street/traffic lights
- Mini-hydro power pilot in partnership with University of Pretoria
- 8 buy back centres
- Annual Tshwane Green Ride launched in 2014 (non-motorised transport)
- Mini-hydro power pilot in partnership with University of Pretoria
- TshWi-Fi (Wi-Fi) – 776 Free Wi-Fi zones
- 5 permanent and 8 street boxes air quality monitoring stations
- Greening the EPWP & co-operatives
- 8 kilometres of bicycle constructed in Atteridgeville

Some key sustainable initiatives

Key Spend Areas	*SCM* products or services
	Municipal services- (water and sanitation, electricity, roads and efficient public transport)
	Infrastructure projects
15 Most procured SCM products	Biggest spender- Energy (fuel and electricity)
	Energy biggest contributor to carbon emissions
	Business case for green transport programmes and other low-carbon technologies
	Current & future EEDSM initiatives to reduce energy demand and lower energy costs

Application of Sustainable Procurement

SP SCM System

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)

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

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

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

TSHWANE'S APPLICATION OF SUSTAINABLE PROCUREMENT TO ENERGY PERFORMANCE IN BUILDINGS

Demand Management

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

Acquisition Management

Bid Documentation-Green requirements minimum criteria

Public invitation to bid-
Environmentally-certified bidders (ISO 140001 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	Product segments
Mandatory Original Equipment Manufacturer (OEM)	**Mandatory** **Regular, off the shelf-** Price and delivery should be the only variables once they have been specified
Mandatory Intermediary (depending on contract size or volumes)	**Mandatory** **STANDARD goods & services (critical)-** Well defined and specified. Re-ordering based on the city's stock level
Voluntary SMME vendors	**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 the 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.

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BARRIERS TO SP

Barriers

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

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ENABLERS OF SP

Enablers

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

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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

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