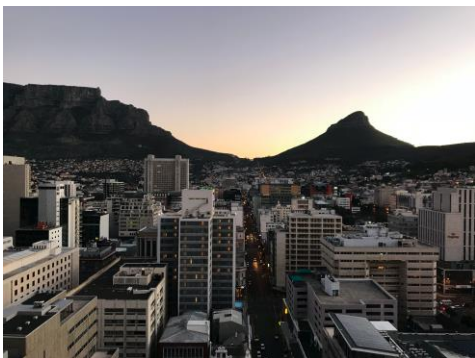




# City of Cape Town

(South Africa)

## Sustainable Procurement Profile



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**PROCURING SUSTAINABLY, LEADING GLOBALLY**



## Introduction

The City of Cape Town (<http://www.capetown.gov.za>) has committed to implementing green procurement in its operations and capital projects. A commitment to green procurement is integrated in the City's Environmental Strategy and is incorporated, as a principle and desired outcome, in the City's Supply Chain Management Policy. This allows staff to include environmental sustainability as a criterion in procurement decision-making.

The City has implemented many successful green procurement projects and practices in its operations. Recently, the City of Cape Town finalised a Green Procurement Action Plan, which seeks to give effect to the City's commitment to green procurement and to consolidate and mainstream the implementation of green procurement in the City.

The City of Cape Town has also published a set of Green Procurement Guidelines that provide staff with information on how to include sustainability criteria when compiling specifications and tender documents. Cape Town joined the Global Lead City Network on Sustainable Procurement in 2015.

## Our SPP highlights/achievements

### OUR SPP HIGHLIGHTS

#### Transport

- The City vehicle fleet tenders have included fuel efficiency and Euro emissions standards, where possible
- Tender for MyCity buses specified Euro 5 vehicle certification
- Ongoing greening of City fleet

#### Energy

- All traffic lights in the city have been retrofitted with LED lights.
- More than 25 000 of the City's street lights (as at 2018) have been retrofitted with energy efficient alternatives.
- More than 57% (as at 2018) of its large corporate buildings have been retrofitted, including 40 large administrative municipal buildings.
- Approximately 847 smart electricity meters installed at City facilities.

#### Buildings and housing

- The City has incorporated green procurement and green building practices in the development of many new buildings and facilities such as Dunoon Library, the Mannenberg Housing Centre, the Bloemhof Electricity building and the Water Services head office.
- The designs of some low-cost housing developments are incorporating green elements to promote resource efficiency and quality of life for the occupants.

### Information Systems and Technology (IS&T)

- All monitors for the City's approximately 15 500 computers have been replaced with more energy efficient technology which has led to an 84% saving in power.
- The implementation of improved desktop power profiles across City computers has resulted in savings of 905 MWh of electricity and R490 000 per year with no capital expenditure.

### Waste

- Tenders for the removal and recycling of waste paper and cardboard and used oil and scrap metal from City departments.
- The City continues to promote green procurement through its waste minimization initiatives.
- Green procurement in support of the circular economy, through initiatives such as the Fifty/50 Wheelie Bin programme.

### Stock items

- An assessment of the greening potential of the City's stock items in its stores has been undertaken.

## Procurement in the city

### Our strategy

Responsibility for implementing sustainable procurement is shared. The City's Environmental Management Department leads the City's sustainable procurement approach, in conjunction with the Supply Chain Management Department. In general, the City has committed to implementing green procurement in its operations and capital projects, through its Environmental Strategy. Additionally, green procurement has already been included in the City's Supply Chain Management Policy as one of seven desired outcomes and principle, and as such has created the conditions for consideration of environmental concerns to be included in procurement decisions.

Notably, in 2019 the City of Cape Town (the City) finalised a Green Procurement Action Plan. The Action Plan was developed by the City's Environmental Management Department in conjunction with the Supply Chain Management Department, through extensive engagement and input from across line functions, and supported by the City's Executive Management Team.

The Green Procurement Action Plan thus seeks to give effect to the City's commitment to green procurement and to consolidate and mainstream the implementation of green procurement in the City. The overall aim of the action plan is to define a set of principles to guide green procurement decision-making, define a set of desired objectives and outcomes for the City to strive towards achieving, and lay out the specific actions required to effectively transition towards green procurement in all of the City's operations and purchasing decisions.

The Action Plan has seven key objectives, namely:

1. Ensure that the City has in place appropriate policies to support green procurement, including associated administrative tools.
2. Maximise the City's sourcing and purchasing of sustainable products.
3. Maximise the City's sourcing and purchasing of sustainable services.
4. Increase the number of green/sustainable buildings built by the City, with a long term aim of a complete transition to green/sustainable building.
5. Incorporate green procurement into the City's large capital projects.
6. Communicate effectively with the public, City contractors and City staff regarding green procurement.
7. Monitor and evaluate the City's performance in terms of green procurement.

The Action Plan furthermore has twenty outcomes and 47 actions or activities, aimed at achieving the above objectives. Some of the important actions/activities, outlined in the Green Procurement Action Plan, that the City intends on prioritising in the short- medium term, include:

- Undertake demand plan analysis to determine priority areas for intervention;
- Develop process flow for RFQs and Tenders, indicating options for integration of green procurement and environmental legal compliance into the processes;
- Undertake a prioritisation process and feasibility analysis to determine priority goods purchasing groups;
- Undertake a prioritisation process and feasibility analysis to determine priority materials groups;
- Investigate the feasibility of developing guidelines and specifications for each utility/transport related materials group within the City's stock items;
- Undertake a prioritisation process to determine priority directorates and/or departments;
- Develop a set of guidelines and specifications for prioritised directorates and/or departments;
- Develop sustainable building guidelines, based on the equivalent of a minimum of GBCSA 4 star standards and aligned with the City's commitment for 'carbon neutral new buildings by 2030' and carbon neutrality city-wide by 2050;
- Further implementation of City buildings retrofit programme;
- Develop a set of sustainable design principles for various types of capital/infrastructure projects;
- Develop sets of guidelines, stemming from sustainable design principles for large capital projects;
- Develop a set of specifications for the use of recycled building materials in City capital projects;
- Develop series of case studies of successful green procurement projects/tenders; and
- Hold annual project manager training and activation sessions for City project managers

In addition, the City developed Green Procurement Guidelines, which provides staff with guidance on implementing sustainable procurement.

## How we procure

Many provisions related to socially-responsible procurement have been incorporated into the City's Supply Chain Management Policy. These include provisions on preferential procurement for small businesses (SMMEs), broad-based black economic empowerment (BBEE), and localisation criteria for certain sectors. These are, furthermore, key procurement priorities at a national policy level and entrenched in national Preferential Procurement Regulations, and have been mainstreamed in the City's policies, processes and practices.

Further, the City has a long history of adopting successful green procurement projects and practices in a number of its operations, and adopting approaches such as life-cycle costing in the procurement for various significant projects. Life-cycle costing has allowed various important interventions to take place on the basis of short-term investment leading to long-term savings.

Overall, sustainable public procurement is increasingly viewed as a critical aspect of the City's Supply Chain Management Policy due to its role in reducing the City's financial costs and environmental impact, promoting urban sustainability and driving the green economy.

However, as mentioned, the Green Procurement Action Plan defines a set of principles that are intended to guide future green procurement decision-making, and to facilitate green procurement in all of the City's operations and purchasing decisions. The four key principles, outlined in the Green Procurement Action Plan, are:

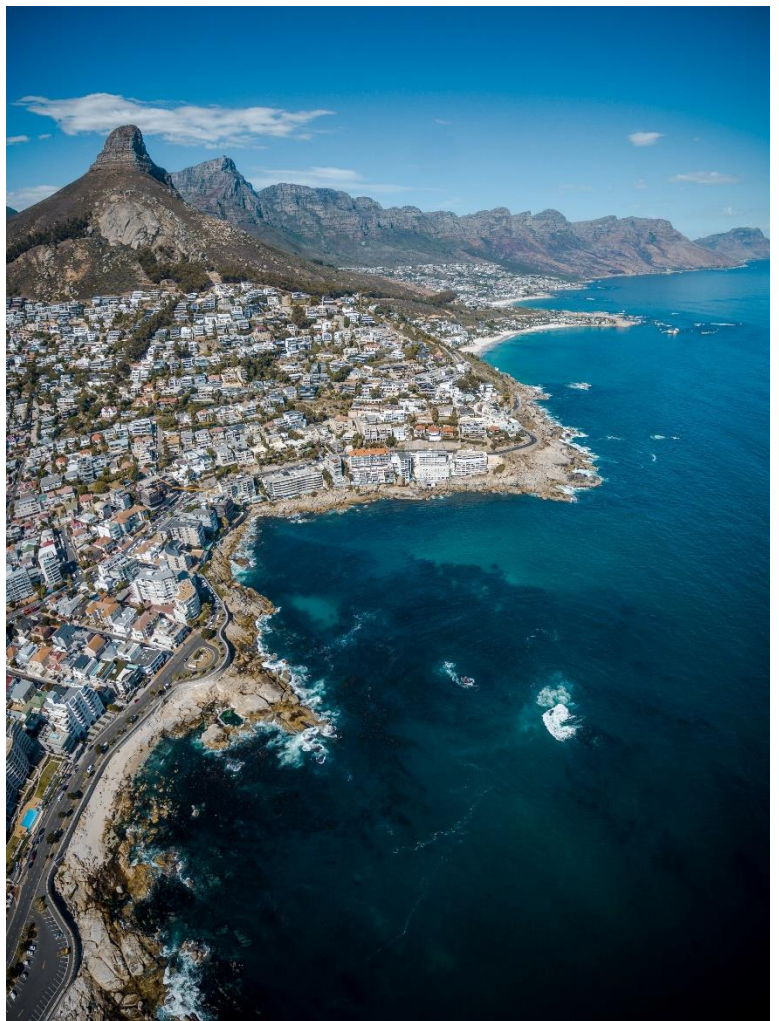


Image credits: Unplash

- **Life-cycle approach:** Procurement decisions should consider the whole life-cycle of a product or service. As such, products or services which may represent a short-term saving at the expense of long-term negative environmental impacts, or those which have the potential to create significant negative externalities, should be avoided.
- **Preventing, Minimising, and Mitigating Impacts:** Procurement decisions should ensure that any potential negative environmental and social impacts of a product or service to be procured are prevented, and where these cannot be completely prevented, minimised or mitigated.
- **Resource Efficiency:** Procurement decisions should ensure that products and services take into

account the need for resource efficiency, both in terms of services that the City provides to the public and the day-to-day running of its own operations.

- **Circular Economy:** Procurement decisions should ensure products and services take into account the three principles of circularity, namely: design out waste and pollution; keep products and materials in use by purchasing for durability, reuse, remanufacturing, and recycling; and regenerate natural systems.

## What we procure

The City of Cape Town's Supply Chain Management Department is the central department responsible for managing all procurement in the City. Category management is in place through the division of the Supply Chain Management department into two broad sections – one dealing with tenders and contracts to the value of more than R200 000, and the other section dealing with procurement under R200 000. The procurement section (under R200 000) is further divided into a number of commodity teams (two focused on services, two focused on goods, and a mechanical and electrical workshop), which are further divided into purchasing groups focusing on specific categories. There is also a section which deals exclusively with stock items – such as paper and cleaning materials – that are kept in the City's internal stores.

## Our partners

The City has a range of long-term partners that support the City in relation to sustainable public procurement, including ICLEI and ICLEI Africa in general and the Global Lead City Network on Sustainable Procurement in particular, as well as GreenCape, a leading green economy sector development agency.

# Procurement-related sustainable projects

## Transport

- **Rationale:** The transport sector is a significant contributor to the City's carbon footprint, as well having a significant impact on air quality. Broadly speaking, more than half of the energy consumed in Cape Town is for transport, which accounts for 28% of the city's carbon emissions.
- **Achievements/current activities:** The City has included sustainable procurement criteria (energy efficiency criteria and Euro emissions standards) into its vehicle fleet tenders, where possible. The entire MyCiti bus fleet currently meets Euro 4 standards for emissions, and newer buses within the fleet comply with Euro 5. The City has and continues to undertake steps to green its fleet. In 2009 the City's Electricity Department won the Green Supply Chain award (from the Consumer Council of South Africa and the institute of Logistics and Transport of South Africa), based on its fleet management tender technical specification.
- **Future plans:** Continue greening the City's vehicle fleet, expansion of the MyCiti bus service and promoting the adoption of electric vehicles.

## Energy Efficiency and Renewable Energy

- **Rationale:** Electricity is a significant contributor to the City's carbon footprint and potential area of significant improvement.
- **Achievements/current activities:** The City has a comprehensive programme to improve energy-efficiency and introduce renewable energy in municipal operations, and continues to retrofit its office buildings (with energy efficient lighting and other energy efficiency interventions) and retrofit its street and traffic lighting (see 'SPP highlights' above).

The City has retrofitted more than 57% (as at 2018) of its large corporate buildings, including 40 large administrative municipal buildings. By making administrative buildings more energy efficient, the retrofit programme reduces costs and improves the quality of the working environment.

All City traffic lights have been retrofitted with efficient light-emitting diodes (LEDs). This has reduced the electricity consumption of traffic lights to very low levels. This was an investment of R23 million, but results in annual savings of R11 million (with a four-year payback period) and carbon reduction of 9 224 tonnes of CO<sub>2</sub> equivalent per annum. Similarly, more than 25 000 of the City's street lights (as at 2018) have been retrofitted.

The City continues to roll-out SmartFacility, an integrated and automated resource data management system for City facilities. Approximately 847 smart electricity meters have been installed in 557 facilities.

Between 2009 and 2019, the City's verified electricity savings tracked from the smart metering devices for all energy-efficiency and renewable-energy projects totalled over 170 000 MWh, which translates into R190 million and 170 000 metric tonnes of CO<sub>2</sub> equivalent.

The City furthermore supports and has taken steps to enable small-scale embedded generation and the has developed a set of standards and regulations for connection of small renewable-energy systems (particularly rooftop solar) to the municipal grid. By the end of June 2020, 720 residential and 245 commercial and industrial PV systems approved by the City had been commissioned. This represents an EG capacity of 41.6 MVA.

- **Future plans:** The City aims to complete the roll-out of energy efficient lighting and other energy efficiency interventions in all large municipal office buildings, as well as energy efficient street lighting. Further, the City intends on increasing the use of renewable energy for municipal operations and exploring the purchase of large scale renewable energy from independent power producers (IPPs). It is hoped that 300MW of generation will be sourced through this programme.

The City is currently developing a Climate Change Strategy, which includes a goal to 'Proactively address climate change through the creation of green jobs and through the use of green procurement'. The draft strategy further includes a commitment 'take active steps to expand zero carbon electricity provision in both the retail and supply sectors through direct procurement from Independent Power Producers' and reiterates the City's commitment in terms of C40's Deadline 2020 programme, to reach carbon neutrality by 2050.

## City Stock Items

- **Rationale:** The City buys numerous stock items that are used on a daily basis such as paper, lightbulbs, cleaning materials, and refreshments. The City has significant purchasing power in relation to these items, and the ability to make a significant impact.
- **Achievements/current activities:** The City commissioned a detailed study with the purpose of developing a stock list detailing specifications for resource efficient stock items for the City, and has investigated options for greening its cleaning products stock items, which includes over 150 separate items. All lightbulbs have been greened, and only energy efficient LED bulbs are now available for use in municipal buildings.
- **Future plans:** Similar interventions are planned for other product areas, including paper products and stationery.

## Information Systems and Technology (IS&T)

- **Rationale:** Information systems and technologies are, globally, the most widely used category of technologies. IS&T require energy and materials for their production and use, and pose significant challenges related to environmental impact and waste management. Thus, there are significant interventions that are available to improve the resource efficiency of IS&T. At the same time, IS&T can be used to facilitate broader sustainable innovation and processes within City operations.
- **Achievements/current activities:** The implementation of desktop power savings across the City has resulted in savings of 905MWh electricity and R490 000 per year with no capital expenditure.

The City has replaced its computer monitors from CRTs to liquid crystal displays (LCDs) and then to light emitting diodes (LEDs). The change from CRTs to LCDs and then LEDs across the City's fleet of approximately 15 500 computers will lead to an 84% saving in power used by the monitors. The requirements for the more energy efficient monitors has been built into the procurement specs

The City started using Tiny Form Factor desktops 1.5 years ago. These are small desktops that use a third of a conventional PC power (65 W rather than 240 W). This equates to the energy consumption of a laptop, but at far lower cost, uses less material to make, takes up less space, causes less heat emissions (and less strain on air conditioning) and runs more quietly than a conventional desktop.

Other IS&T interventions undertaken by the City include programming of printers and the adoption of active management technologies for IT servicing, to assist the City in managing its fleet more efficiently. Finally, in the case that computers and IT equipment reach end of life and is condemned, the City re-uses and refurbishes what it can (including whole computers and components).

- **Future plans:** Continued IS&T interventions are planned, including ongoing work and expansion in relation to IT equipment, IT servicing and in relation to reuse, refurbishment and sustainable disposal of IT equipment that has reached end of life. Notably, in relation to the Future of Work, there is significant work being undertaken in the City to facilitate remote and flexible work, in the context of the COVID-19 pandemic.



## Waste Minimisation

- **Rationale:** Cape Town's landfills have been placed under increasing pressure in the past years and the City's landfill airspace is rapidly dwindling. Green procurement can play a significant role in the City's waste minimisation and circular economy initiatives.
- **Achievements/current activities:** Since 2009, the City's Supply Chain Management Department, Inventory and Stores Management Branch, supported by the Solid Waste Management Department and in partnership with other key City departments such as Facilities Management, has managed a tender for the removal and recycling of waste paper and cardboard from City departments. Over 250 buildings have been serviced by this tender, and between 10 and 15 tons of paper and cardboard are typically recycled per month. This saves paper and cardboard, avoids disposal costs, and generates income from recycling these resources.

Similarly, the City's Supply Chain Management Department and Inventory and Stores Management Branch, in partnership with other key City departments, manage tenders for the removal and recycling of used oil and scrap metal from City departments.

More broadly, the Solid Waste Management Department assists and engages with line functions, with specific waste streams, providing advice on technologies and accredited service providers to recycle or sustainably manage those waste streams.

The City, furthermore, has pursued a number of circular economy projects in procurement, such as the City's Fifty/50 Wheelie Bin programme. The City introduced 240-litre wheelie bins for refuse collection in 1991 and today there are approximately 800 000 bins serviced weekly across the city. These bins were traditionally made from 100% virgin HDPE (high-density polyethylene). However, in 2014, the City included specifications into its refuse bin tender that promotes the recycling of old wheelie bins into new ones. The specification state that the bins must be comprised of 50% HDPE recyclate, 100% local content and recyclable at end of life. These specifications have also been incorporated in a home composting bin supply tender, as part of a programme that seeks to roll out 5 000 home composting bins per annum to City residents.

- **Future plans:** The City has committed incorporating and integrating green procurement through ongoing waste minimization and circular economy initiatives. Notably, the Green Procurement Action Plan includes the 'circular economy' as a key principle to guide City procurement. One of the outcomes of the action plan is to develop and institutionalise closed loop procurement systems through activities such as: potentially instituting an internal industrial symbiosis programme; introducing requirements to include take back systems, refill systems; or hiring systems within specifications for certain goods or services; and to potentially initiate a shared 'Tools Library' whereby line functions can pool, share and 'hire' tools or equipment that are only needed periodically.

## Buildings and Housing

- **Rationale:** Buildings are responsible for between 40% and 60% of greenhouse gas emissions in the city, and are thus a significant contributor to the City's carbon footprint. On the other hand, green buildings offer a range of benefits, including: reduced operational costs; reduced resource consumption; and improved employee health, well-being and productivity.
- **Achievements/current activities:** Apart from the retrofit of existing City-owned buildings (see Energy Efficiency and Renewable Energy section), the City has incorporated green

procurement and green building practices in the development of many new City buildings and facilities. A recent example of a City building that incorporates green design and construction is the Dunoon Library, a three-storey library designed to optimise usable land. The library is highly energy and water-efficient, making use of greywater and light-emitting diode (LED) motion sensor lights. An innovative double-skin curtain wall system keeps the building cool by reducing heat gain in the internal spaces, while letting in maximum daylight. In 2019, the Dunoon library won the Seoul 'Human City Design' Award.

Other examples of new City green buildings include the Mannenberg Housing Centre, Electricity Services Head Office, Water Services Head Office, and the Langa Cultural Precinct.

The City has various examples of integrating and incorporating resource efficiency and environmental sustainability features in the design and construction of City housing projects, including: the Witsand 'iEEECO' (integrated-energy environment empowerment cost-optimisation) low-cost housing project; Morningstar housing project; Greenville Garden City; Ocean View stone houses; and Pelican Park housing development. These seek to promote resource efficiency and at the same time improve the living conditions and environments for housing recipients and occupants.

Furthermore, the City has pursued innovative solutions to reducing construction waste, such as the valuing and use of builders' rubble stockpiled at the City's Coastal Park Landfill as a requirement of tenderers for the bulk earthworks in the Coastal Park Material Recovery Facility.

The City has published Green Building Guidelines for the City of Cape Town that seek to actively promote resource efficient construction of new or renovated buildings in Cape Town.

- **Future plans:** As part of the C40's Deadline 2020 programme, the City has committed to attaining net zero carbon emissions from the City's own buildings (both existing and new) by 2030, for all new buildings in Cape Town by 2030, and for all existing buildings in Cape Town by 2050. In this regard, Objective 4 of the Green Procurement Action Plan is to 'increase the number of green/sustainable buildings built by the City, with a long term aim of a complete transition to green/sustainable building'. Actions to achieve this objective include developing sustainable building guidelines for City buildings aligned with the City's commitment for 'carbon neutral new buildings by 2030' and to 'develop specific sustainable building design guidelines for various types of City buildings' (such as clinics, libraries, and community facilities).

## Keeping track of procurement

The City of Cape Town monitors procurement through an online system which shows staff which contracts have been awarded, for how much, and to which companies, along with other administrative details. Supply chain monitoring thus takes place on an ongoing basis and is an important tool for identifying progress.

While there is as yet no process in place for monitoring sustainable procurement specifically, the Green Procurement Action Plan commits the City to developing such a system. Notably, Objective 7 commits the City to monitor and evaluate its performance in terms of green procurement. This includes actions to 'develop a system to monitor the implementation of green procurement in RFQs and Tenders'; to 'monitor compliance of goods and service providers with relevant environmental laws and standards' and to 'progressively set targets for green procurement, focusing on priority areas'.

## Future challenges

While the City of Cape Town has committed to implementing green procurement, and there is strong support for green procurement at policy and strategy level, there are still challenges to widespread implementation and adoption of green procurement practices. These include challenges related to prioritising goods and purchasing groups; monitoring uptake of green procurement practices; conducting 'green' audits; concerns related to availability of green goods and services and constraints in effectively evaluating the social and environmental performance of goods and services. Further, mainstreaming green procurement across line functions requires considerable training, communication and education, in relation to the means and processes related to green procurement.

Notably, the most significant challenge to green procurement is budget constraints. As a city in a developing country, municipal budgets are limited. Certain green goods and services may cost more, and these additional costs may not be budgeted into initial project costing. Yet, green goods and services may result in significant operational efficiencies and associated cost savings over time. Sustainable procurement interventions that save money (e.g. energy efficiency) are thus most likely to be successful in a constrained budget environment. On the other hand, green goods and services, although they may not result in cost savings, can have considerable city-wide benefits such as stimulating local markets for green goods and services, the creation of green jobs and lead to an improvement in the environmental compliance of suppliers. Nevertheless, such interventions, which cannot immediately be linked to savings, or that have a long payback period, may be more difficult to justify.

## Further information

RESOURCE	WEBSITE
"Superstar" green building	<a href="http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_015.pdf">http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_015.pdf</a>
Leaving no stone unturned	<a href="http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_018.pdf">http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_018.pdf</a>
Reducing the City's carbon emissions	<a href="http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_019.pdf">http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_019.pdf</a>
Feeding excess electricity into the grid (small scale embedded generation):	<a href="http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_048.pdf">http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_048.pdf</a>
Langa cultural precinct (use of recycled materials in building design):	<a href="http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_071.pdf">http://www.capetown.gov.za/en/WDC2014/Projects/WDC_project_071.pdf</a>
City of Cape Town Environmental Strategy	<a href="https://resource.capetown.gov.za/documentcentre/Documents/Bylaws%20and%20policies/Environmental%20Strategy.pdf">https://resource.capetown.gov.za/documentcentre/Documents/Bylaws%20and%20policies/Environmental%20Strategy.pdf</a>
City of Cape Town Supply Chain Management Policy	<a href="https://resource.capetown.gov.za/documentcentre/Documents/Bylaws%20and%20policies/Supply%20Chain%20Management%20Policy.pdf">https://resource.capetown.gov.za/documentcentre/Documents/Bylaws%20and%20policies/Supply%20Chain%20Management%20Policy.pdf</a>

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## About the GLCN on SP

The **Global Lead City Network on Sustainable Procurement** is a group of cities committed to drive a transition to sustainable consumption and production by implementing sustainable and innovation procurement. All participating cities are acting as ambassadors of sustainable procurement to lead to a resource efficient, low carbon and socially responsible society.