

# KwaDukuza and Steve Tshwete Local Municipalities, South Africa

## Comprehensive approaches to local low emission development: from engagement to planning to action

The Urban-LEDS project provided an opportunity for two South African cities to be guided in developing their Low Emissions Development Strategies using ICLEI's GreenClimateCities methodology. The strategies were bolstered by thorough analysis of the energy usage, greenhouse gas emissions and strategic transition areas for each city, and evidence the use of innovative approaches within the emerging discipline of low emission development.

188

ICLEI Case Studies

March 2016

### Summary

Addressing the causes of climate change was – until the inception of the Urban-LEDS project in 2012 – a low priority for the majority of municipalities in South Africa. Accordingly, creating low emissions development strategies presents a significant challenge, as it requires that officials divert their attention from service delivery and crisis management, toward topics that they at first may perceive as peripheral. In spite of these challenges, some remarkable successes have been achieved. This case study outlines the how two South African municipalities – KwaDukuza and Steve Tshwete – used ICLEI's GreenClimateCities (GCC) methodology to successfully craft their low emissions development strategies.

### Introduction: the importance of adopting the right approach to engaging local governments and their community for low emissions development

Climate change is already happening and is expected to accelerate as the developing world further urbanizes and becomes more populous, and the emerging consensus is that a radical shift onto a more sustainable development path needs to happen in cities worldwide. Technology has a role to play, but a much more systemic approach is also required.

The GreenClimateCities (GCC) methodology was developed by ICLEI in response to this need. It provides a structure for tackling low emission development at the local level, while also remaining adaptable to implementation within a variety of local government. To this end it is versatile, not overly prescriptive, and its steps do not need to be implemented in a linear order. These attributes are essential for addressing complex challenges facing cities.

The Urban-LEDS project provided an opportunity for KwaDukuza and Steve Tshwete to innovate and trial regionally unconventional approaches. As an added challenge, the project was also tasked with delivering outcomes set by the funding agency, the European Commission, and these deliverables were often at odds with the priorities of the two local governments. This case study highlights the challenges faced in implementing a project with both local and international deliverables, and acknowledges the role played by the GCC methodology in achieving success and overcoming the obstacles that emerged over the course of the project's 3-year lifetime.



### Facts & Figures

#### Population / Land area

KwaDukuza: 231,189 (2011) / 735 km<sup>2</sup> (2012), Steve Tshwete: 229 831 (2011) / 735 km<sup>2</sup> (2012)

#### Municipal budget

KwaDukuza: ZAR 1 054 million (2013/14)  
Steve Tshwete: ZAR 1 399 million (2014/15)

#### Greenhouse gas inventory

Yes (both since 2012)

#### Total GHG emissions

KwaDukuza: 4.25 tCO<sub>2e</sub> per capita (2012),  
Steve Tshwete: 16.21 tCO<sub>2e</sub> per capita (2012)

#### ICLEI members since

Kwa Dukuza: 2013  
Steve Tshwete: 2010

## The Urban-LEDS project

An Urban Low Emissions Development Strategy (Urban LEDS), or Low Emissions Urban Development Strategy, defines a pathway to transition a city to a low emission, green and inclusive urban economy, through its integration into city development plans and processes.

The Urban-LEDS project (2012 - 2016), funded by the European Commission, and implemented by UN-Habitat and ICLEI, has the objective of enhancing the transition to low emission urban development in emerging economy countries: Brazil, India, Indonesia, and South Africa.

A short video was produced illustrating the successes of and approach to implementing Urban-LEDS in South Africa. The video can be viewed at: <https://www.youtube.com/watch?v=2Xk0LPuyuul>

For more information, please visit: <http://urbanleds.iclei.org/>

## Low Emission Development Solutions in South Africa: why Urban-LEDS?

Urban-LEDS is the first major project to focus specifically on low emission development at the local level in South Africa. Although organisations such as the South African Local Government Association and private consultancies have been assisting cities with state of energy reports and intermittent greenhouse gas (GHG) inventories to help reconfigure the municipal energy landscape, this work has not been systemic and has been limited to the larger metropolitan areas.

Reflecting on the fact that secondary cities in South Africa are facing extraordinary challenges, the Urban-LEDS implementing team made the choice to focus the project on fast growing, second tier cities rather than larger, better resourced cities.

The Urban-LEDS project and the comprehensive GCC methodology can be particularly effective in secondary cities in South Africa, where stringent financial management controls put in place to mitigate corruption make it very difficult to plan more strategically in regard to renewable energy and energy efficiency. Because electricity sales can contribute in excess of 15 percent of the total municipal income, and revenue is derived from the re-sale of electricity, topics such as community energy efficiency and moving to renewable energy sources have implications on the financial viability of local governments in South Africa. The GCC looks to overcome this institutional inertia by integrating low-carbon strategies into all sectors of urban planning and development.

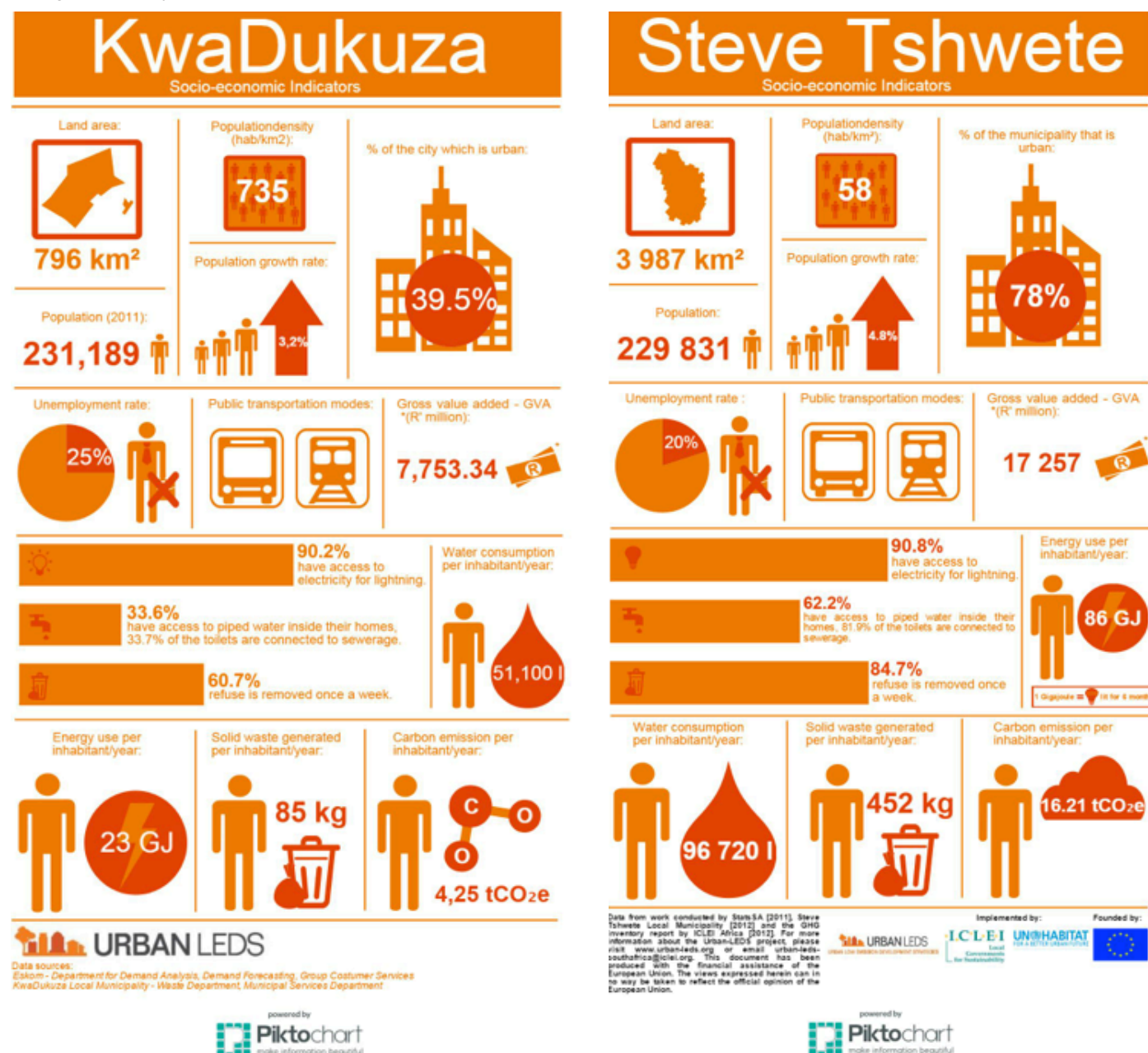
## A tale of two South African Urban-LEDS cities

The experience of implementing the Urban-LEDS project in the two South African model cities – KwaDukuza and Steve Tshwete – was vastly different, providing strong evidence of the versatility of the GCC.

Like most South African cities, KwaDukuza and Steve Tshwete are faced with high levels of economic inequality, unemployment (25 percent and 20 percent respectively) and population growth (3.2 percent and 4.2 percent). Both cities are energy intensive and reliant on carbon-intensive energy sources (4.25 and 16.2 tCO<sub>2</sub>e per capita), while being vulnerable to climate change (sea level rise in the case of KwaDukuza; altered rainfall patterns potentially leading to drought in the case of Steve Tshwete). Public transport in both municipalities is lacking, and there is limited provision for non-motorised transport. Similarly, municipal planners in the two cities acknowledge the need for improved urban density, yet property markets and the lack of capacity to enforce the adopted spatial development frameworks are perpetuating urban sprawl. Both cities, however, recognize the benefit of developing green building guidelines, and the Urban-LEDS project was used to fund the development of these formal Green Building guidelines and implementation plans.

KwaDukuza is the largest municipality of the iLembe District, located north of Durban on the KwaZulu-Natal coast. Sugar and tourism are the backbone of the local economy, however this is set to change due to KwaDukuza's strategic location in the trade corridor between Durban and Richards Bay, and with King Shaka International Airport and the Dube Tradeport located at its doorstep. Nonetheless, KwaDukuza largely remains a low-density, agricultural landscape. The Integrated Provincial Aerotropolis Strategy will be a key driver of change in spatial form over the next 20 years, along with increased demand for coastal developments. Accordingly, KwaDukuza has recognized the need for strong growth management. However, as some of this development will

Figure 1. KwaDukuza and Steve Tshwete Municipalities at a glance structure can be seen at a variety of public and private buildings throughout the city.



not be under their direct control, strong partnerships with external stakeholders will be necessary in order to realize its low carbon vision (see text box 2).

Steve Tshwete is also the largest municipality in its district, Nkangala, located some 150km east of Johannesburg in the Mpumalanga Province. In stark contrast to the Kruger National Park, and the natural beauty of the escarpment further to the east, Steve Tshwete is also home to open cast coal mining, coal-fired power stations, and other heavy industry; all of which come with considerable environmental pollution. Even so, Steve Tshwete was recognized as the greenest municipality in South Africa in 2013, and is one of few South African municipalities with a clean financial audit. The political leadership in the city have acknowledged the need to diversify their economy, and recognize the danger of being overly reliant on the coal market for their economic well-being.

In implementing the GCC in both cities, strong emphasis was placed on inclusion of external stakeholders into the development of the low emission development (LED) strategy.

**“Globally, carbon emissions are on the rise, making expanding cities vulnerable to the impacts of climate change. KwaDukuza recognises that local action is the key to cutting emissions, and adapting to these changes”**

(quoted from the "Come Discover KwaDukuza" video available at <https://vimeo.com/118787594>)



## KwaDukuza's low carbon vision

By 2030 KwaDukuza will have successfully managed its transition to low carbon development and will be:

- A distinctive urban launch pad for the Durban / Richards Bay Corridor
- A job-rich green manufacturing, renewable energy and logistics hub
- A model of integrated resource management and climate change adaptation
- A Shaka-inspired heartland and thriving tourism destination"

KwaDukuza's vision statement was developed through the strategic scenario planning process that took place in 2014 as part of the Urban-LEDS project. This statement was used to guide the drafting of the strategic framework and action plan, which was completed in 2016.

## Introducing the GreenClimateCities methodology in KwaDukuza and Steve Tshwete

The GCC is a well-structured methodology consisting of a 3 x 3 x 3 step approach for analysis, planning, implementation, and reporting. Because it is comprehensive, it requires a number of full-time staff for implementation, and assumes that this capacity is available and that there will be "buy-in" across municipal departments.

It also considers that, outside of the project team, many peers and partners will see climate change adaptation and mitigation, and green growth as peripheral issues. Correspondingly, considerable political support is needed to get all requisite departments interested in contributing to, and participating with, the GCC process.

The two infographics below (Figure 2 and 3) were outputs of Phase 1 of the GCC, and outline the energy and carbon emissions profiles of the two cities.

## Implementing the GCC in KwaDukuza and Steve Tshwete

To carry out the Urban-LEDS project, the majority of technical work was carried out by ICLEI staff and contracted consultants, who worked in direct collaboration with the municipalities. The implementation of the GCC required several steps which tie into its various elements.

### Phase 1: Analyse

**Baseline assessments:** GHG inventories were compiled and surveys carried out to assess staff awareness. The cities took responsibility for sourcing the data for the inventories, as much of this data was already available internally. The inventories were used to develop infographics which were applied in subsequent engagements within and outside the municipality. The infographics effectively translated technical data into an engaging format, and were instrumental in identifying priority areas and raising awareness about the energy and carbon footprints of the municipality through. The GHG inventories proved to be incredibly valuable from a number of perspectives:

1. They challenged the municipalities to systematize data collection.
2. They provide useful information about sectoral energy use and the proportions of different fuel types, allowing for actions to be selected and prioritized.
3. They are an educational tool for the project team to use in dispelling common misconceptions about climate change, and to communicate the difference between pollution and greenhouse gas emissions.
4. They were used to develop a business-as-usual emissions

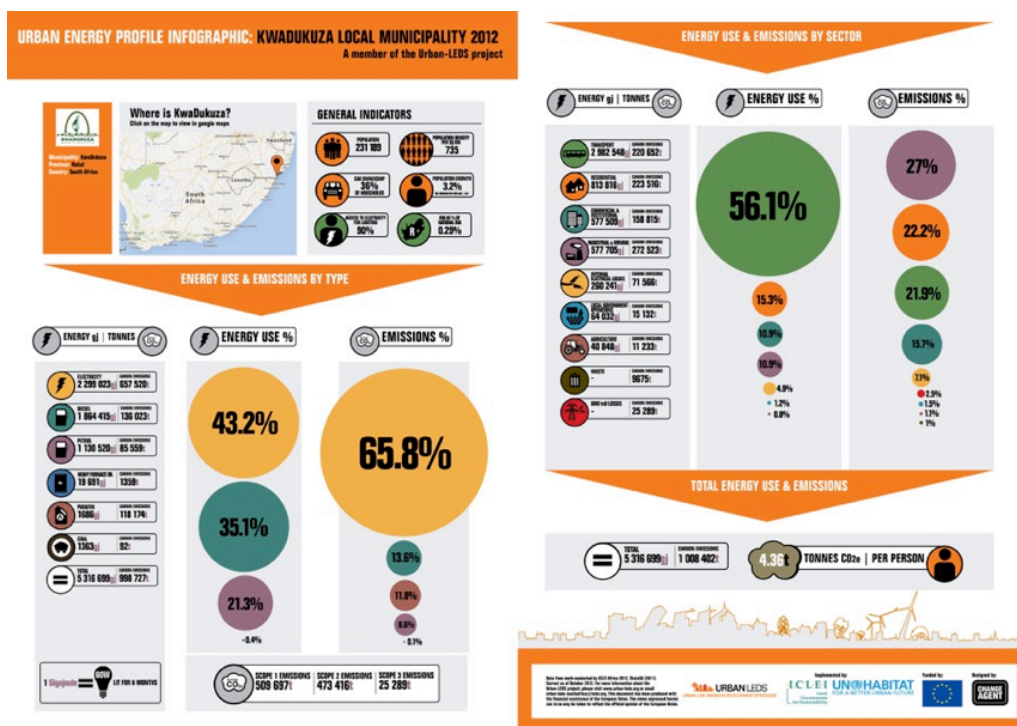


Figure 2. The 2012 greenhouse gas inventory for KwaDukuza

growth scenario and set targets for measurable emissions reductions.

5. They increased the understanding of the climate change mitigation potential of specific projects.

**Strategic Scenario planning:** Shahid Solomon of Novation 2040, in collaboration with ICLEI Africa and the municipal staff in each city, facilitated engagement with officials, political leaders, communities, the private sector, and civil society within a well-attended and engaging process to create a 2030 vision for each of the cities.

**Transition area research:** Experts in selected focus areas were hired to expand on the strategic vision created through the scenario planning process. These experts interviewed municipal staff, examined the outcomes of the baseline assessments, and studied the existing planning documents. Then, based on their findings, they were able to detail how each city would need to transform (spatially, ecologically, institutionally, economically and with regard to energy demand and supply).

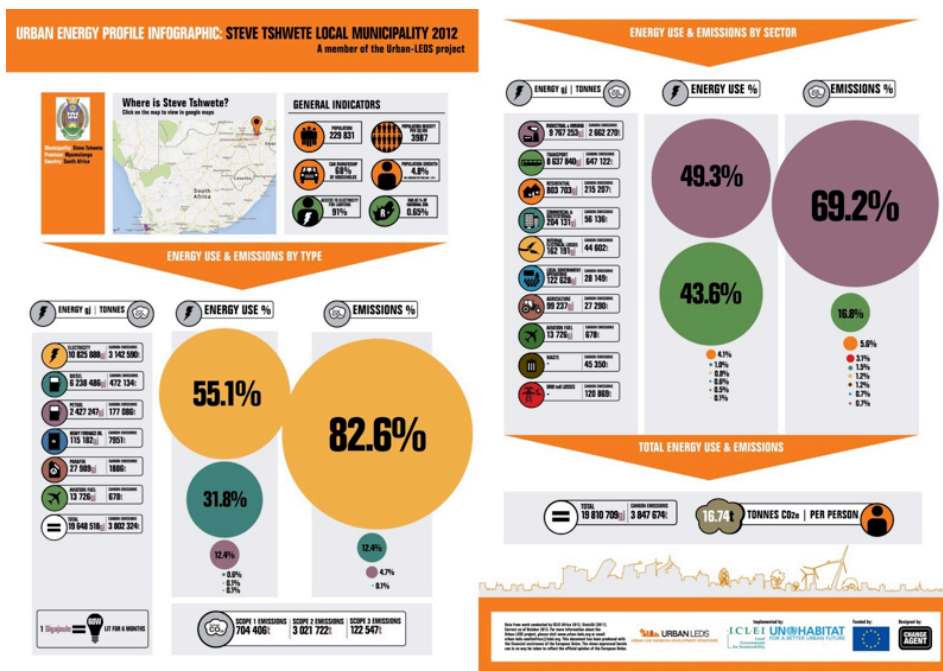


Figure 3. The 2012 greenhouse gas inventory for Steve Tshwete

## Phase 2: Act

**Peer-to-peer learning and capacity building workshops:** These workshops, designed to fill identified knowledge gaps, were carried out in collaboration with project partners and experts from the Urban-LEDS project. The Urban-LEDS implementation team introduced a new dimension to these meetings by including other secondary cities that had missed previous peer-to-peer learning opportunities.

**Rollout of mini-projects to demonstrate the benefits of low-carbon solutions.** In KwaDukuza, the mini-projects involved a roll-out of Insulated Passive cookers and a paper-recycling project. Unfortunately, there was insufficient momentum in Steve Tshwete to roll out any particular intervention.

**Local implementation:** The town planning and building control officers in the two model municipalities combined with the Urban-LEDS team to develop green building guidelines which were accompanied by associated implementation plans. Additionally, community showcase projects – developed in collaboration with the municipal staff, ICLEI Africa, local stakeholders and service providers – were rolled out in the latter part of the project.

**Drafting and adoption of LED strategies:** KwaDukuza's council has adopted its LED strategy; while in Steve Tshwete, the LED position statement is currently under consideration by senior staff.



Scenario Planning requires participants to face tough choices when creating a low carbon vision for the future. These photos were taken during Steve Tshwete's scenario planning process in 2014.



Translating the technical outcomes of the scenarios was a powerful means of communicating the vision for a low carbon future, and obtaining buy-in from the broader community.

Here, a local theatre group in KwaDukuza used a theatre piece to promote engagement within the visioning process.

## Phase 3: Accelerate

The *Accelerate* phase is still in its early stages in each of the model cities.

The in-house environmental team in KwaDukuza is in the process of updating their GHG inventory, while evaluation of the insulated passive cooker roll-out is ongoing. The municipality has reported on its climate change actions in the carbonn Climate Registry (cCR), and has added a Climate Change officer post to its staff organigram.

The *Accelerate* phase has not yet gained much traction in Steve Tshwete; however, the USAID-funded South Africa Low Emission Development Program is aware of the progress in Steve Tshwete and is investigating ways of building on the work carried out under Urban-LEDS.

## Results

### Steve Tshwete

The major achievement of the GCC process in Steve Tshwete is that the city's Greenhouse Gas Inventory and motivation for low emission development was included in the Integrated Development Plan for 2016-2021. Other results included:

- The development of a low carbon development position statement which is being submitted to the Municipal Council for adoption with the support of the Mayor.
- The Doornkop Community Centre showcase project: 18kWp peak solar PV panels, 2 solar water heaters, 5 solar street lights, ceilings, mobile LED solar lights, Wonderbags (insulation cookers), compost containers implemented at Doornkop Community centre. Community of around 500 families that use the community centre, which previously had no access to electricity or modern energy services. Read more in the *ICLEI Case Study 187* on Steve Tshwete's experience at Doornkop.
- Through ICLEI Africa's assistance, the municipality was assured participation in the national demand-side energy management program, which included the replacement of streetlights with energy efficient alternatives (figures are not yet available for the actual kilowatts saved).
- For the first time, an environmental officer post was created within the Municipality. Previously, this role had fallen to staff within the city's waste management department, who lack the necessary skills and capacity to enforce environmental regulations and assess development plans.

**Table 1. GCC successes in KwaDukuza and Steve Tshwete Local Municipalities**

Step	KwaDukuza		Steve Tshwete	
	Implement- ation complete?	Results & Activities	Implement- ation complete?	Results & Activities
<b>I. Analyse</b>				
<b>1. Commit &amp; mobilise</b>	Yes	Executive Director for Development Planning was the main champion, with 4 additional staff involved in the project	Partly	The City Manager was the main contact point (after the project champion left the municipality, however other officials only involved on an adhoc basis)
<b>2. Assess</b>	Yes	Greenhouse Gas and Energy Inventory Completed, and staff awareness questionnaire	Yes	Greenhouse Gas and Energy Inventory Completed, and staff awareness questionnaire
<b>3. Identify priorities</b>	Yes	Scenario planning, transition research, and stakeholder engagement workshops carried out.	Yes	Scenario planning, transition research, and stakeholder engagement workshops carried out. A number of priorities were investigated but these were not pursued



Step	Implemented?	Results & Activities	Implemented?	Results & Activities
<b>II. Act</b>				
<b>4. Develop action plan</b>	Yes	Municipal departments put forward suggested LED actions	Partly	Municipality did not have dedicated capacity to develop the action plan. LED position statement supported by Mayor and currently under consideration by officials.
<b>5. Prepare &amp; approve</b>	Yes	Council adopted the Low Emission Development Strategy and Action Plan in early 2016.	Partly	A low emission development position statement was developed, and is currently in the process of being submitted to Council. Greenhouse Gas Inventory and associated recommendations were included in the Integrated Development Plan review for 2016/17
<b>6. Implement policies and actions</b>	Partly	Community Showcases of sustainable urban solutions were implemented. LED actions in the strategy and action plan have yet to be budgeted and implemented. Green Building Guidelines were developed and implementation is underway.	Partly	Community Showcases of sustainable urban solutions were implemented. Green building guidelines were developed, but implementation not yet underway.
<b>III. Accelerate</b>				
<b>7. Monitor</b>	Not yet	The environmental team is in the process of updating the GHG inventory. Evaluation of the insulated passive cooker roll-out is on-going	No	No progress reported for this step.
<b>8. Evaluate &amp; Report</b>	Partly	Municipality has reported on its climate change actions in the carbonn Climate Registry (cCR)	No	No progress reported for this step.
<b>9. Enhance</b>	Yes	Climate Change officer post added to staff organogram	Partly	The USAID-funded South Africa Low Emission Development Program is interested in building on the work carried out under Urban-LEDS.

### KwaDukuza

KwaDukuza also celebrated the major achievement of having the GCC process influence the inclusion of the city's Greenhouse Gas Inventory and the motivation for low emission development in the Integrated Development Plan (IDP) for 2016-2021. Other results included:

- A Low Emission Development Strategy with targets for emissions reduction adopted by the Municipal Council, and actions integrated into the IDP.
- Green Building Guidelines developed for the municipality, accompanied by a detailed implementation plan.
- Roll-out of 500 insulated passive cookers (Wonderbags) to households across the various wards.
- Community awareness day carried out on World Environment Day.
- Climate Change officer post created.
- Municipal paper recycling program implemented in municipal buildings.

### Doornkop demonstration project: solar solutions for the community

Steve Tshwete's demonstration project focused on the Doornkop Community Centre and a local crèche that had no access to grid electricity. Through the installation of renewable energy options (a photovoltaic system, solar water heaters, ceilings, and solar street lights) the centre now functions more effectively and the whole community has benefited.

A video was produced to document this as a shining example of the benefits of low emission development, and how it can benefit previously disadvantaged communities in South Africa. The video can be viewed at <https://www.youtube.com/watch?v=nBYt1K3Thlg>

- Groutville Community Showcase Project: 20 foster care homes each received solar water heaters, mobile LED solar lights, LED security lights, trees, food gardens, Wonderbags (insulation cookers), compost containers and solar streetlights.

In addition, municipal staff attended numerous networking, training and capacity building engagements over the course of the Urban-LEDS project. They have demonstrated raised awareness, and are actively pursuing the shift toward establishing greener procurement and planning processes.

## Lessons Learned

- **Political leadership is necessary**, both early on and throughout the course of the project, in order to generate support across the municipality. The mayor may turn out to be the most enthusiastic champion of low emission development.
- **A bottom-up approach is essential** to creating a low-carbon vision and implementing low-carbon solutions. Broad stakeholder consultation is a prerequisite in the design and rollout of projects.
- **Selecting and implementing strategic showcase projects** early on in the process is helpful to tangibly demonstrate the practical, social, environmental and economic benefits of implementing low carbon technologies and developing low emissions development strategies (LEDS) through the GCC methodology
- **Willingness to take risks and use unconventional methodologies** such as using theatre for community engagement and awareness-raising, using innovative workshop design, and planning methodologies can lead to a more energetic and consistent participation by all stakeholders in the GCC. Making the interactions fun and engaging was a key to the buy-in and success of the many workshops conducted throughout the project.
- **Understanding the cultural context** helps in the selection of relevant showcase interventions, and determining the best rollout strategy.
- Having **an embedded staff member** from another organisation to co-ordinate activities of the GCC will help sustain momentum when the project team is not present or core municipal functions demand the complete attention of municipal staff. The added advantage is the **professional development** opportunity for the embedded staff member, who gains hands-on experience implementing the GCC and becomes a valuable asset to the municipality.

- **A two-pronged approach of strategic scenario planning and low carbon solution implementation** is a powerful combination of activities, as they are mutually enhancing and lead to greater overall success.

- **Patience is a virtue.** Municipal processes take time, and contingency needs to be built into the process to account for delays (resulting from protest action, service delivery crises, political pressure, and bureaucracy).

## Replication

There is no one-size-fits-all approach to low emission development in developing countries. The GCC provides a useful structure to work with, yet consideration of



Making the workshops fun and engaging was essential for making the most of the expertise of stakeholders and ensuring consistent participation. These smiling faces attended a community engagement event in KwaDukuza that coincided with World Environment Day 2014.



Translating the vision created through the scenario planning processes into cartoons and theatre pieces expanded the depth and reach of this vision among the various stakeholders and challenged the project team to distil the main messages.



Left: Figure 4. Umuzi Wengcebo - The House of Wealth – an illustration of the ideal scenario for KwaDukuza in 2030 (artworks by Andy Mason)  
Right: Figure 5. Masakhane - working together - the desired future for Steve Tshwete (illustrated by cartoonist Andy Mason)

the needs of the municipality is necessary in order to make useful links to local low emission development. The correct institutional arrangements (with succession plans for project contact persons) need to be in place to ensure the long-term success of any attempt at low emission development.

A municipality looking to replicate, and build upon, the success in KwaDukuza and Steve Tshwete will have to emphasize stakeholder engagement, and should consider the benefits of:

- Carrying out simple community showcase projects early on to raise awareness and demonstrate the tangible and multiple benefits of low carbon technologies.
- Embedding a staff member to help sustain project momentum.
- Having a local champion who can help ensure the success of the project.

The key to successful replication has less to do with time and money, and much more to do with the how, why and who the project team engages with.

## Resources and Funding

The methodology and process for implementing the projects were realised under the “Promoting low emission development in emerging economy countries”, or Urban-LEDS project, which is implemented in South Africa by ICLEI Africa, supported by UN-Habitat, and funded by the European Commission. The ICLEI Africa implementing team consisted of one project manager, one technical officer, a project co-ordinator and two junior officers, with occasional inputs from line managers.

Municipal staff involvement for KwaDukuza mainly involved the four staff of the Economic Development and Planning Department, who participated in all the workshops and helped co-ordinate activities in between. Extra staff members representing the other departments participated in all the workshops.

For Steve Tshwete, a core project team of about 10 staff representing the major departments met for a few hours every two months, and participated in all the workshops. The investment of time by the municipal staff was substantial but not easy to quantify. A huge network coalesced around this project including partner organisations, government departments and consultants who assisted with developing the project outputs.

Municipal staff in both cities went above and beyond their day-to-day responsibilities to ensure that the GCC could be carried out effectively.

***“The participatory and consultative approach taken by KwaDukuza Municipality in developing their LED Strategic Framework and Action Plan is a good practical example of how neighbouring Municipalities can collaborate to tackle mutual challenges and opportunities, particularly around Climate Change. Mr. Sikhumbuzo Hlongwane and his team have done a sterling piece of work”***

Magash Naidoo, Acting co-head, Energy Office at eThekweni Municipality

## **"Come Discover KwakaDukuza" video**

The municipality, with the support of the ICLEI project team, elected to develop a marketing video to showcase the area as a:

- Green manufacturing and renewable energy hub of the future
- Desirable ecotourism destination
- Attractive business investment location
- Municipality that is recognises and embraces the opportunities presented through taking climate change and the environment seriously.

***“The collaboratively created low carbon vision recognises that the low-carbon transition is for everyone.”***

(quoted from the video available at <https://vimeo.com/118787594>)

## Key Contacts

Stephen Davis  
ICLEI Africa

Urban Low Emission  
Development Strategies

Knowledge Park III, Heron  
Crescent, Century City, 7441

Email: [iclei-africa@iclei.org](mailto:iclei-africa@iclei.org)

## Acknowledgements

Author: Stephen Davis, Project  
Specialist: Urban-LEDS, ICLEI  
Africa

Contributor: Steven Bland,  
Project Manager: Urban-LEDS,  
ICLEI Africa

Editors: Kathrine Brekke &  
Maryke van Staden, ICLEI  
World Secretariat

### Additionally, we would like to thank:

Local stakeholders from  
business, industry, local  
community groups and  
academia who actively and  
enthusiastically took part in the  
scenario planning process over  
many months

Shahid Solomon, of Novation  
2040, who facilitated the  
scenario planning processes

Transition researchers, who  
provided their expert insights  
on the 2030 transition areas  
in the form of a report for each  
area: Kevin Foster and Gillian  
Sykes, Palmer Development  
Group (Economic transition);  
Nicci Diederichs Mander,  
Futureworks (Spatial and  
Ecological transition); Adelheid  
Rehmann and Linda Manyuchi,  
independent consultants  
(Energy and Institutional  
transitions).

## Additional reading

- Economies of regions Learning Network: Concept Report – The South African energy landscape (commissioned by ERLN via the Isandla Institute and compiled by Dirk de Vos). [Available online.](#)
- The State of Energy in South African Cities 2015, published by Sustainable Energy Africa. [Available online.](#)
- For general resources that support municipalities and local stakeholders to undertake actions towards low emission development in South Africa, visit the resource library at: [www.cityenergy.org.za](http://www.cityenergy.org.za)

## References

Publicly available documents are hyperlinked. Others can be requested.

### KwaDukuza:

- Low Emission Development Strategic Framework and Action Plan. 2016. KwaDukuza Local Municipality – Department of Economic Development and Planning and ICLEI Africa.
- [KwaDukuza Greenhouse Gas Inventory \(2012\) + Infographic.](#) ICLEI Africa
- [Climate Change Response Strategy \(2013\).](#) Mott MacDonald / KwaDukuza Municipality
- [Integrated Development Plan 2014-15.](#) KwaDukuza Municipality

### Steve Tshwete:

- Low Emission Development position statement, 2016. ICLEI Africa
- [Steve Tshwete Greenhouse Gas Inventory \(2012\) + Infographic](#)
- [Steve Tshwete Staff Awareness Questionnaire report \(2012\).](#) ICLEI Africa
- [2030 scenarios](#) arising from the participatory Imbizo process (2014). Novation 2040
- [Integrated Development Plan 2015- 2016,](#) Steve Tshwete Local Municipality



Steve Tshwete Local Municipality (STLM)



This series of local case studies is produced within the Urban-LEDS project funded by the European Commission, and implemented by UN-Habitat and ICLEI, which has the objective of enhancing and the transition to low emission urban development in emerging economy countries.

They represent solely the views of the authors and cannot in any circumstances be regarded as the official position of the European Union.

ICLEI – Local Governments for Sustainability is the world's leading network of about 1,000 cities, towns and metropolises committed to building a sustainable future. By helping our Members to make their cities sustainable, low-carbon, ecomobile, resilient, biodiverse, resource-efficient, healthy and happy, with a green economy and smart infrastructure, we impact over 20% of the global urban population.

The ICLEI Case Study series ([www.iclei.org/casestudies](http://www.iclei.org/casestudies)) focuses on urban sustainability activities of ICLEI Members and local governments that are part of ICLEI projects across the world.

ICLEI World Secretariat. Kaiser-Friedrich-Straße 7, 53113 Bonn, Germany  
Email: [urban.research@iclei.org](mailto:urban.research@iclei.org)

© ICLEI March 2016