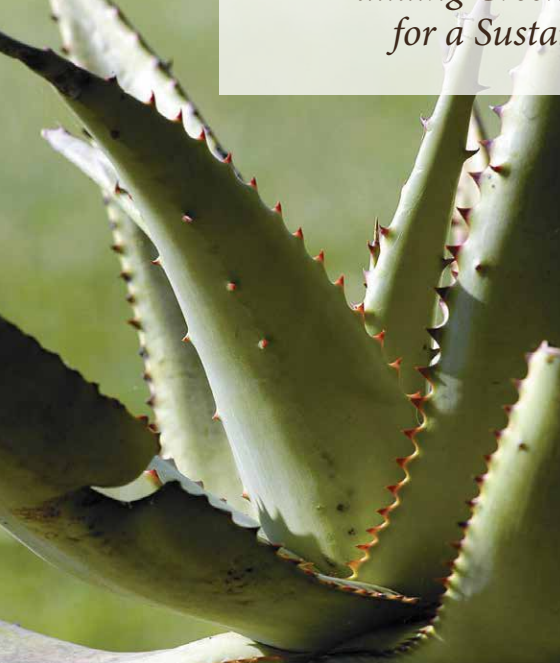


# NELSON MANDELA BAY

*Building Green Communities  
for a Sustainable City*





## MESSAGE FROM THE EXECUTIVE MAYOR

*I am honoured to address you on behalf of the residents and management of the Nelson Mandela Bay Municipality regarding a pertinent societal question, climate change. Nelson Mandela Bay as part of the global society is not immune to this international phenomenon and as a result we implemented a number of renewable energy initiatives focusing on solar heating, wind energy and methane gas harvesting from solid waste.*

We especially made good progress during the mass roll-out of our solar water geyser project that commenced in 2009 and a year prior to that we launched our Go Green Campaign. Our burden during load-shedding has been slightly eased with the implementation of ripple relay units that allow us to switch off geysers remotely with limited to little impact on the end users of electricity. These campaigns showcased our initiatives from Electricity and Energy, Water and Sanitation, Waste Management and Environmental Management, and other service departments.

These actions helped us, together with our residents, to conserve water through the Water Wise Campaign and the Water Leaks programme. We also made an impact with our alternative waste processes with our Waste Exchange and the very successful All Hands on Waste Campaign which further demonstrates our commitment to sustainable development.

We remain steadfast in our efforts to continually bring about change in the way our residents and officials perceive sustainable environmental initiatives to ensure that we preserve the environment for future generations.

Some of you will recall my statement in October 2014 during a full sitting of our municipal council. I stated that we are fully aware in Nelson Mandela Bay of the high levels of poverty and unemployment in our city and the need to work towards the creation of sustainable and decent jobs. As our time on this earth is not forever, we need to make a sincere and dedicated contribution while we have the chance as the political leadership of Colchester, Despatch, Port Elizabeth and Uitenhage.

I therefore would like to pertinently state that our communities must also benefit economically from our environmental initiatives.

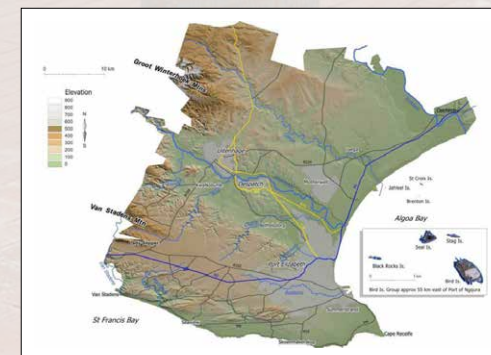
I thank you.

Dr Danny Jordaan  
Executive Mayor



## CITY PROFILE

|                               |  |
|-------------------------------|--|
| <b>Local government name:</b> | Nelson Mandela Bay Metropolitan Municipality. Also commonly known as the Windy City and the Friendly City  |
| <b>Geography:</b>             | Coastal city along the south eastern part of the Eastern Cape Province in the Republic of South Africa.  |
| <b>Population:</b>            | 1,152, 115   |
| <b>Census year:</b>           | 2011   |
| <b>Size of Area:</b>          | 1950 square kilometres   |
| <b>Policy:</b>                | NMBM is developing a policy and strategic framework to promote sustainable urban development which responds to climate change. Some of these policies include: <ul style="list-style-type: none"> <li>• Integrated Environmental Policy</li> <li>• Nelson Mandela Bay Metropolitan Open Space System</li> <li>• Integrated Energy Plan</li> <li>• Sustainable Community Unit Planning Guide</li> <li>• Disaster Management Plan</li> <li>• Built Environment Performance Plan</li> <li>• Climate Change and Green Economy Action Plan</li> </ul> |



# ADAPTING TO CLIMATE CHANGE



The NMBM has begun the process of adapting to the current and expected impacts of climate change.

For a city such as Nelson Mandela Bay, our climate change is felt in the increasing flood events, storm events and our vulnerability to water shortages in drought periods. For us, resilience to all risks is an outcome of the relationship between disaster risk reduction and adaptation to climate change. NMBM is in the preparatory phase of planning for developing their climate change adaptation responses.

If climate change occurs as predicted, the top three adaptation impacts or risks on the city would be:

- Reduced water supply damage to natural ecosystems
- Increasing economic loss
- Increased urban heat island effect

Given these risks, the following are top three drivers of adaptation action in NMBM:

- Reducing economic impacts
- Being prepared for future climatic conditions
- Securing local public services

## Adaptation Actions

### Go Green Advocacy Programme

|                        |  |
|------------------------|--|
| <b>Type of Action:</b> | Education & Awareness Raising  |
| <b>Year:</b>           | 2013-2014  |
| <b>Summary:</b>        | NMBM Go Green Advocacy Programme Project is the product of the Department of Environmental Affairs' (DEA) Greenest Municipality Competition. The Go Green Advocacy Programme is meant to raise awareness and educate people on issues related to sustainable environmental management practices. Facilitators from 52 selected wards within NMBM will be trained on sustainable environmental management practices. These facilitators will be used to disseminate the message to the communities they reside within. Additionally extensive community awareness campaigns including roadshows will be conducted in all the wards of the NMBM. |

### Relocation of Inappropriate Coastal Infrastructures

|                        |  |
|------------------------|--|
| <b>Type of Action:</b> | Infrastructure Investment  |
| <b>Year:</b>           | 2012   |
| <b>Summary:</b>        | To comply with the coastal legislation, the NMBM commissioned the identification of coastal development lines along its coastal area. The purpose of coastal setback lines are to delineate where development should occur in order to reduce the impacts on the coastal zone functioning and also to maximise opportunities from climate-resilient infrastructure |

### Durban Adaptation Charter

|                        |   |
|------------------------|---|
| <b>Type of Action:</b> | Governance  |
| <b>Year:</b>           | 2011  |
| <b>Summary:</b>        | NMBM signed the Durban Adaptation Charter, which commits governments to concrete evidence-based adaptation actions and robust monitoring and verification (M&V) of actions. |





# ACHIEVING ENERGY SECURITY & REDUCING EMISSIONS

Nelson Mandela Bay has made renewable energy production and energy efficiency a major aspect of its local economic development and social welfare strategy.

Energy costs are on the rise, so energy efficiency and renewable energy make economic sense in the medium term. By taking proactive steps, NMBM aims to secure the future of its economy and play its part in reducing climate change-causing emissions.

## Mitigation Actions

### Cycle Tracks and Walkways

|   |  |
|---|--|
| <b>Type of Action:</b>                          | Technical/Infrastructure Investment  |
| <b>Mitigation sector:</b>                       | Transport. Facilities.   |
| <b>Primary method:</b>                          | Low carbon energy shift  |
| <b>Year:</b>                                    | 2014-2017  |
| <b>Summary:</b>                                 | The provision of approximately R5 million for sidewalks and cycle tracks throughout the Friendly City will ensure that access to non-motorized transport is given to all citizens. This is in line with the city's Comprehensive Integrated Transport Plan (CITP), and also coincides with other non-motorized facility works, such as the upgrading of pedestrian walkways in previously disadvantaged areas of the city. The initial phases of this action have been the upgraded beachfront walkways and cycle tracks to focus over a beachfront 25km area. |
| <b>Co-benefits for sustainable development:</b> | Improving urban air quality. Improving public health. Increasing access to sustainable mobility, other.  |

### LED High Mast Township Lighting Project

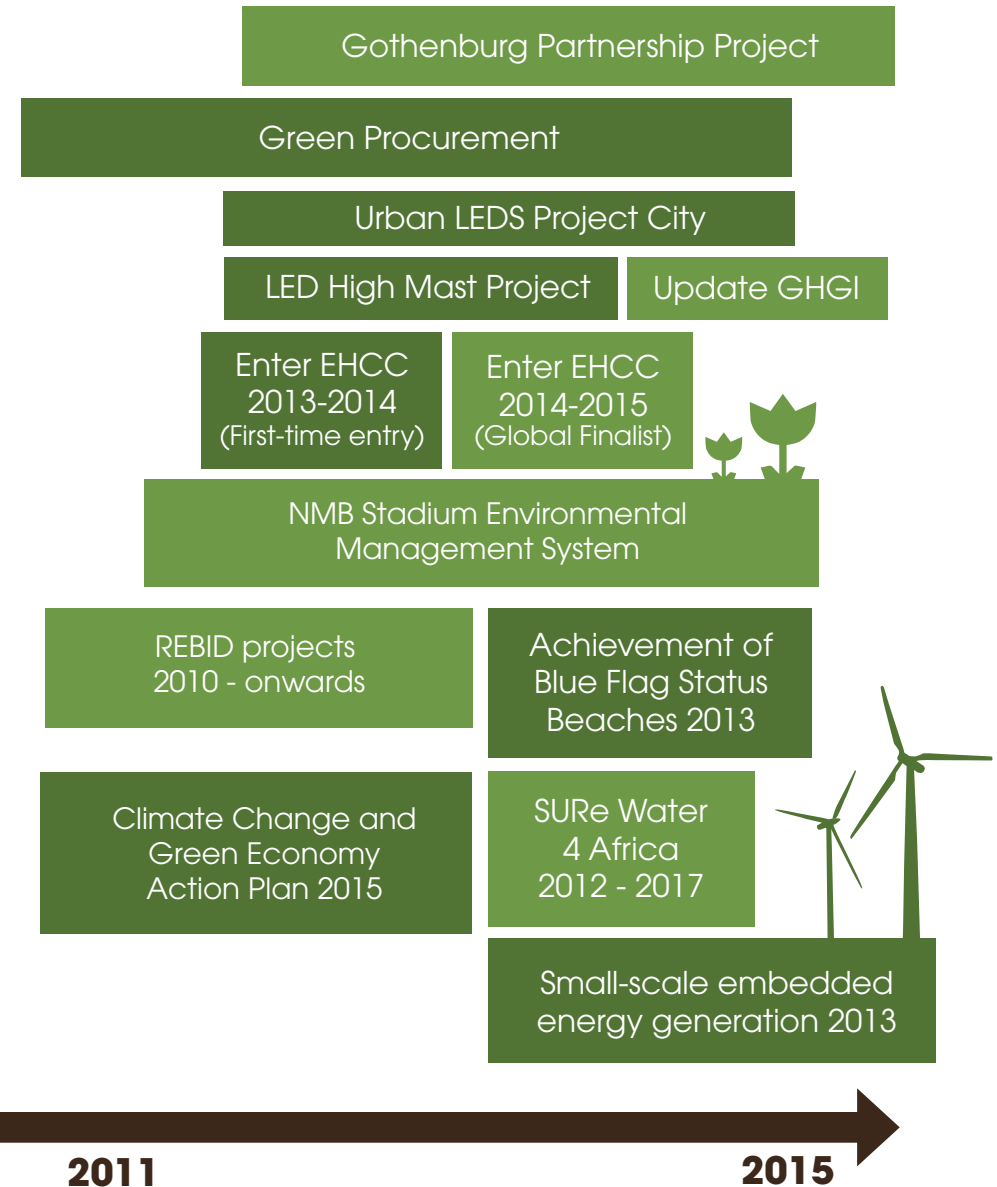
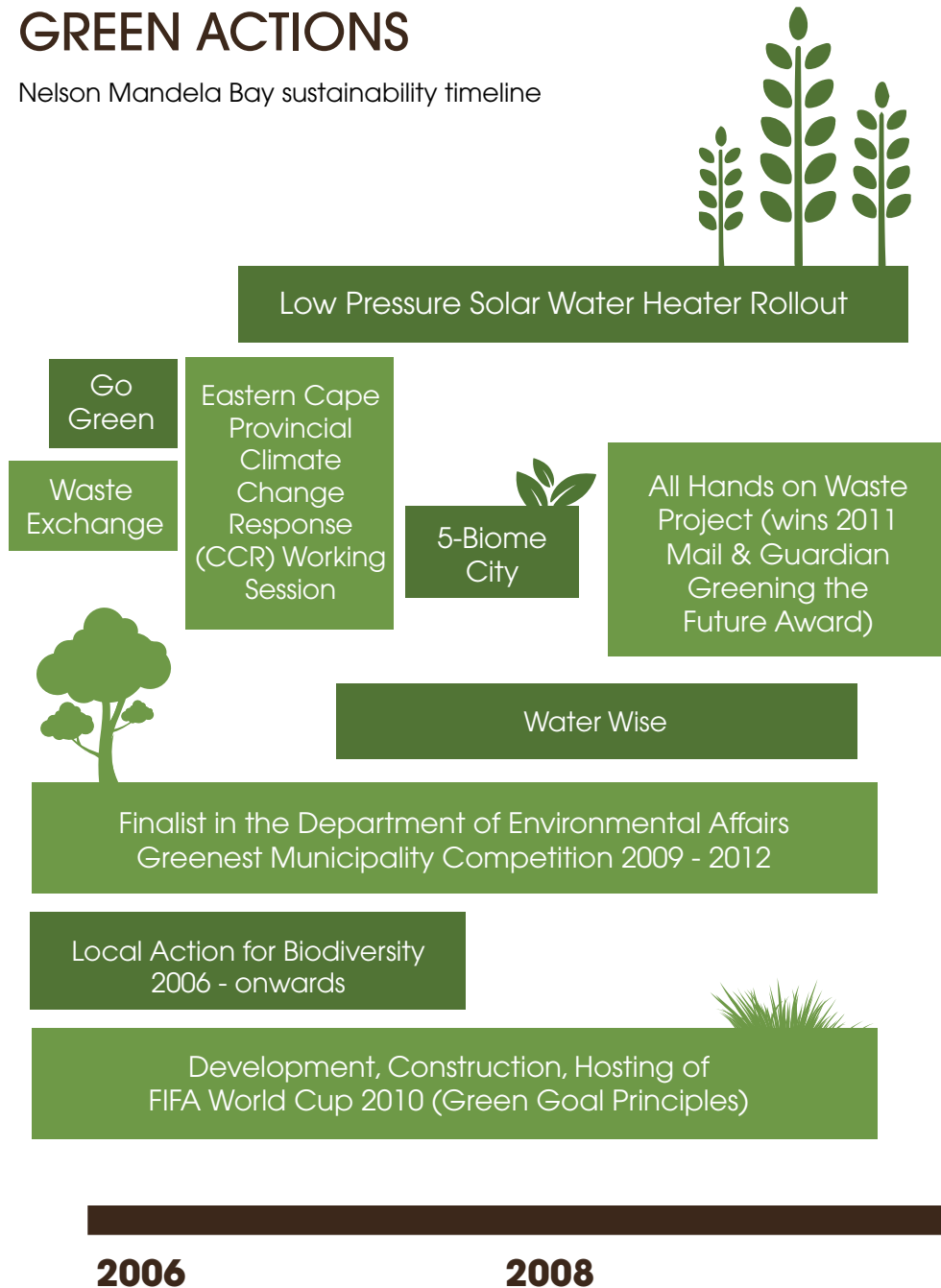
|   |  |
|---|--|
| <b>Type of Action:</b>                          | Technical/Infrastructure Investment  |
| <b>Mitigation sector:</b>                       | Residential  |
| <b>Year:</b>                                    | 2013   |
| <b>Summary:</b>                                 | The award-winning high mast street lights were installed in the Walmer Township in November 2013. The lights will save in excess of 65% on the energy consumption of conventional street lighting. |
| <b>Co-benefits for sustainable development:</b> | Improving urban livelihoods; Securing safe and resilient energy supply. Promote gender equality and empowering women. Improving public health.   |

### Embedded Small Scale Renewable Energy Generation

|   |  |
|---|--|
| <b>Type of Action:</b>                          | Technical/Infrastructure Investment  |
| <b>Mitigation sector:</b>                       | Residential, Commercial, Industrial  |
| <b>Year:</b>                                    | 2013   |
| <b>Summary:</b>                                 | In March 2013 the first small-scale generation system, a 3.8kW solar PV ground mounted system, was installed and officially connected to the grid. The NMBM is allowing embedded generation, and although they are not actively promoting it due to the lack of long term financial viability of the current approach, they are facilitating it through minimal cost requirement and a simple application process. |
| <b>Co-benefits for sustainable development:</b> | Securing safe and resilient energy supply; Increasing access to energy; Increasing local jobs.   |

# GREEN ACTIONS

Nelson Mandela Bay sustainability timeline



# GREEN ACTIONS

What you can do to lower your carbon footprint and deal with climate change



**Power Wise** - Conserving Energy – emissions from coal-fired power stations and transport are the leading sources of greenhouse gas emissions in this country. Conserving electricity and switching to public transport is critical to achieving our mitigation goals.

**Water Wise** - Conserving Water – South Africa is a water scarce country, and our fresh water resources are under stress. Climate Change will exacerbate this situation and conserving water is a vital tactic for making the country more climates resilient.

**Waste Wise** - Reduce, Reuse and Recycle Waste – minimization and proper management of our wastes both reduces greenhouse gas emissions and conserves forests, which absorb carbon dioxide.

**Pollution Wise – Air & Water Pollution Management** – We need to ensure clean air / water and to maintain the air / water quality for future generations. This is done by monitoring the environment, controlling the release of air / water pollutants, giving advice and taking action against those who pollute.

**Conservation Wise** - Plant indigenous trees, start a vegetable garden – food gardens promote food security and poverty alleviation. Planting indigenous trees and clearing alien invader plants restores natural eco-systems and conserves water. Consume Responsibly – goods and services that are environmentally friendly and locally produced will usually have a lower carbon footprint than imported, and buying locally creates jobs.

*For information on Nelson Mandela Bay's Responsible Tourism campaign:  
Promoting Responsible Tourism and to calculate your carbon footprint go to:*

[http://www.nmbt.co.za/responsible\\_tourism.html](http://www.nmbt.co.za/responsible_tourism.html)

<http://www.nelsonmandelabay.gov.za/gogreen>



The WWF Earth Hour City Challenge initiative was created to mobilise action and support from cities in the global transition towards a climate friendly future and to stimulate the development and dissemination of best practices for climate mitigation and adaptation. It is run in partnership with the global cities network: ICLEI – Local Governments for Sustainability.

With progressive development strategies, best urban planning practice and best available energy-efficiency and renewable energy solutions, global investment can leverage the potential of cities to become solution hotspots for a future in which the human economy fits within the capacity of one living planet. The Earth Hour City Challenge is intended to stimulate this process.

The project is run as a recurrent and increasingly global challenge for cities to present plans for low carbon development and for dramatically increasing the use of sustainable and efficient renewable energy solutions in the next few decades.

Having taken part in the challenge two years running, Nelson Mandela Bay Municipality was awarded as a global finalist in the 2014-15 Earth Hour City Challenge. As part of the challenge the NMBM reported its emissions reductions targets and actions to the Carbonn Climate Registry, the world's largest database on local and subnational climate action ([www.carbonn.org](http://www.carbonn.org)).





**WWF** is one of the world's largest and most respected independent conservation organisations, with almost six million supporters and a global network active in over 100 countries. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

**ICLEI** – Local Governments for Sustainability is the world's leading association of cities and local governments dedicated to sustainable development. ICLEI is a powerful movement of 12 mega-cities, 100 super-cities, 450 large cities and urban regions as well as 450 small and medium-sized cities and towns in 83 countries.

Designed by Apula

Published March 2015 by WWF-SA – World Wide Fund for Nature (formerly World Wildlife Fund), Cape Town, on behalf of Nelson Mandela Bay Municipality

**Disclaimer:** Content provided by Nelson Mandela Bay Municipality does not necessarily reflect those of WWF or ICLEI

For more information go to [www.wwf.org.za/what\\_we\\_do/ehcc/](http://www.wwf.org.za/what_we_do/ehcc/)

