



Earth Hour City Challenge 2015 - 2016: Tanzania

Report on Feedback and Capacity Building Workshops for Arusha City Council and Moshi City Council
28 February - 04 March 2016



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I. Background

Earth Hour City Challenge piloted in Tanzania for its 2014-2015 edition. The pilot nature accommodates the cities without quantitative climate-related reduction target in policy climate commitments through their non-participation in the formal competition. Three participating entities (Dar es Salaam, Moshi, and Arusha) reported a total of 18 actions in the 2014-2015 edition.

Local government elections, which took place in the latter part of 2015, left minimal time to meaningfully prepare cities' carbonn Climate Registry (cCR) entries in time for the EHCC 2015-2016 edition reporting deadline. Consultations were undertaken in December 2015 to ascertain the municipalities' needs and capacity to participate. Dar es Salaam's participation for this year's edition was compromised owing to power vacuum as a result of the local elections.

In response to these developments, implementation of demonstration projects in Arusha and Moshi was made possible, alongside a 1-day capacity-building workshop for each. The second day of engagement was reserved for on-site visits of the demonstration projects as well as individual meetings for cCR reporting. This proved useful as the workshop sessions were cut short for both Arusha and Moshi owing to the East Africa Community meeting taking place that same week in the area.

II. Capacity building workshop

Building on last year's workshops to understand the challenges and opportunities of translating low-carbon development in the developing country context, this year's workshops aimed to:

- A. Share updates on the global sustainability landscape
- B. Provide feedback on the municipality's participation in the EHCC 2014-2015 edition
- C. Undertake carbonn Climate Registry (cCR) exercise in preparation for the municipality's entry for the next round of EHCC
- D. Design the proposed demonstration project in an integrated & inclusive approach using the cCR

Introductions

Both workshop sessions were opened by Dr Teresia Olemako of WWF Tanzania followed by Hon. Mayor Kalisti Lazaro in Arusha, and Hon. Deputy Mayor Peter Minja in Moshi. These speeches expressed appreciation and support for selecting the respective cities as pilot for combating climate change in Tanzania, while affirming cooperation to implement activities that are required to be done by the municipality. They also highlighted ongoing initiatives such as urban forests and recreation areas.

The round of introductions also revealed extensive representation from various municipal departments: In Arusha- Education (primary and secondary), Trade and Local Industry, Agriculture, Elections, Health, Public Relations Officer/Community Outreach, Sanitation and Environment, Natural Resources, Urban Planning, and a representative from the Regional Commission Office

In Moshi- Livestock and Fisheries, Human Resources and administration, Community Development, Conservation, Environment, Public Relations Officer, Education, Forest, Waste Management, Municipal Director, and representatives from Association of Local Authorities Tanzania (ALAT) and Vice President's Office (VPO)

This round of introductions also demonstrated the extent of coordinated work between the different departments. For instance in Arusha, the urban planning department's 2-3 trees per mandate is implemented in coordination with the trade department to ensure participation of the local industry. The same applies for the business-oriented recycling initiative involving communities.



A. Share updates on the global sustainability landscape

The workshops provided the platform to brief participating municipalities on developments in global sustainability processes, with the aim of fostering vertical integration.

United Nations Framework for Climate Change Convention – 21st Conference of Parties (COP 21)

ICLEI Africa presented outcomes of its advocacy work for local governments at the UNFCCC discussions and key COP21 Paris Conference outcomes that recognise the role and support for local governments in addressing climate change.

Contextualizing these discussions to Tanzania, the country's Intended Nationally Determined Contributions (INDCs) were also presented. Recurring droughts in the country over the last 40 years has had devastating effects to its agriculture, water, and energy sectors. Progressive and consistent decrease in rainfall has been projected, and the north-eastern highlands region--where the two municipalities are located--could experience the impacts of climate change most significantly, with a decrease by up to 12% in 2100. Key adaptation and mitigation targets were also presented, particularly with respect to food and water, as well as the means of implementation, which mentions the need for improved institutional capacity, coordination and awareness.

The Moshi workshop had the pleasure of welcoming partners from the Vice President's Office (VPO) and Association of Local Authorities Tanzania (ALAT) with the view of unpacking the role of cities and the available support channels as well as coordination measures. Eng. Ladislaus Kyaruzi, from the VPO and a member of the Tanzanian delegation to the UNFCCC processes, held extensive discussions with the officials on the UNFCCC process and key COP21 outcomes, its implications for the country as well as the cross-cutting issues of adaptation and mitigation in the local context. Benjamin Klaus of ALAT stressed the importance of local governments in addressing climate change and the challenges in doing so.

These discussions highlighted the local government's role in coordinating and fostering ownership of activities in the community. Specific entry points for urban planning and land-use planning in climate mitigation include the promotion of renewable energy, sustainable transport, tree planting/urban forest, and waste management. It also posited driving climate initiatives from mere reliance on historical commitments to opportunities for local funding that would complement national and international support. However this also opened up challenges within the government set-up, such as the absence of a specific municipal budget line catering to climate change at the local level, which the VPO is also working on. At the moment municipalities integrate climate change in related activities such as agriculture.

Sustainable Development Goal 11 and the New Urban Agenda

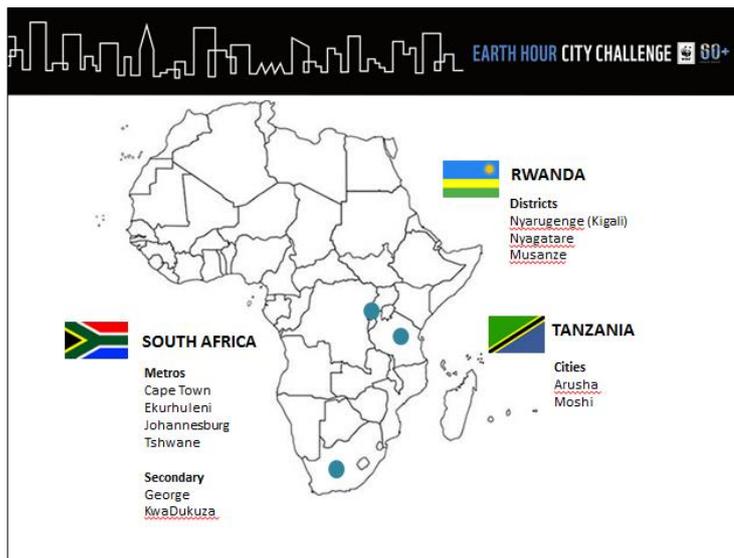
In light of recent adoption of the Sustainable Development Goals 2030 Agenda and the upcoming Habitat III gathering, discussions were also grounded with links to broader sustainable development goals and the New Urban Agenda. Being at the epicentre of cross-cutting links between sustainable development, urbanization and local governance, municipalities are best placed to link all global goals within areas of work to benefit local community needs. Their proximity allows for gathering useful information key for implementation, such as an understanding of local needs, while also influencing behavioural change towards sustainable development. Resolutions from a recent gathering on the SDGs in Tanzania were also presented, which specify working with local governments on capturing data and informing decision-making. There was also acknowledgement of how central government alone cannot deliver on the SDGs, and the need to incorporate climate change to environment, conservation, and human development, given the transboundary nature of its impacts and intensity.

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Earth Hour City Challenge 2015-2016

Following the overview of the international sustainability landscape, various components of Earth Hour City Challenge (data reporting, capacity building, and citizen engagement) were presented. Such practices that can promote better coordination, enable local governments to engage processes, and mobilise support for the implementation of their sustainable development initiatives.

This is especially relevant in the context of Eastern Africa, which will have 60% of the population living in cities by 2050, changing the profile of the region and challenging governments, private sector and civil society to harness the opportunities urbanization provides to address long-standing development challenges for sustainable and inclusive growth. As a prominent feature of the region’s economic development, this rapid urbanization is a mega trend linked to internal migration, development transformation, and the distribution of development activities and wealth between rural and urban areas. It imposes major changes in energy use, as it shifts production activities to cities. Higher density living also induces high rates of energy use and substitutions of modern for traditional energy forms.



Following this contextual input from WWF Regional Office for Africa, an overview of EHCC participants and activities in three African counties (Tanzania, Rwanda and South Africa) was shared.

B. Provide feedback on the municipality’s participation in the EHCC 2014-2015 edition

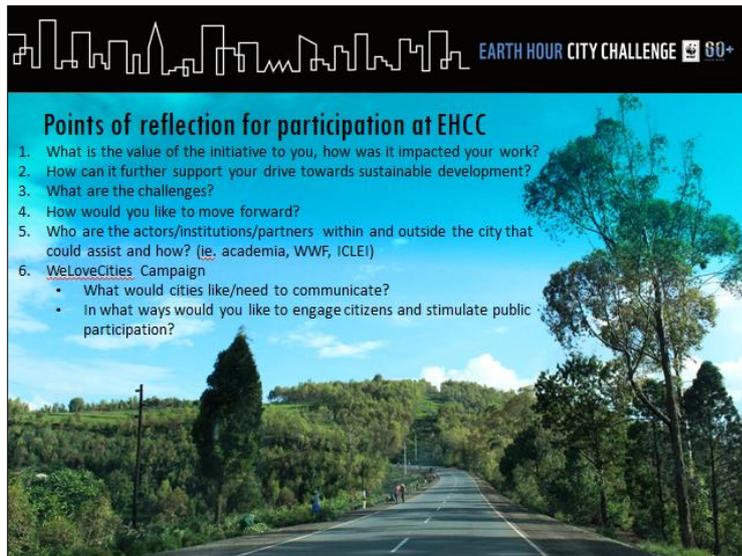
This section of the workshop was envisaged to be a two-way feedback between the EHCC initiative and the municipalities’ participation. Developments such as the EHCC taking place every other year with transition years for preparation and its expanding thematic coverage were shared with participants.

It also served as an opportunity to share outcomes of this year’s leading entries for international benchmarking by top performing cities, highlighting initiatives that resonate and those already being undertaken by Tanzanian localities.

A review of feedback from the municipalities’ 2014-2015 entries also took place. James Lobikoki of Arusha City Council also took this opportunity to share progress on the city’s initiatives since last year’s competition. Due to time constraints, the first cCR exercise in updating old entries with new information and co-benefits was relegated to the meetings the next day.

The infographic is titled "Earth Hour City Challenge 2016" and "Cities can learn from global leaders that show strong commitments realized through innovative actions, leading to impactful results". It lists "Global leader characteristics per area" across five categories:

- Low Carbon:** Ambitious GHG commitments short term and long term; Impactful actions with clear link to sectors with the most emissions; Comprehensive action plans and infrastructure investments for sustainable transport; Technology platforms that provide real time traffic data, helps find parking space etc.
- Renewable Energy:** Strong long term commitments (e.g. 80% renewables in energy mix by 2030 or 100% by 2050); Thorough feasibility assessment of all renewable energy sources available for the city; Ambitious plans to turn the whole city into a renewable power plant (PV panels, hydro fuel cells etc.); Energy generation from solid waste, organic waste and organic materials.
- Energy Efficiency:** Ambitious short term commitments; Regulations ensuring that new or retrofitted buildings meet energy standards; Smart energy management systems to monitor public and commercial buildings; Wide-spread and measurable incentive scheme for community to improve efficiency support low-income groups with retrofitting, ceiling insulation, efficient lighting, and solar water heaters.
- Co-benefits:** Relevant mitigation and adaptation actions across key topics (water, food and energy security); Significant employment potential and investments across each topic; Innovative and impactful action content in each topic.
- Ability to drive change:** Comprehensive climate change action plan developed with high stakeholder involvement across government, business, NGO's etc.; Solid commitments across low carbon, renewables and energy efficiency; Proven track record of implemented initiatives with high impact; Focus and ability to involve the public and create awareness; Cooperation across government, academia and business to drive innovation; Innovative approaches to finance initiatives e.g. through residents fund or green bonds.



Feedback from municipality’s reflections on their participation and potential way forward are attached to this document. These discussions aimed to capture the city’s experience—its challenges and opportunities. Facilitated discussions took place where time allowed for it, or where time is limited, written down.

General feedback indicates a great uptake of climate knowledge and interest in mainstreaming climate-sensitive practices across all development sectors, particularly in health and education.

Moving forward, engagement with decision-makers and communities at the grassroots level was emphasised with respect to awareness-raising, policy, and behavioural change. Partnerships with key stakeholders both within the municipality (such as those listed above, and the academe, private sector) and beyond was also a point of interest, especially opportunities for learning exchange with other cities, as well as closer collaboration with local educational institutions to foster stronger research-policy-practice links.

C. Undertake carbonn Climate Registry (cCR) exercise in preparation for the municipality’s entry for the next round of EHCC

This session did not take place owing to time constraints and the scheduled individual meeting with the dedicated cCR officials the following day.

D. Design the proposed demonstration project in an integrated & inclusive approach using the cCR

The integrated planning exercise aimed test-driving the cCR as a project-design tool for integrated sustainability actions by looking at how the proposed demonstration project can be amplified in consideration of the cCR’s co-benefit indicators. It was an exercise that aimed at exploring the potential of integrated interventions with respect to their local context and needs in light of the SDG Agenda 2030.

A brief introduction to the Urban Food-Energy-Water Nexus was envisaged to promote its approach towards achieving the sustainable development goals. The idea was to select one of the upcoming

implementation projects and explore ways through which it could address and integrate other co-benefits in its design. These opportunities were unpacked through the SOAR (strengths, opportunities, aspiration, results) approach by identifying information gaps, potential partners/stakeholders, and brainstorming ideas for means of implementation to realise these. While the programme schedule tried to make time allowance for scheduling contingencies, this was an element of the workshop that could have benefitted from a bit more time. Nonetheless it served as a platform for a fruitful discussion on the potential of integrated planning in the respective cities.

cCR II: planning exercise

- Select at least two “co-benefits” assigned to your group
- Discuss how the project can incorporate these elements by considering the **Strengths, Opportunities, Aspirations and Results** that already exist in the municipality (see →)
- Note the **information gaps** to be on the look out for tomorrow’s on-site visit

Some variables to consider: projects, policies, processes, partners (within and outside the municipality, such as the private sector, civil society, academe), data, etc.

| Co-benefits | |
|-------------|--|
| 1 | Improving urban air quality Improving urban livelihoods Securing safe and resilient energy supply Increasing access to energy Reduced energy consumption |
| 2 | Increased property values Improved insurability Increased job and business opportunity creation Supporting green urban economy Improved supply chain security |
| 3 | Promoting gender equality and empowering women Community building Improved social equality Improved governance and multi-stakeholder engagement Preserving/improving ecosystems and biodiversity |
| 4 | Improving public health Increasing access to sustainable food Increasing access to water/sanitation Increasing access to sustainable mobility Increasing access to sustainable housing |
| 5 | Nutrient recycling Increased carbon capture Reduced noise pollution Increased recreational space Increased urban green space Improved aesthetics |



Arusha

Group 1: Improving air quality

The group elaborated on the need to improve health in Arusha for both its residents and workers coming from different areas outside the city. Through interventions such as tree planting, the risk of airborne diseases is decreased, while creating an environment conducive for people to live, work and play, thereby increasing investment and tourism opportunities as well. They recognise having sufficient skilled people in forestry, the support of organisations interested in the environment, appropriate weather and water for irrigation. All this allows for an initiative that would develop recreation areas, increase fresh air, minimise airborne diseases and an overall increase in life span.

Group 2: Improving public health

The second group elaborated on complementing the solar retrofits with the installation of rainwater harvesting in health facilities to improve the availability of water storage. They note the benefits of having ideal roofing material, guaranteed security from the nearby community, political will, heavy rainfall and well-skilled personnel. Such an intervention will secure water supply amid projected decrease in rainfall, leading to improved health in the city by preventing the transmission of diseases and providing water for afforestation efforts as well.

Group 3: Increased carbon capture

The third group made reference to their strengths based on the availability of 5 million seedlings in their nursery, community buy-in and capacity, as well as the political will to drive it. They also highlighted the initiative's potential to create employment, promote investment, tourism and recreation, making for an Arusha that is free from pollution, has effective police enforcement and reduced diseases.

Group 4: Promoting gender and social equality

The fourth group elaborated on the municipal loan scheme of 20000 Tsh for households to establish small businesses and its potential for tree-planting. Women have availed of this to set up nurseries which contribute to carbon reduction, while providing the means for food and education. In a related matter, links were also established with poverty reduction and overall improved quality of life by way of increased education and reduced crime among idle youth.



Moshi

Whereas participants were split into four groups for presentation in Arusha, a discussion among all participants was facilitated in Moshi. Group discussions revolved around the potential of partnerships and sustainable initiatives to increase property value, promote sanitation, gender empowerment and carbon capture. It explored the possibility of using municipal revenue from properties to invest in services and infrastructures that ease access and sustainable mobility. The costs associated with maintaining a landfill, as well its current state of operations, also push to explore plans for separation at source and biogas, especially relating to storage and innovation that connects it to cookstoves. Participants also highlighted the opportunity that the city's urbanisation presents for environmental education as well as awareness raising on energy efficiency for new migrants. Credit schemes and loans from the women's development fund for business enterprises were also noted for its opportunities to integrate climate initiatives with gender empowerment, especially in a context where men migrate for work opportunities.

III. cCR technical meeting and on-site visits

Day 2 was dedicated to a group on-site visit for the demonstration projects, followed by a one-on-one meeting with the technical officer in charge of the cCR to polish and finalise the entry to prepare for next year's round. The Municipal meetings served as an opportunity to update old cCR entries where necessary, especially for the proposed demonstration projects which build on and upscale existing initiatives.

In Moshi, this also provided the opportunity to clarify the reported commitment which revealed the departure of the previously assigned officer responsible for reporting. Nonetheless discussions led to identify existing documents that can support their reporting, such as the Investment Profile and Strategic Plan. The same is true for potential partner institutions that can provide relevant information, such as the university and weather station. Relevant developments concerning potential policy and advocacy work was also uncovered, given Moshi's former Mayor Jaffari who has been appointed Shadow Minister for Local Governments. Finally, the municipality expressed interest in undertaking a GHG inventory and the information required by the process.



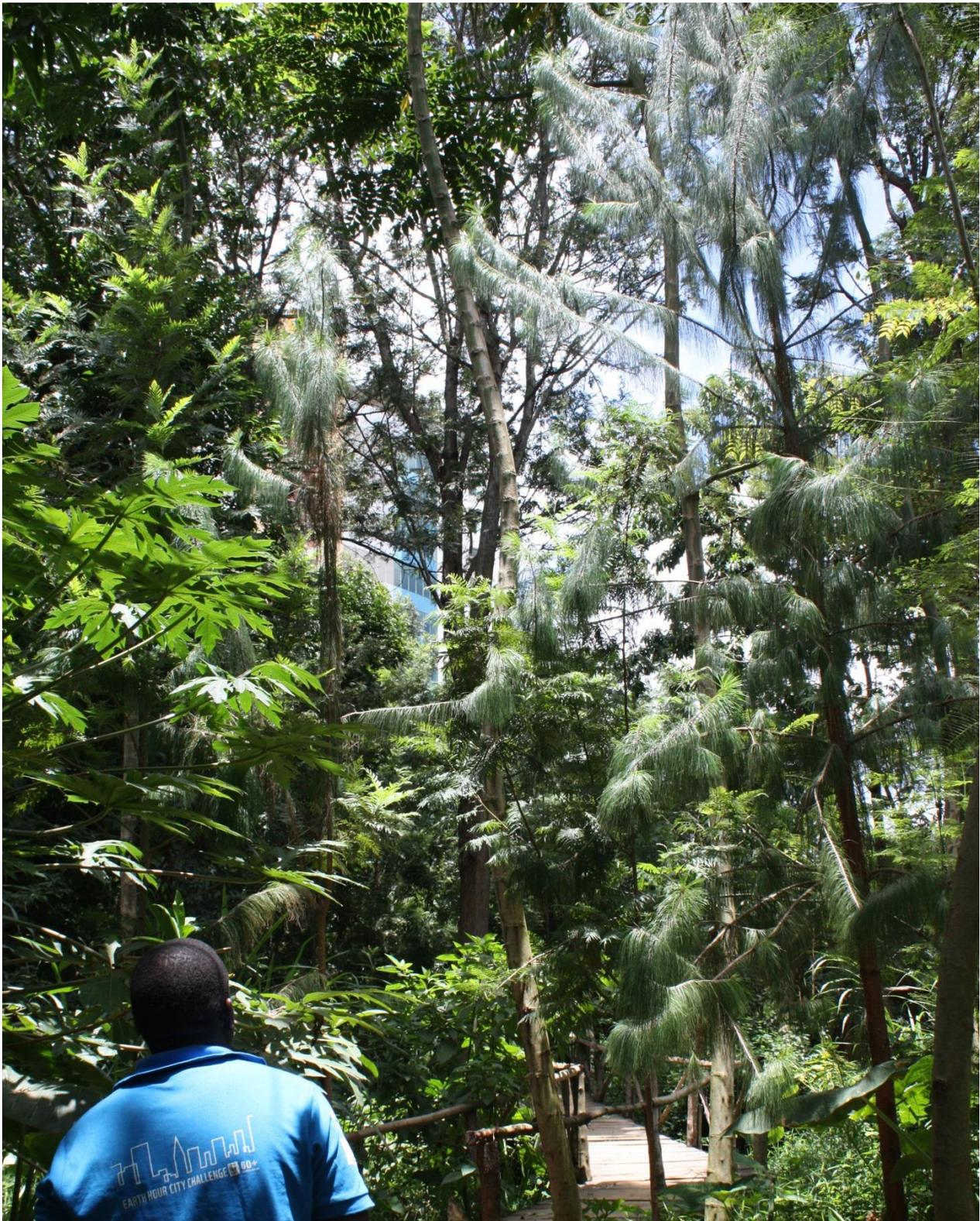
Arusha site visits: dispensary, landfill and urban gardens



The Ngarenaro health facility caters to the women of Arusha, as well as those coming even from as far as neighbouring countries, to provide all-around gynaecological care, post-natal support, as well as testing and treatment for HIV and cervical cancer. It boasts of a 99% success in HIV transmission prevention, and an average of 15-20 infant deliveries at night. Installing the solar retrofit is envisaged to secure lighting for its facilities and laboratory.

The Muriel Sanitary Landfill spans 64 acres which includes a buffer zone, cell and separate area for recyclables. Personnel trained in Durban to learn about mechanisms for separating water and leachate, such as utilizing sand soil/perforated tubes. Boreholes are set up to test water quality. Efforts are also under way to develop its waste-to-energy component to contribute to energy production, complementing the facility's potential for carbon capture and protection of water quality. The local community also figures in strongly as partners in tree-planting and recycling for job creation, as well as enjoyment of recreational space.





The Themi Living Gardens is a reforested area located mid-stream along the Themi river. It features edible gardens, an organic restaurant, and environmental education centre, providing a key tourism opportunity for the city. Afforestation efforts will take place further downstream to complement and enhance this existing initiative. During this visit, it was also uncovered that the upstream area was dubbed a “zero carbon area” given the presence of bats which affirm its air quality. Spanning 100 hectares, it caters to orphan animals as well as a variety of birds that have started nesting there recently. The City Council invites partners to develop this area to maximise its potential so as to minimize carbon, increase town tourism, conserve nature and stop water contamination.



Moshi site visits: dispensary, schools, and tree planting



The Msarangwa Dispensary hosts 5 doctors, 16 nurses and treats 48 people a day in its 3 wards (bed rest ward, children ward and maternity ward). Its maternity ward has 3 beds and attends to 400 deliveries per year. Dr Stella Para welcomes the solar installation to secure energy supply during power cuts-off in lieu of lamps and torch, which pose as risky alternatives especially during delivery.





The Msandaka primary school caters to 388 pupils and 14 teachers. Head teacher Mr. Manasseh Kigo expressed his gratitude for having selected the school as one of the project beneficiaries. The school also has rainwater harvesting to support its climate change initiatives. Langoni primary school caters to 800 pupils and 24 teachers in area near a conserved forest. The head teacher, Mr. Asenga, notes the great challenges that the primary school such as inadequate number of desks and the lack of improved cooking stoves, which make them reliant on three-figure cooking stoves. The same is true for JK secondary school. These are usually housed in separate kitchens and have a high firewood consumption, which is discouraged.

The last area to be observed was an open space dedicated to afforestation efforts, with the aim of providing a recreation centre where people can be enjoying fresh air.

These projects are expected to launch in May 2016.



Earth Hour City Challenge 2015 – 2016 Tanzania

Feedback and planning workshop

29 February – 1 March 2016, Arusha/3 – 4 March 2016, Moshi

Draft programme

Objectives of the workshop:

- Share updates on the global sustainability landscape:
 - UNFCCC COP 21 outcomes
 - UN-Habitat III and the Urban Sustainable Development Goals (SDGs)
 - Earth Hour City Challenge 2015-2016
- Provide feedback on the municipality's participation in the EHCC 2014-2015 edition
- Undertake carbonn Climate Registry (cCR) exercise in preparation for the municipality's entry for the next round of EHCC:
 - Update old entries
 - Inclusion of proposed demonstration project(s)
- Design the proposed demonstration project in an integrated & inclusive approach using the cCR

| Time | Agenda |
|---------------|--|
| 8:30 – 9:00 | Registration |
| 9:00 – 9:20 | Welcome from Mayor and WWF |
| 9:20 – 9:45 | Introductions: ice-breaker and context-setting |
| 9:45 – 10:15 | Global sustainability landscape <i>(with inputs from VPO and ALAT)</i> <ul style="list-style-type: none"> • UNFCCC COP 21 outcomes • UN-Habitat III and the Urban SDGs |
| 10:15 – 10:30 | Tea |
| 10:30 – 12:00 | Earth Hour City Challenge 2015 – 2016 <ul style="list-style-type: none"> • Updates from global edition: benchmarking and future direction • Feedback on the 2014-2015 entries • Reflections on municipality's participation and potential way forward |
| 12:00 – 12:30 | cCR exercise I: update of old entries |
| 12:30 – 13:30 | Lunch |
| 13:30 – 14:30 | cCR exercise II: <ul style="list-style-type: none"> • Addition of proposed demonstration project • Integrated planning exercise |
| 14:30 – 15:00 | Closing and evaluation |

cCR technical meeting and on-site visits:

Day 2 is dedicated to a 1-hr one-on-one meeting with the technical officer in charge of the cCR to polish and finalise the entry, followed by a group on-site visit for the demonstration project.