THE PLAN FOR KWAZULU-NATAL’S FIRST EMISSIONS INVENTORY: FINDING OPPORTUNITIES, SETTING TARGETS AND INFORMING STRATEGY

In this interview, representatives of the Provincial Government of KwaZulu-Natal, South Africa, demonstrate that it is possible to create a greenhouse gas inventory with limited resources by prioritising sectors, building a core team, aligning across government levels and planning for future improvements. The team also delved into what the inventory brings to their province – an evidence base for setting emissions targets, informing strategy and developing opportunities across economic sectors.

KwaZulu-Natal is a South African province with 11 districts, including one metropolitan municipality (Ethekwini, City of Durban). Under the Climate Footprint Project, the provincial government developed their first province-wide inventory, focusing on three priority sectors/subsectors. As part of the project, they also took part in capacity building workshops and activities; formed a core team; and developed partnerships and collaborations across the region’s districts, state-owned entities and other provincial departments, as well as with the national government.

In February 2021, four members from the core project team, Noloyiso Walingo (Director), Ntokozo Ngubo (N. Ngubo – Control Environmental Officer), Ntokozo Nkosi (N. Nkosi – District Manager of Amajuba District), and Thabani Gambu (District Manager of Harry Gwala District) from the Department of Economic Development, Tourism and Environmental Affairs (EDTEA) of the Government of KwaZulu-Natal were interviewed by Natalie Orentlicher, Knowledge and Learning Manager, of the Climate Group.

THE CLIMATE FOOTPRINT PROJECT

The Climate Footprint Project supports state and regional governments to improve their greenhouse gas emissions tracking and reduction efforts.

In order to support the development of regional greenhouse gas inventories, the Climate Group, as Secretariat of the Under2 Coalition, is leading a consortium of partners to provide direct support and training to Pernambuco (Brazil), Chhattisgarh and West Bengal (India), Baja California, Jalisco and Yucatán (Mexico), and KwaZulu-Natal (South Africa).


Local partner in South Africa: Sustainable Energy Africa
ENERGY, WASTE AND AGRICULTURE: KWAZULU-NATAL’S KEY SECTORS

NATALIE: HOW DID YOU IDENTIFY THE THREE SECTORS/SUBSECTORS THAT THE INVENTORY FOCUSED ON?

N. Ngubo: First, we started from the four main sectors of the IPCC guidelines, those identified as key sources of greenhouse gas (GHG) emissions. We then took stock of our team’s capacity to process these different types of data, as well as the availability of it. From there we decided to focus on the waste sector, the stationary and mobile combustion components of the energy sector, and the livestock and manure management of the AFOLU sector. Another key point to note is that we consider this as our baseline and we decided to start small, and then move forward, strengthen our capacities, and expand to the other sectors.

Noloyiso: That’s the technical aspect. Now, if you look at it from a strategic perspective, firstly, these sectors are driving the existence of our economy. And the inventory assists us to identify the economic opportunities that exist for them. Because when we reduce emissions, there are also opportunities that arise. In terms of energy, we are an energy-intensive country, with our energy currently coming from fossil fuels. But we are also shifting in the direction of renewable energies and green technologies, so this inventory provides us with context and direction in terms of how we manage the transition. Moving to agriculture, this sector provides food security and is also a key pillar of the provincial economy, so it is also our priority to understand the emissions from this sector.

NATIONAL: WHAT WERE SOME OF YOUR BIGGEST CHALLENGES AND YOUR MOST IMPORTANT LEARNINGS IN THE PROJECT?

N. Nkosi: Of course, COVID-19 was a challenge which affected our meetings, tested our capacity in terms of technology, and personally impacted some of our team members. But there was always someone from the core team available to move the project forward.

The other biggest challenge was to obtain the data – it took a long time for us to get through that phase. We thought that since most of the information was with fellow state institutions, that it was going to be easy for us to access it. Not knowing that there were certain protocols, like memoranda of understanding, that needed to be followed in order for us to be able to source that data. So, there was a lot more preparation than we realised we needed, but eventually everything worked out. Of course, after obtaining the data, we still had to refine it into a usable format. We needed to both verify it and to sense-check it, to ask ourselves if it was a true reflection of the state of our province.

Thabani: And another important lesson was the issue of keeping track of the work that we had done and documenting every step of the way. Therefore in the future, when we go to review and update the inventory, or revise the strategy, we will know exactly what steps we took in compiling the inventory. For me, that was an important lesson because the aim was to improve the inventory throughout the years.

Putting the core team together was also a key moment. It was not that much of a challenge to form the team because, fortunately, we already knew each other’s strengths. Some of us had previously dealt with air quality issues, or climate change, or had legal training. And we also had different skills in terms of both technical themes and competencies such as facilitation, communication, networking, negotiation, or management. So, we learned to work together very well, and this was useful for the project as it allowed us to keep the process going, exchange information and take on different roles.

1 The Intergovernmental Panel on Climate Change (IPCC) sectors are energy; industrial processes and product use (IPPU); agriculture, forestry and land use (AFOLU); and waste. (See: 2006 IPCC Guidelines on National Greenhouse Gas Inventories.)
FURTHER IMPACTS: THE INVENTORY AS A STRATEGIC INFORMANT AND THE PROVINCE SPEAKING AS ONE VOICE

NATALIE: HOW WILL THE PROJECT AND THE INVENTORY INFORM YOUR CLIMATE CHANGE STRATEGY GOING FORWARD?

Noloyiso: As a province, we are currently undertaking a review of our climate change strategy. Previously, as an African state, we were focusing on adaptation, but now the Department has taken a stance that we must really strive to move towards mitigation, as well as strengthen adaptation. Before, we were not ready. Now, having the data and inventory, we have something to base our mitigation actions on, so it has placed us into a state of readiness.

Our provincial growth and development strategy also requires us, as mentioned, to set some targets around green technologies and renewable energies. The inventory is able to inform those indicators and monitor those targets. It also allows us to align with and determine the province’s contributions to the national GHG emission targets and air quality minimum emission standards, as well as South Africa’s Nationally Determined Contributions.

So as we move forward and grow our inventory, we will use it to assess the emission reductions from the past and future projects, to set our future targets and to adjust our strategy. All of this strategic work will be informed by the work that is being done at this level of compiling the inventory.

Thabani: To also add, the province now works together with and better understands what the municipalities are doing at the local government level. We share lessons, but we also now speak together as one voice, as KwaZulu-Natal. So, with one voice we can state our contribution to the national targets and also discuss our challenges with mitigation. The process has turned us into a unified team and that is very important because, together, we can do more.

ADVICE AND NEXT STEPS: START SMALL AND ADD FROM THERE

NATALIE: WHAT ADVICE WOULD YOU LIKE TO SHARE WITH OTHER STATE AND PROVINCIAL GOVERNMENTS THAT ARE LOOKING TO START COMPILING AN INVENTORY AND TRACK THEIR EMISSIONS?

N. Ngubo: The first advice from our experience is that it is good to start small. And by that, I mean, assess your capacity and start with fewer sectors, then expand at a later stage. Secondly, create a clear plan at the beginning on how you want to approach your inventory. Include in this plan institutional items, like setting up a core team with diverse capabilities. Thirdly, be prepared to learn along the way. Of course mistakes will happen, but you can learn from those mistakes and move forward with the work of your inventory.

Noloyiso: Going back to sector selection, over and above all, you must know what is important for your country or your subnational, in order to help you prioritise initially and not feel the need to go for everything at once. This allows you to start small and then grow as Ntokozo has said. For us this was important because, in the end, we are growing the economy and this inventory informs our growth. And our success can eventually be measured by how we have actually contributed to the well-being of the people of the province.
Natalie: As this phase of the project comes to an end, what are the next steps for KwaZulu-Natal?

N. Ngubo: We will add in the remaining inventory sector (Industrial Processes and Product Use (IPPU)) and subsector (Forestry and Land Use (FOLU)). For IPPU, we are going to follow the guidelines of the federal government, as they are currently establishing sectoral targets and quantifications, together with provinces and municipalities. And for FOLU, we have provincial entities collecting this type of data with GIS, so we will capitalise on that as we move forward with updating the inventory.

And, as previously noted, we have already linked our work with that of the national and municipal levels. Going forward, we would also like to involve the private sector as a key next step. Because the target that we set for the province should be the target owned by all the sectoral stakeholders, as they are the ones participating to achieve that target.

Noloyiso: As mentioned, the review of the climate change strategy process, which is now incorporating mitigation, is a next step. This will include creating a strategic forecast and setting targets. We have also set aside some budget for one or two projects that we want to implement on a pilot basis, as a result of having the inventory. So, we will also be defining and finalising the pilot concepts.

Thabani: Going back to our challenge on data sourcing, we have now identified areas that are difficult to source data from. Those are areas in which we need our senior management to help us put in place memoranda of understanding beforehand, so that we can source the data more easily moving forward as we update the inventory in the future.

And there’s also the awareness creation part of the work, because we don’t want the inventory to lie on shelf number 12, gather dust and be known only by the technocrats. We want the people in the province to understand the work that we’ve been doing, so we will communicate the results of the inventory in a simple, user-friendly way to the citizens of KwaZulu-Natal.

N. Nkosi: And, lastly, we now have a group of young interns that we’ve recently recruited and are building the capacity of.

So we are not worried going forward if anything changes, as the knowledge and lessons will be preserved, because there’s a group of youth that can take over in the future.