# **#6 Towards sustainable waste** management in Africa? 29/06/2023



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### **The Observatory's Lens** In Africa, GHG emissions from the waste sector are rising



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Mélaine Assè-Wassa Sama, Project Officer for Climate Action in Africa, Climate Chance and Victor Bérenger, Senior Energy and Climate Policy Analyst, Enerdata, present the analysis note on emissions from the waste sector in Africa.

### What are the challenges of waste management on the African continent?

Waste management is a huge challenge in Africa even though there is a strong framework and some regional policies such as the <u>2063 African Union Agenda</u>. We also have national strategies to control waste management, but despite these policies and the international commitments the production of waste is increasing.

> Sub-Saharan Africa produces 174 millions tonnes of domestic waste. 20% of this waste is recyclable, but only 4% gets recycled. This type of domestic waste will continue to fill the landfills. Today, 19 of the 50 biggest landfills in the world are located in Africa.

### What is the current state of greenhouse gas emissions in the waste sector in Africa?

If we look at the African continent, the greenhouse gas emissions connected to waste account for 8% of the total emissions of the continent. This is due to emissions from the waste sector having a yearly growth rate of 3% (from 2000 to 2021), which is twice the rate of total emissions in Africa.

On a geographic level, if we look at the emissions produced by the waste sector by country, Nigeria is the biggest emitter accounting for 15% of emissions of the waste sector in Africa. South Africa is ranked second biggest emitter with 8%, then Algeria with 7%. There are 12 countries for which the waste related emissions account for more than over 10% of their total emissions. The countries include: Djibouti, Morocco, Comores, Democratic Republic of Congo, Rwanda and Gambia.

In terms of the composition of these emissions we have mainly methane at 95 % and the power connected to CO2 is quite small. They mainly come from the water treatment and its discharge (up to 65%) and to the solid waste disposal (up to 35%). This last one is a growing figure and increased by 5% between 2000 and 2021.

### What are some initiatives that contribute to a better waste management?

Municipalities and local authorities struggle to manage waste on their own. There is a big financial issue as waste management absorbs a large chunk of the budget, which makes things difficult. The solution they found was to partner with private businesses. Unfortunately, these types of partnerships do not always work out. In Gabon, one of these collaborations ended in litigation so there are mixed feelings about these partnerships.

It is interesting to mention that local actors are really at the frontlines on this sector. For example, we have a cooperative, <u>EcoClean Environnement</u>, in Cameroon which has implemented a waste collection programme with about 19 tonnes of waste that have been collected each month and sorted for definitive elimination, and they create employment. Another example is the Initiative <u>Mon Restaurant Zéro Déchet in Senegal</u> that raises awareness among people working in restaurants, on issues related to waste management.

However, to face these challenges in Africa, actors must release the financial and technical means to face them.



Read the Note : "In Africa, GHG emissions from the waste sector increase despite efforts"





# **Special segment by Afrik 21**



#### Ines Magoum, Afrik 21

Ines Magoum, journalist with Afrik 21, explains the role of the circular economy on the international agenda and the concrete actions being taken at African level.

#### What were the international highlights of the month?

June was marked by the 52nd World Environment Day on the theme of solutions for plastic pollution. The United Nations Environment Programme produced a report showing that it is possible to reduce plastic pollution by 80% before 2040. To achieve this, we need to speed up recycling, and make this activity more stable and profitable through new standards and job creation (<u>Read the article</u>).

In addition, a negotiating session for the International Treaty against Plastic Pollution was held in Paris, bringing together some 175 countries to discuss the strategy for adopting the treaty. Three further sessions are planned. Adoption of the treaty will help reduce plastic waste production, promote a circular economy that protects the environment and human health, and ensure efficient waste collection and management.

### What solutions and events have caught your attention on the African continent?

Donors such as the African Development Bank have launched a plastic waste collection campaign in Côte d'Ivoire to mobilize stakeholders (<u>Read the article</u>). Companies are also getting involved in the sector. I think that, in addition to waste management systems, we need to raise public awareness on the importance of reducing waste.



As part of this dynamic, the University of Sfax in Tunisia has just created a master's degree in waste recycling and circular economy. In the field, in Douala (Cameroon), the WasteAID program trains young people to recycle plastic waste in order to reduce pollution in coastal areas (<u>Read</u> <u>the article</u>).

At the local level, we also need to strengthen financing mechanisms and increase the funding allocated to recycling and sustainable waste recovery.

Last but not least, the focus should be on technology. A number of applications and intelligent equipment are moving in this direction.

More articles on the website: www.afrik21.africa







# Education in selective sorting and transition towards inclusive circular economy models

### Rosanne TANOE, Moi Jeu Tri Côte d'Ivoire

Rosanne Tanoe, Executive Director of <u>Moi Jeu Tri</u>Côte d'Ivoire explains how her project educates people about selective sorting and supports the ecological transition of local areas towards inclusive circular economy models.

#### What is the purpose of Moi Jeu Tri?

Moi Jeu Tri is an international NGO that started in Togo through various initiatives in schools. We work with different types of waste, biowaste or plastic waste. The name Moi Jeu Tri means I am sorting or I am recycling. We have a branch on Togo and on Côte d'Ivoire and we implement different types of programmes depending on the needs of the regions.

#### What are the types of projects are you carrying out?

In Cote d'ivoire we have two types of programmes: recyclable and non-recyclable waste. For non-recyclable waste we have organic waste that we treat through and upgrading process. For recyclable waste we have a different programme in the schools. The children can bring back to school any plastic or paper waste from home and place them on the schools containers. That waste is collected once a week and it's used to generate a positive impact on the environment in which the children live. We collect the waste and we sell it to recycling plants and this money is used for other projects.

Moi Jeu Tri also works with other social projects like sanitation projects and also in partnerships with other companies to build new classrooms.

> It allows the children and the teachers to really learn how to recycle waste and to teach the children and the adults how can waste have a positive impact through selling it or upcycling it.

Through another programme, we teach children how to make compost. This compost helps develop the gardens in the school that the children and teachers take care of. We also have "biodigestors" that allow to create biogas and we have adapted bio-gas cookers that we use to prepare the meals for the children. This helps in the areas that do not count with a lot of resources, as we mainly work in public schools.



### What can you tell us about the new jobs on waste management and Moi Jeu Tri's gender perspective?

The waste management sector was predominantly a male dominant sector, but at Moi Jeu Tri, we decided to include women in some of the businesses and activities. Now we have a programme to include and train women in the various regions where we work. It is important that they have jobs that are valorised, so we train them to be managers and in charge of the collection centers. I think that by 2025 we will have more women working in this business, we need to have many programmes and we need stakeholders to give women the opportunity to get involved in this sector

Find Moi Jeu Tri on our Cartography of Action!







# A Climathon to impact students and local actors for change

#### Abdoulaye Guire,

Ecole nationale de formation agricole (ENFA) de Matourkou

Abdoulaye Guire, Head of Continuing Education and Incubation, National agricultural training school (ENFA) of Matourkou, presents the Climathon of the VIVRE project (FAO), a way of involving students in the development of sustainable waste management solutions.

#### How was the Climathon organised in Bobo-Dioulasso?

At my school we are an incubator so we were able to address these sustainability issues in the framework of the VIVRE project from the FAO. For the Climathon, in Bobo-Dioulasso, we wanted to propose some solutions and in order to do this, we asked the students from our city to gather together to come up with some suggestions and pragmatic ideas. We talked about a number of practices and we organised working groups that we connected with other groups from the Global North so that they could exchange between them.

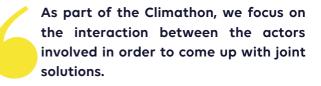
In Bobo, we had 5 groups composed by three students each from different profiles and we asked them to take on three main activities.

- 1.Creating a Cartography to identify all the actors working on the environmental field in Bobo-Dioulasso
- 2.Crossing the village while identifying the various environmental and climate issues impacting the city that require solutions
- 3.Define the profile of a typical personality who would carry out the proposed activity

We worked in collaboration with FAO partners such as IRD, GIZ and CIRVES, but above all with the municipality, which was at the heart of this activity. This enabled us to bring together the key actors who can work on environmental and climate issues.

### How was the collaboration with the local government?

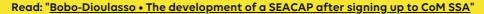
Following the activities, the suggestions, proposals and challenges were reported back to the city. The decided to focus on waste management. The challenge was chosen by the Mayor's office to help find solutions through the students contribution and see which solutions could be used immediately as part of the waste management plan at the city level. This challenged had also a high entrepreneurial potential because we could see that there were some solutions that could be implemented quickly.



#### What solutions did the students imagine to improve waste management in their city?

The first group proposed to turn the plastic waste into building construction material. The second group proposed to turn the plastic waste into a form of compost wall. This idea is relevant because Faso has very poor soil. The third group envisioned designing and developing a treatment center for upgrading the waste and turning the plastic materials into some bags or other products of public interest. The fourth group came up with the idea of making coal ecological or organic by using biodegradable materials. Finally, the last group worked on a municipal unit for upgrading waste dealing with organic waste.

There was a jury, so each group came up with some suggestions which could bring solutions to the issue of waste management.









## Projet régional pour la gestion durable des déchets

### Eric Amoussou, West African Development Bank

Éric Amoussou, Senior Environmentalist from the West African Development Bank Environment and Climate Finance Department, explains the Bank's commitment to circular economy through the regional waste management project.

### What is the area of intervention of the project and what is its budget?

The area of intervention is the 6 countries of the West African Region: Senegal, Togo, Niger, Mali, Burkina Faso and Benin. For the project we work at both the regional and national level, and we also develop and build infrastructures to sort and recycle solid waste.

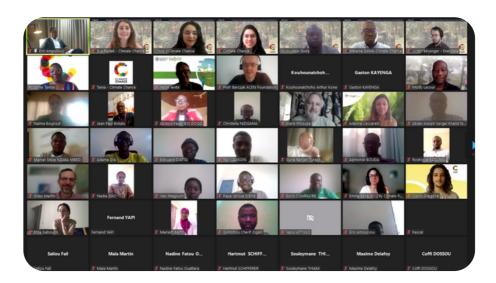
The global cost of this is 145 million USD, of which we finance 124 million.

For the time being, we have a project in Togo, which can then be replicated.

#### Could you describre the project led in Togo?

We want to develop all the relevant infrastructures for valorising and recycling the waste. We have waste centers and recycling centers in the various municipalities. We also have stores, which are secure, to store and stock the waste, and there is also the whole training aspect. Raising awareness and supporting actors through techniques and finances from the households all the way to the largest organisations. Other organisations are involved in the landfill in Lomé, like the Agence d'Exécution Volet Régional, the Unité Régionale de Gestion du Projet and the Unités Nationales de Gestion du Projet. This landfill is situated 20 km away from Lomé, the capital.. It has a surface of 194 ha that receives 300.000 tonnes of waste per year. We work there in order to improve the urban sanitation for the population and to avoid CO2 emissions. Finally, we also produce gas from waste

#### Watch the replay of eMag #6



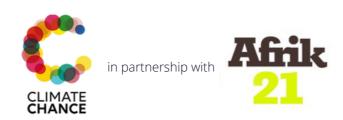




# Upcoming Events

Join us once a month on Thursdays from 3:00 to 4:15 PM CEST for a themed virtual meeting on climate change adaptation and mitigation in Africa, followed by an e-magazine to read through.





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