

Virtual Workshop #12 – Summary Report Improving Access to Climate Data for African Actors – Emissions and Activity Data

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Moderated by **Vanessa Laubin,** Manager/Strategy and Territorial Planning Consultant, PROJECTIONS CC

Panelists:

- Amaury Parelle, Coordinator of the <u>Climate Chance Observatory</u>
- Gabriel Follin-Arbelet, Project Lead Impact Measurement, Bureau Kinomé
- **Jafaru Abdulrahman**, Head of IT, <u>ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)</u>
- Joël Nana, Senior Project Coordinator, Sustainable Energy Africa (SEA)
- **Marie Colson**, Mobility Project Coordinator, <u>Institut für Energie- und Umweltforschung</u> <u>Heidelberg (IFEU)</u>

Key Takeaways:

- -The issue of access to activity data for non-state actors is essential, for the **monitoring of climate** change mitigation projects, for the construction of new relevant actions and for the projection and elaboration of emissions trajectories.
- -For the workshop participants, the priority regarding access to activity data is to **involve local** actors in the collection of field data. The question of means is not central, and comes in last position, which proves that **many tools already exist.** Local stakeholders must now be trained to use these tools.
- -The social enterprise Kinomé used the Global Forest Watch tool, built from satellite data, to update Guinea's deforestation data. Field forest data are very expensive to collect and update, and the use of alternative tools such as Global Forest Watch can provide less complete but sufficient data for many applications.
- -ECREE uses a regional monitoring framework, within which it collects data from the 15 ECOWAS member states. Using this data, Renewable Energy and Energy Efficiency policies were created, which implementation plans for each of the states, and the yearly progress of implementation is tracked, with annual reports published. **The ECOWREX observatory makes all this data publicly available.**
- -SEA works with local authorities as well national statistics boards **to collect household level energy use data, to help cities build their energy profiles**. The type of data required depends on the purpose for which it is collected, and the household data provides insights on end-uses of energy, shares of income spent on energy, etc.
- -Within the framework of the Mobilize Your City program, the German research centre **IFEU** supports cities and countries in the implementation of sustainable mobility plans. The issue of data collection is essential for the evaluation of the current situation and the construction of prospective scenarios. Most of the time, IFEU combines different methods of data collection from different actors for its work.



Amaury Parelle, Climate Chance Observatory

Climate Chance is an association which aims to be a platform for non-state actors engaged in climate change related projects.

3 main areas of work:

- A website, portal for climate action, in French/English
- The Observatory that publishes an annual report on non-state climate action
- The organization of summits every year, organized around thematic coalitions

This year, since the association was unable to organize a Summit because of the Covid-19 pandemic, Climate Chance has organized these Virtual Workshops.

The issue of access to data for non-state actors is carried by the Climate Chance Observatory since the Abidjan Summit in 2018. After discussions in Abidjan and then in Accra the following year, which allowed us to lay a certain number of foundations, this year a series of 3 Virtual Workshops is organized (24/09/2020, 29/10/2020, beginning of 2021), with the following objectives:

- (1) To identify African initiatives contributing to improving access to climate data and their governance for local actors
- (2) To explore concrete avenues for collective work and a space for collaboration that can be conducted on these issues.
- (3) Capturing the main lessons and principles to formulate a common position among the actors involved.

Vanessa Laubin, PROJECTIONS CC

To recall, in order to calculate Greenhouse Gas (GHG) emissions, we multiply activity data with an emission factor, which is an average that gives the amount of GHG emitted during a certain activity.

Objective: To discuss the constraints, issues and difficulties related to the collection, analysis and use of activity data.

⇒ Why should non-state actors ask about mitigation data?

-To act at the level of knowledge, monitoring and projections of GHG emissions

- To participate in GHG emissions inventory processes
- To participate in the development of future GHG emission trajectories

-To act on the implementation of measures to mitigate climate change

- To implement projects in areas identified as priorities to reduce/capture GHG emissions
- To ensure the follow-up of the commitments made by the different actors to participate in the mitigation of the effects of climate change
- For Improving information on climate change mitigation issues

"If you can't measure it, you can't manage it" Pierre Drucker.

3 steps related to activity data, each of which has its own problems:

- -collection: how do we ensure the robustness of the data collected?
- -analysis/use: how do we organize advocacy actions based on these data?
- -Governance: how can we ensure that the data is accessible, especially to non-state actors?



Gabriel Follin-Arbelet, Bureau Kinomé

Kinomé is a French social enterprise, which works on 4 main activities: research, consultancy, NGO projects, and education of the general public, on subjects such as climate, biodiversity and deforestation.

The use of the Global Forest Watch tool for monitoring deforestation in Guinea and the formulation of national objectives.

Kinomé has recently intervened in Guinea, within the framework of a project on the revision of their National Determined Contribution to the Paris Agreement. This example shows the importance of having robust and reliable data to formulate relevant commitments.

First of all, it should be pointed out that in many African countries, access to energy and climate data has greatly improved in recent years, allowing for reference situations closer to reality and good monitoring over time. However, a counter-example in Guinea: data from the National Institute of Statistics showed that between 2012 and 2016, 75% of energy consumption came from biomass (wood or charcoal). However, forestry data from a 30-year-old forest inventory did not take this into account. In order to make clear commitments on the fight against deforestation, it was therefore necessary to have up-to-date reference data.

The collection of forestry data is very difficult and requires a great deal of financial and human resources. Kinomé therefore used the Global Forest Watch (GFW) tool, an online platform for monitoring forests and deforestation data, which uses satellite data to visualise the loss of forest cover over time.

The GFW tool makes it possible to see where and when deforestation is taking place. In addition, from these data and emission factors, GFW makes estimates of CO2 emissions due to observed deforestation. On the other hand, GFW data does not provide information on the emissions captured by existing forests, on the reasons for deforestation, on the nature of the forests cut down. They cannot therefore be used as a substitute for a "real" forest inventory.

The use of the GFW platform has therefore made it possible to rebalance what was a strong inconsistency between the available data and the reality observed.

In Côte d'Ivoire, two pioneering projects illustrate cooperation between state and non-state actors in the fight against deforestation

-National forest inventory since 2018, for fauna and flora. The result of collaboration between ONFI (ONF International), IGN (data analysis expert) and SODEFOR (National Forestry Office of Côte d'Ivoire). The use of satellite data makes it possible to target the most relevant locations to deploy field teams to collect data. More info: https://youtu.be/ha9XUw78ifE

-Starling monitoring tool: to prevent deforestation due to cocoa cultivation. Collaboration between SODEFOR (National Forestry Office of Côte d'Ivoire), the NGO EarthWorm and Airbus. Allows the identification of deforestation actions and the rapid intervention of field teams.

Forest inventory projects are very costly and are not often the priority of donors because they seem less concrete, whereas they are in fact indispensable for the implementation of development projects. However, there are already a number of tools such as the Global Forest Watch tool which are very easy to use and which could be made available to States so that they can integrate them into their systems for monitoring and updating their forestry data, without requiring much investment. In Guinea, with relatively little investment of time and money, the use of GFW data has made it possible to update the country's forestry data with a fair degree of accuracy.



Jafaru Abdulrahman, Project manager at <u>ECOWAS Centre for Renewable Energy and Energy</u> <u>Efficiency (ECREEE)</u>

ECREE was created in 2008 to promote the development of sustainable energy markets. is a platform for collecting energy data from the 15 member countries of ECOWAS, which is provided to the public through the ECOWAS Observatory of Renewable Energy and Energy Efficiency (ECOWREX). ECREE also supports member states for energy planning.

How ECREE collects energy data: As a baseline, when ECOWREX was created, energy statistics and GIS spatial data was collected. Following this, a regional monitoring framework was created, with 15 designated focal points in each ECOWAS member state, through which there is annual data collection and capacity-building. This framework governs the data collection, analysis and publishing, and gives confidence to the users about the legitimacy and accuracy of the data.

-The entire pool of staff at ECREE who support the entire process, and to mobilise resources and develop skills. Desktop research is also carried out, collecting primary data from energy and electricity ministries and regulators to compile data. International sources are also used.

How this data is used to develop policies promoting access to sustainable energy: Using this data Renewable Energy and Energy Efficiency policies were developed at the ECOWAS level in 2013. ECREE oversees their implementation. Accordingly, Sustainable Energy Action Plans have been developed in each of the 15 member states. The regional monitoring framework tracks the progress made in the implementation of these policies. A regional progress report is published every year.

The capacity for data collection within member states has been observed to be poor. Financing is being sought to help them develop adequate structures and processes to collect data. The existing governance structure of ECREE is not useful unless these also exist on the ground, at the local levels.

Joël Nana, Senior Project Coordinator at Sustainable Energy Africa (SEA)

SEA is an NGO based in South Africa, working at the city level in Southern Africa to promote equitable, low carbon, clean energy development, through research, capacity building, policy engagement and information dissemination.

Insights from household energy data: From all the projects worked on, the insights needed are usually along the lines of how households use energy (example of Yaoundé), what do they use it for, what percentage of of their income goes towards energy, future projections of energy requirements and changes in the energy landscapes.

Types of data for household energy use: This depends on what the data is needed for. For emission profiles, what is usually needed is grid electricity demand, or distributed renewable sources which are off grid. In case of solid or liquid fuel, it is the quantity of wood, biomass, kerosene, petrol, etc. being used.

Where to obtain household energy data? There is no single place to collect all this data from. The first step is always the most expensive. Having donors is helpful. The CoMSSA project drew up 10 steps of the data collection process (see presentation). Getting stakeholders on board, and enumerators on board is important. Metadata and methodology is also important. Leaning on household census surveys in each country is also very helpful, and a source for a fair amount of data. In South Africa, the electricity companies have also been open with household data-this is not the case in all African countries. SEA is working on a database. Secondary data is always cheaper and easier to find but may be aggregate national level data.



We've worked with national institutes to collect data in South Africa and help cities to build their energy profiles.

Marie Colson, Institut für Energie- und Umweltforschung Heidelberg (IFEU)

IFEU: Institute for Environment and Energy in Heidelberg. Independent, non-profit research institute based in Heidelberg and Berlin. One of IFEU's major works: inventory of GHG emissions from transport in Germany. Besides that, IFEU works a lot internationally, with cities and countries, especially in the framework of the Mobilize Your City project.

For data collection, IFEU uses 2 parallel methodologies:

- top-down: typically, state data
- bottom-up: kms of cars, boats... type of cars, boats... and multiplication by emission factors. This methodology is much more complicated since the data is not centralized. The challenge is therefore to mobilize a large number of players to find this data.

IFEU has developed the Mobilize Your City tool. It is a Franco-German initiative, funded by the European Commission, which aims to help cities implement sustainable mobility policies. At the moment 61 cities and 13 governments are part of the initiative. In this context, the IFEU has created a transportation emission calculator, called the MYC-calculator.

Presentation of 2 projects that have been carried out under the MYC:

-Rwanda: Project to assess the relevance of deploying electric mobility. The first step was to calculate current emissions. For this, IFEU used both national and local data (e.g. from the city of Kigali). An example of a challenge encountered in data collection: MYC was able to get data on the number of vehicles registered at the national level, but it was hard to know how much of the vehicle fleet was actually active, i.e. who was actually driving. Once the data were collected, IFEU constructed scenarios for both vehicle and traffic growth and for transportation-related emissions based on different assumptions, through meetings with research units of the country's universities and local experts.

IFEU calculated the benefits of deploying electric mobility in Rwanda, particularly for two-wheelers. And showed that an increase in electric mobility would benefit the country in the fight against climate change.

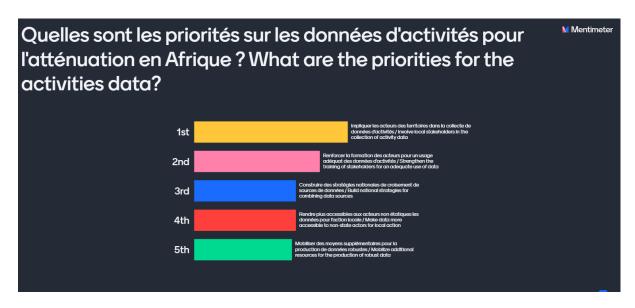
-Tunisia: National plan for urban mobility. Construction of scenarios after numerous consultations with many stakeholders (bus companies, cities, regional agencies ...). The IFEU has shown that coordination between actors was very difficult to put in place, and was a major undertaking, yet necessary for the implementation of sustainable mobility plans. Difficulty encountered: a lot of fuel is sold unofficially, making it difficult to have clear data on fuel consumption.

Some data are made available to everyone from the outset and are public by nature. Conversely, some countries are wary of sharing data, sometimes even between different ministries. IFEU therefore tries to advocate for data sharing with the actors it works with.

In addition, it is difficult to put data in the right format to make it accessible, and to find money to maintain and update the data. For example, in Europe, we are fortunate to have EUROSTAT, which allows us to have access to a large amount of data. However, for African countries, there is no equivalent organization. This is very much lacking.



Results of the Menti:



Reactions of the Panelists:

Marie Colson: Indeed, involving local actors in data collection is a big challenge. It requires a great deal of coordination, to allow data exchange between actors from different territories. Reinforcing the training of actors is also especially important because climate is a relatively new subject for many actors.

Joël Nana: The priority chosen by the public is also ours. The involvement of local actors in data collection and processing is important, and this is in line with the second priority because it allows actors to become more competent.

Jafaru Abdulrahman: The issue of differences between regions is paramount. The priority must be to give non-state actors the capacity to support data collection processes.

Gabriel Follin-Aberlet: It is indeed surprising to see that the question of means comes last in the order of priorities. It shows that a lot of things already exist. This first priority shows the desire of non-state actors to get involved in data collection, and that's quite exciting.

It is necessary to have national cross-sectoral frameworks for the collection of emissions data, and clearer international frameworks to feed databases such as the Eurostat database in Europe.

Initiatives reported in the Menti questionnaire that contribute to the building blocks of emissions data collection:

- -Establishment of the Mediterranean Climate House in Tangiers, Morocco.
- -The use of the IPCC Good Practice Guidance is well employed during data collection in Africa.
- -Gradual involvement of non-state actors in forums for reflection on policy definition and implementation