

# Summary Report of the Virtual Workshop Access to climate data for African non-state actors

18.02.2021

# Link to the recording of the Virtual Workshop:

https://www.climate-chance.org/en/get-involved/climate-chance-virtual-workshops/2-access-to-climate-data-for-non-state-actors-in-africa/

#### Speakers:

- Vanessa Laubin, Manager/Consultant for Strategies and local climate planning at Projections CC
- Matthieu Wemaëre, Lawyer, Expert in Environmental and climate law, associate researcher at IDDRI
- **Jouairyatou Wague**, Project manager at Association Bilan Carbone Governance and carbon database methodology
- Abdelrhani Boucham, Head of Climate Change service, Moroccan Ministry of Energy, Mines and Environment
- Léo Genin, Managing partner in charge of the public sector, I-Care & Consult
- Georges Kuate, REDD+ in Burkina Faso

#### **Description:**

This 3rd Virtual Workshop in <u>our series of workshops on access to climate data in Africa</u> focuses on greenhouse gas emission factors used for national or local inventories. The factors used by both national and local governments are often not adapted to the African context and can significantly modify the calculation of the impact of certain sectors such as livestock or transport, but also that of offset projects carried out on the continent. Their choice or construction is therefore not only a technical issue and can influence public policies and the support given to certain economic activities.

# Key takeaways:

"The implementation of the Paris Agreement is based on transparency, both in action and support. This is the means chosen to hold countries accountable for meeting their commitments. It is also a means to strengthen international cooperation within the framework of the Paris Agreement." (Matthieu Wemaëre)

"The construction of a Carbon Base is a collaborative work that brings together many structures and it is an opportunity to develop an ecosystem of skills, gain maturity and raise awareness of the issues involved in the transition." (Jouairyatou Waque)

"The construction of specific emission factors is a whole project in itself; it takes time and requires non-negligible means and a fairly strong institutional sharing." (Léo Genin)

"The availability of data was the biggest challenge because the data existed but was located in several institutions, and to access it several forms of collaboration had to be set up. This experience made it clear that it is important to create a mechanism at the national level for information exchange and data sharing." (George Kuate)

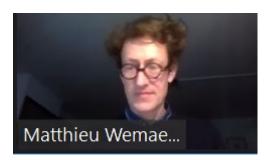


Opening presentation: **Vanessa Laubin**, Projections CC. Presentation of the project on access to climate data for non-state African actors and the past virtual workshops.



- The goal of this Round is to spot African initiatives working on improving access to climate data and their governance for non-state actors. Sharing best practices between actors.
- Latest workshops: on adaptation data, activity data and the present a workshop will focus
  on Emission Factors. The challenge being the creation of emission factors that are based
  on local realities.

Introduction: **Matthieu Wemaëre**, Lawyer, Expert in Environmental and climate law, associate researcher at IDDRI – Introduction and link between political and technical issues and possibilities from the Paris Agreement.



It is necessary to place the technical subject of emission factors in a political context. The transparency framework of Article 13 of the Paris Agreement: an inventory with a report on progress. It is very new for developing countries to be subject to a mandatory transparency framework. For this reason, Article 13 allows flexibility for developing countries and many initiatives have been launched including the CBIT to build capacity on transparency.

- The implementation of the Paris Agreement is based on transparency: transparency of action and transparency of support. This is the means chosen to hold countries accountable for meeting their commitments. It is also a means to strengthen international cooperation within the framework of the Paris Agreement.
- The robustness of transparency reports obviously depends on data, which also gives credibility to countries' actions and strengthens trust between countries.
- The IPCC guidelines are based on emission source categories. There are three tiers in the emission factors, Tiers 2 and 3 are higher tier methods that allow for greater accuracy and completeness of data. In Africa, some countries are not able to adapt the higher categories due to lack of means and capacity, so countries will use Tier 1 factors



#### Presentation on issues related to governance:

**Jouairyatou Wague**, Project manager at Association Bilan Carbone – Governance and carbon database methodology



The Association Bilan Carbone has been carrying the Carbon accounting methodology in France since its creation 10 years ago. Since 2016, the Association has also been working internationally, notably through a partnership with ADEME and the CDP on the ACT (Assessing low Carbon Transition) project.

- Since 2020, ABC has been working on how and why build a carbon database? Worldwide, there are about 8 databases for emission factors (accessible according to different criteria).
- Carbon assessing is emerging at different scales (territories, companies, associations, States, etc.).
- First need for carbon accounting: a tool to access emissions factors. We must try to understand where the emissions factors of this tool come from and whether it is relevant in the sense that it corresponds to local realities on the ground?
- The objective is to have a national or regional database because the specificity of the emission factor will relate to certain fields of activity (energy, waste, travel, etc.). => Emission factors are really the heart of carbon footprint assessment and GHG emissions reduction.
- Standard emission factors (international data) do not reflect the realities of the local authorities. Adapted emissions factors reflect what is happening on the ground. Once the emissions factors are available, assessments to monitor the emissions of organisations can be produced and will help to raise awareness and educate about climate change more generally.
- How to build a carbon database?

There is a need for data, but also human resources (skills), financial resources (to support the database with software), as well as a range of actors representing users, institutions, governance, etc.

# • Example: ADEME's carbon database:

o Free to access with over 3,000 users per month and 5,000 emission factors updated twice a year.



- o Uniting all actors working on the development of these emission factors → private and public actors are incited to share other emissions factors found from their studies.
- o United actors are at the heart of the Carbon database, so it is essential to identify all existing projects and include them in the carbon database, but also to focus on sharing skills and activities.
- o Carbon database users can also be represented within the governance committee → importance of being a structure instead of a physical person.

The construction of a Carbon Database is a long-term project. This collaborative work brings together numerous structures and is an opportunity to develop an ecosystem of skills, gain maturity and raise awareness of the issues involved in the transition.

Reaction - **Regis Meyer** Ministry of the Ecological Transition, France (former negotiator at the UNFCCC):

Primary emission factors (gas combustion, coal, etc.) and transport-related factors (kilometres travelled by truck, car, etc.) - the emission factor is always very related to what is being measured. For the UNFCCC inventory, the emission factors aim to have additive direct emissions so as not to double-count countries' emissions. For the carbon balance, the goal is closer to the carbon footprint, i.e. Scope 1, 2 and 3, which are direct, induced emissions from the energy sector and others.

It is important to have two approaches:

- Non-additive
- Linked to a responsibility (close to the carbon footprint) which must therefore differentiate the emission factors according to the perimeter.

**Abdelrhani Boucham**, Head of Climate Change service, Moroccan Ministry of Energy, Mines and Environment



With the UNFCCC national inventory, development of a national system for GHGs with a decree of 2019 and things are structured, the departments concerned provide the information for the output of reports or NDCs.

- There is a big gap between the carbon accounting methodology and the national inventory methodology.
- The Ministry uses the 2006 IPCC methodology and was able to recalculate emissions using the new methodology. This has led to a 20% improvement in the greenhouse gas inventory.
- For the Carbon Database, Morocco was able to benefit from a programme (RMP) of the World Bank, 3 sectors (cement, phosphate, and electricity) with the aim of finding mitigation measures for these sectors and involving private actors.
- Ambitious mitigation targets have been set in the NDC for the three targeted sectors of electricity production, cement, and phosphates. GHG emission reduction potential of 42% for electricity production, 6% for cement and around 3% for phosphates.

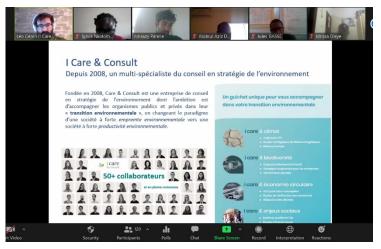


- 3 scenarios are based on criteria of efficiency, acceptability, and ease of implementation.
  - o 1st scenario that respects maximised environmental integrity and consists of having a short-term carbon tax followed by quota trading
  - 2nd scenario: maximized acceptability with an incentive instrument only, tax reduction based on the emissions reductions achieved compared to the trend scenario. This scenario does not quarantee effectiveness.
  - o 3rd scenario: optimised level of effort through the introduction of a carbon tax that is relatively easy to implement from an institutional point of view. Its limited acceptability can be improved by measures to transform existing taxes and redistribute the tax revenue.
- For these calculations, Morocco was able to use its national inventory for energy data. There are also national emission factors for freight that have just been developed for 2020 in collaboration with Citepa France.
- African countries lack the means and experience or expertise to build new adapted emission factors.

# Presentations on technical issues and field experiences:

• **Léo Genin**, Managing partner in charge of the public sector, I-Care & Consult – On building emission factors and experience feedback on urban mobility in Morocco/Tunisia.

Development of emission factors adapted to the context of Morocco and Tunisia to carry out an assessment on a local scale and in a "carbon footprint" approach.



#### 3 Tiers of emission factors:

- ⇒ primary emission factors provided by the IPCC and relating to combustion.
- ⇒ Emission factors for electricity production provided either by the International Energy Agency or on a case-by-case basis.
- ⇒ Specific emission factors provided by ministries, companies, NGOs, federations.

For the primary emission factors, the uncertainties are small but for the specific ones the uncertainties increase rapidly because of many different assumptions.

# - Example of Morocco on the emission factors of electricity:

- Data are available but not free of charge from the energy agency. Some reports of the Ministry of Energy can take up these data, which are particularly useful in the context of the assessment.
- It is useful to have these primary emission factors on electricity because this is what will allow the development of specific emission factors for the use of the tramway for example...
- Construction of specific emission factors (example of transport):
- Emission factors are developed with a view to carbon accounting at the scale of a company or a territory, in a "footprint" logic to identify responsibilities and levers for action.



- Describe the sector in more detail, particularly for road transport, which is developing EFs by type of vehicle or by use.
- Integrating carbon weight into vehicle manufacturing
- Adjust fuel consumption by vehicle type adapted to the country's context.
- Constructing specific emission factors can be of interest to companies and help create an ecosystem at the local level.
- The construction of specific emission factors is a project in itself; it takes time and requires significant means and a strong institutional sharing.

**Georges Kuate**, Focus on land-use and forests – lessons from emission factors in the AFOLU sector and feedback from Burkina Faso:

- The AFOLU sector in Burkina Faso represents 85% of the country's emissions. Burkina Faso's vulnerability sparked several initiatives, quite early in relation to the current international interest in climate change.
- Burkina Faso is currently finalising its third national communication. So far, Burkina has
  based its communication on the IPCC guidelines, with emissions factors as default. At the
  national level, REDD+ should be considered, which since 2015 has enabled the
  development of forest reference levels. More country-specific emission factors have been
  developed. At the activity level, the IPCC accounting level does not allow for monitoring
  activities in the field, so a lot of work has been done to develop specific activities such as
  improved cookstoves and reforestation.
- REDD+ has really enabled Burkina Faso to make progress in terms of data by capitalising
  on the information already available. Carbon reservoirs have been identified
  (underground biomass, above-ground biomass, soil organic carbon and dead wood). As
  with the above-ground biomass, there were already some achievements with the forest
  inventories carried out at the national level.
- Thanks to REDD+ support, a study was launched which allowed the development of emission factors for the root biomass and thus much more specific emission factors for the AFOLU sector.
- The availability of data was the greatest challenge because the data existed but was
  in several institutions, and to access it several forms of collaboration had to be set up.
  This experience made it possible to understand the importance of creating a
  mechanism at national level for the exchange of information and data sharing.



Menti survey results:

