

## **Draft for Hamburg**

### **Carbon measurement initiatives in France**

A call for the deployment of effective carbon competition has just been launched in France.

This will come as no surprise to participants in this workshop, as it is based on the concept developed by co-organisers Karthik Ramanna and Ulf von Kalckreuth. We found it independently later, in 2022, and baptised Carbon accounting measurement, because it is based on accountants (those of companies and national accountants). For simplicity's sake, in what follows I will refer to this shared concept as the Concept, with a capital letter.

Since then, the work has been carried out by a community of volunteers, Carbones Sur Factures, which includes a number of economic statisticians from ENSAE. It has been published in articles in the ENSAE journal (Variances.eu) and on the carbonnes-factures.org website.

### **Four choices**

Our objective, rapid deployment of the Concept, and nearly 200 interviews with people concerned have convinced us of the strengths and weaknesses of the Concept: it is only enlightening for a limited number of people, in a field that requires collective mobilisation. Hence the strong choices (below) that have led to the diversity of support for the Appeal: accountants, financiers, statisticians, economists, but also entrepreneurs, scientists, citizens and associations from all political backgrounds.

#### **1- Linking carbon to the environment rather than just the climate**

Forty years of effort to measure carbons run the risk of dissolving into batteries of environmental measures that fragment energies on a complicated issue. We need to measure carbon for the climate, for water, but ALSO for biodiversity, since carbon in the atmosphere is the primary cause and the primary symptom of the growing suffering of animals, plants and all other living organisms down to the infinitely small.

#### **2- Emphasise carbon competition, accounting is only a means to an end**

Many people are afraid of accounting, whereas competition speaks to everyone. It leads to carbon competitiveness and carbon performance, concepts that speak to companies. It highlights an enormous advantage of the Concept: by starting with the product and displaying its weight to the customer, it enables competition between comparable products. It triggers decarbonisation: as none of its customers is completely indifferent to carbon, every company is obliged to take an interest in it too.

#### **3- Offering a free instant solution for VSEs and SMEs**

There are more than 20 million SMEs in Europe that do not track their carbon performance, and they risk being caught off-guard by the carbon transition and the CSRD. To convince them of the cost-effectiveness of the Concept, we have developed a "Do It Yourself" offer: a free calculator which, with a few basic pieces of information (branch, turnover excluding VAT and

invoices additions once a year) gives the company the carbon weight of its products, its decarbonisation performance, and a file to have the measurements validated by a trusted third party.

We have achieved this by clearly indicating the minority of companies that also need environmental advice and/or an accountant and offering for these exceptions (which make most of the GDP) a simple tutorial for accountants. And by using a single emission factor in the calculator for non-energy purchases without their carbon content: it comes from the national carbon accounts (Eurostat's Figaro database) for the company's branch.

We are now working to develop partnerships with consultants who will incorporate the tools (which are free of charge and copyright) into their accounting or environmental consultancy services.

#### **4- Extending carbon competition to financing**

In order to extend carbon competition to financing, the carbon performance, i.e. the annual contribution to decarbonisation of the producer(s) financed, must be displayed on each loan. There is one obstacle: the current measurement of companies' carbon footprints is not additive, because it mixes the company's performance with that of the entire upstream supplier tree.

One advantage of the Concept is that it divides the carbon footprint between carbon weight and quantity (just as the monetary economy divides value between price and quantity). We have mathematically decomposed the variation in the carbon footprint to arrive at an additive measure of the company's contribution to collective decarbonisation (equivalent to the additive measure of the company's added value). This breakdown is shown in the appendix and is open to comments from participants.

The simplified formula enables the calculator to automatically produce this additive decarbonisation performance. By collecting the performance of the company financed, each bank is able to calculate the carbon performance of its portfolios, and therefore, for its structuring activity, to pass on to savers and investors the annual carbon performance of their money.

#### **Four necessary developments in official statistics**

I will conclude by indicating what this approach suggests about the priorities of official statistics, a theme of this workshop.

##### **1- A cost-effectiveness benchmark of carbon measurement processes**

This is necessary to help companies (the vast majority of which do not yet measure their carbon performance) and public authorities who wish to provide performance measures for the transition. What is the best combination of the Concept approach, LCA and GHG Protocol-type processes?

Our initial work shows that the cost part of the benchmark is easy and that we can make progress on effectiveness: if we concentrate on non-energy purchases, which is the only area where the processes differ; and if we take into consideration both dimensions of efficiency:

- Statistical accuracy (including the room for manoeuvre left to the experts by the process) based on the average and intra-branch dispersion of monetary emission factors for non-energy purchases.

- The acceptability of the measure to the company and its customers in a context of carbon competition: the GHGP captures intra-industry volatility better but may be biased; the Concept captures the average better, initially masks volatility but converges better.

## **2- Helping companies measure their environmental performance**

One priority is to enhance the Figaro tool, particularly for imports and intermediate consumption excluding energy: to better identify dispersion within branches, and to project data to help companies build their carbon trajectories.

Another priority is to closely monitor the weight of carbon-sensitive products: fuels, energy and CBAM products. Producers' and importers' obligations should include reporting their carbon weights to the public statistics authorities. The latter will be able to construct average weights (important for measuring decarbonisation performance) and weights of a higher quantile to replace an importer's absent or unreliable weight.

## **3- Helping individuals to measure the environmental performance of what they buy**

More and more help is being given to consumers and savers to make informed environmental choices. Statisticians don't always have their say. The power of the Concept makes it a platform that can unify these labels around a reliable environmental measure, shared between producers, financiers, public authorities and citizens.

## **4- Extended national carbon accounting.**

The best translation of this unification will be a complete national carbon accounting system, in which the annual flow of carbon into the atmosphere is the equivalent of GDP, with national decarbonisation being the equivalent of variations in GDP.

This framework will include the carbon performance of all national economic players: companies (the decarbonisation of the company is equivalent to the variation in its added value), the financial sector (as indicated above), households (by difference, as in national accounting) and public authorities. It will also include the carbon performance of a 5th family of actors: that of living organisms "outside the monetary economy" (from earthworms to plankton). This is both necessary and possible since this performance can easily be integrated into a territorial approach.

Deploying the measurement of microeconomic carbon performance will make it possible to collect data (bottom up) that will enrich the footprint measurements (top down) of these national carbon accounts (the same dynamic as for the national monetary accounts).

In conclusion, the Concept should be the basis for a collaborative, concrete and ambitious international construction: if we learn to measure and display monetary performance and environmental performance side by side, we will be leaving our children a completely different economy: capable of balancing monetary and environmental performance in a fair and sustainable way.