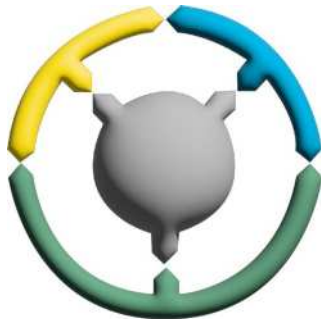


Transposing the accountants' approach to the environment:

A simple, reliable and universal measure of environmental performance



Jérôme Cazes, co-founder of Carbones sur factures,
carbones-factures.org

Hamburg workshop on carbon content measurement
21-23 February 2024

Carbones sur factures (or Carbon on invoice) is a **collective of volunteers**

Creation: After independent discovery in 2022 of the same concept as E-Liability of Karthik Ramanna and Ulf von Kalckreuth

Transposing the accountants' approach to the environment

Objective: The roll-out of what we call the Environmental Accounting Measure or EAM

We suggest developments relating to the measure of **the 2 key environmental performances:**

carbon footprints of
products and waste

carbon footprints of
companies and financing

(We indicate in red how they respond to the questions to the panellists)



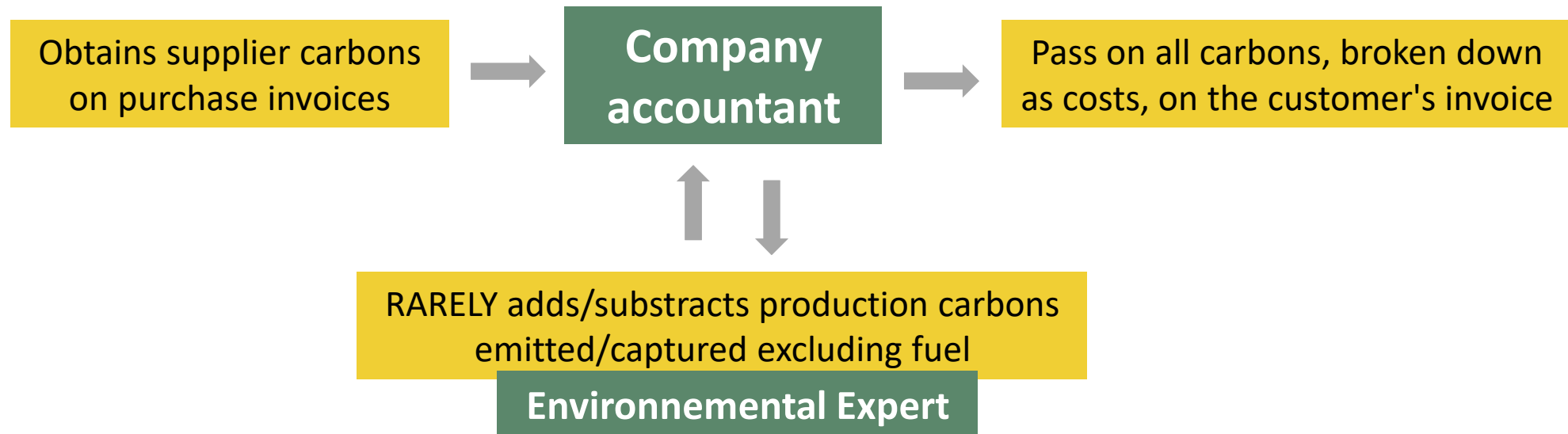
Product carbon footprint, the corporate accountant way

Data move on invoice

Same ABC as for costs

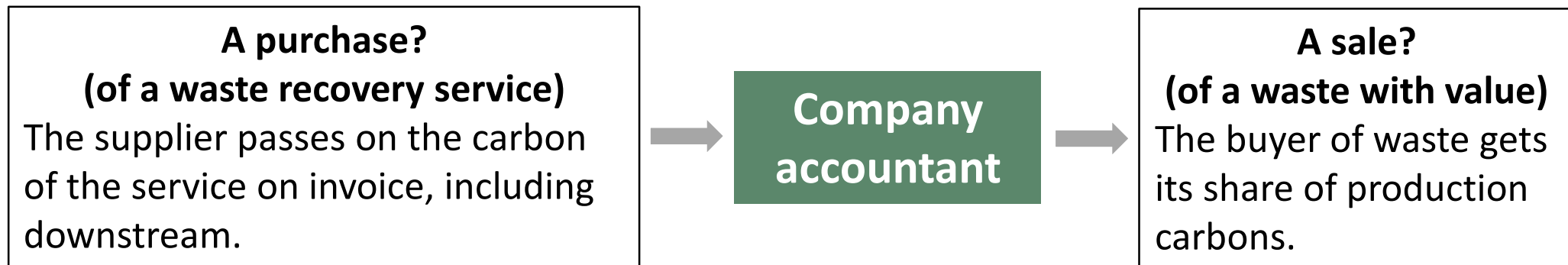
Current methods ask each company to do the measure on its own.

EAM and E-Liability split the measure between company accountants: its simpler and more reliable.



The approach works for waste footprint

The carbon footprint of waste is measured in the same way through a simple alternative:



Footprint is complete « from the cradle AND from the grave to the gate ».



What if a purchase invoice has no carbons on it? (or the chicken-and-egg problem)

Industry/region emission factors inside

- Public emission factors exist for an energy purchase invoice (scope 1 and 2) with no carbons on it.
- For non-energy (scope 3) invoices a good proxy is the average emission factor for the activity/country of the company

It is available from national accountants Input Output Tables (Eurostat Figaro) crossed with atmospheric emissions accounts

**Gradual
convergence**

**reassures producers,
customers and the community**

- from the macroeconomic average
- towards product's true weight



Our calculator unlocks the roll-out

Minimal cost

Audit friendly

Based on EAM we built an **online tool (on carbones-factures.org)** that gives accountants their company's key environmental performance.

- **A tutorial** (short since based on accounting principles)
- **A calculator** (simple data known at closing)



- The carbon footprint of products (and of the company)
- Its contribution to decarbonisation (our next point)

-The 22 million European VSEs and SMEs
-Their partners - accountants, consultants, banks, big companies, IT solution providers, etc.

...are invited to **take advantage of this free and open tool.**

From products to companies environmental performance

The accountants approach gives an accounting measure of



A poor company performance measure

- Double counts upstream performance,
- Forgets substitution, when a product replaces a lighter or heavier competing product
- Does not clarify collective performance (rebound effect)

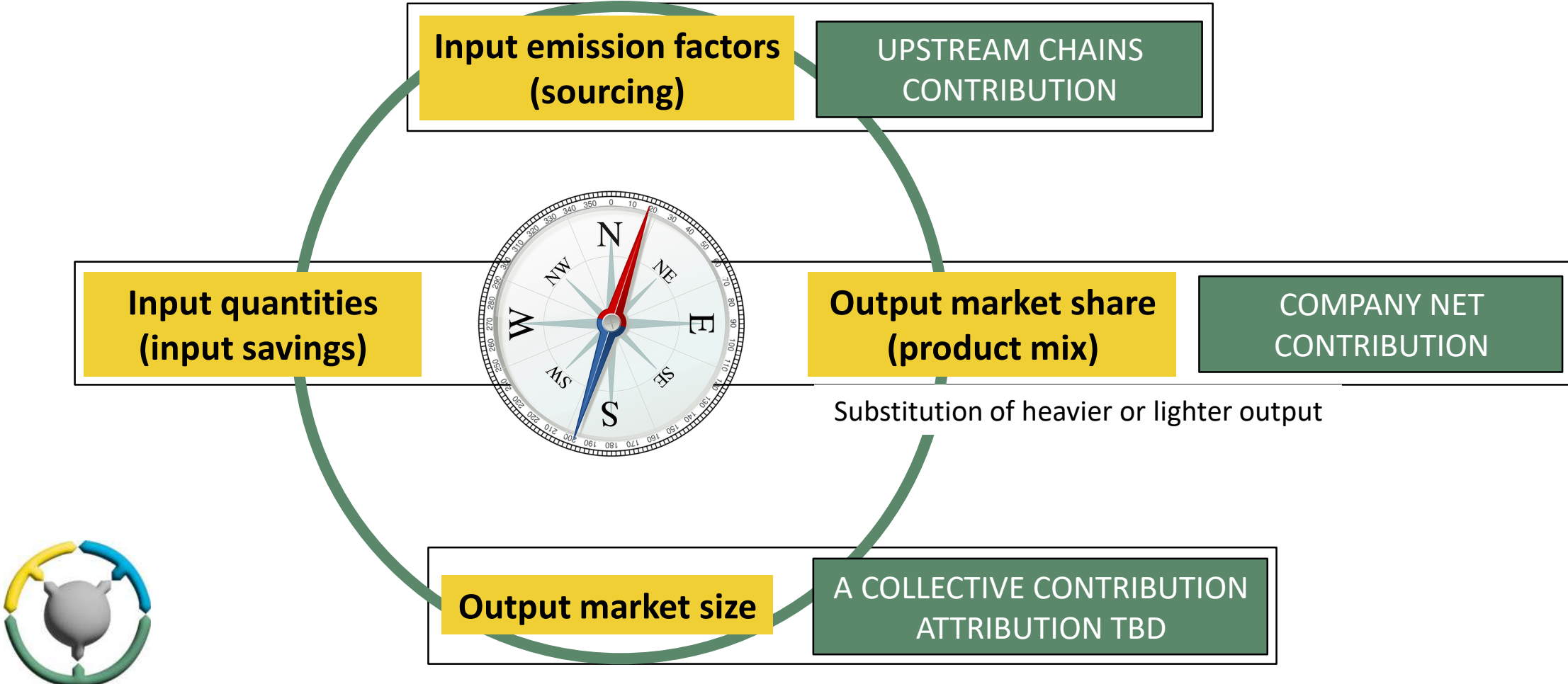
The EAM corrects this.
(mathematical demonstration in the written document)



1- A company footprint variation can be split into 4 contributions

Cost-effectiveness (2 performances for 1)

Triggers decarbonisation decisions



2- Financing contribution to decarbonisation

Cost-effectiveness (3for1)

Triggers decarbonisation decisions

A company's contribution is easy to transpose to its financing.

- **Corporate finance obtains a quantitative environmental performance equivalent to monetary results**
 - Company contribution trajectories are easy to construct. A compass for:
 - . Best environmental opportunities
 - . Future stranded assets
 - Ex post, these (additive) contributions pass on along the financing chains
- **Environmental competition between investments accelerates decarbonisation**



3- Contribution of decarbonisation solutions providers (carbon avoided or “scope 4”)

Triggers decarbonisation decisions

This is a key performance (through their advice, machines, processes, etc.) **poorly recognised.**

- All avoided carbons go to their customer
- The more they produce, the worst their footprint variation

The accounting framework for contributions allows them to be shared without double counting.

- Supplier and customer negotiate a sharing agreement on the expected contribution
- Then, the transfer of contribution is recorded by both accountants (like an invoice)

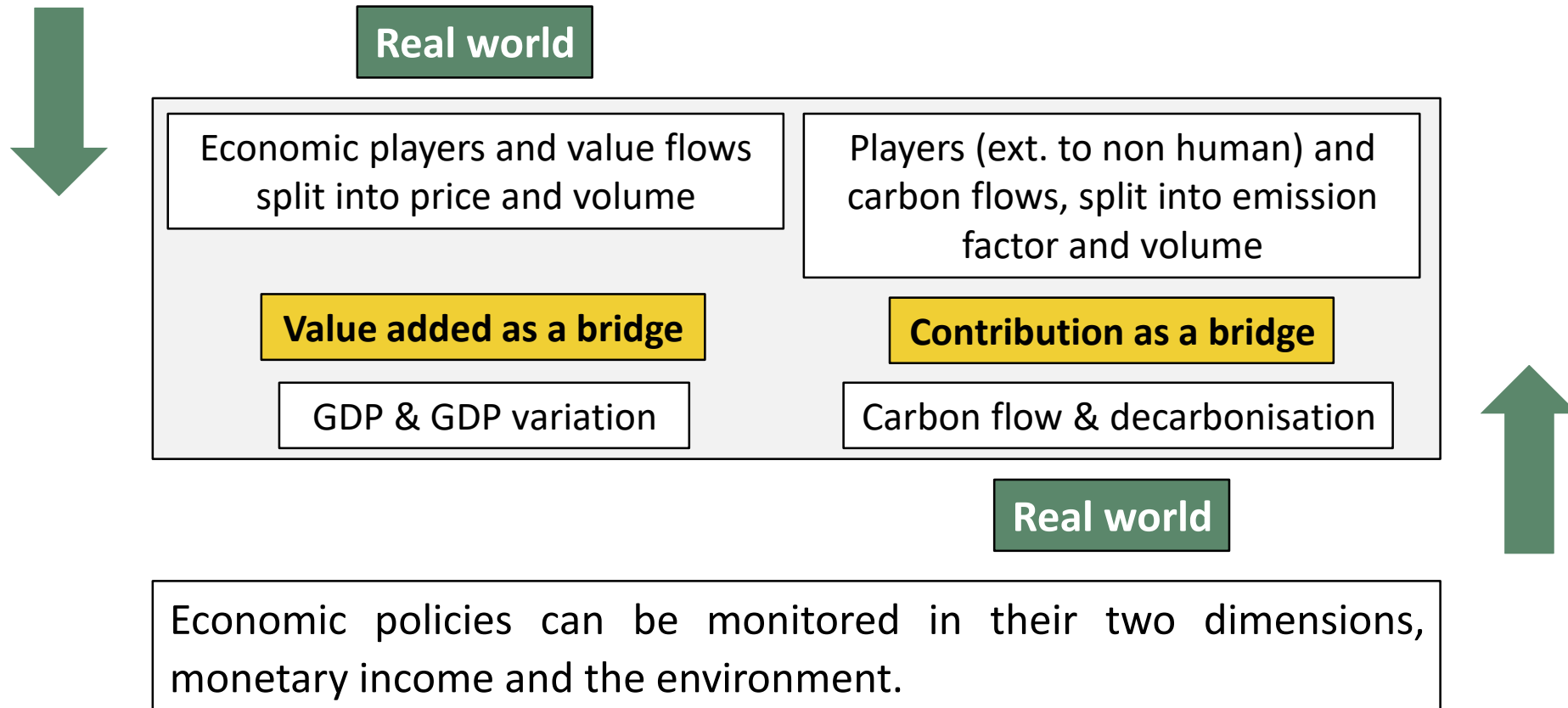


Finally, national accounts can reconcile all data

Cost-effectiveness (4for1)

Data consistency

Contributions make possible interlinked monetary and environmental national accounts.



The accountants' approach sends a consensual promise

For every decision, whether personal, professional or political,

1 performance for income
cost or monetary result

1 performance for the environment
carbon weight or contribution to
decarbonisation

Fair competition in both dimensions brings

The efficiency
of continuous improvements in revenue
and environmental performance

The freedom
to reconcile your values between
income and the environment

