

The Augmented National Accounts program at Insee

ACN conference 20/06/2024

S. Roux

AUGMENTED NATIONAL ACCOUNTS

20/06/2024

GDP IS THE STANDARD FOR MEASURING THE ECONOMIC ACTIVITY

- Comparability over time and between countries
- Relies on a comprehensive information system : The System of National Accounts
- Very regularly published (each quarter) and commented
- 4 main uses :
 - Synthesis of the economy
 - Describes the evolution of income, power purchase
 - Performance of public policies
 - Reference indicators used in ratios (e.g institutional use)

LIMITS TO GDP WELL IDENTIFIED

- Boundaries : domestic production ?
- GDP is not an indicator of wellbeing (although some expect it to be!)
 - Defensive expenditures : safety, environment
 - Economic activity induced by disasters
- Macroeconomic indicator, says nothing on inequality
- Measure of the current economic activity, says nothing on its sustainability

STIGLITZ-SEN-FITUSSI REPORT (2008)

- Idea of a dashboard of indicators covering beyond GDP dimensions but :
 - No coherence between them or with national accounts
 - No synthetic vision
 - Difficult to interpret and to use for public decision
 - Illustration: Wealth Indicators of the Eva Sas law

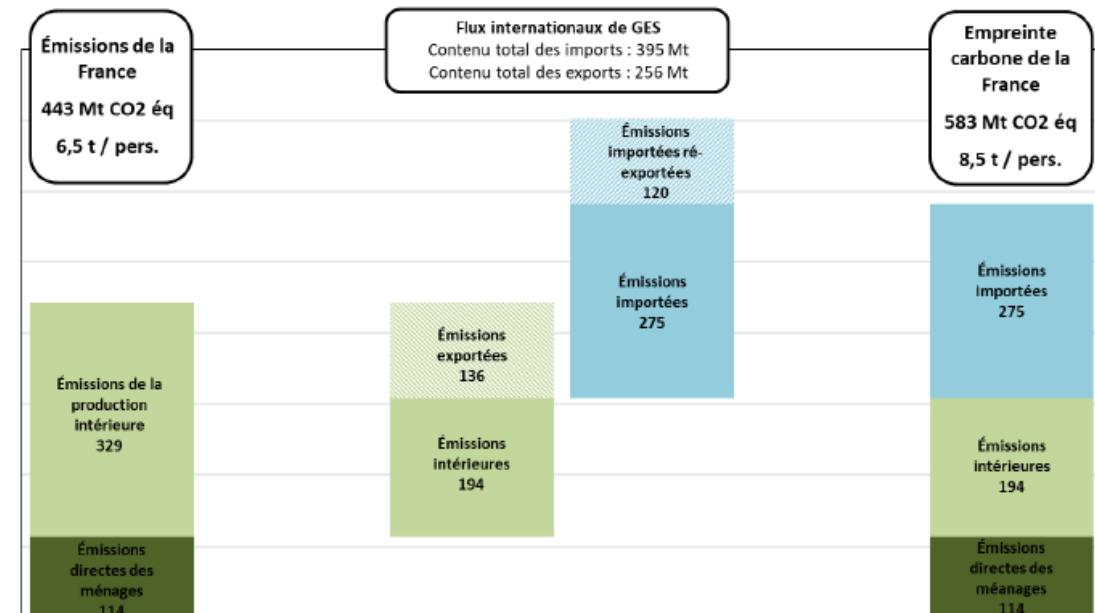
- G20 Data Gap Initiative : focus on climate change and inequalities
- Update of the SNA : Guidance notes on Wellbeing and Sustainability
 - Inequalities, Household work, Human capital (education and training), Health and living conditions, Environment
 - Focus for the need of a consistent system of information with national accounts
- Expertise accumulated since the report:
 - Studies at Insee on carbon footprint and distributional accounts
 - Expert groups in OECD and Eurostat
 - Academics
 - Many papers on inequality or environment
 - Beyond GDP chair

PROJECT

- Building an information system supporting the regular (yearly) production of statistics on environment and income distribution consistent with the national accounts
 - Carbon accounts: emissions and footprint
 - Distributed national accounts (including household sector, but not only)
- Integrating the analysis of environment or inequality and economic activity
 - Expands the types of analyses that can be conducted
 - Building and installing new synthetic indicators still to be defined
- Publishing and disseminating each year these statistics and analyses
- Investing in other topics (Domestic work, Health, Human Capital, ...)

FRENCH CARBON EMISSIONS INVENTORY AND FOOTPRINT

- Publication on 2023
- From the inventory to the footprint
- Role of import/export flows
- Presentation of carbon intensity in t/€ :
 - In added value (production approach)
 - In final demand (demand approach)



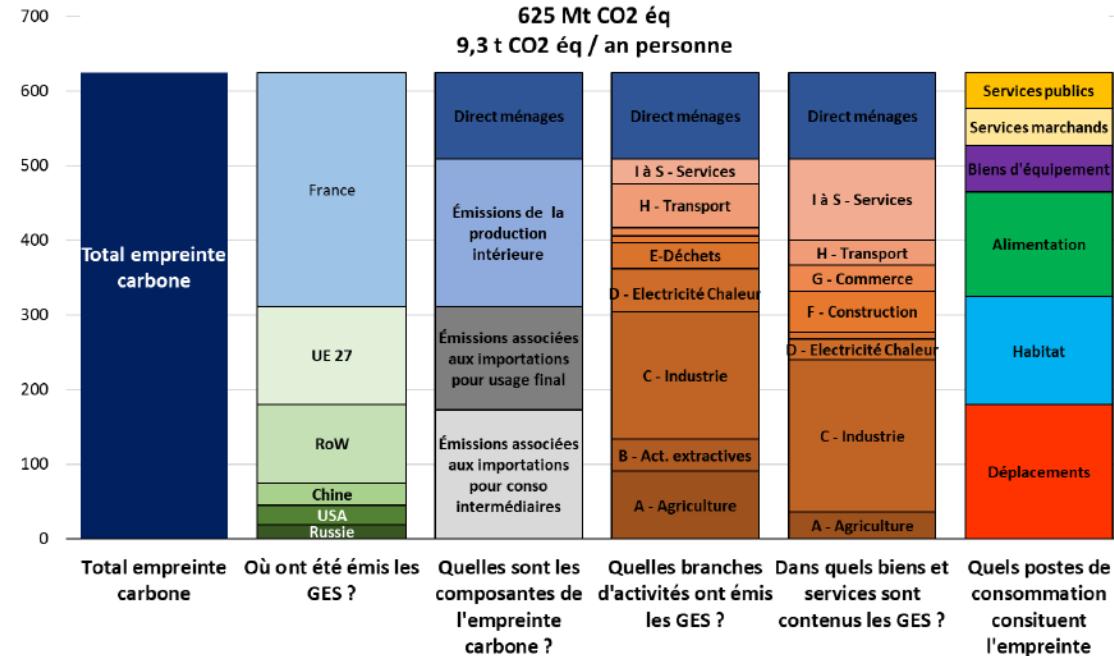
Note : Figures are here illustrative

SUPPLEMENTARY TABLES ON EMISSIONS AND FOOTPRINT

- Tables allowing to match emissions and footprint with economic figure
- 64 industries (AEA classification)
- Detailed gaz (CO₂, CH₄, N₂O, ...)
- 46 countries or regions
- 6 final demand components

Décompositions de l'empreinte carbone de la France
625 Mt CO₂ éq soit 9,2 tonnes de CO₂ éq par personne

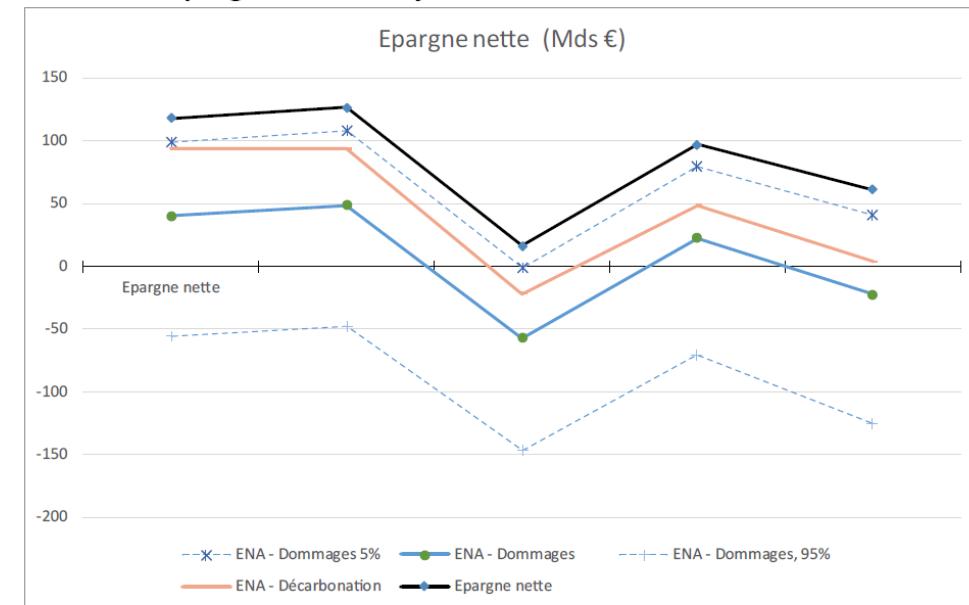
Empreinte carbone de la France et ses décompositions



ECONOMIC PERFORMANCE INDICATOR ACCOUNTING FOR GHG EMISSIONS

- Still in progress
- Different possible synthetic indicators :
 - Two approaches : damage-cost or efficiency-cost, different shadow prices of carbon
 - Applied to the footprint or the inventory ?
 - Net Savings and Net Domestic product
 - Measure of a climate-related debt

Figure 1 : évolution de l'épargne nette et ajustée entre 2018 et 2022



Lecture : ENA – Dommages correspond à l'épargne nette ajustée selon l'approche coût-dommage (i-e en appliquant le prix du carbone à l'empreinte, i-e son coût social). Les valeurs correspondant à 5 % et 95 % correspondent aux valeurs d'épargne nette ajustée reflétant l'intervalle de confiance des prix du carbone dans cette approche. ENA-Décarbonation correspond l'épargne nette ajustée selon l'approche coût-efficacité (i-e en appliquant le prix du carbone correspondant à la VAC à l'inventaire des émissions).

TWO TYPES OF DISTRIBUTIONAL ACCOUNTS, GROUNDED, COHERENT AND COMPLEMENTARY :

- **Distributed Household Sector accounts :**
 - Concerns the household sector (S14), studies income, consumption and savings
 - Published by Insee since 2009, by quintile, age and occupation, but not regularly
 - Implemented in the revision of the SNA
- **Distributed National Accounts**
 - Distribution of all national income
 - Definition of enlarged primary income (before transfers) and enlarged standard of living (after transfers, including in-kind), and many intermediary components
- **Dissemination of account tables by different categories**
 - Income level, age, household type, location, ...

See Mathias presentation !

CONCLUSION

- Articulation between statistics whose initial concepts may strongly differ
 - Search for coherence (e.g. between social statistics and national accounts)
 - May help to build a stronger and clearer message
- A strong demand for a synthetic view :
 - International initiatives
 - Academic work
- At the frontier between analytical studies and statistical production
 - Experimental statistics
 - May rely on complex modelisation or normative choices
- Importance for Insee and the public debate to go beyond GDP !

PERSPECTIVES

- First publication of household distributed accounts and carbon accounts in november 2024 :
 - 2 descriptive publications presenting each account (with the data producers)
 - Carbon accounts on 2023
 - Distributed accounts on 2022
 - 1 or 2 more analytical studies relying on the previous ones, possibly presenting synthetic indicators as experimental statistics
- On a longer term :
 - Building synthetic indicators, reflecting wellbeing and/or sustainability
 - Valuation of the natural capital (in the scope of the SNA and SEEA)
 - Distribution of household greenhouse gaz footprint
 - Other dimensions : domestic production, human capital, health, ...

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insee.fr



Mathias ANDRÉ & Sylvain LARRIEU
Département des comptes nationaux
Sébastien ROUX
Programme des comptes nationaux augmentés

AUGMENTED NATIONAL ACCOUNTS

MEASURE OF THE CARBON FOOTPRINT

- Lenglart, Lesieur, Pasquier, 2010, « Les émissions de CO₂ du circuit économique en France », *Insee-Références, L'Économie Française*
- Use of Input-Output matrices from the National Accounts

ACCOUNTING FOR ENVIRONMENTAL DEGRADATION IN NATIONAL ACCOUNTS

- André Vanoli's reflexions in « unpaid environmental costs »

GROWTH SUSTAINABILITY WITH RESPECT TO CLIMATE CHANGE

- Germain, Lelouch, 2020, « Prix social du carbone et engagement pour le climat : des pistes pour une comptabilité économique environnementale ? » *Insee-Analyses*

DISTRIBUTED ACCOUNTS OF HOUSEHOLDS

- Accardo, Bellamy, Consalès, Fesseau, Le Laidier, Raynaud, 2009, « Les inégalités entre ménages dans les comptes nationaux, une décomposition du compte des ménages », *Insee-Références, L'économie française*.

DISTRIBUTED NATIONAL ACCOUNTS

- Germain, André, Blanchet, 2020 « Rapport du groupe d'experts sur la mesure des inégalités et de la redistribution », *Insee-Méthodes*
- Accardo, André, Billot, Germain, Sicsic, 2021 « Réduction des inégalités : la redistribution est deux fois plus ample en intégrant les services publics », *Insee-Références Revenu et Patrimoine des ménages*

A SYNTHETIC INDICATOR: « REAL FEEL GDP »

- Germain, 2020, « Du PIB au PIB ressenti : en retrait sur le PIB, l'Europe dépasse désormais les États-Unis en bien-être monétaire », *Insee-Analyses*