The EU food system monitoring framework and dashboard

Presentation at policy seminar “Accelerating Action to Reduce Greenhouse Gas Emissions in the Food Value Chain”

Brussels, 13 June 2025

Outline

- What is the EU food system monitoring framework?
- Why to monitor?
- What to monitor?
- How to monitor?
- Data sources and data points of the indicators
- Example of indicator visualization
- GHG related indicators in the system
- Next steps

What is the EU food system monitoring framework?

https://datam.jrc.ec.europa.eu/datam/mashup/EU_FOOD_SYSTEM_MONITORING/index.html

https://publications.jrc.ec.europa.eu/repository/handle/JRC137971

- A tool to assess the transition towards the sustainability of the food systems in the EU
- Main components
  - A conceptual (data) model to describe the main elements FS and its sustainability aspects
  - Indicators to measure the state/progress
- Main deliverable
  - Dashboard published on 26/11/2024

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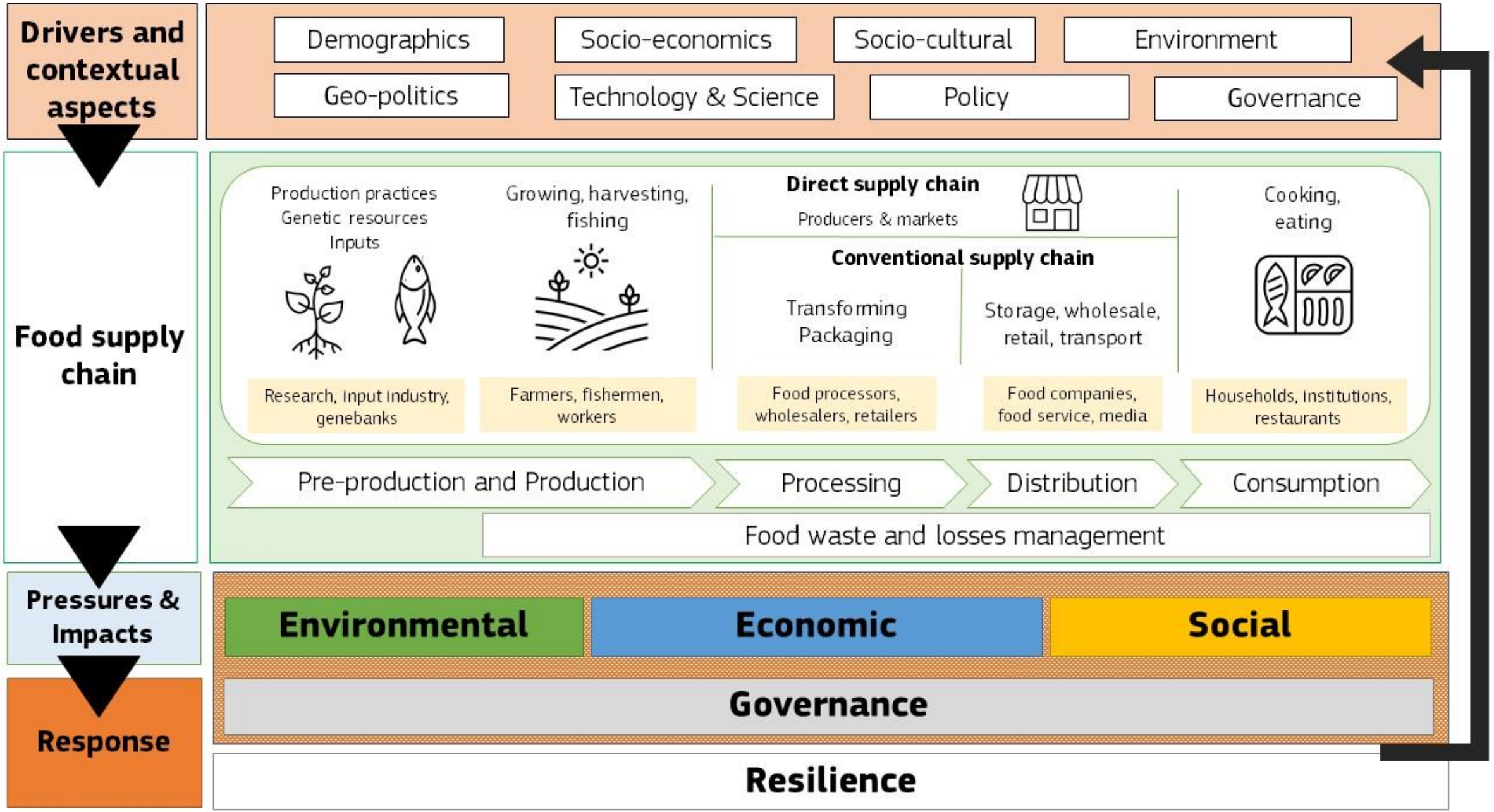
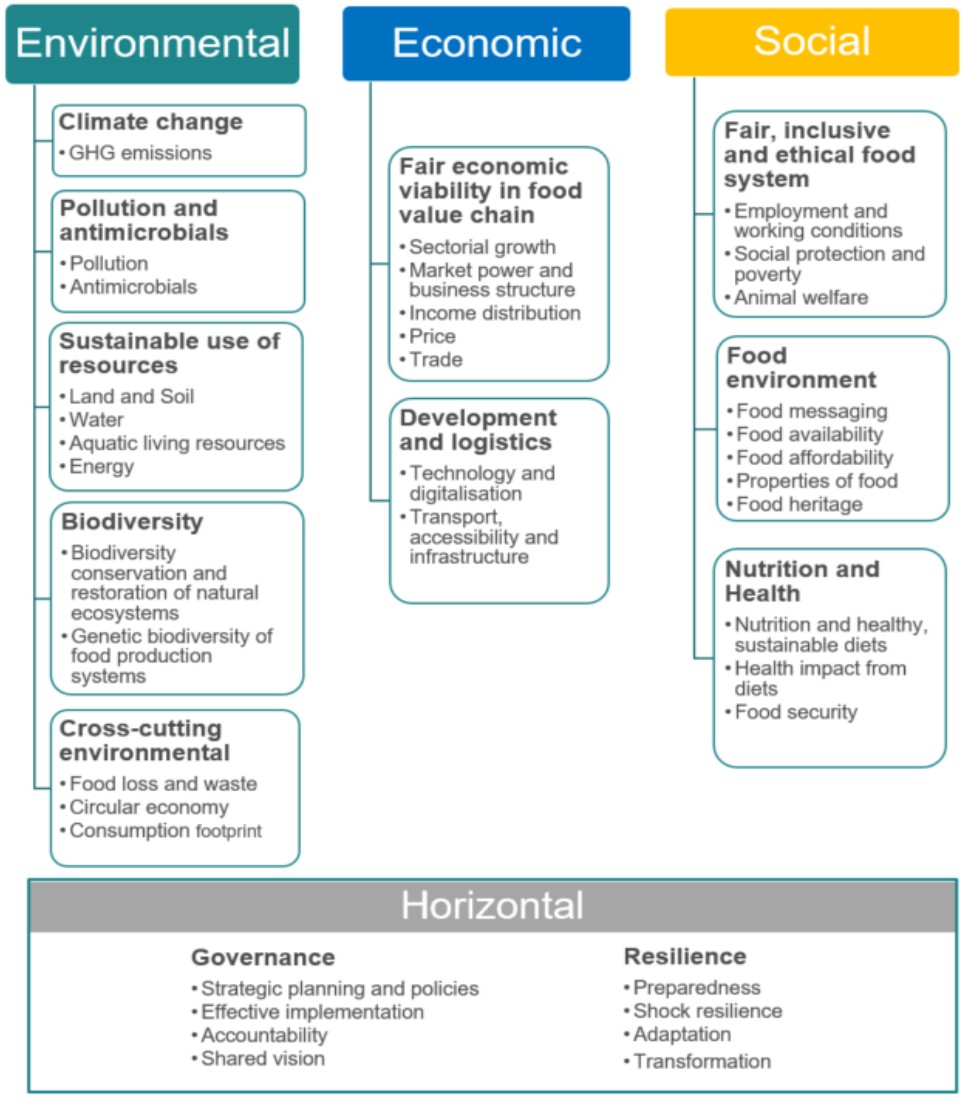
Why to monitor?

- Pivotal role of food systems to
  - preserve balance among environment and human activities (FAO 2024, 2018),
  - stay within the planetary boundaries (Conijn et al., 2018; Gerten et al., 2020; Springmann et al., 2018),
  - achieve Sustainable Development Goals (Food and nutrition security, Fair working conditions, Mitigating climate change).
- Collect knowledge scattered in different monitoring and reporting systems
- Track policy impact, foster research and dialogue

What to monitor?



How to monitor?



- **Holistic view of the food supply chain**:
  - primary food production
  - food processing
  - distribution
  - consumption (including health)
- **Comprehensive assessment of sustainability aspects** are organised in:
  - 3 thematic dimensions (Environmental, Economic and Social)
  - 12 thematic areas (out of which 2 are horizontal)
  - 38 domains
- **Select relevant indicators**
  - Screen existing for fitness for the purpose
  - Develop own (JRC)

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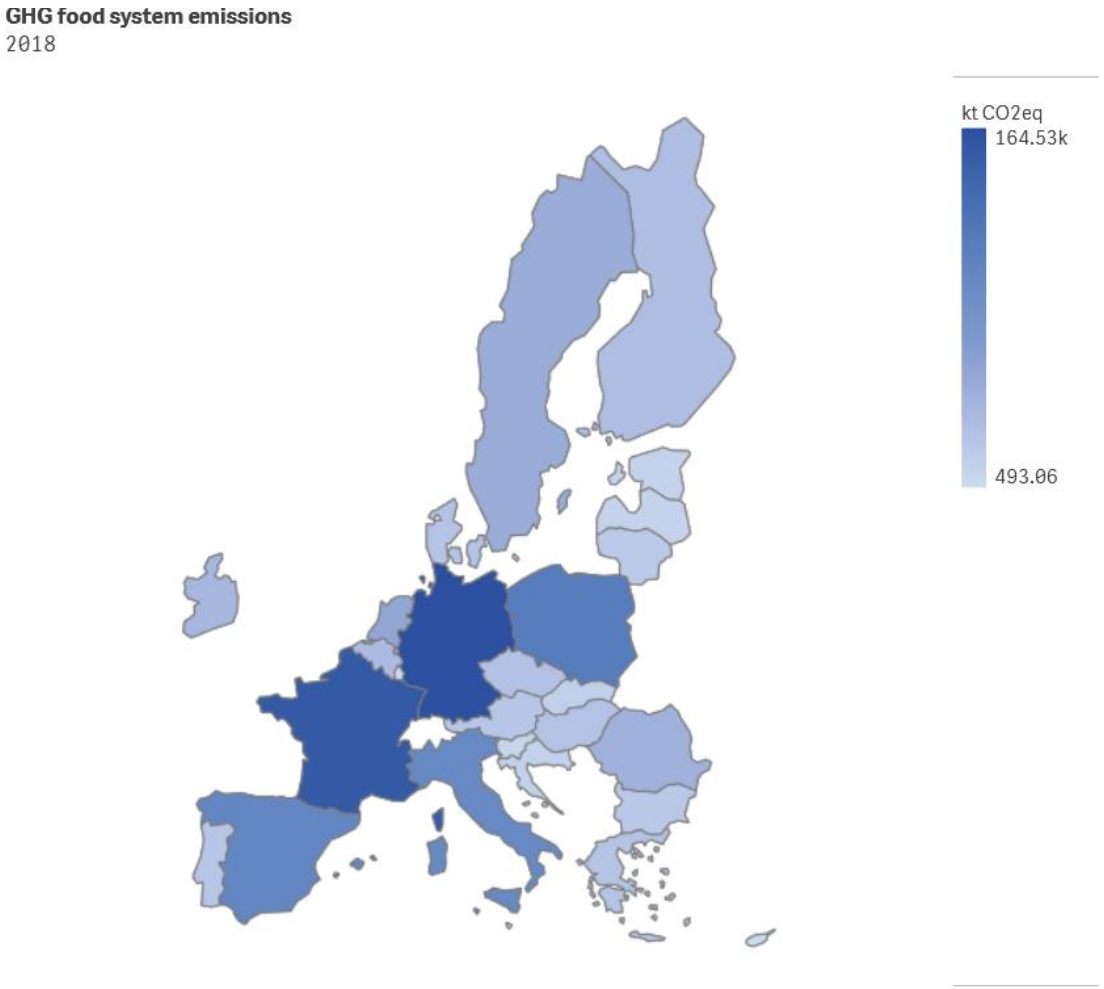
Data sources and data points of the indicators

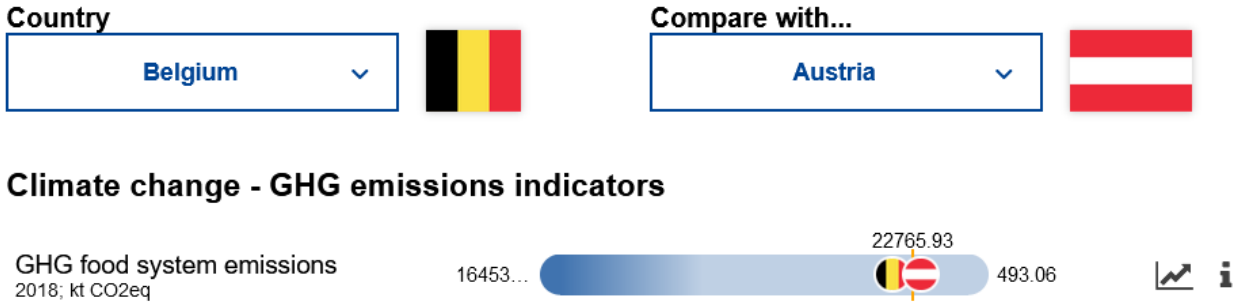
- Currently: public data (more than 300 indicators screened)
  - Statistics reported by MS to ESTAT,
  - Datasets of the JRC and EU agencies (includes both reported and modeled data),
  - Datasets of international organisations (FAO, OECD).
- In the future: other sources, e.g.
  - Market intelligence data
  - Outcome of observatories set up by Horizon Europe projects and partnerships
- Data points of the indicators in the dashboard
  - Frequency: in general yearly, but slowly changing phenomena may have longer intervals
  - Spatial resolution: most frequently at the level of MS. Some indicators (e.g. in Trade domain) are represented by a single value at EU-27 level.

Example of indicator visualisation



Source: https://edgar.jrc.ec.europa.eu/datasets/EDGAR-FOOD_v6.xlsx

- EU overview
- Country profile (also in comparison)



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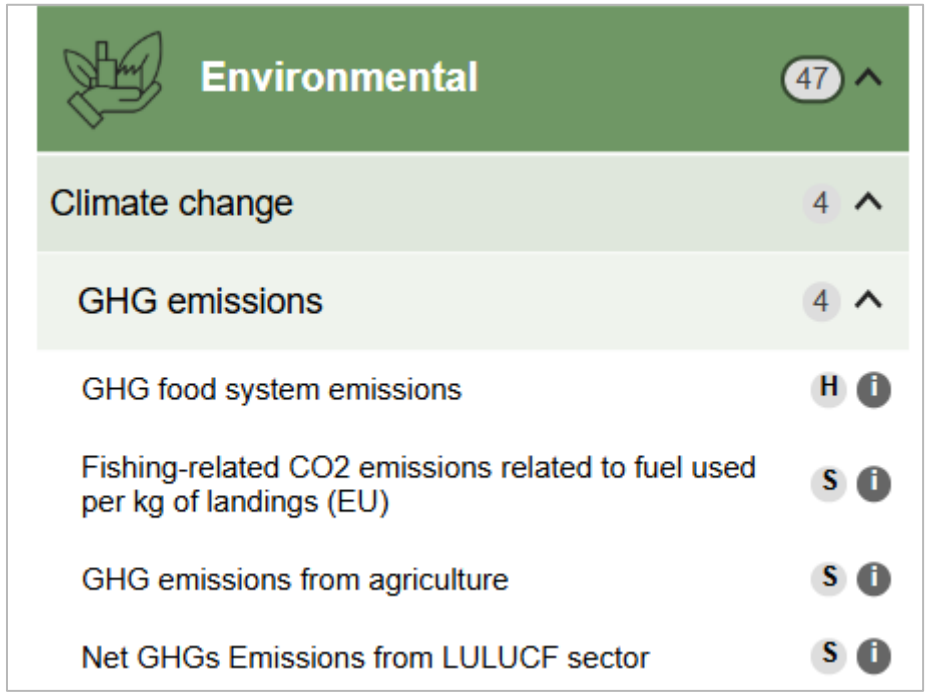
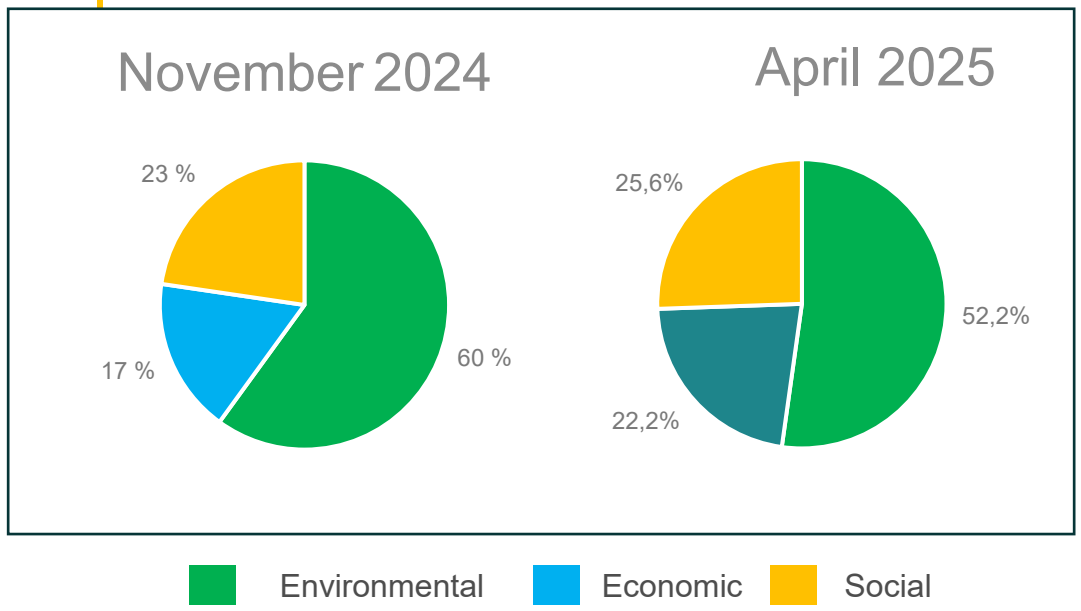
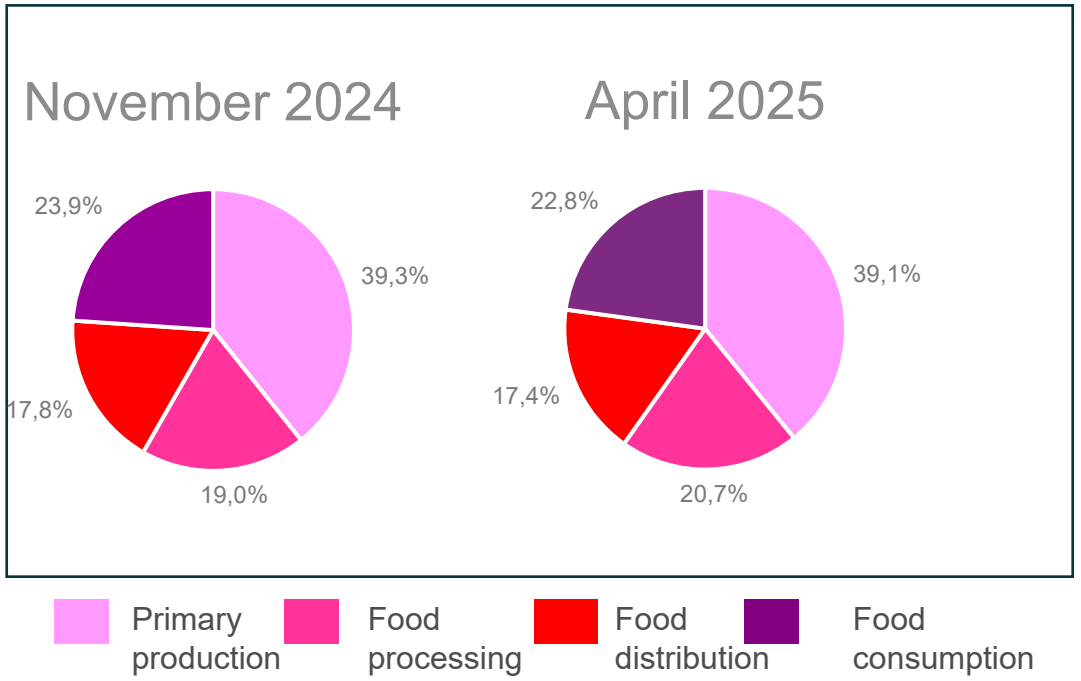
GHG related indicators in the system



- Publicly accessible indicators
  - One headline i(n the dashboard and the report)
  - Three secondary indicators (only in the technical report
- Other climate related indicators (adaptation) might be in other domains (e.g. agricultural practices beneficial for climate and environment in Sustainable use of resources - Land)





Next steps

- Development of new indicators giving priority to
  - Placeholders identified in the first phase of the project
  - Indicators linked to the middle of the supply chain food processing and distribution)
  - Economic and social indicators (to improve the balance with the environmental ones)
- Elaboration of the horizontal thematic areas (Governance and Resilience)
  - Scientific and technical framework for assessment
  - Indicators (including indices)
- GHG emissions – indicators on disaggregated level
  - In pipeline: emissions related to livestock and food processing industry

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Thank you !

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