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European  
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# Biodiversity footprints in policy and decision-making

Briefing on the state of play, needs and opportunities and future directions for biodiversity footprints in the EU context

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# Integrating biodiversity into decision-making

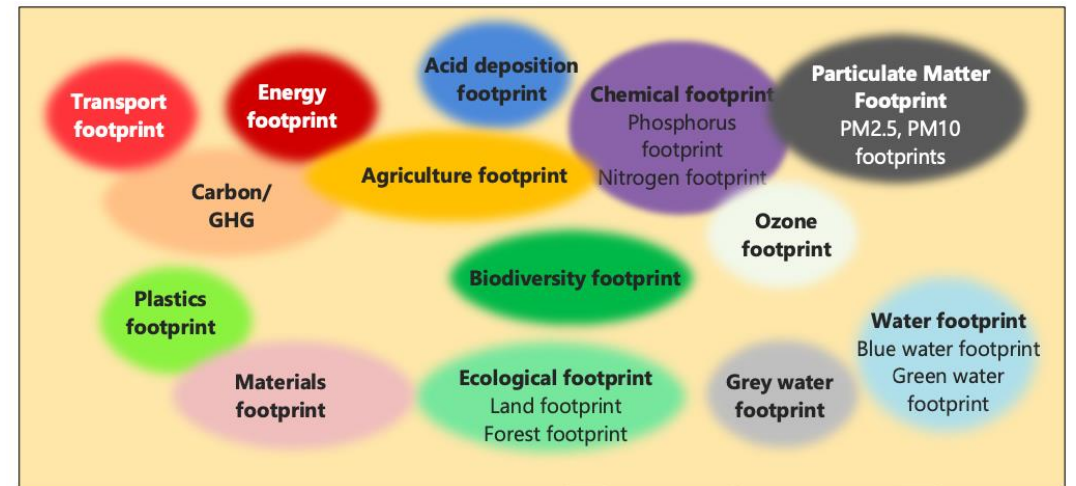
*“Biodiversity considerations need to be better integrated into public and business decision making at all levels” - EU Biodiversity Strategy to 2030*

- The **‘Biodiversity footprint’** concept can contribute to this by providing frameworks and instruments to integrate biodiversity and ecosystem services into decision-making including policies, plans and actions
- IEEP authored a policy report exploring the **current uses, needs and opportunities for biodiversity footprint methods and tools in the EU.**
  - It provides an overview of the key needs for these measures within the current EU and global policy context and reviews over 40 tools and approaches to explore their characteristics, applications, strengths, limitations and future opportunities.



# Defining "biodiversity footprints"

- The *impact* of a commodity, company, person or community on global biodiversity, measured in terms of **biodiversity change**, as a result of production and consumption of particular goods and services
- Considered footprints relating to:
  - Species
  - Ecosystems
  - Ecosystem services
- Biodiversity footprint is influenced by other footprints (pollution, water, carbon, etc).



# Identifying needs for biodiversity footprints

- **Informing and monitoring** biodiversity targets and policies
- **Mainstreaming** biodiversity into policy areas with potential biodiversity impacts:
  - Land-use sectors
  - Trade policies
  - Development cooperation policies
  - Financial and private sector policies
- Reporting, monitoring and assessing progress on the **2030 global sustainability agenda**
- Addressing **global biodiversity impacts**
- Within **product certification** schemes e.g. the EU Product and Organisation Environmental Footprint methods
- **Raising awareness** on the impacts of decision-making on biodiversity



# Biodiversity footprints for regional and local decision-making

At the local and regional level there is a need to understand:

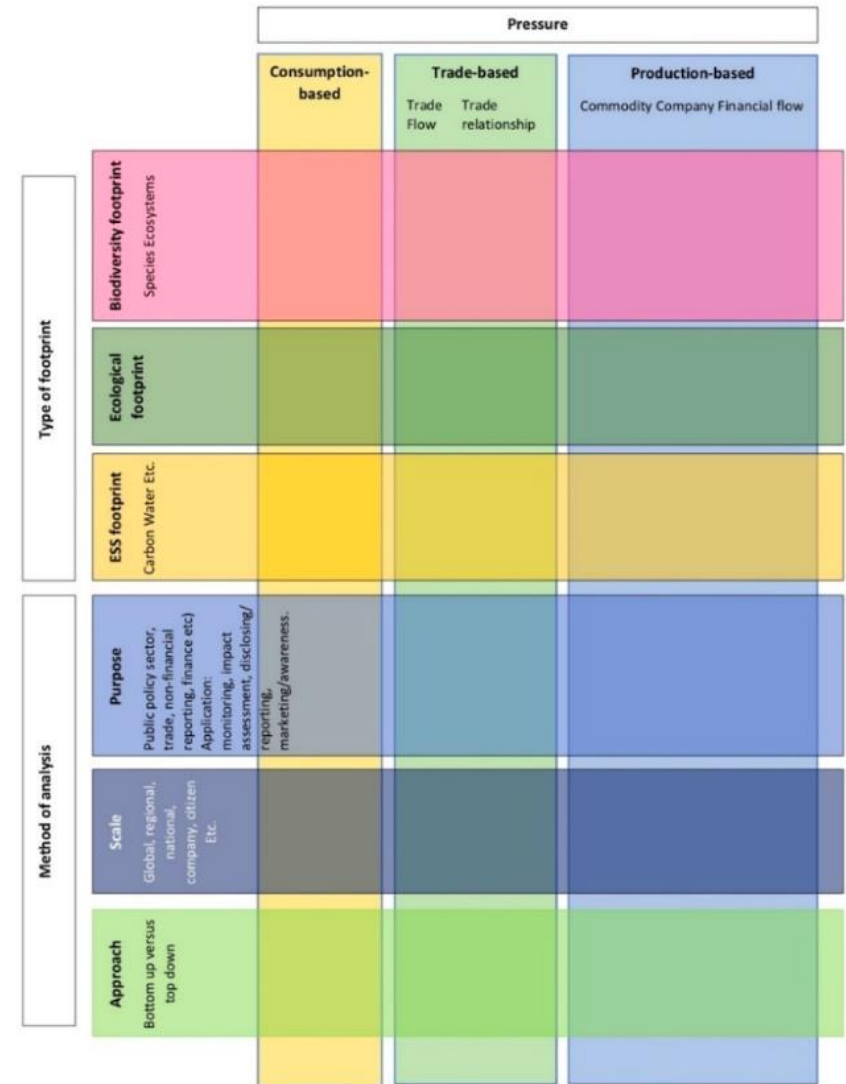
- Direct impacts from their own operations and procurement
  - Biodiversity footprints at a regional/ city scale
    - Aggregated impact of economic activity and management at the local and regional level
  - Understanding link between local activities and global biodiversity impact
  - Biodiversity impact of specific policies/funds/activities/sectors/areas
    - Can inform policies ranging from transportation to agriculture
  - Raising awareness amongst local stakeholders and citizens
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- Understanding these impacts requires spatially explicit information on activities and impacts. For example, for a single organisation, information is needed on:
    - Direct impacts from their own operations
    - Impacts from a wide range of suppliers of food products, energy, materials...
    - Even sometimes downstream impacts of the way in which products are being used
  - This is a huge research job, but if the various biodiversity footprints are known it becomes comparative simple



# Typology of biodiversity footprints: navigating the biodiversity footprint landscape

3 key dimensions:

1. **Driver of pressure:** consumption-based, trade-based or production-based.
2. **Type of footprint:** ecological, biodiversity or ecosystem service footprints.
3. **Method of analysis:** purpose, scale and approach.



# Typology of existing initiatives and applicability to address identified needs

## Broad footprint types

- Foundational biodiversity data and tools supporting the measurement of footprints by:
  - Synthesising data on **biodiversity status** to identify risks and opportunities
  - Linking **biodiversity pressures to impacts**.
- Tools supporting the application of footprint information into decision-making:
  - **General footprint frameworks** combining global datasets to provide a top-down footprint estimate
  - **Detailed methodologies for single sectors or ecosystem services**
  - **Rapid self-assessment tools** using bottom-up methods to assess footprint at the site-level.
  - **Tools outlining general footprint frameworks:** describing information to be collected but leaving it up to the user to access this.

## Assessing initiatives using our typology

1. Drivers of pressures
2. Types of footprints
3. Method of analysis:
  - Approach: Mostly LCA and some top-down approaches. Few biophysical accounting.
  - Scale: wide range. Implications for data needs and uses.
  - Purpose and use: matched against identified needs

# Examples

- **The Ecological Footprint of Slovenia:**

- The Global Footprint Network worked with the Environmental Agency of the Republic of Slovenia and the Republic of Slovenia Ministry for Environment and Spatial Planning to measure their regional ecological footprint. This exercise informed the development of regional programmes for 2021-2027. They identified the sectors with the largest ecological footprint (housing and personal transportation). A set of policy recommendations were developed based on this initial assessment of the biocapacity and impact of the region

- **TRASE: tool for calculating the impacts of trade**

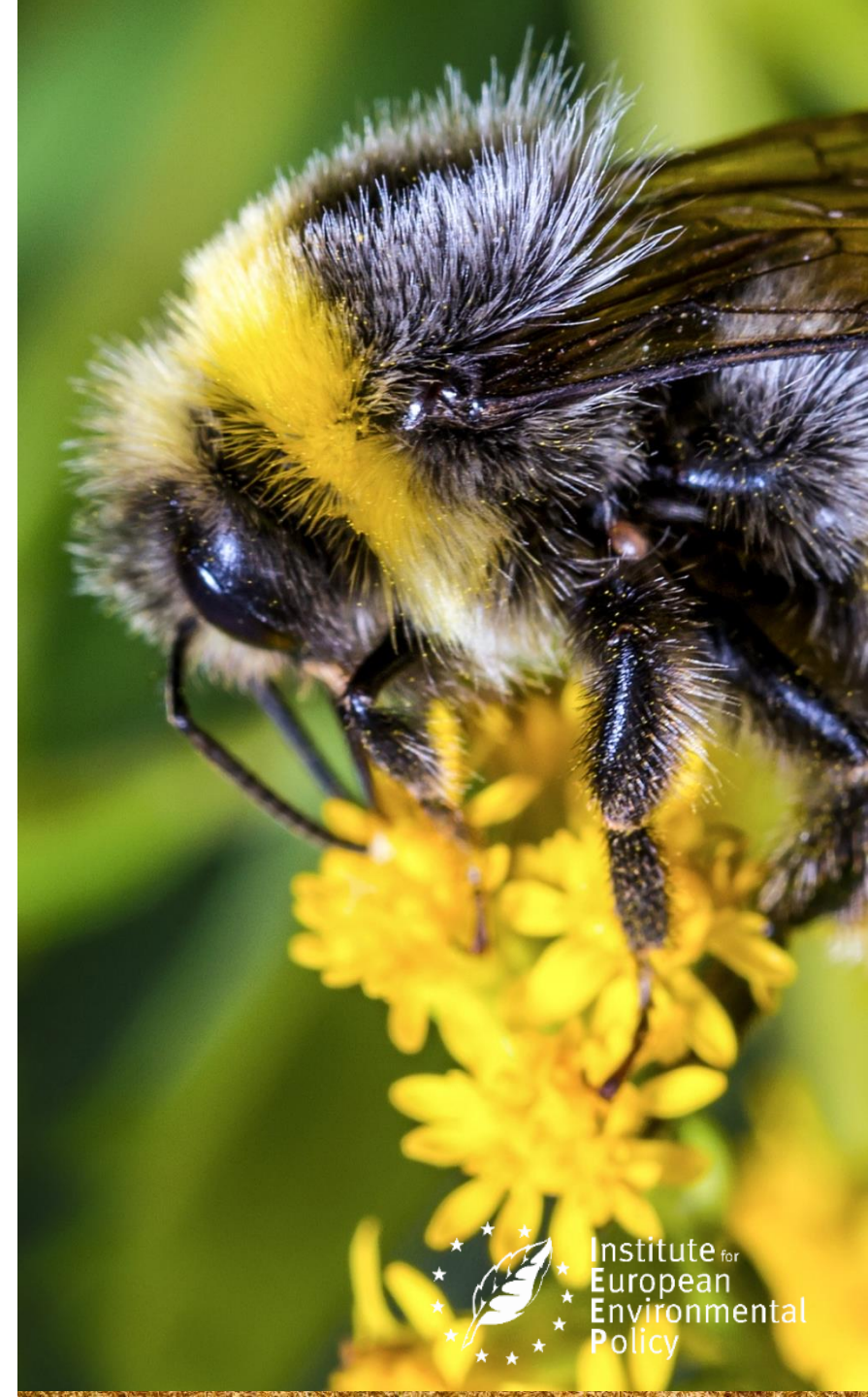
- This tool assesses the impacts of commodity imports on deforestation. It follows agricultural commodity trade flows at national and subnational levels using publicly available data. The spatial scale is often defined by availability of production data.





## Data availability and infrastructure for footprints

- Improving the collection and sharing of the data needed for footprints is critical to their usefulness
- **Data needs:** we know what data we need. We don't always know enough about the technology for collecting that data, nor enough about where there are major data gaps
- Filling these gaps will require support at EU and national level, but will also require conscious efforts by other sectors, including companies, local government, civil society





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Q&A

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