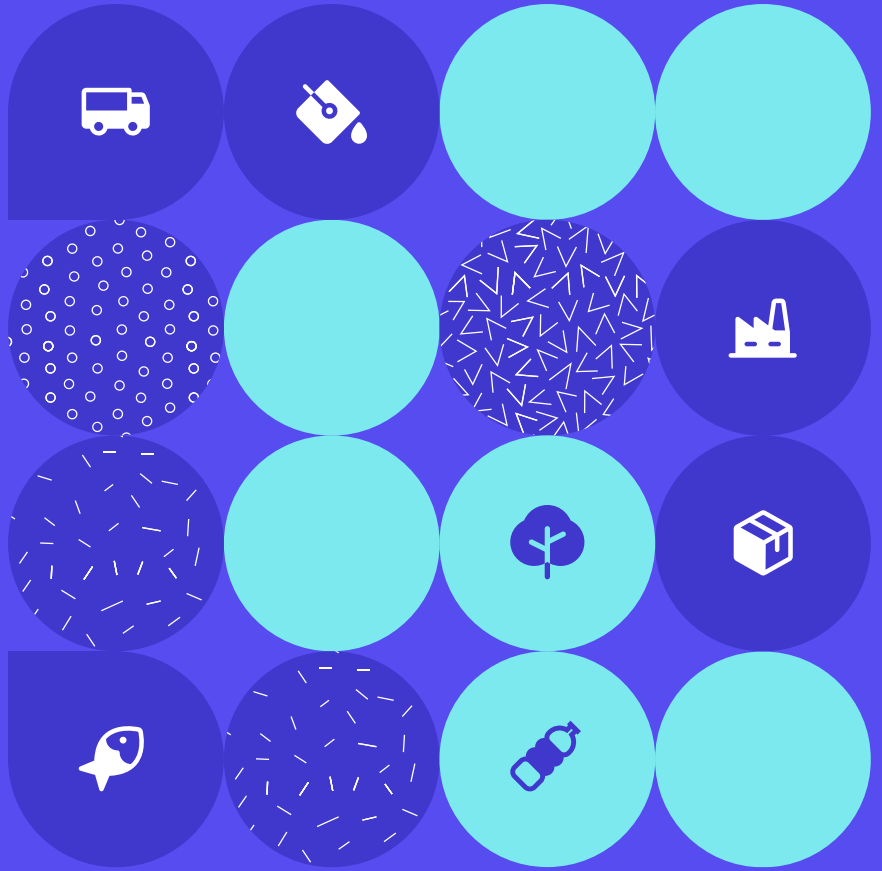
Plastic Footprint Network

Plastic Footprint Guidelines

Guidance



Version 1. November 2023

Convened by EA – Earth Action · www.plasticfootprint.earth

Introduction to the Plastic Footprint Network

Leading organizations have united within the Plastic Footprint Network to chart a new, more effective **path toward plastic pollution** mitigation.

The network's first priority was **unifying the framework** for measuring plastic leakage into a **single**, **science-based methodology** for organizations to accurately assess the environmental impact of their plastic use. Over **100 professionals** from **35 organizations** worked to establish the resulting **methodology**, which consists of **11 modules**, all optimized for usability and delivery of **actionable results**.

Objectives

Unifying the methodologies and perspectives of leading scientists, experts, and global practitioners, PFN enables organizations to understand the full impact, or footprint, from the use of plastic in their companies, products, and services.

1. Update and unify plastic footprinting methodologies
2. Ensure the methodology is used consistently by practitioners
3. Disseminate and scale the use of plastic footprinting
4. Explore link with plastic credit schemes, and how to prevent greenwashing claims

What are the objectives of this module?

This guidance serves as a comprehensive, step-by-step manual for practitioners seeking to use the PFN methodology in assessing their plastic footprint. It provides clear directions on how to navigate through the various modules and help users understand the specific paths to follow.

It is organized as follows:

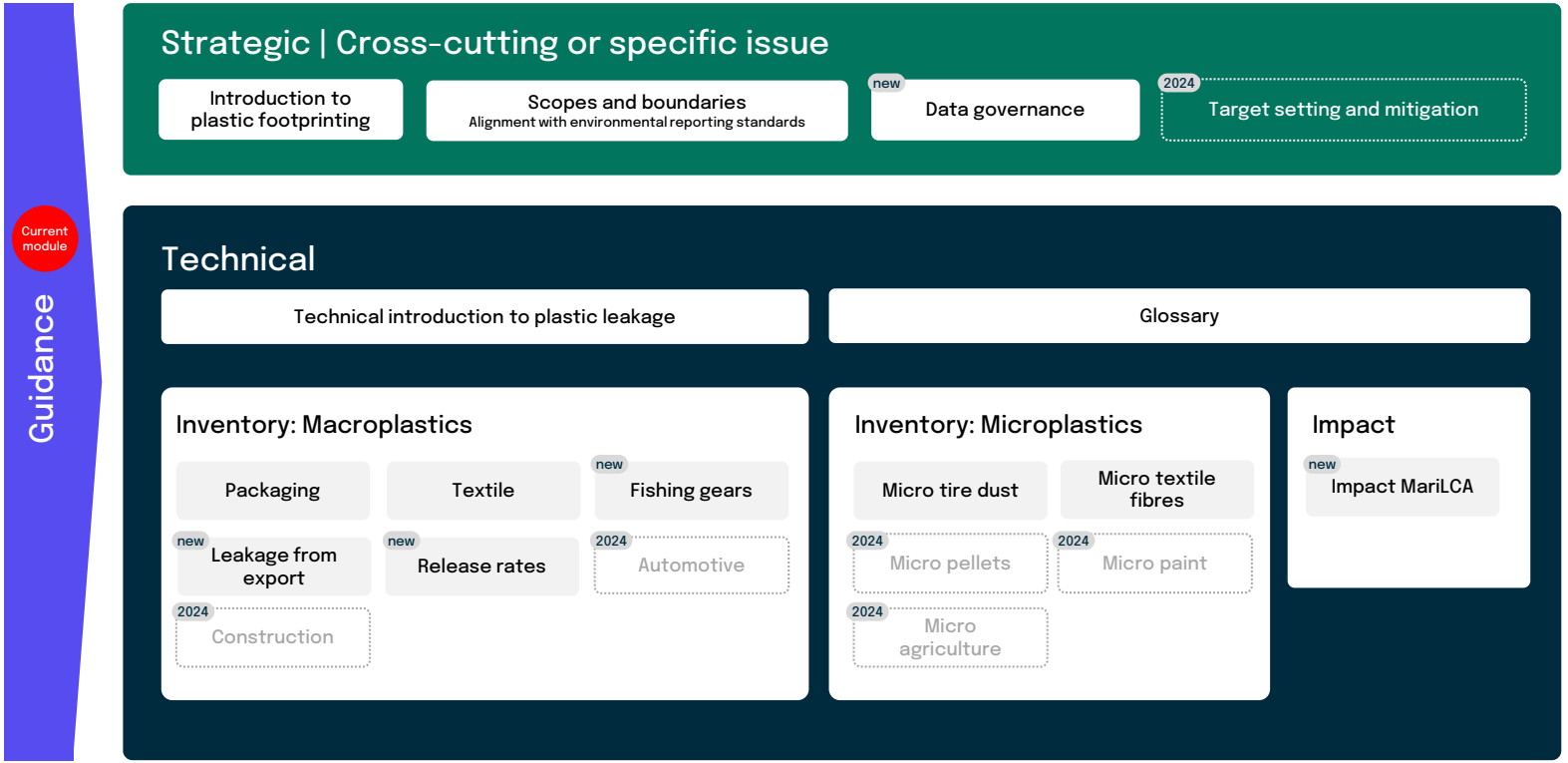
General information about the modules

1. Strategic vs Technical modules
2. Structure of each module: The onion peels
3. Summary of all modules content

4. **How to proceed in a plastic footprint:** from the Inventory to the Impact assessment, a step by step guide

At the end of this module, the users should have a clear idea of the structure of the methodology and how to use the different modules in order to learn about plastic footprint or to perform a plastic footprint.

Where does this module fit in the PFN landscape?



Part. 1

General information about the modules.

Strategic and technical modules

There are two types of modules

Strategic modules

Strategic modules are where the goal of your plastic footprint and the rules for scoping it are set. These modules allow to understand and frame the project and set priorities for data collection (structure & quality) and communication.

Technical modules

Technical modules are where the technical and operational aspects of running a plastic footprint are described. This includes system maps, calculation routes and by default datasets contained in a referenced tool.

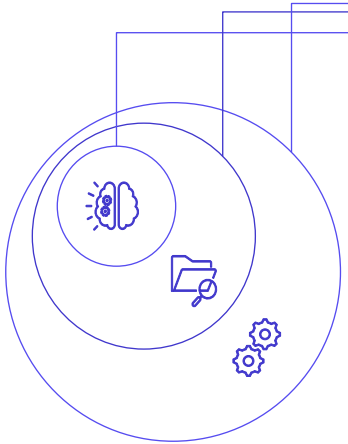
These modules focus on different topics or types of macro and micro plastics. They first offer a comprehensive overview of the topic, followed by in-depth technical information and a detailed methodology for incorporating the particular type of plastic into your assessment.

To start, we advise the users to read every strategic module and the technical module “Technical introduction to plastic leakage” to get in touch with the most important applications of plastic footprint, the main definitions, the concepts of loss, release, leakage and the different calculation routes for macro and microplastic.

Structure of each technical module

Each module presents different layers of complexity and details. The content of each layer may vary from module to module, but the underlying principle is that as we delve deeper into the layers, the level of detail and precision increases. Typically, the last section is the one with the data needed by the users who wants to perform the plastic footprint calculations themselves. In essence, the modules are structured in a way that leads to a gradual and comprehensive understanding, empowering users to perform the plastic footprint assessment with accuracy and confidence.

For a complete understanding of plastic pollution, we advise the users to read at least the first layer of each technical module.



1

Methodological choice

The first layer contains general information and gives a quick overview on the topic and methodology.

Target audience: busy reader, scientific journalist

2

System map and calculation routes

The second layer continues with more details (system maps, calculation routes) on the methodology and calculations.

Target audience: scientist, experts

3

Key data & background assumptions

The last layer is about secondary data needed to perform the assessment and/or the main assumptions for the modeling.

Target audience: scientist aiming at performing a plastic footprint.

Reading keys: Main take away | Supporting information | Key warning

Summary of all modules content

Type of module	Name of the module	Content
Overarching	Guidance	Step-by-step guide for practitioners using the PFN methodology to assess their plastic footprint, offering clear directions and specific paths through the modules.
Strategic	Introduction to plastic footprint	The concept of plastic footprinting is introduced in this module, covering the definition of a plastic footprint, introducing relevant metrics, and explaining practical applications of plastic footprint assessments.
Strategic	Scopes and boundaries	This module provides a standardized approach for establishing the scope of a corporate plastic footprint assessment, determining which activities within their value cycle are included within each scope.
Strategic	Data governance	Comprehensive guidelines for the selection and utilization of data in a plastic footprint assessment are provided in this module, based on the diverse purposes of the assessment.
Technical	Technical introduction to plastic leakage	This module introduces a key element of effective plastic footprint assessments, plastic leakage. The module explains what plastic leakage is and how it is calculated for both macroplastics and microplastics.
Technical	Glossary	Glossary of key terms relevant to plastic footprinting.
Technical - Macroplastic	Packaging	The objective of this module is to introduce a standardized methodology for estimating the impact of plastic packaging waste, detailing how to include and assess packaging materials in a plastic footprint assessment.
Technical - Macroplastic	Textile	This module introduces a standardized method for assessing macroplastic leakage from synthetic textiles, supporting the completion of comprehensive plastic footprint assessments that incorporate leakage from textile use as well as at products' end-of-life.
Technical - Macroplastic	Fishing gears	Conducting an effective plastic footprint assessment involving fishing gear is explored in this model, which provides a unified approach for establishing the volume of macroplastics originating from products used in commercial fishing.
Technical - Macroplastic	Leakage from export	This module introduces a standardized approach for estimating the impact of mismanaged waste and ocean leakage from exported plastic waste within the plastic footprint analysis framework.
Technical - Macroplastic	Release rates	This module provides a clear and transparent methodology that outlines an approach for modeling the release rate. *(Coming soon)*
Technical - Microplastic	Microplastic from tires	Tire particles are a notable source of microplastic leakage and this module details how organizations can incorporate this source of pollution in comprehensive plastic footprint assessments.
Technical - Microplastic	Micro textile fibres	This module details a standardized method for establishing amounts of microplastic leakage from textile fibres when conducting a comprehensive plastic footprint assessment.
Technical - Impact	Impact MariLCA	Methodology to compute the impact on human health and ecosystems based on the PFN inventory. *(Coming soon)*

Part. 2

How to proceed in a plastic footprint.

How to proceed in a plastic footprint

Assessing a plastic footprint is an iterative process; this means that depending on the quality of your data, the scope of your assessment, the markets you take into account, and other relevant factors, you may find it necessary to repeatedly review and refine the various steps of your footprint.

How to read the next slide

Refer to these icons and color codes to help you navigate

Reflection on modeling

Data collection

Calculations

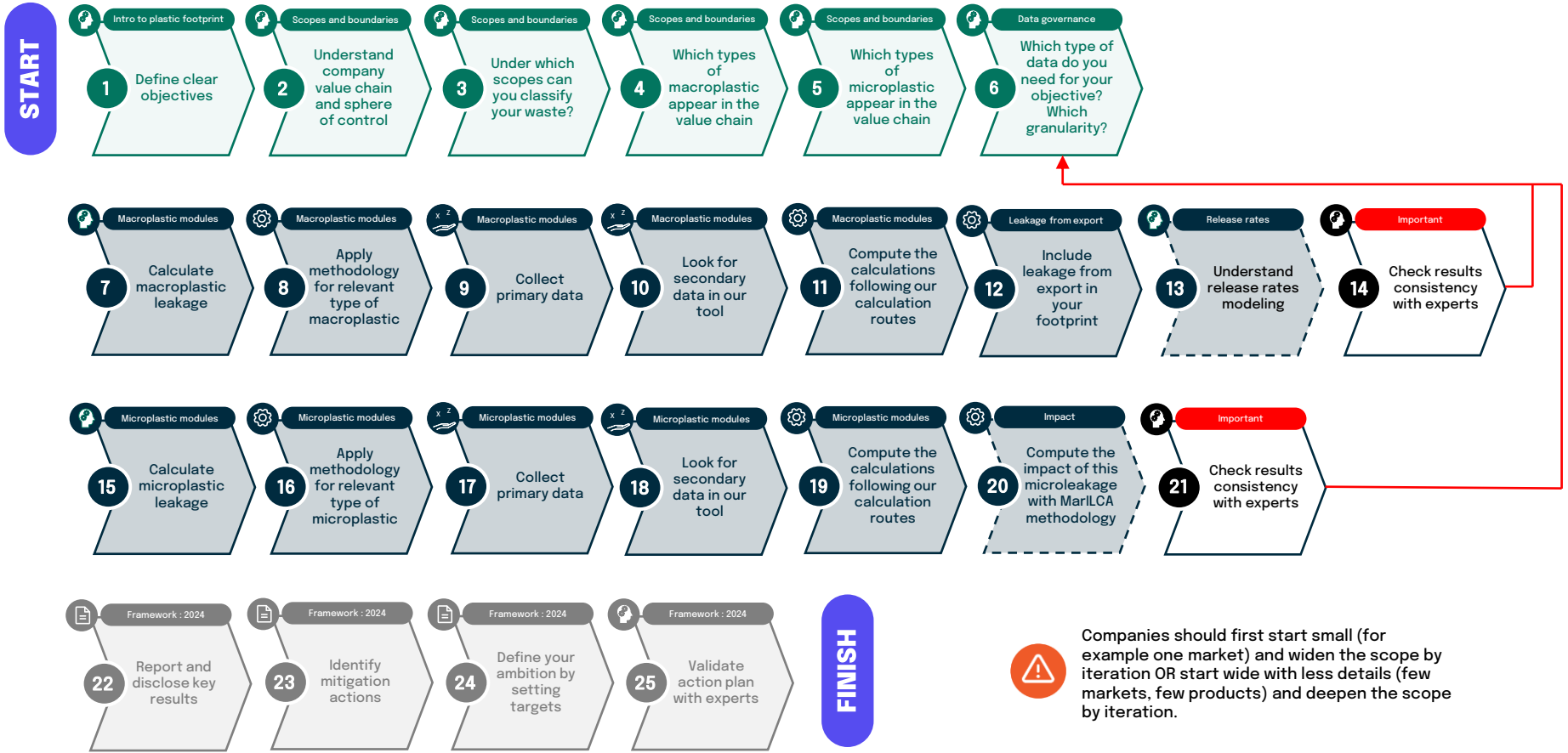
Reporting

Strategic modules

Technical modules

Framework: Coming in 2024

Optional tasks



Companies should first start small (for example one market) and widen the scope by iteration OR start wide with less details (few markets, few products) and deepen the scope by iteration.

Our commitment to continuous improvement

The Plastic Footprint Network's successful collaboration is built on pillars of:

- Open
- Non-competitive and productive dialog
- Leveraging science and supporting ongoing research
- Broadly empowering global stakeholders (product manufactuers, brand owners, treaty negotiators, regulators, consultants, NGOs, etc) to effectively do their part to address the plastic pollution crisis.

Given corresponding commitments to transparency and continuous improvement, we welcome and encourage your feedback and input on this document so that the methodology can continue to be enhanced and refined.

Thank you for supporting the work of the Plastic Footprint Network.

Contact us at: contact@plasticfootprint.earth

Our mission is to continuously advance Plastic Footprint Methodology, ensuring it remains at the forefront of sustainable practices and promoting its widespread adoption. By empowering companies to rigorously assess, enhance, and transparently report their plastic footprints, we aim to make significant strides in mitigating the plastic pollution crisis.

Plastic Footprint Network

The Plastic Footprint Network is convened by EA - Earth Action

This working group was led by:

PFN secretariat is led by

Scientific Committee

2023 members

Illustrations by German Kopytkov

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