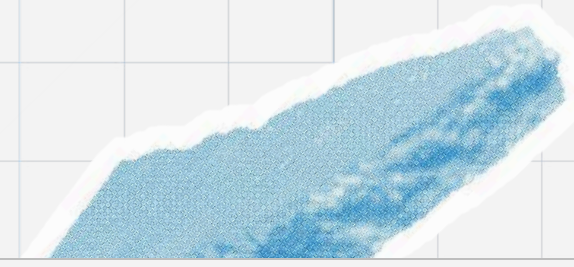




Science as compass

Back to 2024

Context



Since 1990, Surfrider Foundation Europe acts to protect the ocean. Every year, thousands of citizens, associations, companies and scientists take part in collecting data on aquatic waste, enabling us to better understand its origin and impact.

In 2024, Surfrider has carried out different scientific and citizen science projects to analyse the quantity, type and distribution of litter on the beaches and rivers banks in Europe.



Ocean Initiatives project enable anyone to collect and quantify 30 types of waste.



Biocarriers, collects opportunistic data on the presence and type of biocarriers.



Ospar/MSFD protocol monitors 100-metre sites every season, with a detailed classification of 251 categories of beach and river banks litter.



Osparito, a version of the OSPAR/MSFD protocol for primary school children/leisure centres.



Plastic Origins, collects data on river banks.

All the data is used at different levels - local, national and European - **to improve scientific knowledge of the subject**. This information is also used for **advocacy to influence European and national decision-makers and industrial, to act at the source of pollution and promote stricter environmental regulations**.

This report highlights the results of these actions and underlines the importance of collective engagement. **Everyone can contribute to preserving the environment and the ocean.**



Key figures

1 024

Collections with quantification

21 694

Participants

1 295 282

Wastes

223/100 m

Number of wastes by 100 m

581,3 km

Distance analysed

Collection locations

55%

21%

17%

1%

2%

2%

0,5%

0,5%

③

Bay
of Biscay

②

Greater
North Sea

④

Western
Mediterranean

⑤

Eastern
Mediterranean

①

Iberian
Coast

-

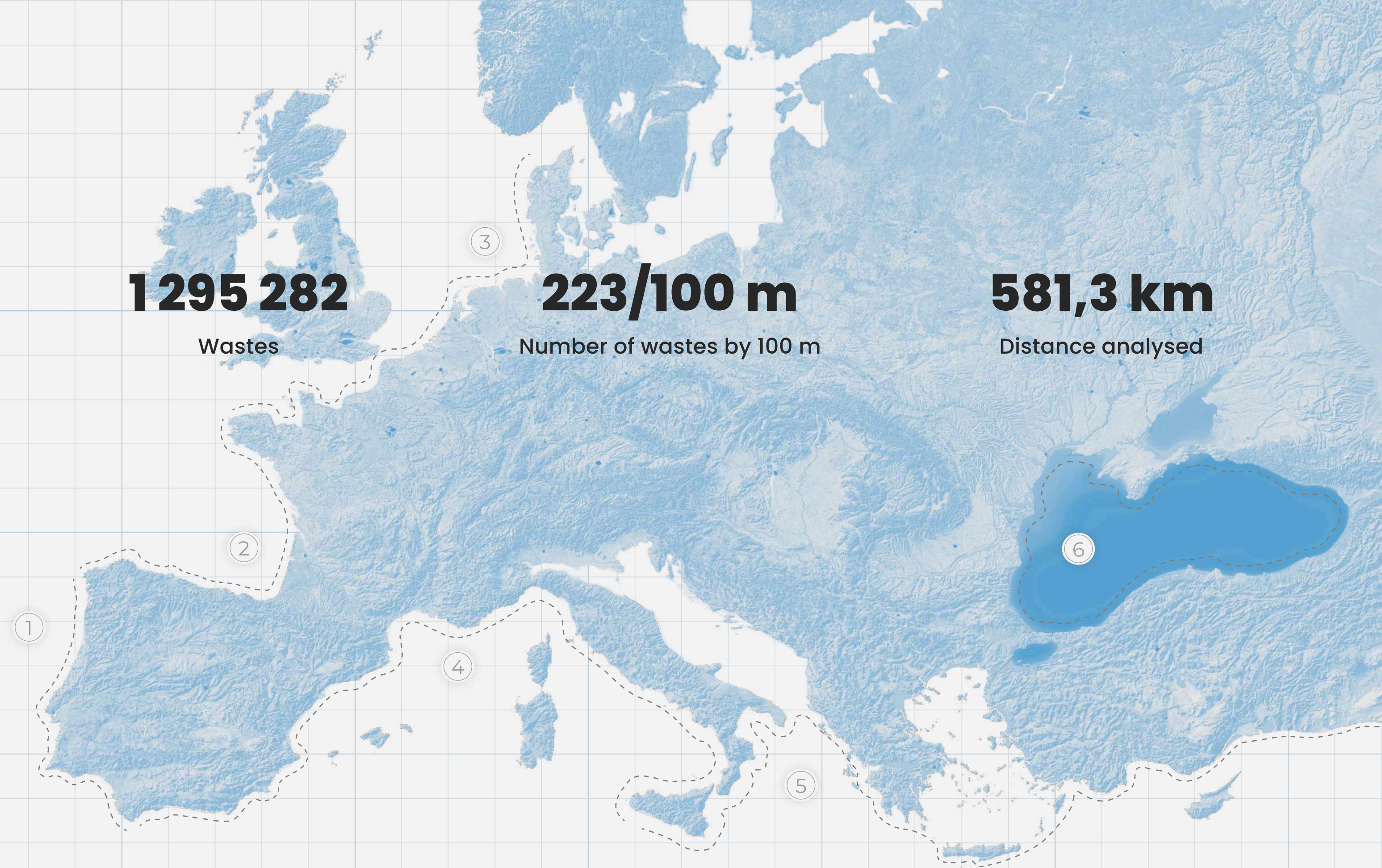
North
Atlantic

-

Indian
Ocean

⑥

Black Sea



Types of Litter quantified

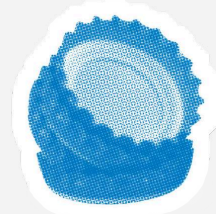
By Ocean Initiatives



Top 10



341 088
Cigarette butts



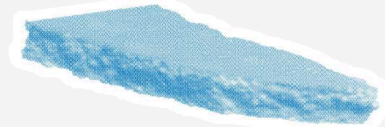
31 677
Metal caps



119 093
Plastic pieces
2.5-50 cm



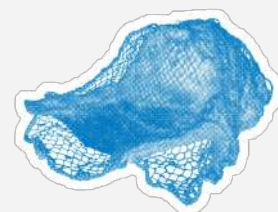
30 687
Pieces of glass



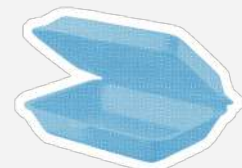
105 375
Polystyrene pieces
2.5-50 cm



28 052
Plastic bags & fragments



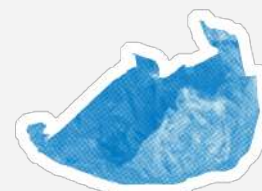
86 722
Fishing
Nets & tangled ropes



27 628
Food containers



39 950
Bottle caps



27 236
Sweet/snack wrappers

Cotton bud sticks	18 153	Tampon applicators	3 360
Shellfish farming waste	13 075	Straws	2 922
Cans	12 019	Fishing Lines / hooks bait boxes	2 202
Plastic bottles < 50cl	10 215	Lighters	1 958
Plastic bottles >50cl	9 050	Toys	1 809
Biocarriers	8 745	Other plastic bottles	1 447
Lollipop sticks	8 159	Plastic cutlery	1 375
Glass bottles	8 068	Stirrers	885
Pieces of metal	7 493	Shoes	846
Pieces of fabric	4 722	Balloons	779
Plastic cups	4 268	Single use masks	623
Wet wipes	4 108	Plastic plates	407
Hunting cartridges	3 838	Tyres	219
Medical packaging	3 633		

Ospar Beach/rivers & Osparito

In 2024, 18 sites across France and Spain were monitored as part of the scientific following up programme.

Criteria to be respected

- * 1 site = a 100m long area
- * 4 collections per year on the site
- * Quantification with a protocol of 251 categories

31 020

Wastes quantified

775

Wastes / 100m
in the areas studied



○ Ospar/MSFD

● Osparito

● Plastic Origins

Single-use products & unidentifiable fragments

Single-use plastic

56%

of quantified litter

Coast

49%

of quantified litter

Inland

71%

of quantified litter

Plastic fragments

27,3%

of quantified litter

Coast

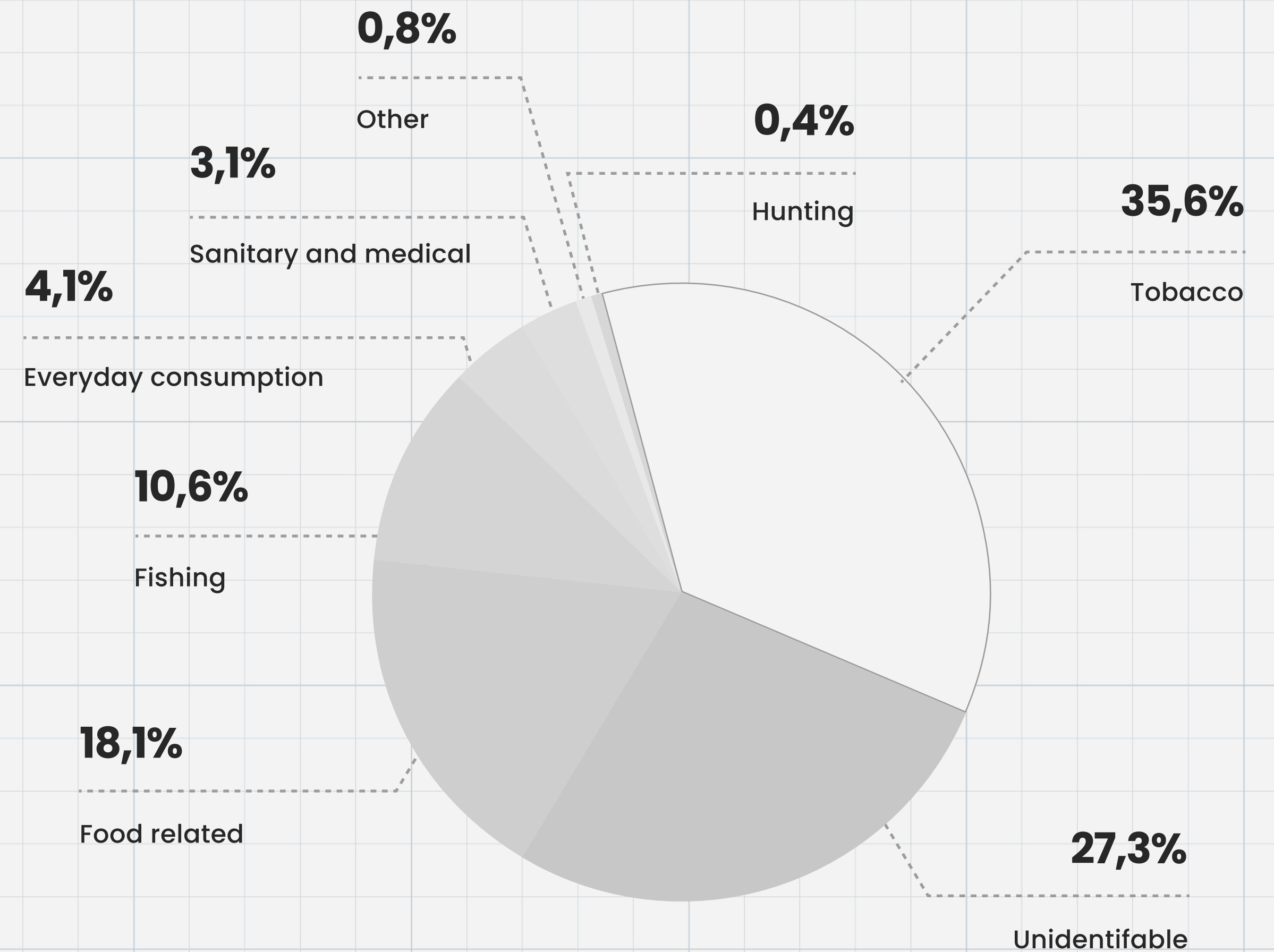
32,6%

of quantified litter

Inland

16,1%

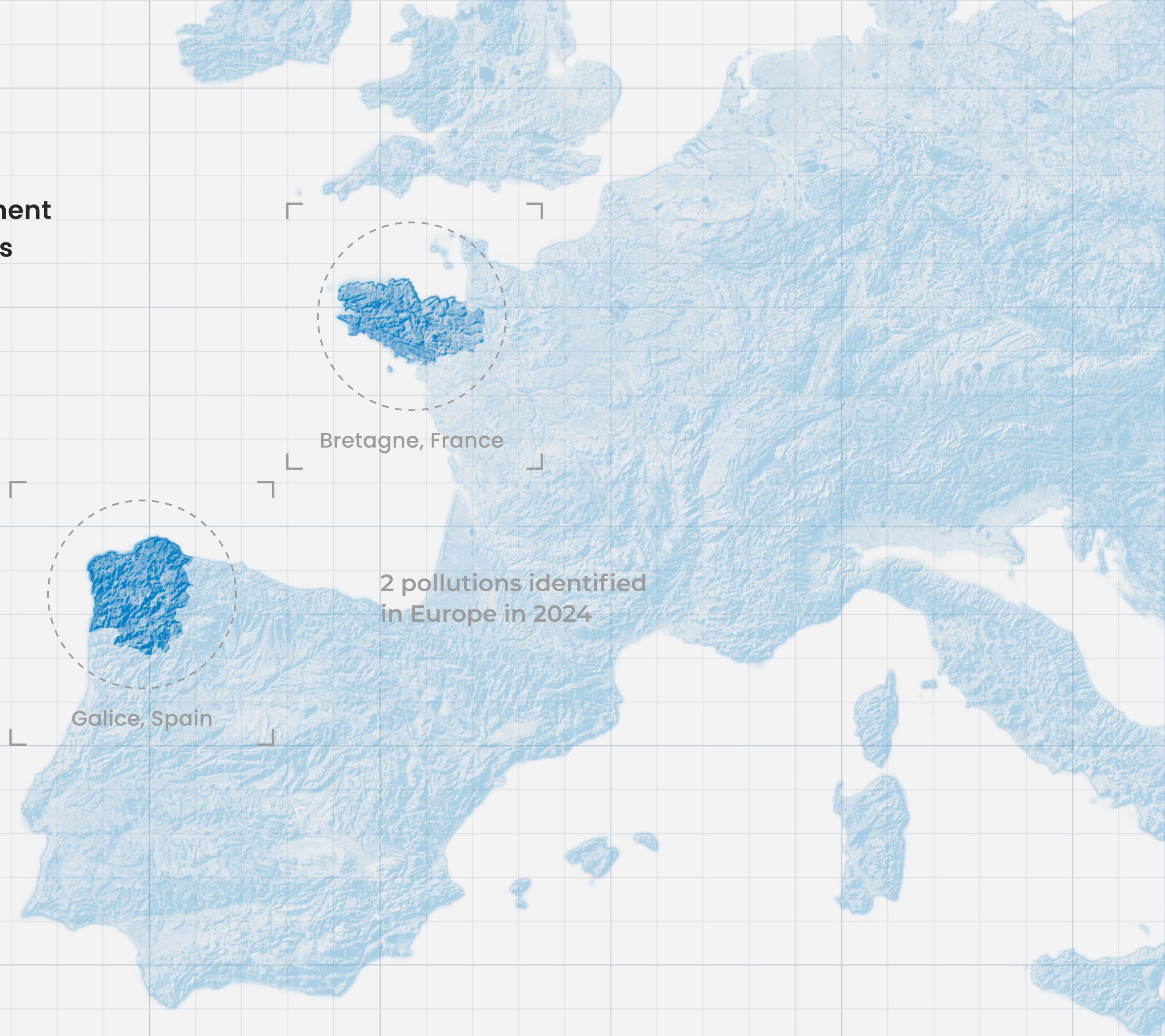
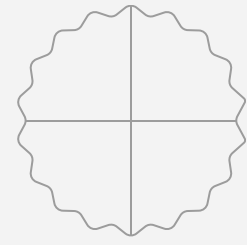
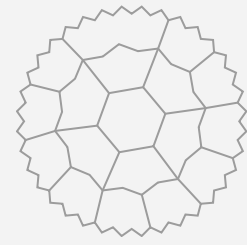
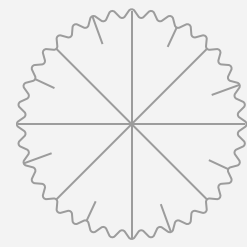
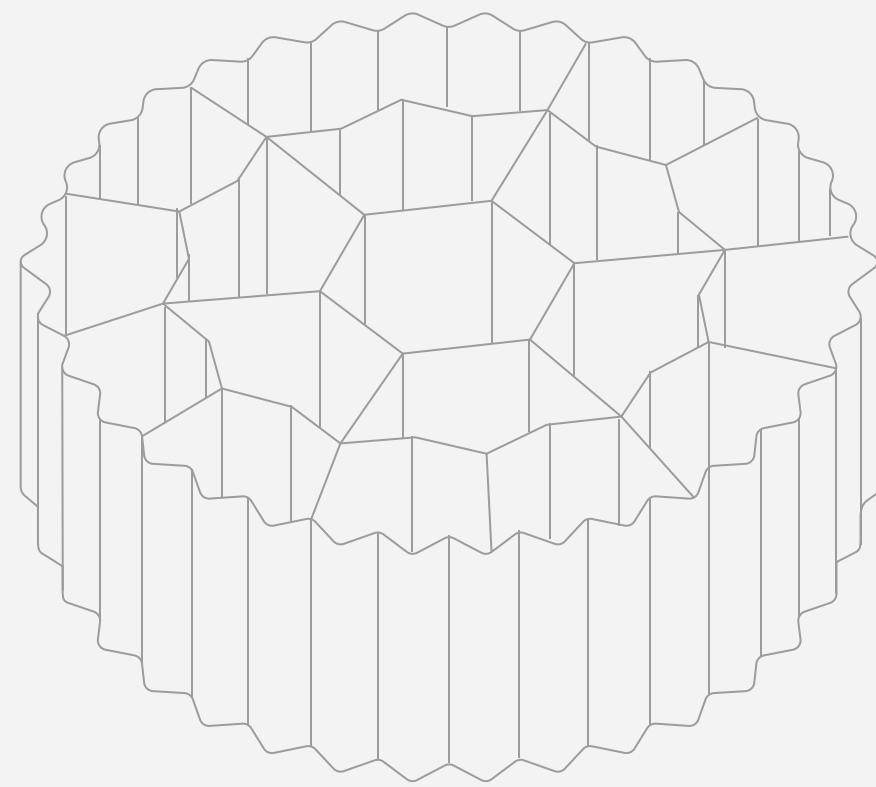
of quantified litter



Biocarriers

Biocarriers are bacterial supports used in some types of wastewater treatment plants. These small plastic cylinders, support the growth of microorganisms that settle, multiply, and break down suspended matter in the water.

During **floods**, intense **storms**, **peak tourist periods** generating **large flows of water** or when **infrastructure malfunctions**, biocarriers can end up being discharged into the environment.



Do you find them on the beach or on the river bank?
Report their presence here.

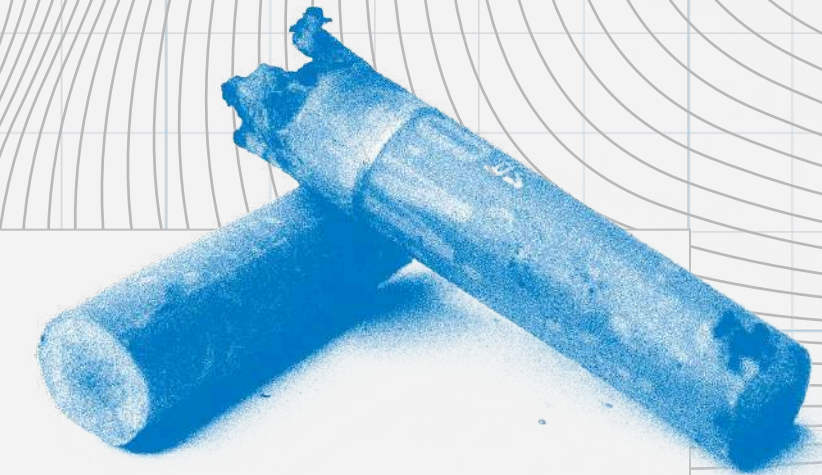
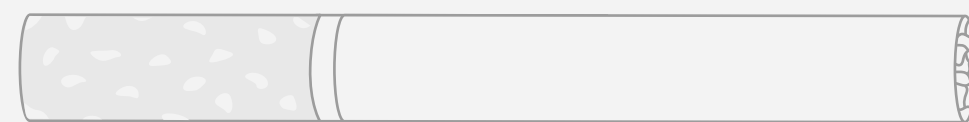
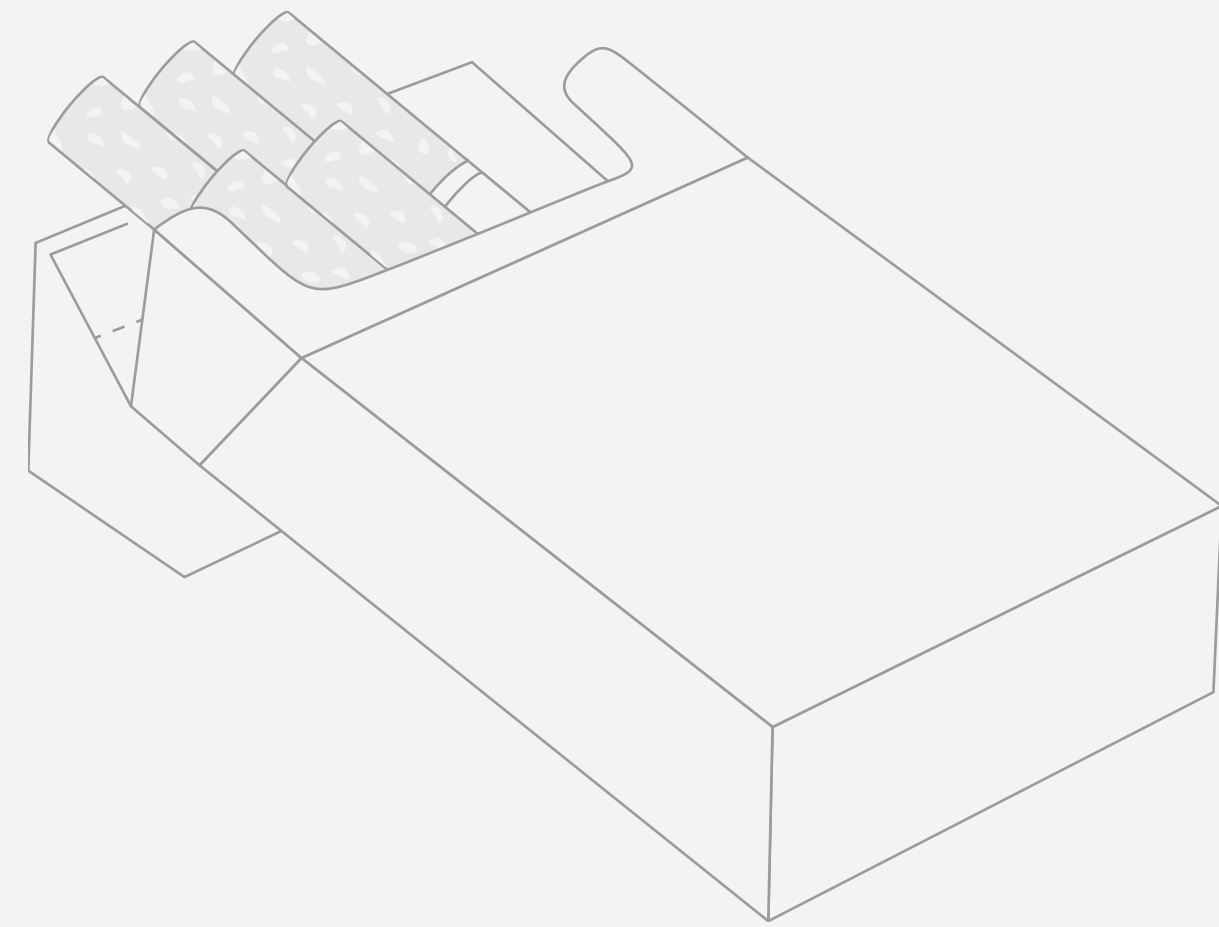
135

Municipalities have had their beaches and rivers banks covered with biomedica

8 775

Biocarriers were found and quantified in 2024

Cigarette butt pollution



634 127

Cigarette butts were quantified in 2024

91,7 %

Of collections reported finding cigarette butts

1000 L

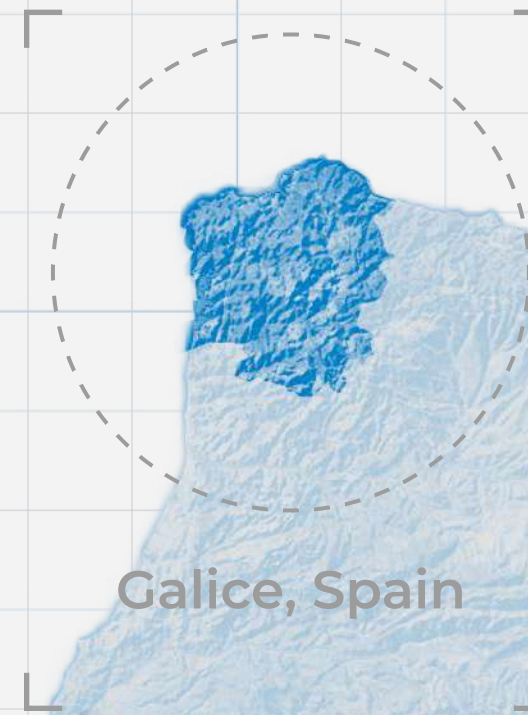
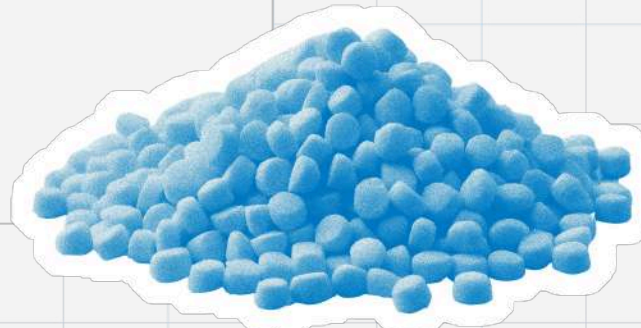
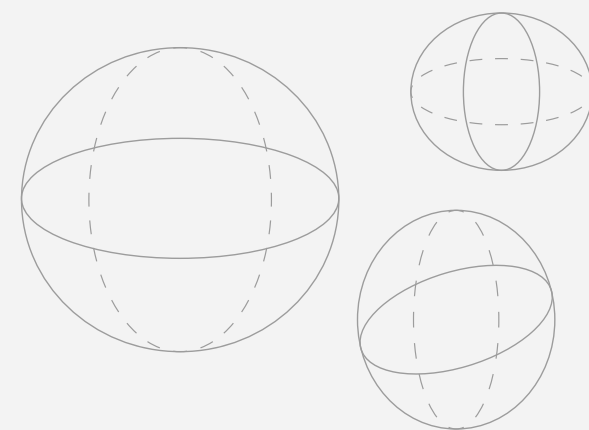
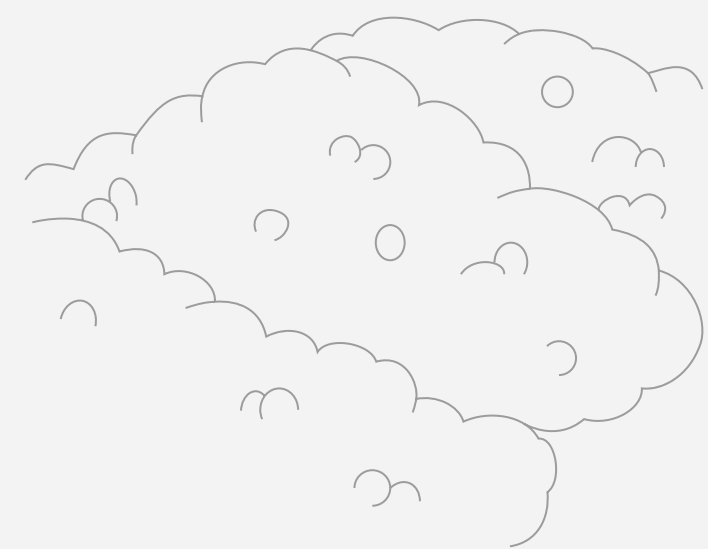
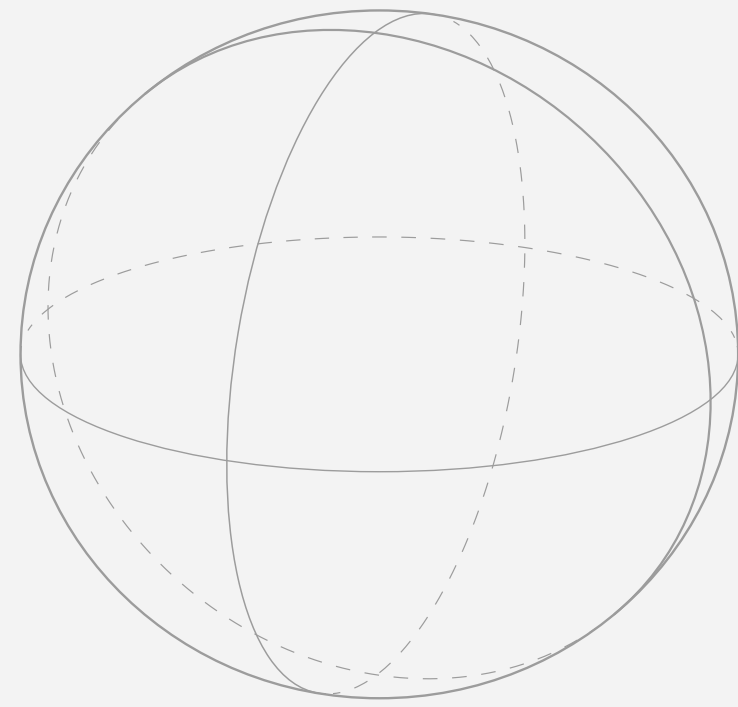
Of water can be polluted by a single cigarette butt

4000

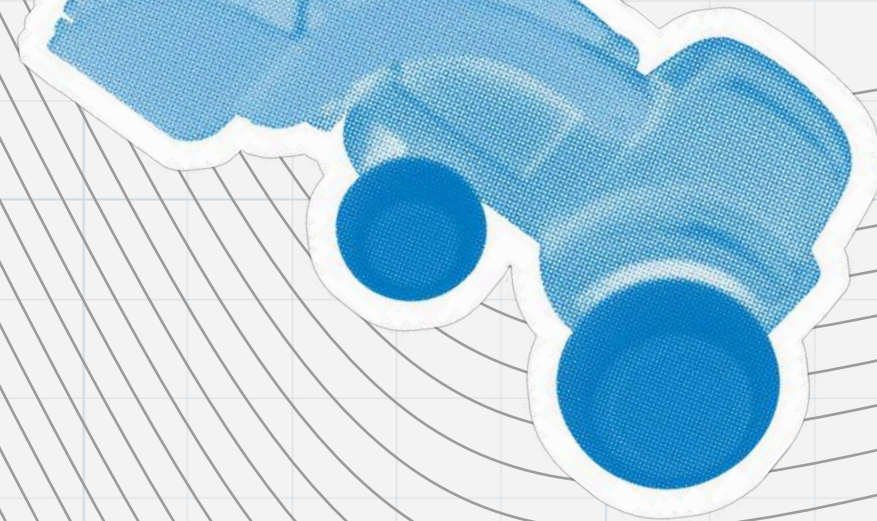
Chemical substances can be contained in a cigarette butt

Pellets

They are the raw materials used by manufacturers to make plastic objects.



Pollution can occur during the **handling** of pre-production plastic pellets (ppps,) **transport** (by sea and land) and **storage**. They are also dispersed by **wind** and **rain**, as they are very light.



RÉGION
Nouvelle-Aquitaine