



# Jointly Developed Solution

Circular Ocean-Bound Plastic

Report



2026

Report on a jointly developed methodology for identifying, collecting and recovering ocean-bound plastic

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Circular Ocean-bound Plastic

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# Executive Summary

The Circular Ocean-bound Plastic (COP) project developed a joint cross-border methodology for addressing ocean-bound plastic before it reaches the marine environment. Working across Denmark, Sweden, Germany and Poland, the project combined research, field testing and material analysis in Aarhus, Gdańsk and Rostock to connect the full chain from litter identification and collection to sorting, cleaning and potential reuse.

The COP methodology follows seven linked steps:



Fig. 1 Designed for cross-border scalability, this framework structures the entire lifecycle from initial leakage detection to final resource recovery



The project showed that effective intervention begins with understanding where litter enters and accumulates in urban waterways. Monitoring must consider not only floating litter, but also material retained on riverbanks, in vegetation and at interception points. Collection methods therefore need to be selected according to local hydrology, access, navigation, maintenance capacity and observed litter behaviour.

COP also demonstrated that collected plastic does not automatically become a recyclable material stream. Recovered waste must be documented, separated from other materials, classified by item and polymer type, cleaned and prepared before its reuse potential can be assessed. Tests on polypropylene recovered from the Aarhus River showed that the material remained mechanically usable after processing, while differences in processing behaviour and oxidative stability confirmed that reuse must be matched to measured material properties and application requirements.

The main transferable result is therefore not one collection device, cleaning method or recycling route, but a practical decision framework that can be adapted to different cities, waterways and waste-management contexts. The project experience has been consolidated into technical reports and dissemination material for relevant public authorities, research organisations, SMEs, environmental actors and other target groups.

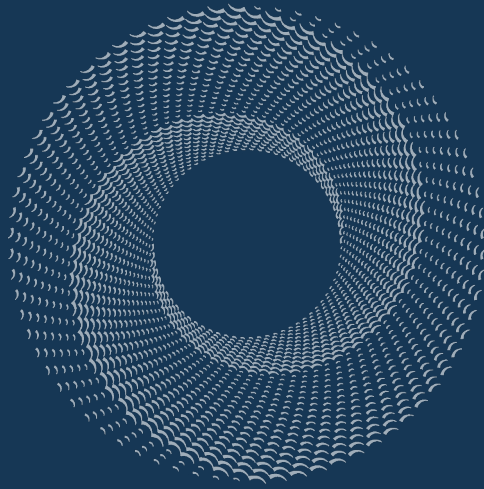
Together, these results constitute the jointly developed COP methodology and best-practice approach for collecting, sorting, classifying, handling and identifying realistic utilisation pathways for ocean-bound plastic and other relevant waste fractions.







# 1. Introduction and Project Approach



# 1. Introduction and Project Approach

## 1.1 From marine litter to ocean-bound plastic

The Circular Ocean-bound Plastic (COP) project addressed plastic waste before it reaches the marine environment. Ocean-bound plastic (OBP) is waste at risk of entering the sea through rivers, canals, stormwater systems, harbours and other leakage pathways. Focusing upstream creates opportunities to prevent further leakage while the material can still be intercepted, documented and, where suitable, prepared for reuse or recycling.

COP therefore considered ocean-bound plastic as both an environmental and a circular-economy challenge. Collection alone is insufficient: recovered waste must also be documented, sorted, classified, cleaned and assessed before realistic utilisation routes can be identified.

## 1.2 The COP approach: from source to solution

COP was implemented through the Interreg South Baltic Programme by partners from Denmark, Sweden, Germany and Poland. The project investigated the challenges and opportunities associated with collecting, recycling and reusing ocean-bound plastic while connecting public-sector needs, research knowledge and business capabilities.

Rather than treating monitoring, collection and recycling as separate activities, COP followed the material through a connected value chain:

- Identify leakage risks
- Monitor litter
- Collect waste
- Document, sort and classify
- Clean and prepare
- Assess material quality
- Identify a realistic reuse or recycling route

The final methodology was jointly developed by consolidating complementary work carried out across the partnership. This included spatial assessment of potential litter sources, field-based monitoring and collection experience, classification and cleaning studies, material testing and assessment of potential recycling and utilisation pathways. The resulting methodology therefore represents a cross-border synthesis of project experience rather than the method of one individual partner or pilot location.



## 1.3 Testing across different urban environments

Practical work was centred on Aarhus, Rostock and Gdańsk, with Malmö contributing as an associated area. The pilot locations represented different urban waterway conditions, including narrow river channels, wider estuarine environments and river-and-canal systems.

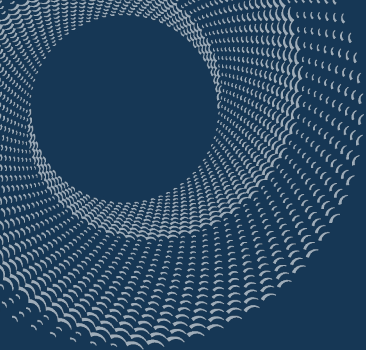
These differences allowed COP to test and compare approaches under contrasting local conditions. The experience confirmed that monitoring, collection and treatment methods cannot simply be transferred unchanged from one location to another. The transferable result is instead a common decision framework that can be adapted to local hydrology, accessibility, waste characteristics, infrastructure and downstream recycling opportunities.

The following chapters present the evidence underpinning that jointly developed methodology, from leakage identification and monitoring through collection, sorting, preparation and assessment of potential circular use.

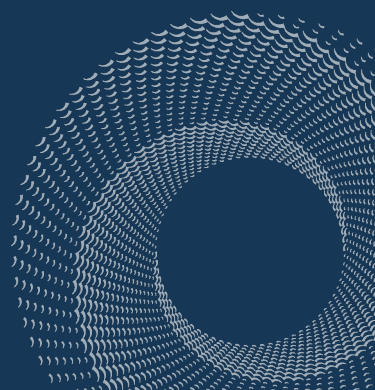








## 2. Understanding Leakage Risks and Potential Hotspots



## 2. Understanding Leakage Risks and Potential Hotspots

### 2.1 Ocean-bound plastic as a land-to-sea leakage problem

COP approached ocean-bound plastic as waste that can move from urban areas into rivers, canals and coastal waters through littering, wind, rainfall, runoff and other pathways. This upstream perspective creates opportunities to intervene before plastic reaches the marine environment.

For the jointly developed methodology, the first task is therefore to understand where leakage is likely to occur and **where litter may enter or accumulate within the local waterway system.**

### 2.2 Identifying potential leakage hotspots

COP developed and applied a spatial assessment approach in Aarhus, Gdańsk and Rostock. GIS data were used to map features associated with human activity within 100 metres of the waterfront, including cafés, restaurants, shops, pedestrian routes, recreational areas and access points. Spatial data were complemented by local stakeholder knowledge.

The assessment identified areas where intensive public activity occurred close to the water and where litter leakage could therefore be more likely. The resulting patterns differed between the three cities, reflecting differences in urban structure, waterfront use and accessibility.

This demonstrated an important best-practice principle:

**Potential leakage risk should be assessed before selecting monitoring or collection locations.**

### 2.3 From potential hotspots to field evidence

Hotspot mapping identifies potential sources of litter, but it does not directly measure how much litter enters the water or where it will ultimately accumulate. Wind, rainfall, current, shoreline form, vegetation and other local conditions can transport or retain material away from the original source area.

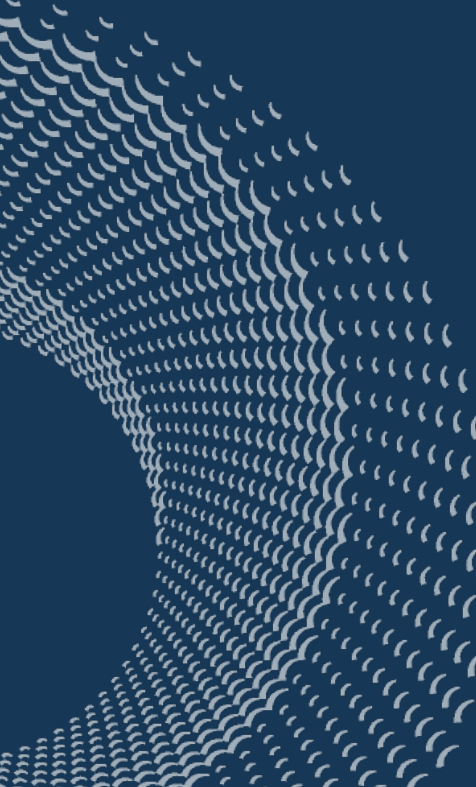
For this reason, COP combined spatial assessment with field monitoring. Mapping was used to guide attention towards likely source areas, while field surveys were needed to determine where litter was actually present and which environmental compartments contained it.



The transferable result is therefore not a fixed map of Aarhus, Gdańsk or Rostock, but a repeatable approach:

- Map potential leakage sources
- Add local knowledge
- Verify conditions through field monitoring
- Use the evidence to guide intervention

This approach can be applied in other cities and countries, provided that the local data, urban activities and waterway conditions are taken into account.



# **3.**

## **Finding and Monitoring Ocean-bound Plastic**



# 3. Finding and Monitoring Ocean-bound Plastic

## 3.1 From potential hotspots to observed litter

Spatial mapping identifies where litter leakage may occur, but field monitoring is needed to determine where litter is actually present, transported and retained. COP therefore tested several monitoring approaches along the Warnow River in Germany, covering floating litter, riverbanks, vegetation and material intercepted by barriers or other structures.

The methods included visual observation from a stand-up paddleboard, reed-belt surveys, standardised 100 m riverbank surveys, passive interception and drone observation. Litter was classified using the EU Joint List of Litter Categories for Marine Macrolitter Monitoring, providing a consistent basis for recording composition.



Fig. 2 Monitoring and collection approaches for different compartments of ocean-bound litter in river systems

The comparison demonstrated that a river should not be treated as a single transport channel. Litter can remain mobile, but it can also strand on riverbanks or become retained in vegetation and structures. Monitoring only floating litter therefore provides an incomplete picture.

## 3.2 What the monitoring showed

The Warnow trials produced a clear practical finding: much of the observable litter was retained within the river corridor rather than freely floating downstream. During paddleboard surveys, only 14.3% of observed litter was free-floating; most was stranded, submerged or entangled in vegetation.

Standardised 100 m riverbank surveys provided a more systematic picture of accumulated litter. Across 40 surveyed sites at five locations, 544 items were recorded, of which 334 items (61.2%) were plastic. The remaining material included glass, paper/cardboard, metal and textiles. This confirmed that plastic was the dominant fraction in these surveys while also demonstrating the need to record other relevant waste fractions.

Passive devices also showed that floating litter transport was not constant, while drone trials demonstrated their potential for observing inaccessible reed and shoreline areas. These methods are therefore complementary rather than interchangeable.

## 3.3 Best-practice monitoring approach

COP's monitoring experience supports a tiered approach rather than reliance on one method:

| <b>Monitoring Methods Used in COP</b><br><i>Different litter compartments require different monitoring approaches</i>                                                                                                                                    |                                                                                                                                      |                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| METHOD                                                                                                                                                                                                                                                   | BEST SUITED TO                                                                                                                       | MAIN COP LESSON                                                                                                                                                          |
| <br><b>100 m riverbank survey</b>                                                                                                                                     | <br>Long-term trends and comparison between sites | <br>Repeatable and practical, but measures accumulated shoreline litter             |
| <br><b>Paddleboard observation</b>                                                                                                                                    | <br>Floating litter and long river sections       | <br>Surface litter is only part of the observed litter stock                        |
| <br><b>Reed / vegetation survey</b>                                                                                                                                   | <br>Retention hotspots in shoreline vegetation    | <br>Vegetation can retain substantial local litter accumulations                    |
| <br><b>Passive interception</b>                                                                                                                                       | <br>Floating transport over time                  | <br>Useful between inspections, but depends on placement, flow and servicing        |
| <br><b>Drone observation</b>                                                                                                                                          | <br>Sensitive or inaccessible areas               | <br>Useful where physical access is difficult, but requires standardised conditions |
|  <b>No single method captures the whole river system.</b><br>Monitoring should be selected according to the litter compartment observed and the information required. |                                                                                                                                      |                                                                                                                                                                          |

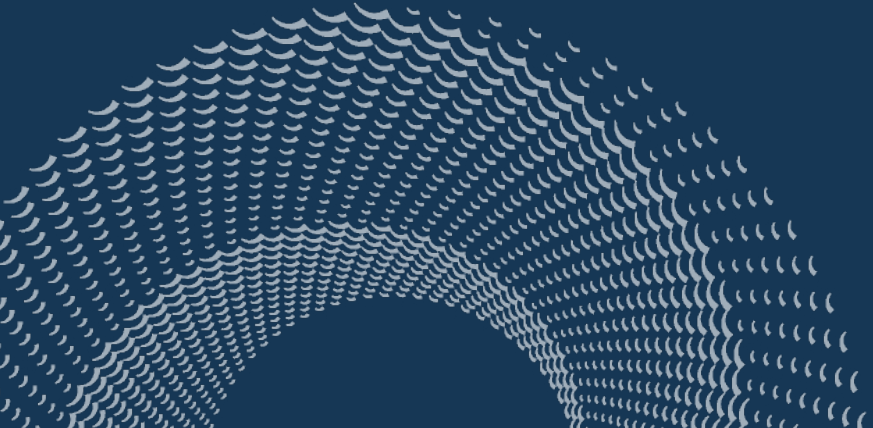
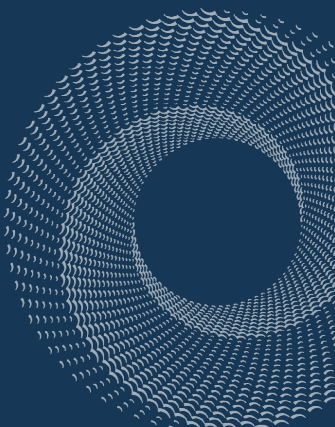
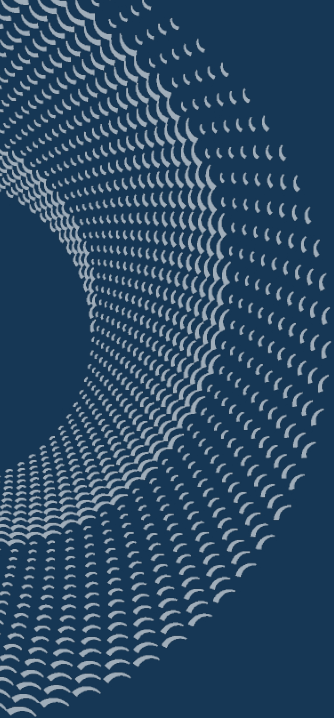
Fig. 3 Comparison of monitoring methods tested in COP

The key best-practice principle is:

**Select the monitoring method according to the litter compartment and the information required. Combine methods where one approach cannot represent the wider river system.**

This monitoring stage links the hotspot assessment to collection. Spatial analysis indicates where leakage may occur; field monitoring identifies where litter is actually present or retained; and that evidence can then guide the selection and placement of collection measures.





# 4. Collecting Ocean-bound Plastic

## 4. Collecting Ocean-bound Plastic

### 4.1 Select collection methods according to the site

COP found no universal technology for collecting ocean-bound plastic. Collection performance depends on local conditions such as waterway width and depth, current, wind, shoreline access, vegetation, navigation, litter type and maintenance capacity.

The project considered four broad collection approaches:

- **Manual collection**, suitable for accessible riverbanks, vegetation and local accumulation areas;
- **Booms and barriers**, which intercept or direct floating litter;
- **Fixed litter-collection systems**, suitable where floating material regularly accumulates; and
- **Mobile collection technologies**, which can provide flexibility in calm or accessible water environments.

Each approach has different requirements for installation, operation, access and maintenance. The transferable best-practice principle is therefore:

**Start with the waterway and observed litter behaviour, not with a preferred collection device.**

### 4.2 Link collection with monitoring and documentation

Collection can also provide information about the waste stream when material is recorded consistently. Where possible, collection events should document the **location, date, method, quantity and composition** of the recovered material before it is mixed with other waste or transferred for further treatment.

This creates a link between monitoring and collection. Spatial assessment identifies potential leakage areas, field monitoring shows where litter is actually present or retained, and collection can then be targeted at the most relevant locations.

For material intended for further sorting or recycling assessment, handling should also preserve information about the source and composition of the collected fraction. The Aarhus work demonstrated this connection by following recovered polypropylene from river collection through sorting, cleaning and material testing.

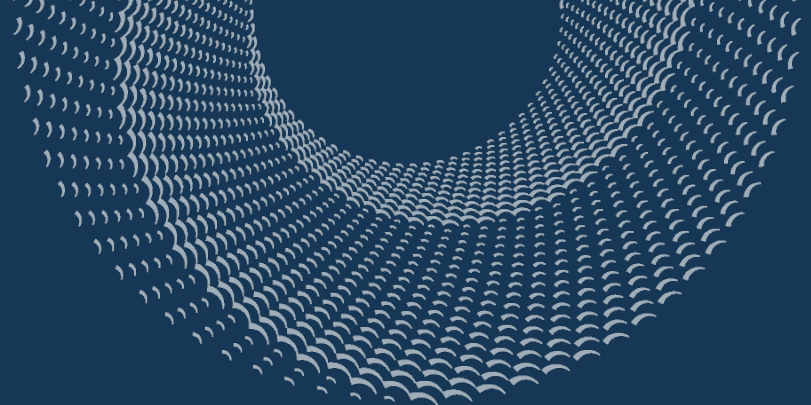
## 4.3 Collection best practice

COP's collection experience can be summarised in five practical principles:

1. Base collection on evidence from mapping and monitoring.
2. Choose methods that fit local hydrological and operational conditions.
3. Plan access, emptying and maintenance before installation.
4. Record the quantity and composition of collected material.
5. Consider downstream sorting and treatment where circular use is intended.

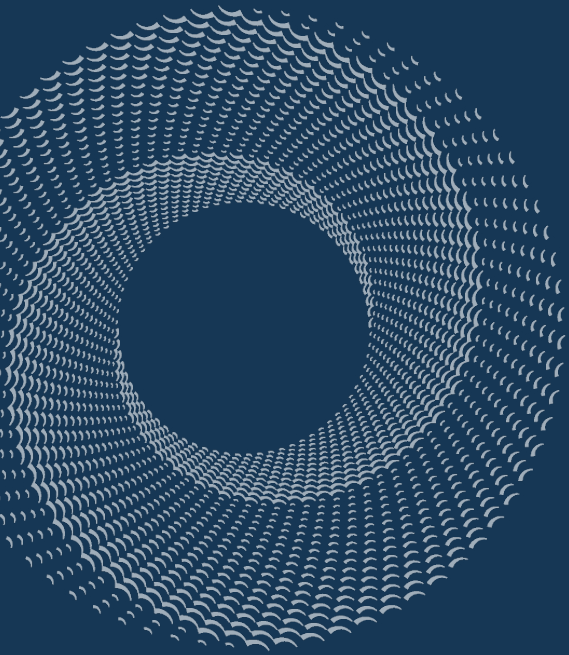
Collection should therefore be treated as one stage within the wider COP methodology. Its purpose is both to prevent further leakage and, where suitable material is recovered, to create a documented input for sorting, cleaning and assessment of potential reuse or recycling.





5.

# Sorting, Classification and Preparation of Collected Material



## 5. Sorting, Classification and Preparation of Collected Material

### 5.1 From mixed litter to classified material fractions

Ocean-bound litter is not a clean recycling stream. Material collected from rivers and urban waterways can contain plastics together with glass, metal, paper, organic matter and other waste, while the plastic itself may be contaminated by sediment, oils, biofilms and other residues.

COP therefore distinguished between two levels of classification. For environmental monitoring, litter was recorded by **item and material category**. For potential recycling, plastic also needed to be separated by **polymer type**.

The cleaning studies used Resin Identification Codes (RIC 1–7) to distinguish relevant plastic fractions, including PET, PE, PP and PS. This was necessary because different polymers have different treatment and processing requirements. Practical examples included polypropylene recovered from the Aarhus River and PET bottles from the Motława River in Gdańsk.

The best-practice principle is:

**Document what has been collected first, then separate suitable plastic fractions according to polymer type and downstream potential.**

Not every collected plastic fraction should proceed further. Fractions that are too mixed, heavily contaminated, inconsistent or available only in very small quantities may be better directed to established waste-treatment routes.

### 5.2 Cleaning and handling suitable fractions

Polymer separation alone does not make recovered ocean-bound plastic suitable for recycling. Contamination must also be addressed.

COP investigated a range of physical and chemical cleaning approaches. The tests showed that simple water washing was often insufficient and that cleaning effectiveness depended on both the polymer and the type of contamination.

Across the investigated samples, **alkaline-based cleaning and ultrasonicationassisted surfactant cleaning** emerged as promising approaches. However, treatments that performed well for one

material did not necessarily give the same result for another. Cleaning should therefore be selected according to the individual material stream rather than applied as one universal recipe.

After cleaning, suitable fractions can be size-reduced through cutting or shredding and homogenised where appropriate. Foreign material and non-target polymers should be removed as far as practicable before further processing or material testing.

Cleaning and preparation should balance three considerations:

1. **Performance**
2. **Economic practicality**
3. **Environmental impact**

The best-practice principle is:

**Treat cleaning and preparation as material-specific handling stages between collection and recycling.**

## 5.3 Practical pathway from collected waste to feedstock

The COP experience supports the following handling sequence:

- Record collection
- Remove non-plastic material
- Separate polymer fractions
- Remove visible contamination
- Clean according to material and contamination
- Shred or homogenise where appropriate
- Assess material quality

This sequence preserves information about the recovered waste while progressively identifying fractions that may have sufficient consistency and quality for further processing.

Where material is intended for circular use, collection and sorting records should include, where available, **location, collection method, quantity, composition and polymer classification**. This provides traceability between the environmental waste stream and the material subsequently tested or processed.

COP demonstrated this pathway most completely with polypropylene recovered from the Aarhus River, which was collected, isolated as a PP fraction, cleaned and mechanically prepared before



material testing.

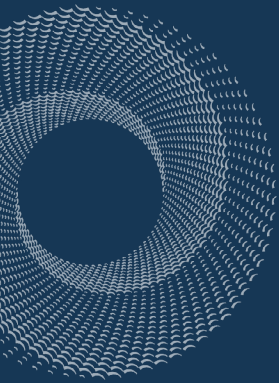
The key result is that collection does not itself create a secondary raw material.

**Sorting, classification, cleaning and controlled preparation are the stages that determine whether a collected fraction can realistically proceed towards reuse or recycling.**

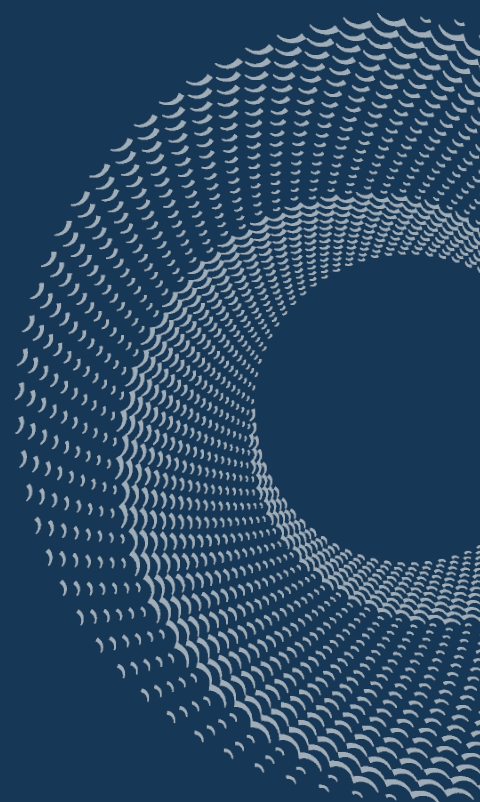








# 6. Recycling and Utilisation Potential



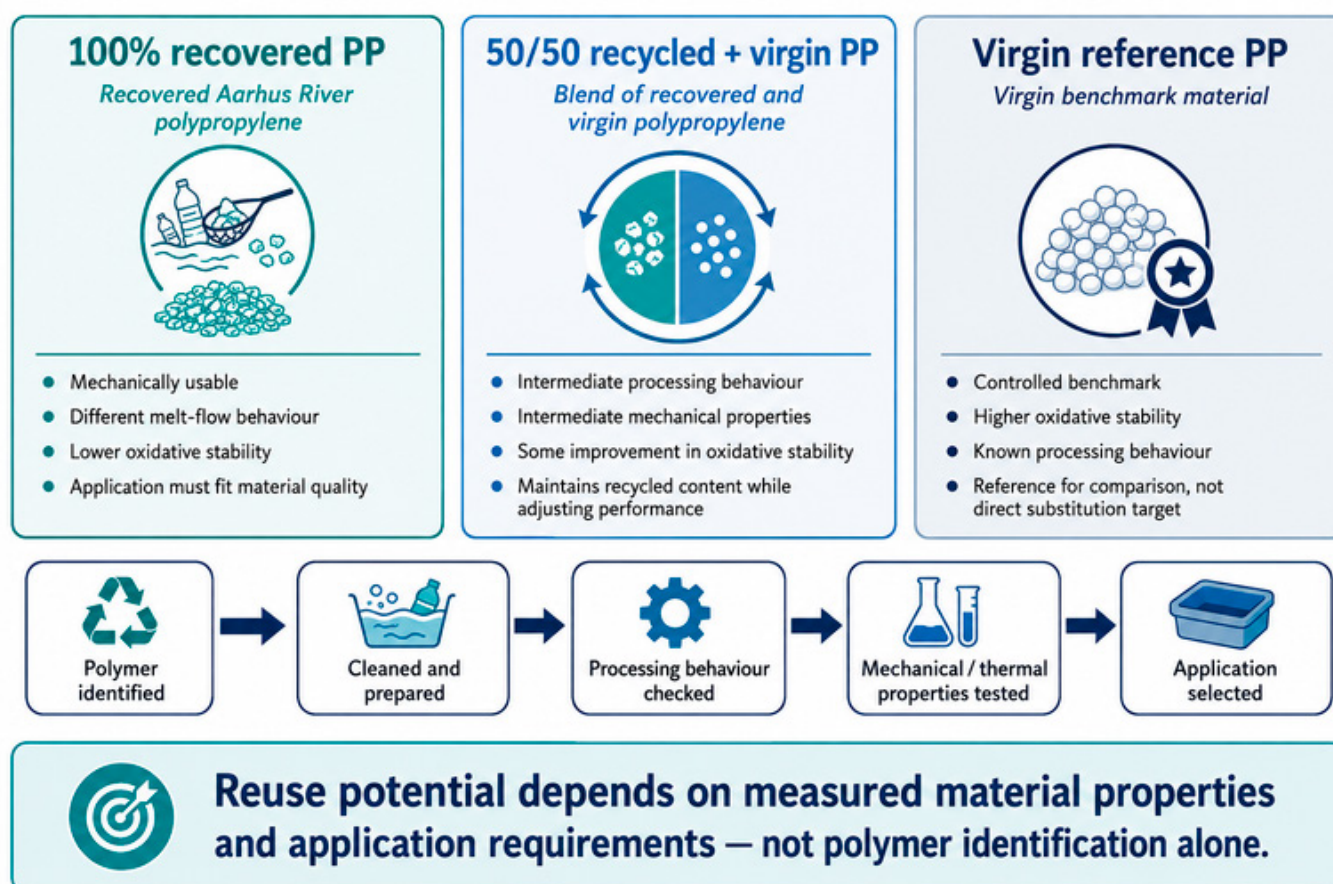
# 6. Recycling and Utilisation Potential

## 6.1 From recovered plastic to tested material

COP assessed utilisation potential most comprehensively using polypropylene recovered from the Aarhus River. Following collection, sorting, cleaning and mechanical preparation, the material was compared in three scenarios:

- **100% recovered Aarhus River PP;**
- **50/50 blends of recovered and virgin PP;**
- **100% virgin PP reference materials.**

Testing covered processing behaviour, chemical and thermal characteristics, oxidative stability and mechanical performance. The purpose was to determine whether the recovered fraction could be treated as a technically usable secondary material and what limitations would need to be considered before selecting an application.



## 6.2 What the material testing showed

The recovered material remained predominantly polypropylene after sorting, cleaning and processing.



Its thermal and mechanical behaviour showed that the recovered fraction could still function as a usable polymer material.

## Key findings and practical implications

|  Finding                                   |  Practical implication                                  |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|  Material remained PP-dominated            |  Polymer recovery and reprocessing were feasible        |
|  Melt flow differed from virgin references |  Processing route must fit recovered material           |
|  Mechanical performance remained usable  |  Recovered PP retained technical value                |
|  Oxidative stability was lower           |  Long-term use may require additional quality control |

However, it did not behave identically to the selected virgin references. The recovered PP showed lower melt-flow behaviour, indicating different processing characteristics, and lower oxidative stability, indicating reduced resistance to future oxidation. Mechanical testing did not show a simple loss of performance; several properties remained comparable with the reference materials.

The 50/50 blends generally showed intermediate behaviour between recovered and virgin material. Blending therefore represents one possible way of modifying processing and performance characteristics while retaining recycled content.

These comparisons must be interpreted with care. The original PP grade composition of the recovered material was not known, and the virgin materials were reference grades rather than exact equivalents. Observed differences may therefore reflect both material history and differences in polymer grade.

## 6.3 Best practice for selecting a utilisation route

The COP results support a practical principle:

**Do not select an application simply because the polymer has been identified. Select it according to measured material properties and the requirements of the intended use.**

A recovered plastic fraction should therefore move through the following decision process:

1. **Identify polymer**
2. **Clean and prepare**
3. **Check processing behaviour**
4. **Assess relevant mechanical and thermal properties**
5. **Match the material to an appropriate reuse or recycling route**

More demanding applications require tighter quality control and may require additional compounding, stabilisation or blending. Less demanding applications may tolerate greater variation where material properties remain suitable.

The Aarhus case demonstrates that selected ocean-bound plastic can be transformed from contaminated river waste into a controlled secondary material suitable for processing and technical assessment. It does not demonstrate that all ocean-bound plastic streams will behave similarly or that recovered PP can directly replace virgin PP in every application.

The transferable best-practice principle is therefore:

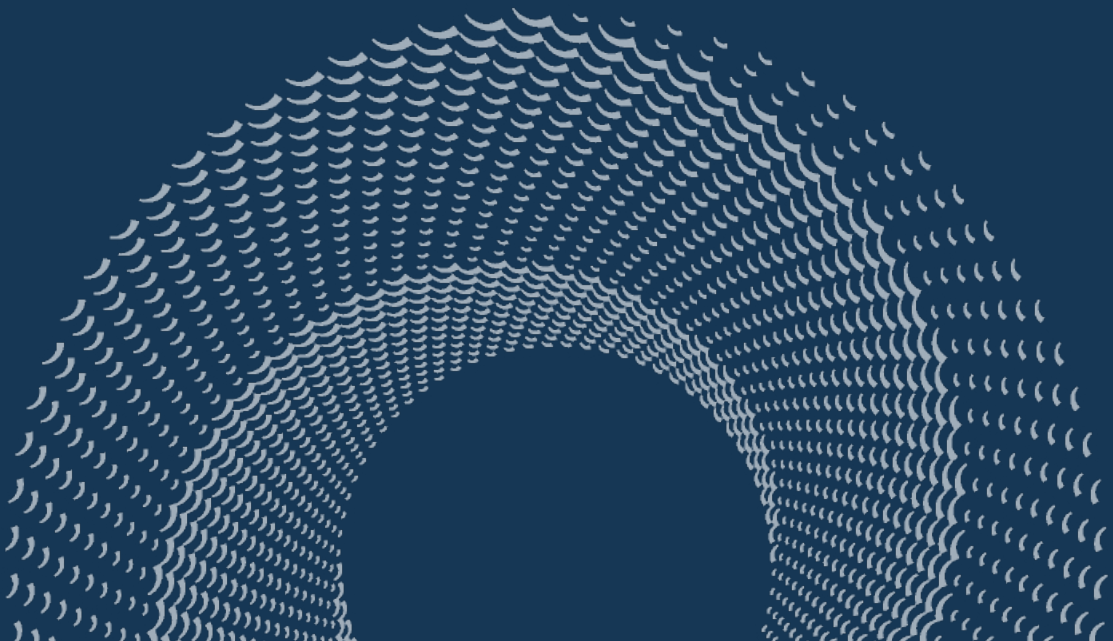
**Assess each promising material stream individually and connect utilisation decisions to verified material quality, processing requirements and realistic downstream demand.**





7.

# The COP Methodology and Best-Practice Approach



# 7. The COP Methodology and Best-Practice Approach

## 7.1 Consolidating the jointly developed solution

COP brought together complementary work undertaken across the partnership in Denmark, Sweden, Germany and Poland. The project generated evidence on potential leakage hotspots, riverine litter monitoring, collection approaches, sorting and polymer classification, cleaning and preparation, material testing and potential utilisation routes.

The jointly developed solution presented here consolidates those project results into one connected methodology. It is therefore not the method of a single partner or pilot location, but a cross-border synthesis of the practical and technical experience developed during the project.

The methodology follows seven linked stages:

- 1. Identify leakage risks**
- 2. Monitor litter**
- 3. Collect waste**
- 4. Clean and prepare**
- 5. Assess material quality**
- 6. Select a realistic utilisation route**

| Stage                                                                                                                    | COP best-practice approach                                                                                                                                      | Key decision                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>1. Identify leakage risks</b>       | Map potential sources and accumulation areas using spatial information and local knowledge.                                                                     |  Where is litter most likely to enter or accumulate?                  |
|  <b>2. Monitor litter</b>               | Select methods according to the litter compartment and purpose of monitoring; combine methods where necessary.                                                  |  What litter is actually present, and where?                          |
|  <b>3. Collect waste</b>                | Select collection approaches according to hydrology, access, navigation, litter behaviour and maintenance capacity.                                             |  Which collection method fits the site?                               |
|  <b>4. Document, sort and classify</b>  | Record collection location, method, quantity/volume and composition where available; distinguish environmental item classification from polymer classification. |  What has been collected, and which fractions are potentially usable? |
|  <b>5. Clean and prepare</b>            | Remove non-plastic material and contamination; select cleaning according to polymer and contamination; shred or homogenise where appropriate.                   |  Can a sufficiently consistent material fraction be prepared?         |
|  <b>6. Assess material quality</b>      | Test relevant processing, mechanical, thermal and durability characteristics according to the intended use.                                                     |  What are the material's properties and limitations?                  |
|  <b>7. Select a utilisation route</b> | Match suitable material fractions with realistic recycling or reuse options and downstream quality requirements.                                                |  Who can use the material, and for what purpose?                    |

Fig. 6 The COP methodology in practice

The stages are connected. Hotspot mapping alone does not identify all accumulated litter; collection alone does not create a recyclable material; and polymer identification alone does not demonstrate suitability for reuse. Each stage provides information needed for the next decision.

The methodology deliberately includes decision points where a material stream may leave the circular pathway. Not every collected plastic fraction will justify further sorting, cleaning or processing. Where quantity, consistency or quality is insufficient, established waste-treatment routes may remain more appropriate.

## 7.2 Best-practice principles for applying the methodology

The COP experience supports five overarching principles:

- 1. Start with evidence, not technology.** Understand leakage and accumulation before choosing an intervention.
- 2. Adapt methods to local conditions.** Monitoring and collection approaches should respond to the specific waterway and operational context.
- 3. Preserve information with the material.** Record quantity, composition, source and handling



where possible so that collected waste can be assessed.

4. **Treat recovered plastic as an uncertain material until tested.** Sorting, cleaning and polymer identification are necessary but do not by themselves demonstrate usability.
5. **Connect collection to a realistic downstream route.** Circular use depends on material quality, processing requirements and an identified potential user or recycling pathway.

A city or organisation applying the COP methodology should therefore be able to answer seven questions:

- **Where is litter entering or accumulating?**
- **How should it be monitored?**
- **How should it be collected?**
- **What was collected?**
- **Which fractions can be prepared?**
- **What are their properties?**
- **What realistic use or recycling route exists?**

The transferable value of COP lies in this structured decision process. Individual technologies and treatment methods may change between locations, but the evidence-based sequence can be applied in other cities, waterways and wastemanagement contexts.

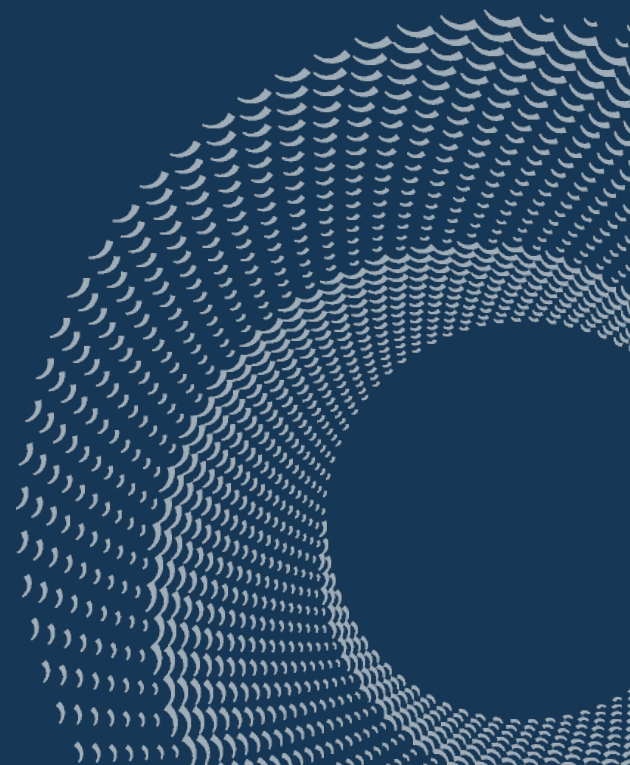






# 8.

## Transferability, Dissemination and Lessons Learned





# 8. Transferability, Dissemination and Lessons Learned

## 8.1 Transferability of the COP methodology

The COP methodology was developed through work in different urban and waterway contexts across the South Baltic region. The project experience showed that transferability does not mean copying a particular technology or treatment method unchanged from one location to another.

The most transferable result is the decision framework developed through COP:

Identify leakage risks   Monitor litter   Collect waste   Document, sort and classify   Clean and prepare   Assess material quality   Select a realistic utilisation route

These steps can be applied in other cities and countries because the underlying questions remain relevant even when local conditions differ.

Individual measures should nevertheless be adapted to:

- hydrology and waterway characteristics;
- accessibility and navigation;
- local litter sources and accumulation patterns;
- available waste-management and recycling infrastructure;
- operational and maintenance capacity; and
- local markets or users for recovered materials.

The monitoring work illustrates this distinction. A standardised riverbank-survey approach can be replicated elsewhere, while the choice of locations, survey frequency and complementary methods must be adapted to local conditions. Similarly, the material-testing approach developed for Aarhus polypropylene can be transferred as a method of assessment, but the results cannot automatically be assumed to apply to PET, PE, PS or other recovered plastic streams.

The COP methodology can therefore be extrapolated to other countries within and outside the South Baltic Programme area, provided that the individual interventions are adapted to the local environmental, operational and material context.

## 8.2 Dissemination of the complete project experience

The jointly developed solution is supported by a series of COP technical reports and dissemination materials covering the main stages of the methodology, including waste-stream analysis, hotspot assessment, riverine monitoring, cleaning pathways and material testing.

The approved project identified several target groups, including public authorities, research and higher-education organisations, blue and green SMEs and clusters, environmental-management organisations, civil society and NGOs. Dissemination should therefore reflect the different information needs of these groups.

## 8.3 Main lessons learned

The jointly developed COP experience produced several recurring lessons:

- **Intervene upstream where possible.** Plastic is easier to intercept, document and potentially recover before it reaches the marine environment.
- **Floating litter is only one part of the riverine litter problem.** Riverbanks, vegetation and interception points can retain substantial quantities of material.
- **Local conditions determine technical performance.** Monitoring and collection technologies should be adapted to the waterway rather than transferred unchanged.
- **Collection does not automatically create a recyclable material.** Suitable fractions must be sorted, classified, cleaned and prepared before circular use can be assessed.
- **Material quality should determine utilisation.** Recovered polymers may remain technically usable while differing from controlled virgin materials.
- **The complete value chain must be considered.** Municipalities, researchers, waste operators, technology providers, recyclers and companies each contribute different knowledge required to move from environmental litter to potential secondary material.

These lessons form part of the transferable COP solution and provide a practical basis for future application in other urban waterways and waste-management contexts.

## 8.4 Dissemination

The project requirement called for the complete COP experience to be consolidated into dissemination materials and reports adjusted to the relevant target groups.

COP produced a series of technical reports covering the main stages of the jointly developed methodology, including plastic waste streams and collection approaches, spatial assessment of potential litter sources, riverine macro-litter monitoring, cleaning pathways for collected ocean-bound plastic, and mechanical and material analysis of recovered plastic. Together, these outputs document the full pathway from identifying leakage risks to assessing potential circular use.

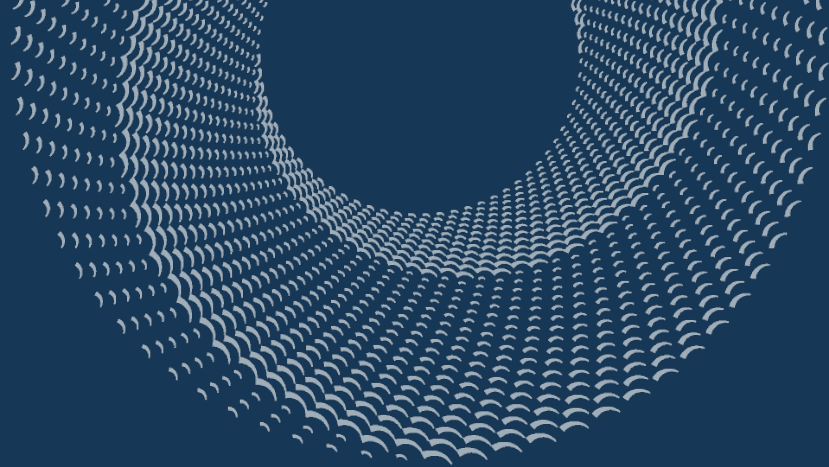
The project identified several relevant target groups, including public authorities and municipalities, research and higher-education organisations, blue and green SMEs and clusters, environmental-management organisations, and civil society and NGOs.

The technical content generated through COP is relevant to these groups in different ways. Public authorities and municipalities can use the project findings on hotspot identification, monitoring and collection planning. Research and R&D organisations can build on the monitoring methodology, classification approaches, cleaning studies and material analysis. SMEs, enterprises and clusters can use the findings on material quality, treatment requirements and potential reuse or recycling pathways. Waste and environmental operators can apply the practical lessons on collection, handling, sorting and preparation, while civil-society actors can use the project knowledge to support awareness and prevention of plastic leakage.

The project reports therefore provide a consolidated knowledge base for different users. Where additional workshops, events, guidance materials or public-facing communication were developed for specific target groups, these should be referenced in the evidence annex using only verified project documentation.

The dissemination element therefore goes beyond reporting individual technical results. It aims to make the complete COP experience accessible to organisations that may apply, communicate, or further develop the methodology.





# Circular Ocean-bound Plastic

Breaking the waves of ocean plastic pollution  
- From source to solution

[www.circularoceanplastic.eu](http://www.circularoceanplastic.eu)

The report is co-funded by:



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