

Assignment supported through the Cooperation Agreement between UN Environment and the Italian Ministry for Environment, Land and Sea Protection (IMELS)



Regional Activity Center for
Sustainable Consumption and Production (SCP/RAC)
UN Environment/ Mediterranean Action Plan

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Terms of Reference (ToR) for the selection of a consultants' team to estimate the quantities and types of food and beverage plastic packaging being placed on the market and in the waste flow in Montenegro

Activity developed in the framework of the MAP PoW 2018-2019, supported through the Cooperation Agreement between UN Environment and IMELS (Italian Ministry for Environment Land and Sea Protection)

Background

The Cooperation Agreement between UN Environment and IMELS (hereinafter referred to as the Cooperation Agreement) was signed in September 2016 providing for a framework of cooperation in support of the UN Environment/MAP mandate implementation, focusing on 4 main Components, one of which is the enhancement of marine litter management. In this respect, financial support has been provided by IMELS for the implementation of a number of activities included in the UN Environment/MAP Programme of Work (PoW) 2018-2019, adopted by the Contracting Parties to the Barcelona Convention in their COP 20 (Tirana, Albania, December 2017).

In this context, under the PoW Activity 2.1.1.2 “to promote the use of relevant instruments and incentives to reduce/forbid the single-use of plastics, reduce the use of plastic bottles etc.” SCP/RAC will undertake in the current biennium and with support from the Cooperation Agreement, a baseline study on the plastics packaging material flow in food and beverage industry and business focusing on the Adriatic area.

This activity is part of the overall portfolio of activities led by SCP/RAC with support from both IMELS and EBRD¹, with the objective of *Improving the policy framework and engaging with the food & beverage industry in Albania, Bosnia and Herzegovina and Montenegro for tackling plastics packaging value chains in a circular economy*. This set of activities aims at contributing to the identification and prioritization of preventive measures that tackle plastic packaging in the food and beverage (F&B) industry², by:

- Improving the relevant policy framework
- Strengthening the engagement of businesses and business support organizations (BSOs).

Plastics and plastic packaging are a valuable resource that brings numerous benefits to modern society and they have become an integral and important part of the global economy. According to the Ellen McArthur Foundation, plastic production has exponentially increased, from 15 million tons in 1964 to 311 million tons in 2014, and it is expected to double over the next 20 years. Today, plastic packaging is the largest application of plastics - it represents 26% of the total volume of plastic used. Globally, 95% of plastic packaging material value, estimated at EUR 70-105 billion annually, is lost to the economy after a very short first use-cycle.

Each year, at least 8 million tons of plastics end up in the ocean³. Marine litter is a growing problem that has attracted significant public attention over recent years. In the Mediterranean

¹ European Bank for Reconstruction and Development

² For the purposes of this assignment, the definition of “F&B industry” shall include the chain from primary food/beverage processing, distribution, wholesale and retail.

³ World Economic Forum (2016) The New Plastics Economy: Rethinking the future of plastics. Available online at: http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

sea, the concentration of marine litter is comparable to that found in the 5 gyres, and plastic comprise up to 95% of the waste accumulated on shorelines, the sea surface or the sea floor⁴.

According to Eunomia, nearly 60% of the plastic waste generated in the EU in 2015 came from packaging, out of which a very high proportion is food and beverage packaging. The trend is towards a significant increase, for example, Smithers Pira estimates that Europe will consume more than 900 billion items of packaged food and drink annually by 2020. In particular, the retail sector is seeing strong packaging penetration rates, growing from 63.0% in 2010 to 66.0% in 2014, with key areas including fresh fruit and vegetables, fresh meat and fish, chilled foods and baked products.

It is therefore of utmost importance to include policy makers, industry and business community in a multi-stakeholder dialogue to identify challenges and specific actions on the issue of plastics ending up as marine litter. The F&B industry is a key stakeholder in providing innovative and transformational solutions to the problem of plastic waste, while also affecting the policy set-up within and around their operations. Moreover, it is an aggregator and multiplier for best practices, in view of its work with supply chain partners and industry associations to explore different packaging solutions that create a circular economy for plastic packaging.

That is why the F&B industry is a central stakeholder group for the purposes of this assignment.

⁴ UNEP/MAP (2015). Marine Litter Assessment in the Mediterranean 2015. UN Environment/Mediterranean Action Plan.

Objective

The objective of this consultancy, a first essential step within the overall SCP/RAC-led set of activities included in the MAP PoW 2018-2019, is to estimate the quantities and types of food & beverage plastic packaging (FBPP) being placed on the market (POM) and in the waste flow (IWF) in Montenegro, for a selected baseline year, as well as providing recommendations to enhance this knowledge.

This activity will support the implementation of the Regional Plan on Marine Litter Management in the Mediterranean, adopted in 2013 (COP 18, Decision IG.21/7) as well as the Regional Action Plan on Sustainable Consumption and Production in the Mediterranean adopted in 2016 (COP 19, Decision IG.22/5).

FBPP-POM means all household and non-household FBPP used around food and beverage products. Today, over 90% of plastic packaging items are derived from virgin fossil hydrocarbons. The following figure (World Economic Forum 2016) shows the main plastic resin types and their applications in packaging.



Post-consumer FBPP-IWF includes composition and amounts of disposed, collected, recycled, landfilled, incinerated, exported and leaked FBPP.

The purpose of this consultancy work is to map the state of the art of the plastic packaging throughout the F&B value chain (see illustrative figure) in order to identify bottlenecks and

priority areas to promote prevention of marine litter and application of circular economy principles.

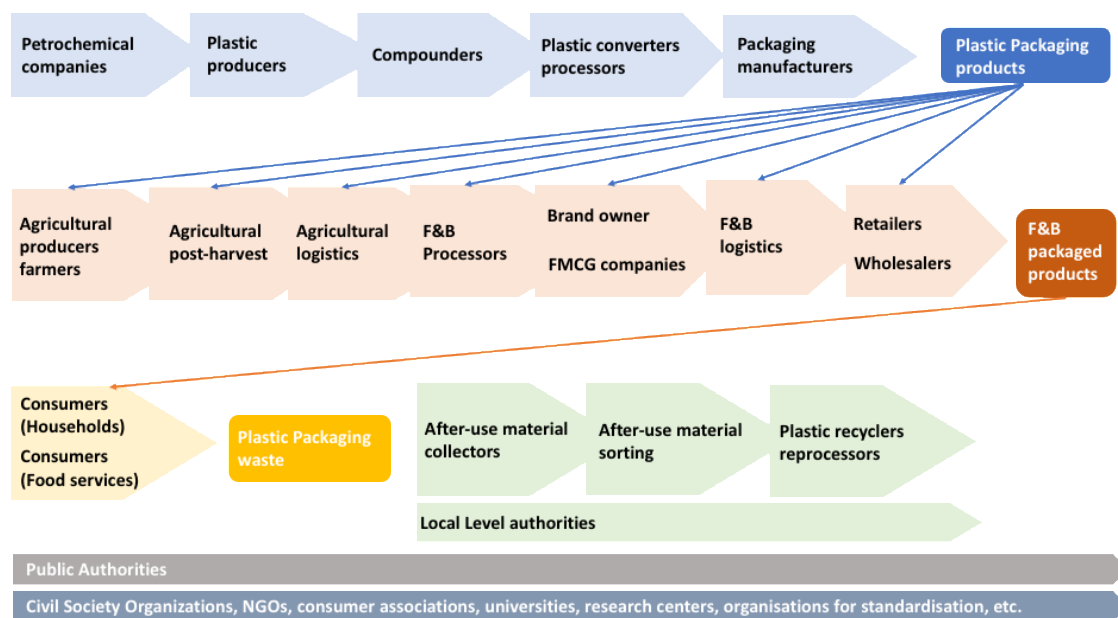


Figure: Food and beverage plastic packaging product-to-waste chain and main stakeholders⁵

Description of work

The consultant shall undertake the following work:

Activity 1. Quantities and types of FBPP-POM.

The Consultant should propose and implement a methodology to have an order of magnitude of FBPP-POM in each country. Information should be included on:

- Types of polymers: PET, LDPE, HDPE, PVC, PS, PP, EPS and others, including bio-based polymers (e.g. PHA).
- Format: rigid vs. flexible, complexity of packaging, e.g. full sleeve label over plastic container, composite packaging material, etc.
- Applications: package/container for the different food and beverage products, as well as other types packaging (e.g. transportation and logistics).
- Origin: domestically manufactured or imported; raw material, reused or recycled.

Existing data and information sources should be used to the extent possible. Gaps should be overcome by field research, including site visits and an initial stakeholders' consultation⁶.

For doing so, in the scenario of data scarcity, a bottom up approach should be proposed that include research among the following key sectors:

⁵ Pome A., 2018. An Inventory of policy measures and industry-based strategies to prevent marine litter from food and beverage plastic packaging. Professional Thesis. Mines ParisTech.

⁶ It should be noted the overall assignment comprises a later stage where an in-depth stakeholders mapping and survey, which is not part of this consultancy. In order to avoid duplication and cross-messaged, the Consultant must communicate in advance to SCP/RAC on the intention to involve stakeholders in this work. See also the section "Additional information".

- Plastic packaging around food and drinks as sold by supermarkets and other non-grocery retailers;
- Plastic packaging around food/drink as consumed in the hospitality sector;
- Plastic packaging around food/drink discarded by retailers back of store;
- Plastic packaging used in the F&B manufacturing industry; and
- Plastic packaging used in agricultural sector.

Depending of the evolution of the work and data collected, the Consultant may suggest focusing on a reduced number of sectors, where most of the FBPP may occur or where prevention measures could be easily developed. This selection will have to well justified and agreed with the Contractor.

Activity 2. Quantities and types of FBPP-IWF.

The Consultant should propose and implement a methodology to have an order of magnitude of post-consumer FBPP waste generated, collected, recycled, landfilled, incinerated, exported and leaked in each country. Information around the different parameters explained in the previous activity should be included (types, format, etc.)

Existing data and information sources should be used to the extent possible. Gaps should be overcome by field research, including an initial stakeholders' consultation. Work should particularly focus on these subsequent steps:

- Estimate post-consumer FBPP waste composition and amounts.
- Estimate collected FBPP by:
 - Official collection system
 - Informal collectors
- Estimate FBPP waste recycled and exported.

The results of Activity1 and Activity 2 shall be described in a report, and illustrated via a graphic, e.g. a Sankey diagram.

Activity 3. Enhancement of the data and information system related to FBPP and related waste.

The Consultant should elaborate recommendations for the improvement of the national data systems and mechanisms to better monitor FBPP and related waste. This should build on the information gaps found in the two previous activities and on an international benchmark review on data sources and management for FBPP and related waste. This could suggest how statistical departments could align with work in other countries considering as appropriate data bases and data holders such as:

- National waste databases, including which industry would have obligation reports
- National trade statistics
- Public utility companies in charge of waste collection
- National plastic producers associations
- PRODCOM: Statistics on the production of manufactured goods by Eurostat (Bosnia and Herzegovina and Montenegro are included)
- Other Eurostat statistics

Additional information

Within the overall SCP/RAC assignment, and following this study, there will be another consultancy work consisting in an-depth stakeholders' mapping and survey, which will support gathering information to fulfill data gaps found in the present consultancy work. Applicants to this will be invited to submit their offers to this subsequent stage.

Coordination

Within this project activity, two additional ToR have been published to undertake the research in Albania and Bosnia and Herzegovina, which follow the same approach and timeline as this one. The Contractor should act in close coordination with the consultants that will undertake similar tasks in Bosnia and Herzegovina and Albania and in view of fostering a harmonized approach in the three Adriatic countries. The contractual legal entity will not be eligible to conduct the work in more than one country (however partnership with other legal entity is allowed).

SCP/RAC will guarantee coordination among the 3 national consultants' teams. In addition, SCP/RAC will report on this work to UN Environment/MAP which in turn will report to the Steering Committee of the Cooperation Agreement. This may result into further adjustments which will be communicated to the consultants in due time.

Deliverables and timeline

The Consultant's team will start the work after the validation of their offer by the contractor.

Deliverable	Deadline
#1. Final methodology to assess quantities and types of FBPP-POM, including final list of stakeholders to be consulted.	3 weeks after contract notification
#2. Final methodology to assess quantities and types of FBPP-IWF, including final list of stakeholders to be consulted.	3 weeks after contract notification
#3. Inception report, including the outline of results for activities 1 and 2, and first recommendations for activity 3*	8 weeks after contract notification
#4. Final report, including final results for all activities	14 weeks after contract notification
#5. PowerPoint presentation of the main results (maximum 15 slides)	14 weeks after contract notification

*The Consultant should submit a draft version of the final report - both as a document and as a powerpoint deck - which will be commented by the Contractor in 2 weeks' time. Based on this the Consultant should produce the final report and powerpoint deck (deliverables 4 and 5).

Means of work and eligible costs

This work should be conducted through literature review and consultation with stakeholders. Equipment, consumables, travel should be included in the financial offer as a lump sum, with the exception of the attendance to national workshops (organized by the contractor), which will be covered by the Contractor.

Regular calls will be organized with the contractor. All the deliverables will have to be presented in English and validated by the Contractor before moving to the next step of the assignment.

Eligibility

Applicants must fulfill the following requirements:

- Be an individual consultant, firm or association
- Partnership and subcontracting are allowed, provided that the legal applicant entity has a substantial role in implementing the assignment. The applicant will be the only legal entity with which the contract relation will be established.
- Academic background in industrial engineering, environmental science or similar
- Acquainted with statistics and data bases management
- Fluent communication in English (oral and written)
- Extensive experience in the targeted country in particular related to waste management and plastic packaging production
- Experience in international projects

How to apply and selection process

Candidates should submit the following documents:

- 1) Technical proposal (maximum 5 pages): **Draft methodology to conduct the assessment of quantities and types of FBPP-POM and FBBP-IWF, including a tentative calendar. The methodology should identify information sources that may be used, as well as an initial list of stakeholders who would be consulted.**
- 2) Profile and project references (maximum 3 pages): the consultant(s) should submit a brief explanation of the candidate, including CVs as annex, and project reference on the topic.
- 3) Financial offer: the consultant(s) should state a lump sum to implement the work as well as the personnel dedication expressed in days (1 day = 8 working hours)

Offers must be sent to pfernandez@scprac.org with the subject “Baseline study - Montenegro” before **20th November, midnight (CET)**.

Important :

- The header of the **technical and financial offers** must clearly note the candidate data (Name, address, country, telephone, email and fiscal identity number or other official number) and those of the Contractor: « Regional Activity Center for Sustainable Consumption and Production / Agència de Residus de Catalunya / Carrer Dr. Roux nº 80 / 08017 Barcelona, Spain / NIF: Q-5856373-E ».
- The maximum amount for this consultancy is 9.000 euro (VAT excluded).⁷

All candidates will be notified the reception of the offers.

Offers will be assessed according to the following criteria and scores:

Points	Criteria
Maximum 50 points	Quality of the technical offer to meet the work objectives
Maximum 25 points	Financial offer
Maximum 25 points	Profile and project qualifications

The Contractor may contact candidates to convene an interview to facilitate the evaluation

If you have questions concerning these ToR, please contact pfernandez@scprac.org.

Selection and payments

The winning candidate will be notified by email on the selection of the offer. From that moment on work can start according to the calendar.

Payments will be done as it follows:

- Submission and approval of deliverables 1 and 2: 40%
- Submission and approval of deliverables 4 and 5: 60%

Payments will be done in a period of 60 days after reception and validation of the invoice. The Contractor is not responsible for banking costs that might be applied by the consultant(s) bank, nor for changes in currency exchange.

⁷ For applicants registered in Montenegro: Due to sur-charges in transfers to Montenegro, applicants are kindly requested to increase by 33% their financial offers to make sure full availability of budgeted funds. Please label this 33% as overheads in the financial offer.