



# Call for proposals for research on the socio-economic, health and environmental impacts of paper and cardboard packaging

## Terms of Reference

### Research

The Rethink Plastic alliance (RPa), Fern and the Environmental Paper Network (EPN) wish to carry out new research on the overall socio-economic, health and environmental impacts of paper and cardboard used for packaging purposes, with focus to reduce it.

The organisations want the research to give a **comprehensive understanding of the socio-economic, health and environmental impacts of the use of paper and cardboard packaging in Europe**. The research would aim to provide a holistic approach of the impacts of paper and cardboard used for packaging in Europe, including an analysis on:

- the production and consumption trends of how much of pulp and paper is going into packaging in Europe, including how much of raw/virgin fibres is used (e.g.: how many trees/forests that would represent); *(essential)*
- the impacts of forestry management, including on land use, soil degradation, water resources, biodiversity losses, and habitat protection. It should also include recent data on the carbon emissions; *(essential)*
- the social and economic impacts for the communities and third countries (exporters/suppliers); *(desirable)*
- the hazardous chemicals that are present in paper food packaging and what are the impacts of such chemicals for human health and for the environment *(desirable)*

The research should account for the whole value chain from the pulp extraction until its disposal, including:

- the potential recyclability of paper-based packaging, especially when in contact with food/beverages (e.g.: such as plastic-coated paper container of multi material bricks/tetrapacks commonly used for prep meals and takeaway). It should look into the challenges in recycling of such materials and at the real value of the secondary material that is obtained (e.g.: if it is mostly downcycled); *(essential)*
- its waste generation, management and disposal, including how much of that is downcycled/land-filled and/or incinerated. *(essential)*

The research should also bring a perspective on the **growing shift from single-use plastic packaging to paper based over the past years and what would be the related impacts of such a trend**, taking into account the environmental and socio-economic challenges mentioned above.

Also, the research should investigate the **hazardous chemicals that are present in paper food packaging** and what are the impacts of such chemicals for human health and for the environment. In this context, it should also look into the (synthetic) barrier coatings that are applied to paper packaging to make it waterproof, grease resistant, etc.

A key aim of this new research is to feed into the recent policy initiatives at the European (i.e: new EU Circular Economy Action Plan and the ongoing review of the Packaging and Packaging Waste Regulation), national and the global levels (i.e a global treaty on plastic pollution) to support a transition from single-use packaging towards more reusable packaging systems.

The two deliverables will be a report of between 20–40 pages (as described below and excluding annexes) with the analysis of the environmental, health and socio-economic impacts of paper packaging as well as concrete recommendations. The final report should also include a taxonomy box of different kinds of paper-based packaging and their relative recyclability (both potential & in reality).

The report should be written in English and in a non-technical, clear and understandable way, using graphs, maps, infographics, concrete examples and other images where possible (the issue of layout will be discussed between the consultant and the Rethink Plastic alliance), and second, an annex document (10–15 pages) to accompany the report which will contain the data, technical information, justifications etc. to backup claims and research in the report. The deliverables are to be completed by maximum 3 months after the study is commissioned (with first draft by maximum 2 months).

## The organisations

**Rethink Plastic Alliance (RPa)** is an alliance of leading European NGOs, with thousands of active groups, supporters and citizens in every EU Member State. We bring together policy and technical expertise from a variety of relevant fields, and work with European policy-makers to design and deliver policy solutions for a future that is free from plastic pollution. We are part of the global Break Free From Plastic movement, along with over 2500 NGOs and millions of citizens worldwide.

**Zero Waste Europe (ZWE)** is the European network of communities, local leaders, businesses, experts, and change agents working towards the same vision: phasing out waste from our society. We empower communities to redesign their relationship with resources, to adopt smarter lifestyles and sustainable consumption patterns, and to think circular.

**The European Environmental Bureau (EEB)** is the largest network of environmental citizens' organisations in Europe. We have over 180 members in more than 35 countries. We stand for sustainable development, environmental justice and participatory democracy.

**Fern** is an organisation based in the heart of the EU, dedicated to protecting forests and the rights of people who depend on them. We make decisions by consensus and build campaigns together with social and environmental organisations and movements across the world. We identify the threats facing the world's forests, and work with affected peoples, social and environmental organisations and policy makers to devise and deliver solutions where the EU can make a difference.

**The Environmental Paper Network (EPN)** is a world-wide network of over 150 civil society organisations working together towards the *Global Paper Vision*. This *Vision* expresses our common goal to create transformational change in the pulp and paper industry and wider society, so that paper production and use contributes to a clean, healthy, just and sustainable future for life on earth.

## Background

The European Commission, through their [proposal for a revision of the Packaging and Packaging Waste Regulation](#), have confirmed their intention to focus on prevention and reuse by proposing overall waste reduction targets for all packaging placed on the EU market as well as reuse/refill targets for specific market segments. For what is relevant for this research, the proposal includes reuse/refill targets for the Horeca sector on the takeaway food and beverage packaging, namely: Beverages: 20% by 2030 and 80% by 2040 and Food: 10% by 2030 and 40% by 2040; as well as for the e-commerce sector: 10 % by 2030 and 50 % by 2040.

Given that most of the packaging used for these sectors are paper-based, this recent legislative proposal has given rise to several studies financed by the paper industry aimed at proving their sustainability (examples [here](#) and [here](#)). On the other hand, it has also given rise to interest in reusable packaging systems for the food service sector (examples: [Vytal](#), [Recup & ReBowl](#), [ReCircle](#), [SwapBox](#), [CupZero](#), [Repack](#), among others).

Therefore, gaining a clear and systemic understanding of some aspects that are not addressed usually (land use, water resources, biodiversity loss, impact on communities, waste management, recyclability and real-life recycling and presence of chemicals), of paper packaging can provide the science to inform policy which is designed to support true circular and sustainable packaging.

## Objectives and description of work

The objectives of this project are to identify the socio-economic, health and environmental impacts of the use of paper and cardboard for packaging in Europe in order to address/mitigate such impacts and support a transition from single-use packaging towards more reusable packaging systems.

The study should build on existing research. We will provide a list of relevant existing studies but further literature review will be necessary, notably with regards to the social elements. Individual or group interviews will also be needed: possible targets for interviews could include those with expertise in pulp extraction issues linked with deforestation, local communities, as well as on experts on packaging for food and e-commerce services from different value chains (e.g: retailers, logistics experts and manufacturers), as well as people working in the social justice sphere. We will provide a list of people to consider for interviews and would welcome additional ideas from the consultants.

Quantitative analysis will be important for an assessment of the production and consumption trends of how much of pulp and paper is going into packaging in Europe, including how much of raw/virgin fibres is used (e.g.: how many trees/forests that would represent and the land and biodiversity impacts associated). Also for the waste management and data estimation on how much of this paper packaging is collected for recycling (e.g: how much ends up in the residual bin and not sorted afterwards), how much is effectively recycled (and into what – if downcycled) and whether there is any potential for closed-loop recycling.

Qualitative analysis is also expected, notably on the challenges in recycling of paper-based materials and at what is the real value of the secondary material that is obtained (e.g: downcycling), since a lot of the claims from the paper packaging industry that single-use performs better than reuse are based on inflated assumptions about the recycling of their paper-based packaging. Qualitative analysis is also expected in the socio-economic impacts for the communities and third countries (exporters/suppliers), on the health impacts of toxic chemicals in paper food packaging; on the growing shift from single-use plastic to paper based packaging and the related impacts of such a trend as well as how much these impacts would be reduced with the implementation of reuse packaging systems according to the specific case studies.

## Deliverables

The consultants will have two deliverables:

1. A written public report of 20-40 pages (excluding annexes), targeted at EU and national policy makers. The report should include:
  - a. a short overview of the challenge and policy context (1 page max)
  - b. analysis of environmental, health and socio-economic impacts of paper packaging;
  - c. policy recommendations for scaling up circular, sustainable and safe food packaging;
  - d. specific recommendations regarding revision of the packaging and packaging waste regulation

The final report will also include a short executive summary. The language of this report will be English and it should be non-technical, focused on (innovative) recommendations, clear and understandable by both policy makers and interested stakeholders.

2. The report should be accompanied with a more technical document which will compile all the background research and evidence gone into compiling the shorter public report. This will contain the solid scientific data and justifications to back-up the new public research and claims. This can be done in the form of an Annex document.

Graphs, maps, figures etc. can be in basic format as the report designers will create a common layout and design for all figures. Raw data must be made available for all relevant figures with reference to the original sources.

The findings of the report will be used by the organisations to contribute to common objectives.

## **Timing**

We would like to have this report completed by the end of April 2023

- Call open until 22 February 2023
- Work to commence by 1 March 2023
- First draft by 15 April 2023
- Last draft by 15 May 2023

A more precise work programme, including a deadline for a full draft, for internal/external reviews etc., should be part of consultants' offers, to be discussed and agreed upon before signing a contract.

## **Budget**

20,000 euros (VAT included if applicable)

## **Monitoring and management**

The main points of contact for the consultants will be:

Justine Maillot, Coordinator of the Rethink Plastic alliance: [justine@rethinkplasticalliance.eu](mailto:justine@rethinkplasticalliance.eu)

Larissa Copello, Consumption and Production Campaigner, Zero Waste Europe : [larissa@zerowasteurope.eu](mailto:larissa@zerowasteurope.eu)