Investigating options for reducing releases in the environment of microplastics.

Fields marked with \* are mandatory.

Investigating options for reducing releases in the environment of microplastics.

#### Introduction

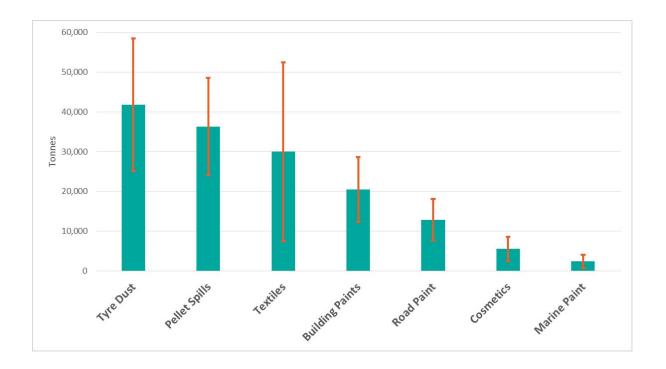
Marine litter, much of which is plastic, is found in marine and coastal habitats throughout the world, washed ashore, floating or accumulating on the seafloor.

Microplastics (Sized below 5 mm) are of particular concern.

The small size of microplastics and their material characteristics facilitate adsorption of toxic substances from the natural environment and increase their potential bioavailability to organisms throughout the food-chain. Their impacts can therefore be disproportionately high relative to the overall tonnage. They are used either intentionally in products (such as exfoliating components in cosmetics, in detergents, or as industrial blasting abrasives) or generated during the life cycle of products (for example during production of plastic products, through tyre wear or the washing of clothes). Microplastics can be partially treated in some waste water treatment plants or dispersed by the wind or via waste water effluents, rain drainage systems and/or rivers to reach the coastal and marine environment.

This internet-based consultation is part of the European Commission's efforts to understand the citizens' and stakeholders' views on the need for and possible range of measures which could be undertaken in order to reduce microplastics entering the marine environment under the basis of the precautionary principle.

Some of the main sources of microplastics were identified in a previous Commission study (see below graph). As part of the study that this consultation is supporting these sources and estimates are being investigated and fine-tuned.



## Questionnaire

Please note that the first questions are of general nature, and replies from question 3 onwards may require some prior knowledge about EU policy measures. The option of 'don't know' is available for all questions if you believe you are not in a position to answer. Questions marked with an asterisk (\*) require an answer to be given. In general several answers are possible. Completing this questionnaire could take up to 30 minutes of your time. Once you start filling in this questionnaire, the maximum time allowed by the system to complete is 90 minutes. Partial responses will not be saved. It is therefore recommended to download the full questionnaire as a PDF and prepare your answers in advance.

Thank you very much for taking the time to contribute to this consultation.

#### **Consultation Questions**

Fields marked with \* are mandatory.

# 1. Information about you

#### \* \*1.1a Your full name

Pedro Fernández Bautista

#### \* \*1.1b Your email address

pferbau@hotmail.com

\* Important notice on the publication of contributions

Replies to this public consultation will be published on the European Commission's website (for further information, please consult the privacy statement).

Please note: regardless of the option chosen below, your contribution may be subject to a request for access to documents under Regulation 1049/2001 on public access to European Parliament, Council and Commission documents. In such cases, the request will be assessed against the conditions set out in the Regulation and in accordance with applicable data protection rules.

Respondents should not include personal data in documents submitted in the context of consultation if they opt for anonymous publication.

#### \* Please indicate whether your reply:

- Can be published, including your name or that of your organisation (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)
- Can be published in an anonymous way (I consent to publication of all information in my contribution except my name/the name of my organisation, and I declare that none of it is under copyright restrictions that prevent publication)
- Cannot be published but only used for statistical and analytical purposes

*	* 1.2 l'r	n replying as a(n):	
	Int	erested individual/citizen/consun	ner

- Stakeholder/expert
- \* \* 1.2 a If you are replying as stakeholder/expert you represent:
  - Private company
  - Non-governmental organisation (NGO)
  - Academic/scientist/research
  - National authority
  - Local/regional authority
  - European Institution
  - International body
  - Industrial or trade association
  - Consumer association
  - Other associations
  - Other
  - 1.2 c If you represent a private company, what size is it?
  - Micro enterprises: fewer than 10 persons employed
  - Small enterprises:10 to 49 persons employed
  - Medium-sized enterprises: 50 to 249 persons employed
  - Large enterprises: 250 or more persons employed

1.2 d If responding on behalf of a(n) organisation/association/authority/company/body, please provide the name:

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Spanish Association on Marine Litter (AEBAM)
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\* \*1.2 e Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

In the interests of transparency, organisations, networks, platforms or self-employed individuals engaged in activities aimed at influencing the EU decision making process have been invited to provide the public with relevant information about themselves, by registering in Transparency Register and subscribing to its Code of Conduct.

Please note: If the organisation is not registered, the submission is published separately from the registered organisations. During the analysis of replies to a consultation, contributions from respondents who choose not to register will be treated as individual contributions (unless the contributors are recognised as representative stakeholders through Treaty provisions, European Social Dialogue, Art. 154-155 TFEU). If your organisation is not registered, you have the opportunity to register register now

- yes
  no
  \* \*1.3 Your country/ies:
  AT Austria
  BE Belgium
  BG Bulgaria
  CY Cyprus
  - CZ Czech Republic
  - DE Germany
  - DK Denmark
  - EE Estonia
  - EL Greece☑ ES Spain
  - FI Finland
  - FR France
  - HR Croatia
  - HU Hungary
  - IE Ireland
  - IT Italy
  - LT Lithuania
  - LU Luxembourg
  - LV Latvia
  - MT Malta
  - NL Netherlands
  - PL Poland
  - PT Portugal

RO - Romania
SE - Sweden
SI - Slovenia
SK - Slovakia
UK - United Kingdom
EU
Other

# 2. Gauging Your Awareness and Concern for Microplastic Pollution

The following section looks at how aware you are of the different sources of microplastics pollution and how concerned you are about it.

\*2.1 On a scale of (1) HIGH awareness to (3) NO awareness, what was you awareness level of the following possible sources of microplastic emissions to the environment before starting this survey?

## Main sources

	(1) High awareness	(2)Somewhat aware	(3) No awareness
*Agricultural Mulch Films	0	•	0
* Artificial Sports Turf	0	0	•
*Building Paints	0	0	•
*Clothing and textiles	•	0	0
*Cosmetics	•	0	0
* Detergents/cleaning products	•	0	0
* Fishing nets and related equipment	0	•	0
*Industrial Abrasives	0	0	0
*Marine Paints	0	0	0
*Pre-production Plastic Pellets	•	0	0
*Road Paint	0	0	0
*Road Tyres	•	0	0

<sup>\*2.2</sup> On a scale of (1) MOST concern to (5) LEAST concern, which sources of microplastics emission sources are of most ENVIRONMENTAL concern to you?

Click <u>here</u> here for definitions/explanations of the sources and base your judgement on your current understanding.

#### Main Sources

	(1) High Environmental Concern	(2)	(3)	(4)	(5)Not At All Concerned	Don' t Know
* Agricultural Mulch Films	•	0	0	0	0	0
* Artificial Sports Turf	0	•	0	0	0	0
*Building Paints	0	0	•	0	0	0
*Clothing and textiles	•	0	0	0	0	0
*Cosmetics	•	0	0	0	0	0
* Detergents/cleaning products	•	0	0	0	0	0
*Fishing Nets and related equipment	0	•	0	0	0	0
*Industrial Abrasives	0	0	0	0	0	0
*Marine Paints	•	0	0	0	0	0
*Pre-production Plastic Pellets	•	0	0	0	0	0
*Road Paint	0	0	0	0	0	0
*Road Tyres	•	0	0	0	0	0

2.3 Are there any other sources of microplastics emissions to the environment, not already listed above about which you are particularly concerned? Please state and explain why.

packaging and bags when it gets to the ocean, it breaks into pieces down to microplastics. So they are an important source  $\frac{1}{2}$ 

\*2.4 On a scale of (1) MOST concern to (5) LEAST concern, which are the potential impacts of microplastic emissions that are of most concern to you?

	(1) High Concern	(2)	(3)	(4)	(5)Not At All Concerned /No impact	Don' t Know
* Harm to human health	•	0	0	0	0	0
*Harm to marine life	•	0	0	0	0	0
*Costs and associated reduction in attractiveness for tourism	0	•	0	0	0	0

*Reduction in aesthetic value of marine	•	0	0	0	0	0
environments (sea surface, beaches etc.)						

# 3. Reducing Microplastics Pollution

The following section seeks your views on some of the potential policy options and mitigation strategies that could be employed to reduce microplastic emissions and who should potentially be responsible.

# Microplastics generated from wear and tear and/or lost during product use

The following questions focus on individual sources of microplastics that are generated during the use of a product and your answers should relate to these.

#### \*3.1 a Road Tyres

Please express your opinion on whether you believe that the following possible approaches to reduce road tyre microplastic emissions to the marine environment would be effective. If you do not have a firm view or understanding of the particular measure select 'don't know'.

## Measures to reduce the wear rate of tyres

	Very Effective	Effective	Not Effective	Don't know
*Inclusion of a durability rating on the <u>EU tyre label</u> to enable consumers to make a more informed choice when purchasing tyres	•	•	•	0
*Information campaign to raise awareness of the role of eco-driving in reducing tyre wear (e.g. avoid excessive speed, ensure correct tyre inflation etc.)	0	•	0	0
*A voluntary commitment by industry to increase the durability of tyres	•	0	0	0
*Legislation requiring producers to increase the durability of their tyres (including phasing out the least durable tyres over time)	•	0	0	0
* Financial incentives for producers to increase the durability of vehicle tyres	•	0	0	0

#### Measures to increase the capture of tyre particles

	Very Effective	Effective	Not Effective	Don't know
*Increasing the use of porous asphalt which allows particulates (and rainwater) to pass through the road surface and the particulates can be captured	0	•	0	0
*Increasing the use of natural buffers e.g. SuDS (sustainable drainage) to capture surface water from roads in vegetated strips adjacent to the asphalt surface	•	0	0	0
*Increasing the rate of road sweeping in order to remove dust (including vehicle tyre particles)	0	0	•	0
*Develop and install technologies that are proven to capture microplastics in a municipal waste water treatment plant and prevent them from entering effluents (and subsequently surface waters)	0	•	0	0

\* \*3.1 b Are there any other approaches to reducing tyre microplastics emissions to the marine environment that you believe would be effective? Please state and explain why.

Improvement of the network for the collection of rainwater and the treatment of rainwater in waste water treatment plants avoinding direct discharges of untreated rainwater
 A more holistic approach should be taken, aiming at reducing the number of cars in Europe, especially related to air quality

\*3.1 c On a scale of (1) GREATEST responsibility (5) LEAST responsibility, who do you think should take action for reducing tyre microplastics emissions to the marine environment?

	(1) GREATEST responsibility	(2)	(3)	(4)	(5) LEAST responsibility	Don't Know
*European Commission	•	0	0	0	0	0
*Member states (countries)	•	•	0	0	•	0
* Individuals	0	0	0	•	0	0
*Tyre Industry	•	0	0	0	0	0

#### \*3.2 a Pre-production Plastic Pellets, Powders and Flakes

Please express your opinion on whether you believe that the following possible approaches to reduce preproduction plastic pellets emissions to the marine environment would be effective. If you do not have a firm view or understanding of the particular measure select 'don't know'.

## Preventing supply chain loss through implementation of industry recognised best practice

	Very Effective	Effective	Not Effective	Don't know
*Continue current industry-led activities to encourage the voluntary uptake of best practice measures highlighted in Operation Clean Sweep guidance	0	•	0	0
*An 'enhanced' business-led approach using retailer procurement standards to require suppliers (and those who supply them) to demonstrate (including an audit process) that they are adhering to Operation Clean Sweep guidance	•	•	0	0
*Legislation at the EU level requiring all companies placing plastics on the EU market to demonstrate that their supply chain adheres to best practice as outlined in Operation Clean Sweep guidance	•	0	0	0

#### Measures to increase the capture of plastic pellets

	Very Effective	Effective	Not Effective	Don't know
*Develop and install technologies that are proven to capture microplastics in a municipal waste water treatment plant and prevent them from entering effluents (and subsequently surface waters).	•	•	0	0
*Mandate the installation of technologies that are proven to capture microplastics on manufacturing locations or sites handling pellets e.g. drain traps or onsite waste and waste water treatment.	•	0	0	0

- \* \*3.2 b Are there any other approaches to reducing pre-production plastic pellets emissions to the marine environment that you believe would be effective? Please state and explain why.
  - Regulate the way they are transported at sea
  - Regulate how they must be packed, handled, loaded/unloaded
  - Improvement of the network for the collection of rainwater and the treatment of rainwater in waste water treatment plants avoiding direct discharges of untreated rainwater
  - Install measurement devices in water sheds close to the production  $\mbox{\sc /manufacturing}$  facilities and impose substantial fines when pollution episodes are detected.
- \*3.2 c On a scale of (1) GREATEST responsibility (5) LEAST responsibility, who do you think should take action for reducing pre-production plastic pellets emissions to the marine environment?

	(1) GREATEST responsibility	(2)	(3)	(4)	(5) LEAST responsibility	Don't Know
*European Commission	0	•	0	0	0	0
*Member states (countries)	©	•	0	0	0	0
*Individuals	0	0	0	0	•	0
* Plastic pellet producers	•	0	0	0	0	0
* Plastic pellet converters	•	0	0	0	0	0
*Logistics Companies	0	•	0	0	0	0

## \*3.3 a Clothing and Textiles

Please express your opinion on whether you believe that the following possible approaches to reduce microplastic (synthetic fibre) emissions from clothing and textiles to the marine environment would be effective. If you do not have a firm view or understanding of the particular measure select 'don't know'.

Research on the relative importance of attributes of synthetic clothing (such as the type of fibre, fibre length, type of weave used) that may affect the rate of microfibre loss, is still at an early stage. It is therefore not clear at present what manufacturers or users can do to reduce the loss of microfibres from synthetic clothing. Research also suggests that the rate of loss of synthetic microfibres from clothing is highest during the first few washes, and then declines.

#### Measures to reduce the propensity of synthetic textiles to be shed from clothing

	Very Effective	Effective	Not Effective	Don't know
*Require all synthetic clothing to be pre-washed by the manufacturer, with fibres collected and managed appropriately, prior to the items being placed on the market	•	•	•	0
*Awareness raising campaign among consumers to alert them to actions they can take to reduce fibre loss, including washing less, washing full loads, washing at low temperatures, and using liquid detergents rather than powder	0	•	0	0
*Promote further research on the relative importance of attributes of synthetic clothing affecting the rate of microfiber (e.g. the type of fibre, fibre length, type of weave used) and widely disseminate its results	0	•	0	0

*Require all clothing placed on the EU market to indicate whether the item is likely to lead to high /medium/low or no loss of synthetic microfibres	0	•	0	0
*Develop EU Ecolabel criteria that manufacturers can choose to adopt.	0	•	0	0
*Develop a mandatory requirement for the progressive reduction of microfiber release that must be adopted by manufacturers of clothing sold in the EU.	•	0	0	0
*Apply an economic instrument to financially incentivise a shift towards clothing that releases fewer or no synthetic microfibers.	•	0	0	0

## Measures to capture synthetic textiles shed from clothing

	Very Effective	Effective	Not Effective	Don't know
*A requirement for all new washing machines to be fitted with filters to trap microfibres. These would need to be manually emptied periodically with the contents discarded with residual solid waste.	•	•	•	0
*A voluntary measure whereby manufacturers are encouraged to provide a microfibre capture bag with each washing machine placed on the market. The user places clothing inside this bag before placing it in the washing machine, and it captures microfibres. It then needs to be manually emptied.	•	•	•	•
*Develop and install technologies that are proven to capture microfibres in a municipal waste water treatment plant and prevent them from entering effluents (and subsequently surface waters).	0	•	0	0

- \* \*3.3 b Are there any other approaches to reducing microplastics (synthetic fibre) emissions to the marine environment from clothing and textiles that you believe would be effective? Please state and explain why.
  - promote non-synthetic textiles. Promote research and application of natural fibers as alternatives, such as bamboo and hemp
  - Promote higher quality and fair clothes instead of "fast fashion" model we have nowadays.
  - Discourage the current pattern of clothes consumption, change it for "consume less, consume better"
- \*3.3 c On a scale of (1) GREATEST responsibility (5) LEAST responsibility, who do you think should take action for reducing microplastics (synthetic fibre) emissions to the marine environment from clothing and textiles?

	(1) GREATEST responsibility	(2)	(3)	(4)	(5) LEAST responsibility	Don' t Know
*European Commission	•	0	0	0	0	0
* Member states (countries)	©	0	•	0	0	0
* Individuals	©	0	0	•	0	0
*Textiles/fibres Manufacturers	•	©	0	0	0	0
*Clothing Manufacturers	©	0	•	0	0	0
*Clothing Retailers	©	0	•	0	0	0
*Washing machine manufacturers	•	0	0	0	0	0

# \*3.4 a Artificial Sports Turf

Please express your opinion on whether you believe that the following possible approaches to reduce microplastic emissions from artificial sports turf to the environment would be effective. If you do not have a firm view or understanding of the particular measure select 'don't know'.

## Changes to handling and management of infill

	Very Effective	Effective	Not Effective	Don't know
*Develop and disseminate best practice guidance for the management of infill associated with artificial sports turf in order to increase awareness and encourage improvements	0	0	•	0
*Include best practice management techniques as requirements for pitches that wish to be certified by FIFA (or the relevant accreditation body for the pitch in question).	0	0	•	0
*Develop and install technologies that are proven to capture microplastics in a municipal waste water treatment plant and prevent them from entering effluents (and subsequently surface waters).	0	•	•	0
*Mandate the installation of technologies that are proven to capture microplastics on sports turf sites e.g. drain traps or onsite waste water treatment.	•	0	0	0

# Changes to the nature of the infill

	Very Effective	Effective	Not Effective	Don't know
*Awareness raising of the possible use of alternative non-polymer based infill material such as cork	0	•	0	0
*Voluntary, industry led, commitment to increase the use of non-polymer based infill	0	•	0	0
*Financial incentives to move towards non-polymer based infill	0	•	0	0
* A ban on the use of polymer based infill as an infill material for artificial sports turf	•	0	0	0

\*3.4 b Are there any other approaches to reducing microplastics emissions to the marine environment from artificial sports turf that you believe would be effective? Please state and explain why.

Improvement of the network for the collection of rainwater and the treatment of rainwater in waste water treatment plants avoiding direct discharges of untreated rainwater

\*3.4 c On a scale of (1) GREATEST responsibility (5) LEAST responsibility, who do you think should take action for reducing microplastics emissions to the marine environment from artificial sports turf?

	(1) GREATEST responsibility	(2)	(3)	(4)	(5) LEAST responsibility	Don' t Know
*European Commission	©	•	0	0	0	0
*Member states (countries)	•	0	0	0	0	0
* Individuals	0	0	0	0	•	0
* Artificial turf manufactures/ installers	•	0	0	0	0	0
* Artificial turf pitch owners /managers	©	•	0	0	0	0
* National and regional sport Federations	0	•	0	0	0	0

# Intentionally added microplastics

The following question focuses on individual sources of microplastics that are intentionally added to a product. This is in support of a targeted stakeholder consultation which took place on this subject during April/May 2017.

\* 3.5 Which is for you, the most efficient and effective way to address individual sources of microplastics that are intentionally added into the following products?

	Voluntary Industry phase-out	Prominent, mandatory labelling to show the product contains microplastics	Tax on microplastic ingredients	Ban on microplastics ingredients	Strongly Oppose such measures	Don't Know
* Cosmetics	0	0	0	•	0	0
* Detergents /Cleaning products	•	•	•	•	•	•
* Building Paints	0	0	0	•	0	0
* Other - please specify	0	0	0	0	0	•

# **Financial Responsibility**

The following question looks at where the financial responsibility should lie for the implementation of any of the proposed measures.

\*3.6 On a scale of (1) GREATEST responsibility (5) LEAST responsibility, who do you think should bear the FINANCIAL responsibility for reducing microplastics emissions to the marine environment?

	(1) GREATEST responsibility	(2)	(3)	(4)	(5) LEAST responsibility	Don' t Know
* Manufacturers of the products concerned, through their own waste and waste water treatment facilities or through public facilities which should capture or be upgraded to capture microplastics before they are released in the environment with costs potentially included in the prices of those products	•	0	•	0	•	©
*The (public or private) waste and waste water treatment companies (who may be able to capture microplastics) and potentially pass the costs in water price/taxes	©	0	0	0	•	0
*Government/ Tax payers	0	0	0	0	•	0

# 4. Document Upload

You may upload here an additional document on the subject of this consultation (max. 3 pages/2000 words).

All additional documents provided will be published on the Commission website.

Please upload your file

# Contact

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