



EUROCITIES response to the Green Paper on a European Strategy on Plastic Waste in the Environment

EUROCITIES

EUROCITIES is the political platform for major European cities towards the EU institutions. We network the local governments of over 130 of Europe's largest cities and 40 partner cities that between them govern some 130 million citizens across 35 countries.

www.eurocities.eu

CONTENTS

Introduction	4
1. Can plastic be appropriately dealt with in the existing legislative framework for waste management or does the existing legislation need to be adapted?	5
2. How can measures to promote greater recycling of plastic best be designed so as to ensure positive impacts for enhanced competitiveness and growth?	6
3. Would full and effective implementation of the waste treatment requirements in the existing landfill legislation reduce sufficiently current landfilling of plastic waste?	6
4. What measures would be appropriate and effective to promote plastic re-use and recovery over landfilling? Would a landfill ban for plastic be a proportionate solution or would an increase of landfill taxes and the introduction of diversion targets be sufficient?	7
5. What further measures might be appropriate to move plastic waste recovery higher up the waste hierarchy thereby decreasing energy recovery in favour of mechanical recycling? Would a tax for energy recovery be a useful measure?	7
6. Should separate door step collection of all plastic waste combined with pay-as-you-throw schemes for residual waste be promoted in Europe, or even be made mandatory?	8
7. Are specific plastic waste recycling targets necessary in order to increase plastic waste recycling? What other type of measures could be introduced?.....	9
8. Is it necessary to introduce measures to avoid substandard recycling or dumping of recyclable plastic waste exported to third countries?.....	9
9. Would further voluntary action, in particular by producers and retailers, be a suitable and effective instrument for achieving better resource use in the life cycle of plastic products?	10
10. Is there scope to develop deposit and return or lease systems for specific categories of plastic products? If so, how could negative impacts on competition be avoided?	10
11. What type of information would you consider necessary to empower consumers to make a direct contribution to resource efficiency when choosing a plastic product?.....	10
12. Which changes to the chemical design of plastics could improve their recyclability?	11
13. How could information on the chemical content of plastics be made available to all actors in the waste recycling chain?	11
14. How can challenges arising from the use of micro plastics in products or industrial processes and of nano-particles in plastics be best addressed?	12
15. Should product design policy tackle planned obsolescence of plastic products and aim at enhancing re-use and modular design in order to minimise plastic waste?	12
16. Could new rules on eco-design be of help in achieving increased reusability and durability of plastic products?.....	12
17. Should market based instruments be introduced in order to more accurately reflect environmental costs from plastic production to final disposal?	12
18. How can the waste burden posed by short-lived and single-use disposable plastic products best be addressed?.....	12
19. What are the applications for which biodegradable plastics deserve to be promoted, what framework conditions should apply?.....	13

20. Would it be appropriate to reinforce existing legal requirements by making a clear distinction between naturally compostable and technically biodegradable plastics, and should such a distinction be subject to mandatory information? 13
21. Would the use of oxo-degradable plastic require any kind of intervention with a view to safeguarding recycling processes, and if so, on which level? 13
22. How should bio-based plastics be considered in relation to plastic waste management and resource conservation? Should the use of bio based plastics be promoted?..... 13
23. What actions other than those described in this Green Paper could be envisaged to reduce marine litter? Should some marine litter related actions be coordinated at EU level (e.g. by setting up a coordinated European Coastal Clean-up Day to raise awareness)? 14
24. In its proposal for a new Environment Action Programme the Commission suggests that an EU wide quantitative reduction target for marine litter be established. How can the setting of such a target provide added value to measures that reduce plastic waste generally? How could such a target be developed? 14
25. Should the EU attach a higher priority to plastic waste in the framework of its "New Neighborhood Policy", particularly in order to reduce plastic littering in the Mediterranean and in the Black Seas? 14
26. How could the EU promote more effectively international action to improve plastic waste management worldwide? 14

INTRODUCTION

Local authorities are key to implementing EU legislation on waste management, and our cities are committed to improving environmental performance, including addressing issues surrounding plastic waste.

We support moving plastic waste up the waste hierarchy as established in the Waste Framework Directive (2008/98/EC). This would mean prevention of plastic waste as a primary goal at the top of the hierarchy, followed by reusing, recycling and recovering it, and disposal only as a last resort at the bottom of the hierarchy. Better implementation of the landfill directive (1999/31/EC) in all member states would be the most effective means of moving plastic up the waste hierarchy. In light of the stark differences in landfilling across the EU, this will require significant efforts at all levels of government; a strategy for better implementation should involve the EU, national, regional and local levels.

The specific measures on plastic waste outlined below would also be very useful.

- Responsibility for waste collection should be clearly allocated to municipalities. Some member states currently use a 'dual' system, in which some parts of household waste are collected by industry and other parts by the municipality. It would be more efficient to leave the collection of household waste entirely with local authorities, who can then distribute it to the relevant waste treatment facilities, including industry and municipal facilities.
- Member states should implement extended producer responsibility schemes to secure financing for the collection and recycling of plastic packaging. This could also help encourage less plastic usage in packaging in the first place.
- Producer responsibility schemes should ensure that producers are fully responsible for taking on and treating all waste covered by the scheme and which has been collected by local authorities. For instance, if a producer responsibility scheme covers plastic waste, the local authority should collect the plastic waste, while the producers should be fully responsible for recycling and/or recovering it.
- Better technology for sorting plastic would facilitate recycling and reduce costs at recycling facilities.

The 50% recycling target set out in the Waste Framework Directive does not specify whether the target must be reached for each waste stream or as an average across all waste streams. While we would support a new recycling target for plastic waste, setting it at 50% would be very ambitious and would require a number of new measures to be put into place, including those described above.

Below you will find our detailed responses to the questions in the Green Paper.

1. Can plastic be appropriately dealt with in the existing legislative framework for waste management or does the existing legislation need to be adapted?

We agree with previous comments from the Commission that the key to better treatment of plastic waste and other waste streams remains proper implementation of existing waste regulation across the EU. While some member states may be able to be more ambitious, the gap between more and less advanced countries is so wide that new EU legislation on waste management would not be useful at the moment.

In particular, the Commission and member states must explore how to improve and speed up the implementation of the landfill directive; implementation of the existing regulations to reach goals set up in the waste framework directive; and the implementation of the packaging directive

Better implementation of the landfill directive in all member states would be the most effective means of moving plastic up the waste hierarchy. In light of the stark differences in landfilling across the EU, this will require significant efforts at all levels of government; a strategy for better implementation should involve the EU, national, regional and local levels.

The specific measures on plastic waste outlined below would also be very useful.

- Member states should implement extended producer responsibility schemes to secure financing for the collection and recycling of plastic packaging. This could also help encourage less plastic usage in packaging in the first place.
- Producer responsibility schemes would also help local authorities set up more separate collection schemes that make it easy for citizens to separate plastic for recycling
- New technology for sorting plastic would facilitate recycling and reduce costs at recycling facilities.
- Clearly allocating the responsibility for waste collection to municipalities. Some member states currently use a 'dual' system, in which some parts of household waste are collected by industry and other parts by the municipality. It would be more efficient to leave the collection of household waste entirely with local authorities, who can then distribute it to the relevant waste treatment facilities, including industry and municipal facilities.
- The 22.5% recycling target for plastic used in packaging set out in the Packaging Directive (PPWD) is being met by almost all member states. The Commission could explore possibilities for further improvement.
- Exploring the possibility of introducing more specific provisions on plastics recycling in other directives, such as the Waste Framework Directive (WFD), the Waste Electric and Electronic Equipment Directive (WEED) and the End-of-Life Vehicles Directive (ELV).

Adaption of new legislative framework to reach more ambitious goals

The 50% recycling target set out in the Waste Framework Directive does not specify whether the target must be reached for each waste stream or as an average across all waste streams. While we would support a new recycling target for plastic waste, setting it to 50% would be very ambitious and would require a number of new measures to be put into place, including those described above.

However, for some countries in Europe, an overall 50% recycling rate should be achievable by 2020. For instance:

- the Netherlands has already reached 50%, while their recycling target under the Waste Framework Directive is 52% by 2022
- Germany has already achieved over 50% in the past, although market liberalisation and overcapacity of waste incineration plants have recently led to increased burning of recyclable plastics
- in some member states, deposit systems have already led to very high recycling rates for beverage containers; for instance, a recent report concluded that Norway may achieve a 60% recycling rate by 2020¹.

Climate change mitigation can also offer incentives to recycle more plastic waste. For instance, Copenhagen has largely moved away from plastic waste incineration as part of their strategy to become carbon neutral by 2025. Together with the existing ban on landfilling, this should lead to more recycling.

For more details, see the answers to question 2 - 7.

2. How can measures to promote greater recycling of plastic best be designed so as to ensure positive impacts for enhanced competitiveness and growth?

While recycling would lead to better resource efficiency and therefore contribute to long-term growth, measures to promote recycling should be designed as cost-effectively as possible.

The EU should consider:

- further developing extended producer responsibility, starting with an analysis of existing producer responsibility schemes and lessons to be learnt from them
- bringing together producers of different types of plastic, manufacturers of products using plastic and waste managers to optimise the design of any new measures
- the mandatory use of recycled plastic as part of new plastic production
- supporting R&D on sorting plastic for recycling and on using recycled plastic for new products.

3. Would full and effective implementation of the waste treatment requirements in the existing landfill legislation reduce sufficiently current landfilling of plastic waste?

Experiences from different EU member states show that the implementation of the landfill legislation and the implementation of a stricter landfill ban significantly reduce the landfilling of plastic waste².

¹ www.klif.no/no/Publikasjoner/Publikasjoner/2012/September/Okt-utnyttelse-av-ressursene-i-plastavfall

² europa.eu/rapid/press-release_STAT-13-33_en.htm

4. What measures would be appropriate and effective to promote plastic re-use and recovery over landfilling? Would a landfill ban for plastic be a proportionate solution or would an increase of landfill taxes and the introduction of diversion targets be sufficient?

As mentioned above, we believe that systems of extended producer responsibility would be most effective to promote plastic re-use and recovery over landfilling. It is essential to develop tools that both push and pull plastic up the waste hierarchy.

Measures to reduce the landfilling of plastic waste should be part of an overall strategy to tackle landfilling, and should include:

- ensuring the implementation of the existing landfill directive
- collecting and exchanging member states' experiences of landfill bans³ and of landfill taxes to support others considering adopting these measures

If the landfill directive is fully implemented in all member states the EU could also consider possibilities for a landfilling ban at EU level that would include plastic waste. A separate landfilling ban for plastic waste would be counterproductive, since:

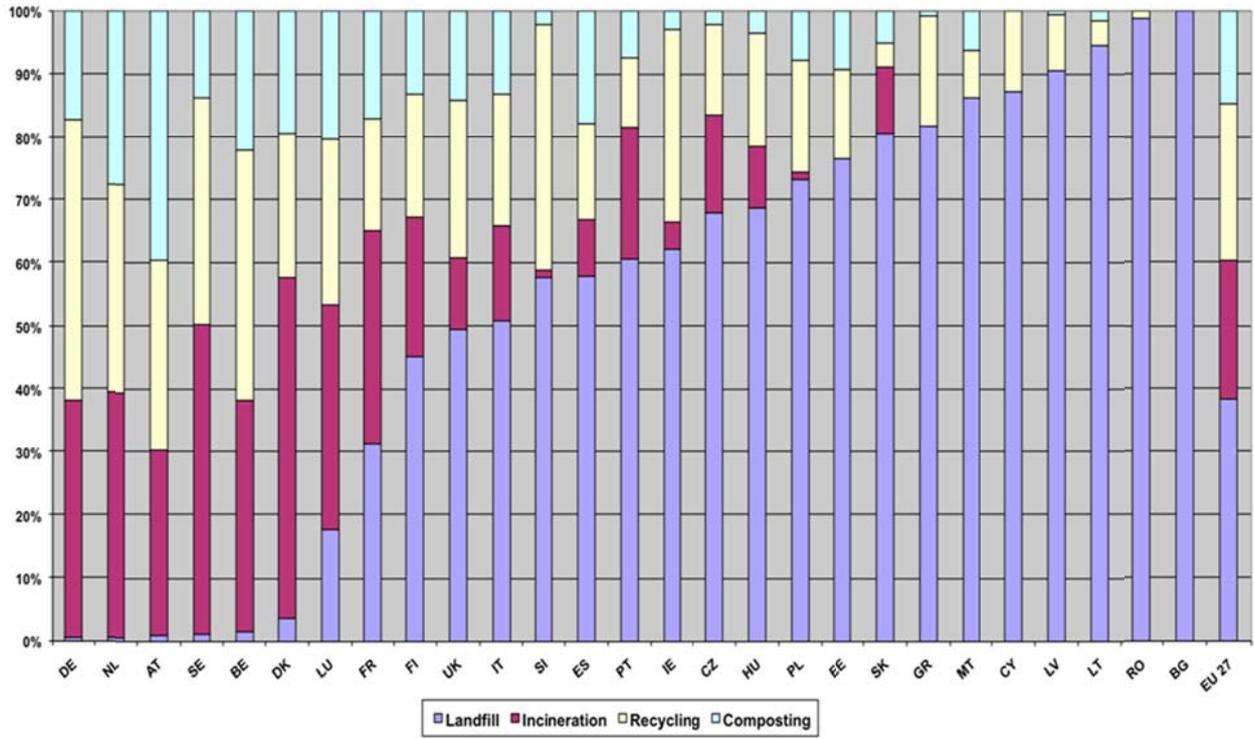
- the separation of plastic waste is part of the overall waste handling system and needs to be well integrated into it
- it would be difficult to ensure that all plastic is sorted out from the waste going to landfill

5. What further measures might be appropriate to move plastic waste recovery higher up the waste hierarchy thereby decreasing energy recovery in favour of mechanical recycling? Would a tax for energy recovery be a useful measure?

We support moving plastic waste up the hierarchy, favouring mechanical recycling over incineration.

However, a tax on energy recovery would not be helpful. Eurostat data clearly show that successful waste management includes high rates of recycling together with energy recovery of waste not suitable for recycling or reuse (see the graph below). The issue of energy recovery from waste that should have been recycled should be addressed for all relevant waste streams, not only plastic waste.

³ for instance in Germany, Austria, the Netherlands, Sweden and Denmark



European waste management 2010

Source: Eurostat 2012, europa.eu/rapid/press-release_STAT-12-48_en.htm?locale=en

6. Should separate door step collection of all plastic waste combined with pay-as-you-throw schemes for residual waste be promoted in Europe, or even be made mandatory?

a. Separate door step collection of all plastic waste

Local authorities should be able to decide how to collect different types of waste so that they can adapt to local circumstances, such as:

- densely populated urban areas or sparsely populated rural areas
- climatic conditions
- how built-up the area is
- the level of traffic
- relevant national legislation

However, our cities can significantly benefit from the exchange of experiences and good practices on collecting plastic and other waste, be it using door step collection, curbside collection or recycling stations. For instance, experience in Swedish municipalities reveals that consumers sort their waste more thoroughly when it is collected at the doorstep.

At EU level, setting ambitious targets is crucial for increasing recycling. However, local authorities should decide how best to collect and sort waste according to local circumstances and depending on the most appropriate technology available to them.

In particular, the EU should not make plastic waste separation by consumers mandatory throughout Europe. Instead, local authorities should be able to adapt the separation methods to local

circumstances, not least when it comes to the overall local organisation of waste collection and treatment.

Allowing for choice in how to reach a target not only helps with the adaptation to local circumstances but also allows for competition between technologies.

b. Pay-as-you-throw schemes

While pay-as-you-throw schemes could be a useful tool to promote waste separation at source in households, further research and pilot projects are needed to fully understand their benefits and avoid pitfalls.

For instance, we already know that such schemes require:

- a well-designed and accepted local waste tax
- a well-developed service for delivering bulky waste to recycling stations
- effective enforcement to avoid illegal dumping
- (financing of) software and hardware for measuring the amount of waste inside each container

Establishing these conditions throughout Europe would be difficult, at least in the short term.

Another potential drawback to avoid is stimulating the generation of certain types of waste, such as food waste, by collecting these types of waste for free.

For cities, the best way forward would be further testing of pay-as-you-throw schemes at the local level and exchanging experiences with the Commission and with cities across the EU.

7. Are specific plastic waste recycling targets necessary in order to increase plastic waste recycling? What other type of measures could be introduced?

The Waste Framework Directive already includes a 50% recycling target for different waste streams. As mentioned above, we would support a new recycling target for plastic waste but setting it at 50% would be very ambitious and would require a number of new measures to be put into place, including those listed under point 1.a.

A new target should focus on actual recycling. In other words, it should not be set as a share of the amount of waste collected but as the share of plastic used as a raw material for new production. This is already under discussion in some member states⁴ but more discussion and analysis will be needed to decide what measures would be effective to achieve a target on actual recycling.

8. Is it necessary to introduce measures to avoid substandard recycling or dumping of recyclable plastic waste exported to third countries?

Recycling plastic waste within Europe would facilitate the enforcement of relevant regulation and standards.

⁴ See for instance a consultation by the UK DEFRA on Draft Materials Recovery Facility (MRF) Regulations for insertion into Environmental Permitting www.gov.uk/government/consultations/draft-materials-recovery-facility-mrf-regulations-for-insertion-into-environmental-permitting-england-and-wales-amendment-regulations-2013

If plastic waste is exported to third countries, it should be recycled in facilities that comply with environmental and labour standards equivalent to those applied in the EU. In particular, the EU and member states must effectively enforce regulation to avoid that the plastic exported for recycling contain significant amounts of other waste.

Setting targets on actual recycling could, among other measures, help prevent the export of low-quality waste outside the EU, including of low-quality plastic waste.

9. Would further voluntary action, in particular by producers and retailers, be a suitable and effective instrument for achieving better resource use in the life cycle of plastic products?

Voluntary action by the private sector could help achieve better resource use in the lifecycle. In particular, producers and retailers are well-placed to develop new solutions for their respective businesses. New or revised regulation should take such technological processes into account.

10. Is there scope to develop deposit and return or lease systems for specific categories of plastic products? If so, how could negative impacts on competition be avoided?

There is scope to develop deposit and return or lease systems for several kinds of products. We would prefer an open approach to developing new schemes that is not limited to only one material and that involves local authorities as well as industry. Our cities have the necessary experience to help ensure that waste management systems for different products remain manageable and do not become too complex for citizens.

As mentioned in Article 4 of the Waste Framework Directive, the prevention of waste has got the highest priority in the waste hierarchy. Therefore the use of multi-use bottles (reusable beverage bottles; refillable bottles) has a higher priority than recycling of single-use bottles. Many different international studies and life-cycle analysis⁵ show that multi-use bottles have a better ecological and economical balance sheet than single-use bottles.

Refund systems have been and are being introduced for plastic bottles in some member states. While they do increase recycling rates, their introduction can be costly, in particular for beverage containers. The cost of an EU-wide system would probably be even higher.

In general, waste that cannot be prevented should be recycled. Some plastic products cannot be used as returnable products, for instance due to technical or hygiene reasons. If these kinds of products become waste, they should be recycled according to the waste hierarchy. To this end recycling systems already in place should be stimulated. Switzerland, for instance, has achieved an 80% recycling rate for PET bottles without a deposit system.

⁵ http://www.duh.de/uploads/media/PwC-Studie_mit_OEsterreichkapitel_Leseversion_01.pdf

11. What type of information would you consider necessary to empower consumers to make a direct contribution to resource efficiency when choosing a plastic product?

As for other consumer goods, empowering consumers to contribute to resource efficiency must involve clear information.

An ecolabel for plastic should include both:

- a clear indication of the type of plastic and plastic additives used
- an assessment of whether the product may be dangerous

The public sector, including our cities, can have a great impact on producers through their purchasing decisions. The EU should allow national, regional and local authorities sufficient freedom to use environmental criteria in procurement⁶.

12. Which changes to the chemical design of plastics could improve their recyclability?

Reducing the amount of hazardous substances would improve recyclability of plastic, and would also have a positive impact on the usability of recycled plastics for new products. The Commission should explore relevant quality standards for plastics.

13. How could information on the chemical content of plastics be made available to all actors in the waste recycling chain?

One way of making information on the chemical content of plastics available to all actors in the waste recycling chain could be to use extended producer responsibility through either:

- single producer responsibility where each producer establishes a take-back scheme for its product
- collective producer responsibility schemes where producers join a common scheme such as the existing systems for waste of electrical and electronic equipment (WEEE) systems

EU and national regulation on extended producer responsibility should also oblige producers to provide more information to the recycling industry.

As resources become scarcer in the long term, industry will likely become more and more interested in using plastic waste as a raw material for new products in the future. Consequently, we also expect increased awareness around the chemicals used in plastic and how they influence the properties of recycled plastic.

To speed up this process, the Commission could explore possibilities for regulation that would already oblige industry to use a certain percentage of recyclables in new products. Such a regulation would also create new business opportunities.

⁶ Also see the EUROCITIES position on the revision of EU procurement legislation at bit.ly/Sj6W3K

14. How can challenges arising from the use of micro plastics in products or industrial processes and of nano-particles in plastics be best addressed?

More research and analysis is probably needed, in particular when it comes to the consequences of nanotechnology use on human health, the environment and on waste treatment.

15. Should product design policy tackle planned obsolescence of plastic products and aim at enhancing re-use and modular design in order to minimise plastic waste?

We agree with the points mentioned in the Green Paper on this issue. The measures needed to improve resource efficiency in the EU include the development of product design for both the reuse and repair of products, including plastic products and products with plastic content.

We would welcome suggestions on how to establish new regulation or standards that ensure product designs that are suitable for reuse and repair. More sustainable product design would also make disassembling easier, which in turn would facilitate recycling.

16. Could new rules on eco-design be of help in achieving increased reusability and durability of plastic products?

Yes, and the new rules could integrate recycling and design into the eco-design directive (2005/32/EG).

17. Should market based instruments be introduced in order to more accurately reflect environmental costs from plastic production to final disposal?

We would welcome that the Commission explore the possibilities for introducing market based instruments addressing the environmental costs of plastic production to final disposal.

18. How can the waste burden posed by short-lived and single-use disposable plastic products best be addressed?

The main reason so many plastic bags and other short-lived and single-use disposable plastic products end up as litter in parks, streets and oceans is that these plastic products are extremely cheap.

Extended producer responsibility is likely to be the best option to transfer the cost for handling this type of plastic waste from the environment and the waste handling phase to the production phase, and thus from the environment and waste handlers to the producers.

In other words, producers should be financially responsible for the waste they produce, including properly disposed of and handled waste as well as litter.

While banning plastic bags may be useful in certain cases, they should not be uniformly banned, in particular when it comes to plastic bags for waste, since:

- so far there is no other material that will seal waste as well as plastic bags

- certain plastic bags are part of the organisation of some municipal waste management systems; for instance, Norway has invested in optical sorting plants that sort the local waste bags according to colour and the plastic used in these bags is either recovered or used to generate energy for district heating and electricity production

19. What are the applications for which biodegradable plastics deserve to be promoted, what framework conditions should apply?

As mentioned in the Green Paper, the large majority of so-called biodegradable plastics are only biodegradable under very specific conditions and in industrial composting installations. They are neither fit for home composting nor do they decompose in reasonable time when littered. Their decomposition can also cause other problems for the environment.

As long as these issues are not solved, the EU and member states should:

- not promote, but limit the production and use of, biodegradable plastics
- focus on improving the handling of non-biodegradable plastic waste

20. Would it be appropriate to reinforce existing legal requirements by making a clear distinction between naturally compostable and technically biodegradable plastics, and should such a distinction be subject to mandatory information?

Extended producer responsibility should apply to biodegradable plastics as well. Since waste from these plastics cannot be handled together with other sorts of plastic waste, producers of biodegradable plastics should have separate systems for taking back and treating biodegradable plastic waste. Biodegradable plastic must be clearly labelled to prevent consumers from mixing it up with other plastic waste.

21. Would the use of oxo-degradable plastic require any kind of intervention with a view to safeguarding recycling processes, and if so, on which level?

See answers to questions 19-20.

22. How should bio-based plastics be considered in relation to plastic waste management and resource conservation? Should the use of bio based plastics be promoted?

Regarding resource conservation: since current bio-based plastics are usually made from starch extracted from maize, rice, sugar cane or potatoes, they can potentially cause similar problems to those experienced with biofuels, such as competition with food production. The EU and its member states should closely examine these threats and consider lessons from past and present biofuel policies before promoting bio-based plastics.

Regarding waste management: bio-based plastics have characteristics very similar to plastics based on fossil raw materials, are fully recyclable and do not cause significant problems in waste management.

23. What actions other than those described in this Green Paper could be envisaged to reduce marine litter? Should some marine litter related actions be coordinated at EU level (e.g. by setting up a coordinated European Coastal Clean-up Day to raise awareness)?

We welcome awareness-raising activities such as the coastal clean-up day. To tackle waste from fishing in particular, the EU and producers should look into new take-back systems for fishing equipment, such as ropes and nets.

24. In its proposal for a new Environment Action Programme the Commission suggests that an EU wide quantitative reduction target for marine litter be established. How can the setting of such a target provide added value to measures that reduce plastic waste generally? How could such a target be developed?

Before establishing a target, the EU should ensure that marine littering is measured as precisely as possible. Quantifying the amount of marine littering more precisely and identifying where the waste comes from are both important to raise awareness.

Extended producer responsibility has a crucial role to play in reducing littering in general, be it in the oceans, in forests or in cities.

25. Should the EU attach a higher priority to plastic waste in the framework of its "New Neighborhood Policy", particularly in order to reduce plastic littering in the Mediterranean and in the Black Seas?

More international cooperation on marine littering would indeed be helpful, not least since plastic waste in the seas does not respect borders.

26. How could the EU promote more effectively international action to improve plastic waste management worldwide?

As a first step, the EU could consider supporting European organisations dealing with waste management that cooperate with partner organisations outside Europe to promote exchange of experiences, development of joint projects, improvement of statistical information and more.