Market Advisory Council

MAC ADVICE

Plastics and the Seafood Supply Chain

Brussels, 11 December 2020

1. Background

On 7 November 2019, the Market Advisory Council (MAC) and the North Western Waters Advisory Council (NWWAC) jointly organised a workshop on "Plastics and the Seafood Supply Chain", which brought together members of several Advisory Councils, experts, scientists, industry representatives, Commission officials, and members of the European Parliament.

The workshop examined the EU policies governing the various aspects of plastic use along the seafood supply. It delved into research carried out at European level addressing marine litter, circular economy and plastics at sea and on land, while showcasing best-practice examples from seafood industry actors on reducing, replacing or avoiding plastics. A detailed workshop report is available on the MAC's official website[1], which served as a basis for the present advice.

Several major initiatives on the topic of plastics have taken place among the Advisory Councils, such as the workshop "Re-Imagining Gear in a Circular Economy", on 28 January 2020, organised by the NWWAC, the Pelagic Advisory Council (PelAC), the North Sea Advisory Council (NSAC) and the Baltic Sea Advisory Council (BSAC). On 15 July 2020, the MAC endorsed the "Multi-AC Advice on the Implementation of the Single Use Plastics Directive and Fishing for Litter" developed by the NWWAC. On 15 September 2020, the European Commission provided a reply to this multi-AC advice, which recognises that marine litter is a continuously increasing problem and in

[1] Available here: https://marketac.eu/wp-content/uploads/2020/04/MAC-NWWAC-Plastics-Workshop-Report-EN.pdf. The report also includes the presentations prepared by the panelists.

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particular for the seafood industry[2]. With this advice, the MAC is following-up on the contents of the Commission's reply.

Amongst the MAC, since the organisation of the mentioned workshop, several discussions on the impacts of plastics have taken place, leading to the adoption of this advice.

In the Annex, supporting information that substantiated the recommendations is made available.

2. Recommendations

Taking into account that the topic of plastics is of significant concern for European consumers, driving their behaviour and impacting the seafood supply chain, which demonstrates the need for further action by the industry and public authorities as well as consumer engagement, the MAC recommends the following:

a) Implementation of a proactive awareness campaign, at EU and national levels, by the European Commission services and the Member States' authorities, with the involvement of EFSA and national food safety agencies and consumer organisations, directed at European consumers with a clear message on the known impacts of plastics on human and animal health, the marine environment and aquatic food production cycles as well as on the food safety benefits, based on the best available science, including through the creation of a dedicated webpage on the topic with supporting material, the relevant large-scale communication channels, and social media focused on all consumer profiles;
b) Ensuring clear communication to the media and in social media on marine pollution, the impact of the different sectors of the seafood supply chain, and the potential human and

[2] The Multi-AC advice and the European Commission's reply are available on the MAC's website: https://marketac.eu/en/commissions-reply-single-use-plastics-directive-and-fishing-for-litter/

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animal health risks, in comparison with the known nutritional benefits of fishery and aquaculture products;

c) Provision of funding under the next EMFAF and the national programmes to ensure that seafood supply chain operators, particularly the smaller undertakings, are able to face the challenge of marine litter and potential market shocks, plus the development of packaging alternatives;

d) Promotion and research, in collaboration with the industry and other relevant stakeholders, of increased recycling of seafood packaging, higher recycled content in packages, and the development of biodegradable and compostable alternative materials, while ensuring the same levels of food safety;

e) Funding and development of additional scientific research on the human and animal health risks of microplastics, nanoplastics and their compounds as well as the clear rejection of studies not based on the best available data;

f) Continue funding of projects to collect and assess information on the status of marine litter in the different European sea basins and the initiatives addressing this environmental problem, while improving existing monitoring methodologies and data management;

g) Undertaking of a study on potential increases of costs and prices in the market by the European Commission for seafood operators and consumers of Extended Producer Responsibility schemes under Directive (EU) 2019/904 on the reduction of the impact of certain plastic products on the environment;

h) Maintain and consider expanding the existing legal restrictions on intentional uses of microplastics in products placed on the EU market to avoid and reduce their release to the marine environment;

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i) Encouragement of cooperation with stakeholders, including professional sector organisations, in the development of Extended Producer Responsibility schemes by national authorities, with a view of harmonisation at European level;

j) Ensure consistency across different EU legislation on the use, reduction and other obligations in relation to plastic, since, in some occasions, the use of plastic is the only appropriate solution for the sector[3];

k) Development of methods to calculate and limit the impact on the marine environment of the increased use of disposable protection material, such as masks and gloves, in the context of the COVID-19 pandemic safety measures;

l) Development of agreed common definitions of "microplastics" and "nanoplastics" by the European Commission services, relevant EU agencies, and Member States' authorities as well as the harmonisation of testing methods for the presence of plastics in food products.

The MAC would also like to draw attention to the fact that European countries are allowed to export plastic to third-countries for recycling purposes. There is clear evidence that some of this waste is not recycled, but ends polluting the marine environment. Therefore, the European Commission should not focus exclusively on plastic coming from the seafood industry, but also from other industries.

The MAC welcomes the planned organisation by DG MARE for the first half of 2021 as well as the invitation to the Advisory Councils of workshops on the promotion of fishing for litter activities and the use of EMFAF support, the implementation of Extended Producer Responsibility schemes, and fishing gear best practices. The MAC remains available for continuous cooperation

[3] As an example, Directive 2009/147/EC on the conservation of wild birds (Birds Directive), which foresees various ways of protection depending on the level of threat to the species, restricts hunting and deliberate killing of certain wild bird species that feed off aquaculture farms and set a strong predation on economically important stocks. In order to respect the provisions of the Birds Directive, while maintaining economic sustainability, producers resort to plastic protective sleeves, meaning that the use of plastic is necessary to ensure financial viability.

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with the European Commission services on the development of measures to reduce the impact of plastics on the marine environment and human health as well as to ensure balanced consumer information.

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Annex

1. Use & Impact of Plastics in the Seafood Supply Chain

Since the early 1950s, plastic production has increased exponentially and, by 1976, plastics became the world's most used material. The production of plastics is expected to continue to increase in the foreseeable future. On average, 70% of the produced plastics are single use, of which 55% goes straight to landfill and only 9% goes to recycling. The global recovery rate is merely 6%[4].

The lack of proper disposal or recycling of plastics means that this material can persist in the environment for a long period. Once plastics are in the environment, they are exposed to the elements and start breaking down through mechanical, chemical and biological influences, which produces fibres and fragments (microplastics) as well as smaller particles (nanoplastics). In some cases, microplastics are deliberately manufactured and intentionally added to non-food products. In relation to marine litter, less than 20 percent of leakage originates from ocean-based sources like fisheries and fishing vessels, meaning that over 80 percent of ocean plastic comes from land-based sources[5].

Along the seafood supply chain, plastics play an important role in fishing gear and in aquaculture farms as well as in the packaging of seafood products for processing and retail. Plastic packaging contributes to higher quality of the products, increased shelf life, more labelling options, and less food waste, while ensuring proper food safety.

Studies have shown that over 220 different species have been found to consume microplastic debris *in natura*. Of this number, 58% were commercially targeted species. Still, there is very little

[4] Geyer, R., Jambeck, J., Lavender Law, K. (2017). Production, use, and fate of all plastics ever made. Science Advances.
[5] Eunomia. (2016). Plastics in the Marine Environment, p. 4

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knowledge of how plastics affect fish and if and how these are passed along the trophic line[6]. At the same time, microplastics from seafood consumption only contribute in a very minor way to the exposure of humans[7] and there is no available data or information that provides evidence of potential human health effects of ingested or inhaled microplastics[8]. Nanoplastics can represent a greater concern, since these can pass through the membranes in human and animals, but basic knowledge on these is still lacking, due to lack of analytical methods for their identification[9].

Nevertheless, across the EU, three in four people (74%) are worried about the impact on their health of everyday products made of plastic and 87% are concerned about the impact of plastics products on the environment. These attitudes are generally consistent across Member States. In relation to consumer behaviour and attitudes, the top three consumer concerns are climate change, plastic waste, and water pollution. Furthermore, consumers expect business operators and national authorities to take the lead in addressing these concerns. These concerns also correspond with the topics that receive prominent media coverage, government initiatives, or that are close to the individual consumers[10].

In relation to benefit/risk communication, it is important to note that negative news have a stronger impact than messages promoting positive outcomes[11]. Changing the behaviour of

[6] Lusher, A., Hollman, P., Mendoza-Hill, J. (2017). Microplastics in fisheries and aquaculture - Status of knowledge on their occurrence and implications for aquatic organisms and food safety. FAO Fisheries and Aquaculture Technical Paper, pp. 41-42

[7] EFSA CONTAM Panel (EFSA Panel on Contaminants in the Food Chain), 2016. Statement on the presence of microplastics and nanoplastics in food, with particular focus on seafood. EFSA Journal 2016;14(6):4501, p. 18

[8] VKM. (2019). Microplastics; occurrence, levels and implications for environment and human health related to food. Scientific opinion of the Scientific Steering Committee of the Norwegian Scientific Committee for Food and Environment, p. 128

[9] Lusher, A., Hollman, P., Mendoza-Hill, J. (2017), p. 64

[10] Kantar, Gfk, Europanel (2019). The Who Cares, Who Does? – Consumer Response to Plastic Waste. Available here: https://www.kantarworldpanel.com/global/News/Who-Cares,-Who-Does-Consumer-response-to-plastic-waste

[11] Verbeke, W., et al. (2005). Consumer perception versus scientific evidence about health benefits and safety risks from fish consumption. Public Health Nutrition: 8(4), pp. 422–429. Verbeke, W. (2008). Impact of communication on consumers' food choices. Proceedings of the Nutrition Society (2008), 67, pp. 281–288

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consumers towards seafood consumption by means of advisory messages is only possible when consumers are aware of the advisory, know the advisory, and trust the advisory information[12]. According to the results of a survey undertaken by the ECsafeSEAFOOD project[13], as an information sources, consumers tend to trust the physician/doctor the most, followed by consumer organisations and scientists, while respondents tend to have no trust in the information form the government and the seafood industry. Family and friends are the information sources more frequently used, followed by media and internet.

Another study performed by ECsafeSEAFOOD highlighted that stakeholders believe that the level of information available especially about plastics is unsatisfying[14]. It is also important to note that health and environmental sustainability are of particular interest because of their potential impact in terms of changing consumers' knowledge, shaping their attitudes and redirecting their food choices and dietary behaviour[15].

[12] Jardine, C.G., 2003. Development of a public participation and communication protocol for establishing fish consumption advisories. Risk Analysis 23 (3), pp. 461–471

[13] Jacobs, S., et al. Marine environmental contamination: public awareness, concern and perceived effectiveness in five European countries. Environmental Research, Volume 143, Part B, November 2015, pp. 4-10

[14] Tediosi, A., et al. Insights from an international stakeholder consultation to identify informational needs related to seafood safety. Environmental Research, Volume 143, Part B, November 2015, pp. 20-28

[15] McGloin, A., Delaney, L., Hudson, E., Wall, P., 2009. Nutrition communication The challenge of effective food risk communication. Proc. Nutr. Soc. 68 (2), pp. 135–141.

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