

## Let's Talk Plastics Session 10. Stopping Ghost Gear: The Most Lethal Form of Marine Plastic Debris – Q&A

### Panellists:

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### Questions and Answers:

- **Is there any alternative to nylon fishing net and if yes, how much they have penetrated in the industry and what are the challenges to these alternatives**
  - There is currently no alternative for Nylon fishing nets that can compete on performance, weight and cost. Various materials are claimed to be biodegradable that are under development but nothing currently available to compete against Nylon nets.
- **Are there initiatives to implement EPR initiatives to apply to large fishing companies? how successful are they?**
  - EPR specifically, this has not been done for fishing gear yet, though the EU has made it mandatory for all member states to incorporate an EPR program for fishing nets by 2025. Several other countries are looking at this as a possible solution, but it's not been implemented yet, so my feeling is that many are looking to see how this works in the EU before diving in, so to speak. The only comparable example I can think of is in Iceland where the fishing industry leads a program to recover all gear at the end of its life across all ports in the country and recycle as much of it as possible. But this is not technically EPR, as the costs are borne by the fishing industry - not the gear producers.
- **What are the big players in the fishing industry doing to address this issue? Are there specific training/awareness-raising/recycling activities within the industry?**
  - Several of the largest fishing companies and retailers in the world are members of the GGGI, including Thai Union, Tri Marine, Bumble Bee, Nomad Foods, SeaBOS. Thai Union was the first fishing company to produce a dedicated work plan to address ghost gear [which can be found here](#). Some other industry members have supported GGGI project work around the world, and we are working with these companies and our other fishing industry and retail members

to develop their own dedicated work plans to address ghost gear. We have also developed a suite of tools specifically for our industry members to incorporate the [GGGI Best Practice Framework](#) into their supply chains.

- **Dear Ben, great initiative indeed. Was there any incentives provided to the fishing community to return the fishing nets, or what was the approach to building the partnership with the communities?**
  - BEN: Yes, in the case of artisanal fishermen, we pay the fishermen as well as a community collection manager directly for every KG of end of life fishing nets that they return to our program. This provides a much-needed incentive for the fishermen to make extra effort when managing their fishing net waste. In the case of commercial fisheries, we have commitments for them to donate nets to our program where we then donate the funds budgeted for purchasing the nets to instead be allocated to local non-profit organizations that then utilize the funds to implement additional environmental projects in the artisanal fishing communities most affected by these forms of waste.
  
- **Are there studies on (sea conditions)biodegradable plastics? and on the hydrodynamics of the gear?**
  - Polyhydroxyalkanoates (PHAs) are a family of naturally occurring biopolyesters that are produced by bacteria and are completely biodegradable by microbes typically found in the aquatic environment. There are several studies on using PHAs as biodegradable components in gear that have been promising, particularly since the same microbes which biodegrade it are not present on the land, and exposure to UV from the sun will inhibit their growth, so they tend not to biodegrade while on land (making them usable longer when regularly fished). A South Korean company, AnKor bioplastics are currently working on biodegradable resins such as PBS (Polybutylene succinate) and PBAT (Polybutylene adipate-co-terephthalate) for twines used in fishing nets and ropes - see <http://en.an-korbio.co.kr/>. As for the hydrodynamics of the gear, I'm not familiar with any studies, but that doesn't mean they aren't out there.
  
- **What is expected to be the impact of COVID on the issue of fishing gear? In Thailand, much more illegal fishing in MPA's has been recorded due to lack of enforcement**
  - It is difficult to state in numbers in such a short time what the implications of COVID have had on the issue of fishing gear in Turkey. The situation is also more difficult to study due to the local and national restrictions in place. However as far as we can see in our local area, there is a definite increase in illegal fishing activities, and recreational fishing activities, as people want to benefit from what the sea provides "for free", or as a way of additional income in a time of financial

difficulties. It is also suggested that illegal fishing activities are more harmful to the ecosystem, with regards to; catching of endemic species, size of the catch, use of illegal gear and methods, and fishing intake zones etc.

- **With the extremely low cost of oil and gas, how profitable and sustainable are the net recycling business?**
  - BEN: Our business is not extremely profitable at this point. You need to be in it for the passion and mission that it is serving. That said, the way we have been able to scale is by focusing on high-value products that require low volumes of material. These products can justify a higher cost for the material which we require for the added effort that is needed to properly collect back and recycle these fishing nets. With time, we believe that there is still an opportunity to have a healthy profit for our business through this approach as soon as we reach scale.
  
- **If the loss is unavoidable, then clean-up needs to happen. Deniz, how costly is the clean-up? how often do you recommend it? Do governments and industries pay for the clean-up in Turkey?**
  - Unfortunately, it is impossible to prevent complete loss of gear, due to the reasons Joel has outlined. With regards to cases and projects in Turkey, a total of approx 565,000 USD has already been spent since 2011. This number more specifically is made up of grants and co-funding from various NPOs. Namely, 116,000 USD of the total originates from SGP GEF Small Grants Programme. Unfortunately, I do not have the numbers for the global scale. With regards to the involvement of National Governing Bodies; following support from SGP, UNDP and other organisations and successful execution of small scale removal programmes, the Turkish government launched a national removal programme in 2014. This national-scale removal programme continued for 4 years and claims to have cleared 65 K Ha area, 499 k m<sup>2</sup> of nets and removed 4420 fish traps. The total budget of the project was not declared publicly but it is important to note that such projects also create a large economic gain resulting from the removal of nets which otherwise would continue to put pressure on the ecosystem resulting in more ghost fishing and less catch for the fisheries.