Part B
Input on the potential areas of intersessional work to inform the work of INC-3 (following the lists compiled by the co-facilitators of the two contact groups)

Inputs relating to potential areas for intersessional work. Please identify clearly which area your input relates to.

Criteria and Plastic Phase-down Targets
Intersessional work should focus on creating science-based criteria to identify which plastics need to be reduced and prohibited. The work should identify plastic that contributes to social and environmental damage at any part of its lifecycle. It should establish targets for reduction, reuse, and repair of plastic products. Importantly, it should involve phased transition periods for the eventual restriction or reduction of plastic products.

We urge the creation of targets, baseline values, and well-structured timetables to achieve an overarching decrease in plastic production. Despite limited negotiation time, it is imperative to address the pivotal Core Obligation 1, as delineated in the Options Paper, which garnered significant support for option 10(a)(i) during INC-2. While prioritizing problematic plastic products and chemicals is paramount, a holistic approach must extend to the overall quantity of plastic precursors and polymers. A reduction in overall production is essential to achieve objectives safeguarding human and environmental well-being for current and future generations, as well as to limit global temperature rise to 1.5 degrees Celsius, potentially necessitating even stricter measures to uphold human rights.

We encourage the initiation of intersessional efforts to explore viable strategies for comprehensive plastic production reduction. These efforts should encompass establishing baseline reference years, quantifiable targets, well-calibrated freeze and phase-down schedules, and production thresholds harmonized with ecological and human health imperatives. The phase-down should prioritize environmental justice and prevent expansion of petrochemical corridors that disproportionately burden low income and communities of color.
Intersessional work should also identify robust standards and limits on air and water pollution from industries that produce and handle plastics. Establishing robust air and water pollution standards for industries engaged in plastic production and handling is imperative to mitigate the release of harmful chemicals that pose significant risks to both human health and the environment. These industries can emit a range of toxic substances during plastic manufacturing processes, such as volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and plasticizers like phthalates. VOCs and PAHs are notorious for their carcinogenic potential, contributing to air pollution and even increasing the risk of respiratory illnesses. Plasticizers, commonly added to enhance flexibility and durability of plastics, can leach into water bodies, disrupting aquatic ecosystems and potentially leading to endocrine disruption in various species. Additionally, plastic production processes may generate hazardous waste byproducts, such as dioxins and furans, which can persist in the environment and accumulate in the food chain, posing long-term threats to biodiversity and human well-being. By implementing stringent pollution standards, monitoring emissions, and requiring the adoption of cleaner technologies, the plastic industry can minimize the release of these hazardous chemicals, safeguarding human health and the integrity of ecosystems.

Additionally, the work should recommend requirements for national monitoring and reporting, and delineate the role of a treaty-affiliated scientific body in periodic reviews and updates of freeze and phase-down schedules, pollution limits, as well as target adjustments. This collective endeavor seeks to create a robust framework for plastic production reduction needed to accomplish the treaty's overarching objectives.

It should be considered deceptive to misrepresent packaging as reusable unless the company is engaged in collection and reuse of said packaging through any of the four reuse business models laid out by the Ellen MacArthur Foundation (return from home, return on the go, refill at home, refill on the go). We need a well-defined definition for reuse and reusable packaging that includes the minimum number of trips or rotations per product before it can be counted as actually reused (measured e.g., by an average reuse rate or an average number of use-cycles per package).

Problematic Plastics That Should Be Restricted

Tire Dust: 6PPD-quinone, a harmful compound that forms from the degradation of the tire antioxidant 6PPD (N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine), poses significant environmental hazards, including causing significant salmonid mortality. Research has shown that 6PPD-quinone is toxic to aquatic organisms, disrupting aquatic ecosystems and potentially affecting aquatic life at various trophic levels. The compound's presence in stormwater runoff, which often carries it into water bodies, raises concerns about its widespread distribution and impact on aquatic habitats. Moreover, 6PPD-quinone's potential persistence and bioaccumulation in aquatic environments could lead to long-term ecological repercussions.

Polyvinyl Chloride (PVC): Polyvinyl Chloride (PVC) is a widely used plastic polymer with significant environmental and health concerns. It contains toxic additives, including phthalates and heavy metals, which can leach into the environment and pose risks to both human health and ecosystems. During its production and incineration, PVC releases harmful dioxins, highly potent and persistent pollutants that contribute to air and water pollution. PVC is toxic to humans and the environment and should be restricted and handled like hazardous waste.
Polystyrene (Styrofoam): Polystyrene, commonly known as Styrofoam, is a plastic polymer notorious for its environmental hazards. It is non-biodegradable and can persist in the environment for centuries. Over time, polystyrene breaks down into smaller pieces, including microplastics, which can be ingested by marine organisms, potentially entering the food chain and causing harm to aquatic life. The manufacturing process of polystyrene involves the use of fossil fuels, contributing to greenhouse gas emissions. Moreover, the lightweight nature of Styrofoam makes it prone to littering and can lead to pollution in terrestrial and aquatic environments. Efforts to phase out polystyrene products are essential to reduce its negative impact on ecosystems.

Polyethylene Terephthalate (PET): Polyethylene Terephthalate (PET) is a widely used plastic polymer found in various consumer products, especially single-use plastic bottles and containers. While PET is commonly considered safe for its intended use, concerns arise from its potential to leach harmful chemicals, especially when exposed to heat or sunlight. The recycling rates for PET vary widely, and inadequate recycling practices can result in its accumulation in landfills and the environment.

Polypropylene (PP): Polypropylene (PP) is a versatile plastic polymer used in packaging, bottles, and consumer goods. While it offers durability and practical applications, concerns arise from its potential to degrade into microplastics, which can enter aquatic ecosystems and harm marine life. The production of polypropylene requires energy-intensive processes and fossil fuels, contributing to greenhouse gas emissions. Its challenging recyclability further exacerbates its environmental impact, as improper disposal can lead to its accumulation in landfills and ecosystems.

Polycarbonate (PC): Polycarbonate (PC) is a plastic polymer commonly used in various products, including water bottles, food containers, and eyeglass lenses. Of concern is the presence of bisphenol A (BPA), an endocrine disruptor, in polycarbonate products. BPA can leach from PC items, especially when exposed to heat or acidic conditions, potentially leading to adverse health effects upon ingestion. While some efforts have been made to produce BPA-free polycarbonate, the concerns surrounding the potential health risks have prompted a shift towards alternative materials. Polycarbonate products becomes increasingly important for protecting human health.

Nylon (Polyamide): Nylon, also known as polyamide, is a plastic polymer widely used in textiles, fishing nets, and various consumer goods. While nylon offers durability and strength, it is non-biodegradable and contributes to the issue of microplastic pollution. Over time, nylon items can degrade into smaller particles that are ingested by marine organisms, potentially entering the food chain and causing harm to aquatic ecosystems. Moreover, discarded nylon products, such as fishing nets, can entangle marine life, posing threats to wildlife.

Sources of Microplastics

Microplastics, defined as tiny plastic particles or fragments measuring less than 5 millimeters, originate from a variety of sources across human activities and natural processes. These sources contribute to the widespread distribution of microplastics in terrestrial and aquatic environments, raising concerns about their potential environmental and health impacts. Some significant sources of microplastics include:

1. **Degradation of Larger Plastics**: Macroplastics, such as plastic bottles, bags, and packaging, break down over time due to exposure to sunlight (UV radiation) and physical forces like abrasion, eventually fragmenting into microplastics.
2. **Microbeads**: Often found in personal care and cosmetic products, microbeads are small plastic particles intentionally added to exfoliating scrubs, toothpaste, and other consumer goods. They can wash down drains and enter water bodies, posing a direct source of microplastics.

3. **Plastic Fibers**: Synthetic textiles, including clothing, upholstery, and carpets, shed tiny plastic fibers during washing and use. These fibers are then released into wastewater systems and eventually reach aquatic environments.

4. **Plastic Pellets and Pre-production Resins**: Plastic manufacturing processes involve the use of small plastic pellets (nurdles) and resin granules. Accidental spills and improper handling can lead to these materials entering waterways.

5. **Tire Dust**: Microplastics can originate from the abrasion of tires and road surfaces. As vehicles travel on roads, small plastic particles are generated and may be washed into nearby water bodies through stormwater runoff.

6. **Paints and Coatings**: The degradation of paints, coatings, and other surface treatments on buildings, vehicles, and ships can release microplastic particles into the environment.

7. **Plastic Packaging**: The deterioration of plastic packaging materials, such as films, wraps, and containers, contributes to the release of microplastics.

8. **Wastewater Effluents**: Microplastics can be present in domestic and industrial wastewater due to the shedding of plastic particles from various sources. Inadequate treatment processes may allow these particles to be discharged into aquatic ecosystems.

9. **Aquaculture and Fisheries**: Microplastics may be introduced through the use of plastic-based materials in aquaculture operations and fishing gear, as well as the breakdown of plastic litter in marine environments.

10. **Natural Degradation**: Natural weathering and degradation of plastic materials over time can lead to the formation of microplastics, particularly in exposed environments.

Not only should an instrument address these sources of microplastics, but it should also address the contribution of shipping and transportation of plastic pellets and pre-production resins.

**Enforceable Measures for Microplastics**

**Zero Pellet Discharge**: Enforcing a zero-pellet discharge policy is a cornerstone of effective microplastic regulation. Drawing parallels from existing environmental laws such as the Clean Water Act in the United States, a zero-pellet discharge standard is needed to compel industries and entities handling plastic pellets to adopt stringent containment practices, preventing the inadvertent release of these pollutants into water bodies. By mandating the implementation of state-of-the-art technology, conducting regular audits, and imposing substantial penalties for non-compliance, this approach offers a potent deterrent against pellet discharge, ensuring the protection of aquatic habitats and preventing further accumulation of microplastics in the environment.

**Banning Microbeads**: An instrument should ban microbeads in cosmetics, cleaners, paints, and various products that find their ways into wastewater or stormwater systems is immensely important. Microbeads, minute plastic particles intentionally infused into numerous items, pose grave threats to aquatic ecosystems and human health. The United States, recognizing the dire consequences of microbead pollution, enacted a notable ban on microbeads in cosmetics and
personal care products. The Microbead-Free Waters Act, signed into law in 2015, effectively prohibited the manufacturing and sale of products containing plastic microbeads. These diminutive fragments, often impervious to effective filtration by wastewater treatment facilities, find their way into water bodies, thereby entering the delicate balance of aquatic life and subsequently infiltrating the human food chain. This regulatory measure not only underscores a commitment to preserving aquatic habitats and well-being but also fosters innovation toward alternatives.

**Preventing Lost Fishing Gear:** Addressing the urgent issue of lost fishing gear will reduce microplastics. Measures should include the implementation of gear marking and identification systems, which enable tracking and accountability; the establishment of regular gear retrieval and maintenance requirements to prevent abandonment; incentivizing responsible gear disposal; requiring transition to GPS-linked pop-up gear; required innovation in gear designs featuring biodegradable components and escape mechanisms; stringent regulations and penalties to deter gear loss; mandatory monitoring and reporting protocols for enhanced transparency; and collaborations with technology providers to develop advanced tracking and monitoring solutions. By uniting these measures, a concerted effort can effectively combat ghost gear, safeguard marine ecosystems, and promote better fisheries management.

**Avoiding and Filtering Microfibers:** To effectively address the pervasive issue of microfibers, enforceable regulations must be established across the textile industry. Implementing stringent manufacturing standards that limit microfiber shedding, alongside mandatory product labeling indicating shedding potential, will empower consumers to make informed choices. Enforceable mandates for washing machine manufacturers to incorporate effective filtration systems, coupled with regulations requiring wastewater treatment plants to capture microfibers before discharge, are essential steps.

**Robust Waste Management:** To tackle the pervasive issue of land-based plastic pollution fragmenting into microplastics, comprehensive measures encompass effective waste management and reduction strategies. Enforcing strict regulations to minimize plastic production and consumption, promoting the adoption of reusable and biodegradable alternatives, and implementing extended producer responsibility programs are essential steps. Incinerating plastic should be rejected as should industry’s false-solutions such as so-called advanced chemical recycling. Best practices for waste management should be adopted, including robust wastewater and storm water systems.

**Single-use Plastic Bans:** Plastic bag and bottle bans have proven effective in curbing the escape of plastic waste that evades proper management, as exemplified by Kenya's successful implementation. These bans play a crucial role in reducing the prevalence of single-use plastics, which often end up as litter, contributing to environmental harm. Kenya's ban on single-use plastic bags, for instance, has resulted in a notable reduction in plastic pollution. By enforcing restrictions on plastic bags and bottles, these measures encourage sustainable practices, raise public awareness, and promote the adoption of reusable alternatives, ultimately mitigating plastic waste's impact on ecosystems and setting a positive example for other regions to consider. Alternative single-use materials should be considered only after reuse and refill options have been exhausted.

**Scope and Guidance for National Action Plans**
We recommend that National Action Plans include binding commitments that (1) reduce production of plastic, (2) prevent waste, including measures favoring reuse and refill and refusing new products, (3) limit the pollution from the entire plastic lifecycle, (4) advance environmental justice and (5) eliminate lost fishing gear. We developed eight priority recommendations for a United States presidential action plan on plastic, and about 400 community and environmental groups endorsed these actions. We urge Member States to adopt National Action Plans including the actions like those described in that plan, which can be found at https://www.plasticfreepresident.org/.

Reduce Plastic Production

A top priority for the intersessional work is to develop recommendations to phase down and restrict plastic production. Curtailing plastic production is a compelling imperative in addressing the escalating environmental challenges posed by plastic pollution. The unrestrained growth of plastic production strains finite natural resources, accelerates carbon emissions, and exacerbates ecological degradation. To effectively phase out plastic production, a multi-faceted approach is needed, encompassing the development of stringent regulations, incentives for sustainable alternatives, and investments in research and innovation. It's important to acknowledge that the burden of plastic production and its environmental repercussions often disproportionately impacts low-income communities and communities of color, as the petrochemical industry tends to concentrate its operations in these areas, exacerbating social and environmental injustices. By curbing plastic production, we can alleviate the burden on ecosystems, reduce the demand for fossil fuels used in plastic manufacturing, and stem the tide of plastic waste that overwhelms waste management systems.

We need to work to address the transition away from exploitation, endless growth, and unsustainable patterns of consumption and advocate for environmental, health and social reform. We urge the UN to review alternative economy frameworks such as the solidarity economy which has a commitment to sustainability, equity, social welfare, democracy and pluralism. This is an excellent way to transition from a linear to a circular economy while also addressing social concerns.

Monitoring and Reporting

The plastic treaty should establish robust monitoring and reporting mechanisms as integral components of the plastic treaty's implementation. This entails regular and transparent collection of data related to plastic production, consumption, waste management, and pollution levels within member nations. Comprehensive reporting should encompass the quantities and types of plastics produced, imported, exported, and disposed of, as well as progress made in adopting circular design principles, reducing single-use plastics, and implementing measures to prevent plastic leakage into the environment. Member states should collaborate to establish standardized methodologies for data collection and reporting, facilitating accurate comparisons and analyses at the global level. They should provide an easily accessible public dashboard of the information.

The need for corporate transparency regarding “reuse” and “refill” is becoming increasingly relevant as more consumer product good companies are making public commitments to reuse such
as Coca-Cola. They state that by 2030, the company aims to have at least 25% of all beverages globally across its portfolio of brands sold in refillable/returnable glass or plastic bottles, or in refillable containers through traditional fountain or Coca-Cola Freestyle dispensers. https://www.coca-colacompany.com/news/coca-cola-announces-industry-leading-target-for-reusable-packaging

The system should include accountability and encourage enforcement actions to ensure treaty compliance. By systematically tracking and sharing this information, member states can facilitate evidence-based decision-making, measure the treaty's impact, identify areas of concern, and adapt strategies to effectively curb plastic pollution and achieve the treaty's overarching goals.