



Common
in SEAS

**The Klosters Forum
Workshop Summary**

July 24 – 26th 2018
Klosters, Switzerland

Introduction

In July 2018, The Klosters Forum brought together 70 inspirational leaders to help tackle one of the most pressing environmental issues of our time, ocean plastic pollution. Committed stakeholders from around the world gathered in the Swiss Alps for two-days to share and deepen their understanding, build new networks, develop solutions and become further inspired to take action.

Alongside plenary sessions, panel discussions and networking opportunities, The Klosters Forum partnered with Common Seas to provide specialist support on the topic of plastic pollution. Common Seas is a non-profit business igniting a deep level of system change on plastic pollution. They work to ensure solutions are robust and ocean-friendly, policies are sustainable and grounded in reality and that public attention is a gateway to wider ocean protection.

Adding to the incredible knowledge in the room, Common Seas' circular economy and marine science experts guided four workshops providing opportunities for both individual and collective learning which created tangible outcomes to support action on this issue.

This document summarises each workshop, the outputs and next steps.



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Workshop one

Defining unnecessary and avoidable



Workshop one

Defining unnecessary and avoidable

Objectives

In many parts of the world heightened awareness of the urgent need to address the threat of plastic pollution has triggered a spate of new pledges and plans from governments and businesses.

The UK Plastics Pact, launched by WRAP in April 2018, and the UK Government 25 Year Environment Plan, set targets for the reduction of plastic waste and marine plastic pollution. The documents set out the intention to shape policy and action across the value chain to eliminate ‘**avoidable**’ and ‘**unnecessary**’ plastic:

*‘...Work towards eliminating all **avoidable** waste by 2050 and all **avoidable** plastic waste by end of 2042’*

UK Government 25 year Environment Plan

*‘...by 2025 take actions to eliminate problematic or **unnecessary** single-use packaging items through redesign, innovation or alternative (reuse) delivery models.’*

UK Plastics Pact

Defining ‘**avoidable**’ and ‘**unnecessary**’ is key to the success of these plans in informing meaningful interventions in the UK and globally. ‘**Unnecessary**’ features in a range of documents, including European Strategy for Plastics in a Circular Economy. The UK Plastics Pact is the first of a global initiative to drive collaboration within countries and regions to achieve a circular economy for plastics. It sets an important global precedent, which Chile and other countries are set to follow.

The objective of our first workshop was to develop a shared definition/s to support WRAP and the UK Government to reduce ambiguity, measure effectiveness of interventions, and clearly communicate stakeholder expectations.

We rose to the challenge of exploring “What does ‘unnecessary’ and ‘avoidable’ mean to you and/or your organisation?” Working alone, in pairs, small groups and finally together as an entire group, we considered the definition of these terms and brought them to life with examples of plastics considered unnecessary and avoidable.



Workshop one

Defining unnecessary and avoidable

Outputs 1 of 5

Consensus of workshop participants was the terms ‘unnecessary’ and ‘avoidable’ are ambiguous, making interpretation subjective and an unhelpful basis for policy making. For example, there are a breadth of potentially competing ‘needs’ within the design of plastic products, which will shape different stakeholder definitions and priorities. From the perspective of a marketing team, something that increases the desirability of the product to a customer may be inherently necessary, when it serves no ‘functional’ purpose. Plastic may be considered unavoidable if it is cheaper than the alternatives, raising questions about how we weigh-up the economics versus the cost of plastic pollution.

Whilst there is a value in working within the policies of today, some participants pointed out that government plans are inherently constrained by an assumption that we maintain our dependence on plastic packaging. Some participants considered the need to catalyse a more radical system change where *all* single-use plastic could be avoidable or unnecessary. As a society we need to think and work within different timescales: improving collection and recycling of post consumer plastics today, whilst working to develop new materials and systems of the future.

There was no consensus on whether avoidable and unnecessary could be grouped under the same definition. In general, groups reported finding ‘unnecessary’ easier to define (5 of 6 groups), whereas defining ‘avoidable’ was more contentious. Generally the feeling was that there are subtle differences between the two words, which relate to whether plastics should be substituted for a different material or removed all together. The importance of considering ‘net cost’ appears to be central in both definitions.



Workshop one

Defining unnecessary and avoidable

Outputs 2 of 5

On **avoidable**...

- Terms such as *“that a minimal viable alternative exists”*, *“there is a feasible alternative”* and *“alternatives exist”*, *“replaceable”* were used to describe avoidable.
- Alternatives need to consider the net environmental impacts across the entire lifecycle. This requires knowledge of the environmental, economic and social costs of plastics and alternatives to ensure that in eliminating plastic we do not inadvertently shift the impact elsewhere, e.g. through increased carbon emissions, land use change, or food waste. The metrics of how to calculate costs/ benefits will be just as important, if not more important, than the definitions themselves.
- Things that are currently considered unavoidable may (or should) become avoidable as alternative materials are developed and tested.

On **unnecessary**...

- Terms such as *“it’s non-essential for product performance”*, *“it’s superfluous”*, *“you can simply do without the packaging”*, *“when the performance is equal if the plastic is removed”*, *“easily phased out with no cost”* were used to describe unnecessary.
- Unnecessary is bound up with the concept of value i.e understanding the value it brings to the product and society and whether that value justifies the impact.



Workshop one

Defining unnecessary and avoidable

Outputs 3 of 5

What about defining which plastic is **necessary** and **unavoidable?** (as opposed to unnecessary and avoidable).

- A number of groups considered how we might define necessary and unavoidable plastic, discussing who makes these definitions and what criteria should be used.
- One group defined necessary and unavoidable plastic as “*when the value is greater than the environmental cost.*” Examples included medical applications, and there was discussion on whether preventing food waste would meet this definition. This also drew out the need to consider terms in the context of the Global South, for example if there is no access to safe drinking water or the ability to properly sterilise glass.

New terms used included...

- “*Pointless*” described plastic that is considered to have very limited social utility, and no justification for the environmental impact could be identified e.g. balloon holder sticks.
- “*Unacceptable*” was used when the level of environmental harm cannot be justified regardless of the benefits of its use.



Workshop one

Defining unnecessary and avoidable

Outputs 4 of 5

There was broad agreement of the need to send a strong signal to governments and businesses on how these terms should be defined. Whilst no consensus was reached, the following definitions are considered to most widely represent the feedback received.

AVOIDABLE

When an alternative exists that has a net-positive environmental impact and can be implemented with minimal long-term costs and behavioural change, but may require short-term changes to supply chains.

UNNECESSARY

When the use of plastic brings no added value to the product or society and can be replaced or removed without cost to infrastructure or major behavioural change.



Workshop one
Defining unnecessary and avoidable

Outputs 5 of 5

Two breakout groups identified the value of using a hierarchy or scale to describe how different plastic product types could be managed – rather than an approach based on independent definitions for ‘avoidable’ and/or ‘unnecessary’. One direct output is summarised in Figure 1 below:



Figure 1: A hierarchy of plastics, based on the complexity of addressing them and the most appropriate strategy.



Workshop one

Defining unnecessary and avoidable

Next actions

Contributions from The Klosters Forum support a wider Common Seas initiative to support governments and decision makers to deliver a clear, consistent and meaningful suite of policies that prevent plastic waste and pollution. Please contact Common Seas if you would like to continue to contribute or replicate this work in your specific geography.

Next steps include:

1. Drafting a paper to:
 - Outline the importance of defining these words
 - Combine outputs from The Klosters Forum with contributions from other Common Seas convenings
 - Propose workable definitions to help support positive policy interventions.
2. The paper will be presented for input to UK based NGO's advocating to reduce ocean plastic pollution with the aim to deliver a clear robust message.
3. A final draft will be presented to:
 - The Marine litter team, UK Government Department for Environment Food & Rural Affairs
 - The UK Plastics Pact, WRAP - of which Common Seas are a member.
4. Outputs have been shared with a researcher at the University of Oxford who is exploring these terms more deeply.





Workshop two

Wedges interventions and influences



Workshop two

Wedges interventions and influences

Objectives

Common Seas is devising a Wedges approach to support the development and evaluation of strategies to minimise the flow of plastics into the rivers and oceans. Inspired by the Princeton Climate Change Stabilization Wedges and Paul Hawken's Project Drawdown, the model aims to deliver an understandable and practical framework that decision makers could populate and strengthen according to their regional context.

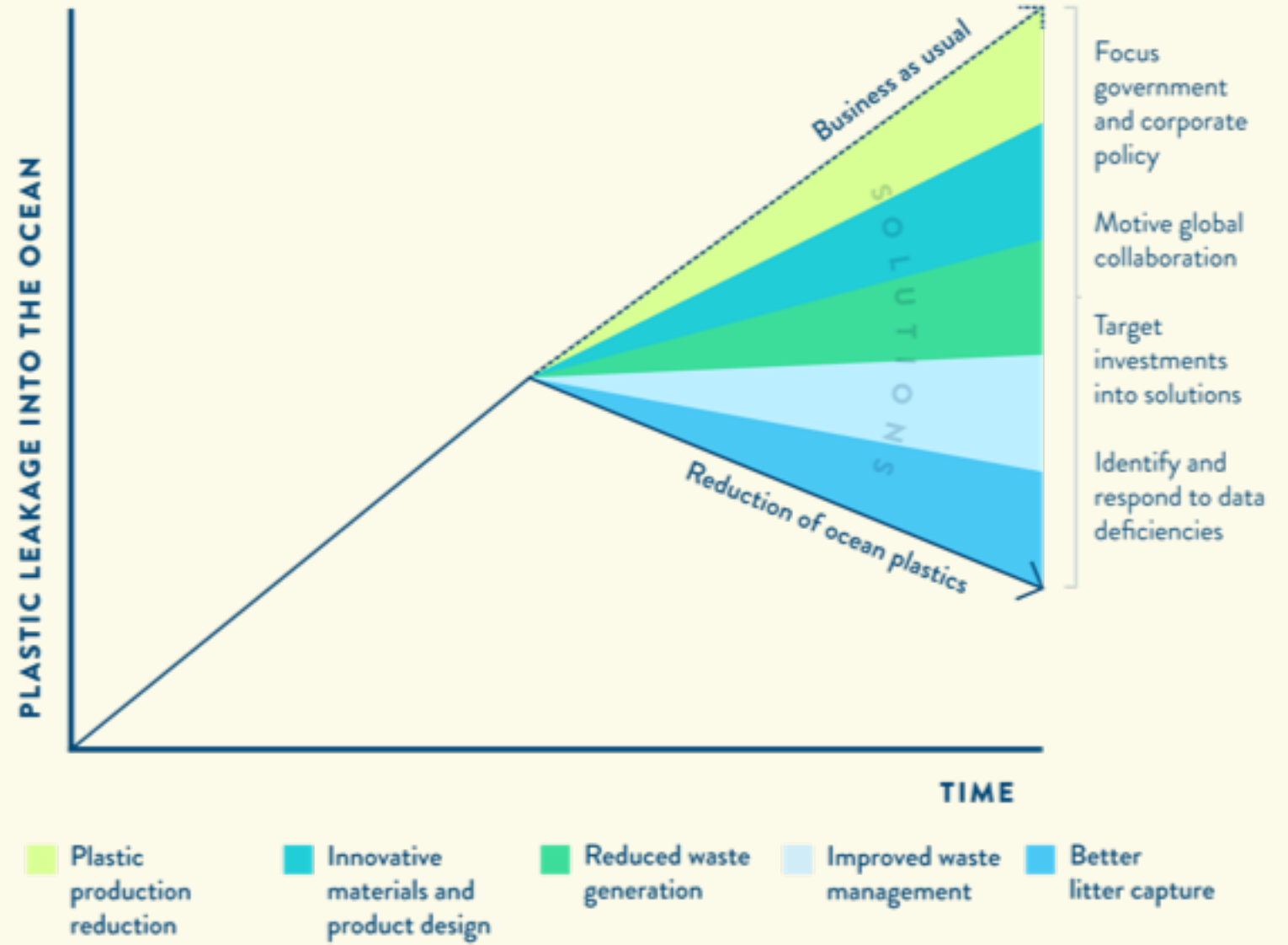
A key output is to effectively communicate, on one platform, that a portfolio of solutions delivered in tandem are required to solve the plastic pollution problem. Its users would range from policymakers, academics, designers and planners to help coordinate actions and expedite results in an efficient, unified manner.

During this workshop we explored interventions that could mitigate plastic pollution and identified 'influencing factors' that might enable or limit the success of an intervention at a regional scale. 'Influencing factors' consider the nuances and complexities of a localised context, which is critical in determining the efficiency and feasibility of a strategy to reduce plastic pollution, for example; consumer behaviour, governance and physical geography.



Figure 2:
Concept drawing of Common Seas Wedges

Each 'Wedge' represents the impact of a group of policy interventions which reduce the volume of plastic leakage into rivers and seas from a business as usual projection.



Workshop two outputs

Wedges interventions and influences



Plastic Production Reduction

Interventions included:

- New tax measures (incentives & penalties)
- Impose bans on certain polymers
- Improve or implement Extended Producer Responsibility
- Require oil refiners/plastics producers to pay a subsidy towards developing alternative materials
- Ethical investment policies and standards
- 'Montreal Protocol style' cap on plastics production
- Bulk buying schemes that make alternative materials economically feasible for SMEs

Influencing factors included:

- Public awareness
- Public support
- Business engagement
- Political will
- Economic trends
- Valuation of externalities



Materials & Product Design

Interventions included:

- New product standards to spur innovation
- Financial incentives for use of alternatives
- Better measurement standards to assess new materials
- Investment in new material design
- Polymer and additive standards
- Incentivise circular design

Influencing factors included:

- Technical capacity
- Investment
- Political will
- Level of business innovation
- Customer demand



Reduced Waste Generation

Interventions included:

- Policies for cradle-to-cradle upstream / downstream, redesign
- Material standardisation
- Consumer behaviour change campaigns and education (e.g. 'myth busting')
- Enhanced waste infrastructure at municipal level
- Data on leakage to ID cause and hotspots
- Enhanced recycling
- Deposit Return Schemes

Influencing factors included:

- Research and technical capacity
- Public engagement
- Education system
- Availability of capital & rate of economic return



Improved Waste Management

Interventions included:

- Eliminate open dumping
- Enhanced waste segregation
- Fiscal models incentivise recycling
- Localised /extended recycling producer responsibility
- Reframe waste and refer to it as 'resource'
- Localise recycling to bring home the value

Influencing factors included:

- Infrastructure
- Availability if investment
- Political will
- Economic trends
- Public awareness



Better Litter Capture

Interventions included:

- Standardise capture methods and requirements
- Technology to capture in rivers and streams
- Pay per kilo schemes for collection of different types of plastics

Influencing factors included:

- Technology
- Investment for innovation
- Wealth and employment levels
- Industry buy-in
- Physical infrastructure



Workshop two

Wedges interventions and influences

Next actions

In order to understand the potential for a dynamic Wedges approach to effectively inform plastic pollution drawdown strategies, Common Seas is currently catalysing and investing in the development of proof of concept models for three contrasting case study countries.

Current programmes of work include:

- Researching and refining the methodology to model qualitative information sets to value influencing factors within a country context. This was the focus of the workshop at The Klosters Forum.
- Developing the data architecture and identifying the quantitative data sets to model 'business as usual' plastic inputs into rivers and seas and the interventions in three case study countries.
- Designing a dynamic platform to visually present the relative impact of interventions.

The Common Seas team look forward to sharing outputs as the Wedges approach develops.





Workshop three and four

Practical case studies



Workshop three and four

Practical case studies

Objectives

The first day of The Klosters Forum was spent looking at overarching policies and frameworks. We explored how words shape the impact of government plans and looked at models to support decision makers to identify the right policy measures. On the second day we worked to translate theory into practical action on the ground.

We focused on three locations chosen due to their commitment to address plastic pollution, diverse geographies and opportunity to implement outputs of the workshop:

- Harbour city: Bristol, UK
- Mountain town: Klosters, Switzerland
- Island: Syros, Greece

Building on the concept of ‘influencing factors’ within the Wedges model, we explored how local information about social, economic and geographic factors can inform top down policy measures, to maximise impact and avoid negative unintended consequences.

The morning was spent exploring the variety of challenges in different locations and in response, developing a portfolio of solutions. In the afternoon, the group considered what information, partnerships and resources would be required to bring various ideas to life.

The workshops provided opportunities for networking and catalysing new collaborative partnerships. A small number of the collective project ideas are summarised on the following pages. The raw files from these sessions are available on request.



Workshop three and four Practical case studies

Outputs 1 of 3

A Harbour City // BRISTOL

Winners of the European Union's Green Capital Award, Bristol remains one of the UK's greenest cities. The city has a vibrant student population. Food and drink on-the-go culture, as in many cities, is prevalent.

The River Avon running through the heart of the city collects litter swept into the river by the rain, wind and tide, where it floats down the River Avon, the River Severn, The Bristol Channel and into the Irish Sea.

Ideas included catchment **gates in the harbour** to capture litter, **promoting the benefits of a 'slow food'** culture to challenge on-the-go lifestyles, **on-street recycling, better enforcement by the police** and **bans on specific on-the-go packaging materials** like Styrofoam.

- **A Bring-Back programme.** Create a compelling offer to local residents to bring back plastics for recycling, particularly those that will not be captured by incoming Deposit Return Schemes. Drop-off points could include petrol stations and local retailers. A social enterprise could run the programme to sell the recycle to the recycler. People bringing back their materials (clam shells, rigid plastic packaging etc.) could be incentivised, with the potential for a bonus for items collected from the river or beach.
- **Penalty and incentive system for coffee mugs.** Pay a higher price to purchase your drink in a takeaway cup. Incentives for using refillable, e.g. Bristol Pound voucher.
- **Increase refill across the city.** Local authority, business, communications and digital agencies collaborate to spread an existing refill project application far and wide. Turn fountains into WIFI hotspots to raise awareness and encourage use, develop vending options for other beverages.



Workshop three and four Practical case studies

Outputs 2 of 3

A Mountain Town // KLOSTERS

Momentum exists, with the ambition for Klosters to be a plastic free town. A high tourist population presents specific challenges.

The group discussed how 'plastic free' can be integrated into the Klosters brand. Friends of Klosters are proud of their connection to the town. There is a strong opportunity to build on existing relationships with local business, hotels, shops, restaurants to participate.

Outputs considered distributing "plastic free" branded products like **cigarette butt tins** and **symbolic reusable bottles** to curate an experience people will remember.

Achievements could be celebrated and magnified through **engaging art installations** in public places like park benches, bus stops and walls. Becoming a model for plastic free creates opportunities to work with other small towns to achieve global impact.

- Develop **new financial models** to enable innovation and action within towns. Consider how a breadth of tools can be used to spur investment, from grass-roots 'kick-starter' style crowd sourcing to Green Bonds. Organise towns through **cooperative models** that support investment and open sourcing best practice approaches and development cross-culturally.
- Create a desirable **plastic-free key card** to promote the plastic free Klosters program. The card allows access to refill and plastic-free perks across the city (like a resort card would), unique design shaped like the mountain range, fits into a wallet. You purchase the card to get discounts elsewhere, locals get a reduction to help with promotion.
- Put on a **sustainable event** which has replaced single-use plastics, uses clean energy, green transport, low carbon footprint, responsible vendors and purchasing. Showcase the possibility and potential, to become a standard of reference for other events, offer consulting and inspire widespread innovation.



Workshop three and four Practical case studies

Outputs 3 of 3

An Island // SYROS, GREECE

A small island with a large influx of seasonal visitors. Of the 188,000 visitors each year, only 9,000 arrive by air. The vast majority of tourists arrive on the island through the port, providing an opportunity to focus initiatives highlighting good plastic behaviours.

An output highlighted the potential for Syros to kick start a **league of plastic-free islands**, to help shape and promote a positive identity around plastics that will add to tourist appeal and spread outcomes globally. Potential for interventions such as, straw and bag bans, regulations to reduce smoking on the beach and water refill projects were discussed.

The group highlighted the necessity for a baseline study to understand current trends as key to creating positive impact. Research could quantify the economic impact of plastics, e.g. to tourism, which would encourage many local stakeholders to participate, from retailers to Scuba clubs, ensuring they develop and own their solutions.

- Working within a local municipality, alongside engineers, investors and businesses, to implement a **water purification system** using Tetra-amido macrocyclic ligand (TAML); a functional analogue of peroxidase enzymes, which activates hydrogen peroxide to form high valence iron-oxo complexes that selectively degrade persistent aromatic organic contaminants in water. This has the potential to reduce the consumption of single-use plastic water bottles.
- **'Butt-free' Syros campaign** Delivering a positive and empowering message to raise awareness and inspire action. Create bespoke bins or tins to encourage responsible disposal. Connect the issue to the conservation of marine life, local bird habitat and tourism revenue.
- **Education campaign** for stakeholders on the prevention of ocean plastic pollution. Involve schools, teachers, chamber of commerce, ferry operators, local NGOs, government, law enforcement, local shops, tourist office and tourism providers. Roll out the initiative and tailor content for different audiences to generate a consistent, positive and enabling culture for future interventions and behaviour change.



Workshop three and four

Practical case studies

Next actions

Near-term outputs include:

In Bristol, Common Seas will share ideas generated during the workshop with activists across the city -which is already a test-bed for innovation around plastic waste.

In Klosters, The Klosters Forum hope the ideas will inspire new action and support a legacy of reduced plastic pollution within their host community.

In Greece, Common Seas is developing a demonstration project to support an island to significantly reduce single-use plastic and transition towards plastics circular economy in partnership with a local NGO. Common Seas would love to collaborate with participants who are developing innovations or have experience that could support this project.

Please keep us informed as you build on relationships formed through The Klosters Forum and as you work to turn the ideas you generated into projects that help to ensure clean seas.





Please keep in contact!

Thank you for your energy, creativity, engagement and passion to safeguard a clean and healthy ocean.

Please continue developing the initiatives you discussed during your time at The Klosters Forum and if you haven't already, please do reach out the people who inspired you.

Due to GDPR Data Protection Act 2018 if you'd like to remain involved please email Common Seas to ensure they can keep in contact, explore collaborations and update you on their progress.

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