Ocean Plastics
A story of system change
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1. About Forum

This report was authored and independently researched by Forum for the Future in 2018, in collaboration with Sky. The report was written by Ivana Gazibara, Louise Rezler and James Goodman, with input and support from Anna Birney, Stephanie Draper, Joanie Koh and Ulrike Stein.

About Forum for the Future
Forum for the Future is one of the world’s leading sustainability non-profits. For over 20 years we’ve been working in partnership with business, governments and civil society to accelerate the shift toward a sustainable future. We specialise in addressing critical global challenges by catalysing change in key systems, from food to apparel, energy to shipping. We do this by convening transformational collaborations to drive change, by partnering with organisations to help them lead by example, and by building a global community of pioneers and change makers.

Together we are reinventing the way the world works. Find out more at www.forumforthefuture.org or by following @Forum4theFuture on Twitter.

Forum for the Future’s work on plastic
Forum for the Future has been working on the challenge of plastic pollution with a number of collaborators, including:

• Working in partnership with Foodpanda to develop and test a protocol for food delivery companies in Singapore and another South-East Asia market to help them, and by extension their partners, to eliminate single-use plastic waste.
• Working with Marina Bay Sands resort in Singapore on a comprehensive strategy to reduce single use plastics across more than 40 restaurants and cafes, more than 2500 hotel rooms, and various event spaces.
• Conducting a theory of change assessment for Circulate Capital; a partnership aiming to facilitate investments in waste management and recycling solutions in Southeast Asia, involving Closed Loop Partners, Kimberly-Clark, Coca-Cola, Dow Chemical and Partners in Environmental Management for the Seas of East Asia (PEMSEA).
• Facilitating the Marine CoLABoration – a system change coalition of nine UK and EU organisations, supported by the Calouste Gulbenkian Foundation, which aims to increase collaborative action on ocean sustainability issues and explore how to communicate the value of the ocean more effectively. Action has included establishing the #OneLess movement - a pioneering coalition of progressive individuals, communities, businesses, NGOs and policymakers, working to reduce the amount of single-use plastic water bottles entering the ocean from the city of London through fostering culture change around the use of water bottles. Their first pilot project has been the installation of a series of water fountains across London, in partnership with the GLA.
• Designing and running a collaborative system change experiment in out-of-home plastic waste collection in partnership with the Klöckner Pentaplast Group, the UK’s largest buyer of recycled PET. The aim of this work is to explore practical solutions to the challenge of plastic waste collection, and design and pilot a radically different out-of-home waste collection system – enabling the Klöckner Pentaplast Group to create a completely circular solution for its products, initially in the UK, but ultimately with the potential of scaling across other European markets.
2. Executive Summary

Our understanding of the sustainability impacts of plastic has been growing since the 1980s, but it is in the last two-three years that we have seen an unprecedented amount of activity around ocean plastics pollution. From prominent campaigns and regular media stories to bold corporate targets, policy shifts and innovations in alternative materials and technologies, public awareness of ocean plastic pollution – and expectations for industry and society to act – is at an all-time high.

This system change case study explores some of the key activities and initiatives aiming to tackle the challenge of ocean plastic pollution. System change is a deliberate process designed to transform the fundamental behaviours of a system so that a new, sustainable pattern of organisation and structure can emerge. Through this case study, we aim to understand and convey where industry and society are in the change process of transformation; from the plastic crisis our seas are currently facing, towards a sustainable status quo for production, consumption and end-of-life in plastic. We explain and examine the strategies needed to achieve systemic change and use them to interrogate how transformative the current landscape of activity truly is, including a detailed look at Sky’s Ocean Rescue campaign as an example of change in action. We approach the case study with a focus on ocean plastic because the oceans are experiencing such significant impacts from pollution and because the issue is so live for people right now, but we also look to the broader challenge and signal that plastic pollution is a global disaster reaching far beyond our oceans.

This case study provides clear lessons for business, policy makers and other organisations and individuals that want to have a systemic impact on plastic pollution – or that are already working to do so – and will guide you on what is needed now to scale and mainstream change.

“We want to support the change being directed at one of the biggest man-made environmental disasters that faces our planet – plastics in the ocean. That’s why we launched Sky Ocean Rescue to raise awareness about ocean health and encourage our staff, the public and other businesses to remove single-use plastic from their lives.

As part of this we want to make sure we’re meeting our commitment to remove single-use plastic in the best possible way, and if not, learn how to do it better. We have commissioned experts from the Cambridge Institute for Sustainability Leadership to conduct this in-depth review of what we’ve done and how we’ve done it. We will use the findings of this work to inform how we further transform our business and inspire other businesses to become single-use plastic free.”

Jeremy Darroch – Group Chief Executive, Sky
In the last 15 or so years we have produced more plastic than in the rest of human history combined and around 8 million metric tons of plastic waste is leaked into the world’s oceans every year, from littering, dumping and failed waste management. Plastic waste poses a threat to human health as well as to the environment and economy, and every person and every industry is implicated. Even as our sea life is endangered by plastic pollution and we are finding microplastic in our food, air and 83% of the world’s drinking water, we continue to use and dispose of plastic at an unparalleled rate, with investments already underway to drive a 40% rise in plastic production in the next decade.

Most corporate (and policy) commitments so far have focussed on single-use plastic items such as carrier bags, plastic bottles and straws, and on increasing recycling rates or the recyclability of packaging products. These are an important part of the solution but, on their own, they are too incremental. Efforts need to be coordinated beyond this narrow scope to understand and tackle the root causes of plastic pollution, and to ensure that less visible problems aren’t ignored. What about the polyester T-shirt that might last 5 years but releases microfibres into the water system every time it is washed, or the car tyres and shoe soles that shed microplastic particles into the air and the soil every day?

To create transformational impact (and not create new unexpected problems in the process), those working to tackle plastic pollution need to act collaboratively and deliberately to fundamentally change the way industry and society behaves around plastic. This means understanding your own leverage points for creating change – where your strengths and opportunities are. It means being led by a bold ambition, and willing to be flexible and to weather disruption in order to achieve it. And it means testing new things and actively learning from them and from others, whether they go right or wrong.

And, crucially, it means starting now.

“A lot more businesses need to step up to the plate now. And I don’t mean in 5 years. If you’re gonna make the change, do it now!”

Fiona Ball – Group Head of Inspirational Business and Sky Ocean Rescue

If you are interested in discussing the findings of this case study further, please contact Ivana Gazibara, Associate Director UK, Forum for the Future at i.gazibara@forumforthefuture.org

3 https://orbmedia.org/stories/invisibles_plastics
At present, plastic can only be recycled a very small number of times - 6 or 7 times might be possible but, in practice, it is usually only recycled once or twice before being downcycled into products which cannot be recycled again - and currently relies on a constant input of virgin (new, unrecycled) plastic. A circular system for plastic could include a number of different initiatives - such as making compostable packaging that returns nutrients to the soil, producing recyclable plastic from renewable (non-petroleum) sources, and enhancing plastic so that it can be perpetually recycled. Increasing recycling rates alone won’t create a circular system. Nor will compostable packaging that is landfilled, littered, or made using materials that have negative effects on the surrounding environment.

What happens to the plastic packaging that is leaked into the environment? Part of the problem is that we don’t entirely know. What we do know is that a great deal of it ends up in the world’s oceans; a rubbish truck-full every minute. Ninety percent of plastic pollution reaches the ocean via ten rivers, eight of which flow through China which, until 2018, was the world’s largest plastic waste importer – receiving (by weight) 56% of global imports and 87% of European imports.

Plastic pollution isn’t just unappealing. Plastics contain a number of toxic chemicals, and can absorb more from their surroundings. Exposure to the chemicals in plastics can have serious health impacts on people including: interrupting hormone function; irritating eyes, skin and the respiratory tract; establishing diabetes and obesity; damaging the immune system; and causing birth defects and cancer.
Microplastics – tiny plastic particles measuring up to 5mm in diameter – are a particular threat because their small size makes them excellent vehicles for transporting the toxic chemicals found in plastic into the soil, water and even the air. They are formed when small particles or fibres of plastic material are released into the environment or when larger plastic items break down into smaller particles. Plastic microbeads in personal care products are one source, but an estimated 87% of the microplastics that are formed on land come from washing synthetic textiles (35%), tyre erosion when driving (28%) and city dust (24%). They are ingested by, and have harmful effects on, animals, birds and insects: studies have already shown that ocean concentrations of plastic can impair reproduction and development in a number of ocean species. Humans ingest microplastics by eating species that are contaminated with them, or through common food products such as salt, beer and honey. Plastic microfibers have now also been found in an estimated 83% of the world’s drinking water.

Larger-scale plastic pollution in the oceans also poses a huge threat to marine wildlife and habitats. Plastic debris causes blockages and entanglement as well as starvation of birds and fish that mistake plastic for food. Nearly 700 marine species are known to regularly encounter ocean debris, including over 100 already endangered species.

Plastic pollution in the oceans is also expensive, costing governments, local authorities and the tourism, fishing and shipping industries billions every year to clear it from coasts, beaches, equipment and infrastructure. Oceans contribute $1.5 trillion per year to the global economy. They provide livelihoods for 10-12% of the world’s population and coastal habitats, such as sand dunes and mangroves, provide protection against storms and erosion. Spending time near the sea is linked with improved human health and important ingredients in medicines continue to be discovered in the oceans.

There has been an unprecedented amount of activity around ocean plastics pollution in the past 2-3 years, from major environmental campaigns to bold corporate targets, to policy shifts and innovations in alternative materials and technologies. We now know what the problem is, understand the need to change our relationship with plastic, and have pioneering practices we can learn from. The window of opportunity now is to accelerate and mainstream the change.

**Together, we need to transform every aspect of how we produce, consume and manage end of life in plastic.**

To do this, we need to take a systemic approach. This means that all the interconnected elements of the problem need to be understood and strategies for change need to be targeted in order to achieve a real transformation to a sustainable mainstream.
This is a case study that aims to explore the activity taking place to solve the ocean plastics problem, and to understand where society is in the change process. It interrogates the change that stakeholders acting on plastic pollution are seeking and examines the strategies needed to achieve real transformation. The case study includes a detailed look at Sky’s Ocean Rescue campaign as an example of systemic change in action and draws on lessons that can be learned from the campaign. Through this case study, we have:

• Mapped the range of current activities seeking to address plastic pollution
• Identified what the most pioneering practices have been so far
• Analysed what those activities are telling us about where we currently are in the process of change
• Provided guidance on how we need to proceed in order to scale and mainstream change

This case study is aimed at business, policy makers and other organisations and individuals that want to make an impact on ocean plastics pollution – or that are already working to do so. It is also an attempt to communicate a systemic approach to tackling complex sustainability challenges like ocean plastics, something we at Forum for the Future believe is essential given the scale and urgency of many such challenges.
What are systems and what is system change?

“For every complex problem there is an answer that is clear, simple and wrong.” – H L Mencken

Systemic innovation has been at the heart of Forum for the Future's strategy since 2010, mainly because two decades of work in sustainability have demonstrated to us that the challenges in this field are complex, rarely with a silver bullet solution, always involving multiple (and often competing) stakeholder perspectives, and constantly evolving. And they are certainly problems which no one organisation can solve on its own, especially in light of the increasing urgency for action.

Well-articulated stories and case studies of deliberate systemic change are rare, and the ones that do exist are historic examples rather than stories about transitions that are happening around us today. This collaboration with Sky is therefore also a contribution to understanding and applying the systemic change approach to addressing complex sustainability challenges like ocean plastics.

So, with that in mind: what are systems? There are a number of definitions, but we like this one:

A system is a set of elements—people, molecules, species within the marine ecosystem—interconnected in such a way that they produce their own pattern of behaviour over time.

A system can be can be large, like an entire economy, or small, like a single microorganism. It can be something created by humans, like the monetary system, or an ecosystem like the ocean.

System change is a deliberate process designed to transform the fundamental behaviours of a system so that a new, sustainable pattern of organisation and structure can emerge. We have seen major systemic changes happen throughout history, but we just don't tend to think of them in this way. One example is the transition of humankind from small, nomadic, hunter-gatherer groups, to larger, settled, farming communities. Not only did this change our food system, but it also radically changed the fabric of human society, culture and interaction. We began to store and preserve food, which was arguably the inception of the concept of saving assets and, therefore, a precursor to saving in the monetary system as we know it today. Other examples of system change include the horse to car shift, moving from oil lamps to electricity as the energy source for lighting, and so on.

This hindsight about how system change has happened in the past enables us to think and theorise about the leverage points and interventions that drive that level of transformative change. This leads us to the possibility of being deliberate about creating change. And this lies at the heart of how people and organisations working at the forefront of system change are thinking today: how does system change occur, and therefore how can we make it an intentional part of the way we work? As with most theories, there are various frameworks used to explain how system change happens. One that we use very often at Forum for the Future is called the Multi-level Perspective, a framework that helps to order and understand what is happening around us, and to identify where in the change process we are.
We use the Multi-level Perspective because it helps to explain large scale, long-term shifts. It has three components: the **Regime**, the **Niche** and the **Landscape**.

The **Regime** describes the mainstream of the system; the way things get done today. This includes the rules and regulations, technology and economics that make our food, energy, finance or any other system work. Elements of the regime generally change and adjust incrementally over time, and within the boundaries of how the system currently operates.

The **Niche** is where new and unstable technologies, ideas, concepts and innovations emerge and percolate until they begin to mature and edge into the mainstream market. Unlike the regime, there is a smaller number of actors in the niche. They are not as well-networked, and the rules are not aligned or formalised. For this reason, niche developments often need to be protected from pressures being exerted by the regime until they have become mature enough to enter the market.

The **Landscape** is the external context shaping the way the niche and regime behave and interact with each other. It includes long-term trends such as globalisation, urbanisation and climate change, but also macro events such as wars, natural disasters, and economic crises.

The transition of a system results from the interaction of events on all three of these levels of the MLP. It happens when pressures from the Landscape (including political transformations, violent physical events or changes in societal expectations) and the development of strong alternative solutions in the Niche combine to disrupt business as usual (the Regime). This change has three phases: Start up, Acceleration, and Stabilisation (see Figure 1). In the **Start-up** phase, high-level landscape pressures create tensions within the regime, exacerbating existing problems that may thus far have been ignored, and creating windows of opportunity for niche innovations to disrupt the regime. In the **Acceleration** phase, we see innovation niches expand, begin to mainstream and compete with incumbent stakeholders and solutions. In the **Stabilisation** phase, what was formerly niche innovation has disrupted the regime and reconfigured it so that in effect it becomes the new regime. It is characterised by maturing innovation and technology, an institutionalization of new rules, and a high number of actors adopting the new organising structures and behaviours.

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**Figure 1: Multi-level Perspective (MLP)**
System change in plastic

Defining a vision for change

If it is our aim to create a positive systemic change, we need to have a vision, or at least principles in place, for what a sustainable mainstream should look like.

As with any challenge where there are multiple influencers and competing perspectives, it can be difficult to define precisely the change that is needed.

Amidst all the ambition and activity going on to tackle plastic pollution, there are competing approaches around how to tackle plastic pollution. These tend to fall into three categories:

Limiting and reusing packaging, where the focus is on behavior change which will ultimately reduce society’s dependence on packaging altogether, particularly disposable packaging. Activities adopting this approach tend to be centered around new disruptive business models (e.g. Cup Club) and initiatives designed to change people’s behaviours and attitudes (e.g. Reverse Vending Machines, DRS schemes, discounts on products in exchange for using reusable containers).

Displacing plastic with other materials, an approach which sees plastic as part of the problem due to its environmental impact and focuses on new material innovation (e.g. compostable, biodegradeable) as well as quick-win substitutions (e.g. aluminium, card board).

Creating a ‘circular’ system for plastic, an approach which pinpoints the management of plastic waste as the issue, not the material itself. Main efforts here include improved capacity and technology in plastic recycling, combined with better and streamlined waste management infrastructure and practices.

These different perspectives could point us towards very different futures. That is not to say that they only happen in isolation, or that everybody working in this space is married to just one. But it is important to recognise that organisations or initiatives tackling the plastic problem may implicitly be working towards different goals – and some may even be on a path to disrupt or cancel each other out if not coordinated. A classic example of this might be that, without coordination, efforts to simultaneously scale up both recyclable and compostable packaging in the same location could result in compostable material regularly entering and compromising recycling streams. This would result in ‘recycled’ plastic that is not viable, cannot be used, and must be discarded.

To take a systemic approach, anyone looking to take action on plastic needs to understand the interdependencies and relationships in the plastic space and to discuss and agree on explicit, shared, long-term goals.

“The first [industrial processing of a] synthetic polymer was invented in 1869 by John Wesley Hyatt, who was inspired by a New York firm’s offer of $10,000 for anyone who could provide a substitute for ivory... Hyatt discovered a plastic that could be crafted into a variety of shapes and made to imitate natural substances like tortoiseshell, horn, linen, and ivory... This discovery was revolutionary... Advertisements praised [plastic] as the savior of the elephant and the tortoise. Plastics could protect the natural world from the destructive forces of human need.”

Science History Institute
In the case of the plastics agenda today, some conclusions can be drawn from the scientific data and analysis about the scale of the pollution, and the visions for change articulated by experts and pioneers tackling the challenge. Here are the broad objectives around which business, policy makers, NGOs and other stakeholders should rally:

1. **Eliminate plastic flows into the environment, particularly oceans which absorb 8 million tons of plastic every year.** According to the now notorious statistic from The Ellen MacArthur Foundation, if we don’t change this, there will be more plastic than fish in the ocean (by weight) by 2050. We must ensure that landfills and oceans are no longer acting as sinks and that countries take responsibility for their own plastic waste.

2. **Phase out unnecessary ‘single-use’ plastics** We need to reduce the amount of packaging in general and phase out ‘single-use plastic’ items such as plastic bags, straws, coffee stirrers, soda and water bottles and most food packaging. Where appropriate, we should replace plastic with alternative materials. These might be fully compostable packaging, such as cellulose, mycelium or seaweed-based, or might be recyclable materials that don’t leach dangerous chemicals, such as cardboard or glass. In accordance with this, we need to design farming, transport and retail infrastructure to function with less or different packaging, in order to prevent increased food waste.

3. **Design all plastics with end of life in mind** – Design which does not account for end of life is bad design, and that currently includes most single-use plastic packaging. We need to ensure that almost all plastic is designed to be either recyclable or compostable (with the exception of e.g. infectious equipment), and that materials are appropriate to local needs. For plastic destined for recycling, component materials such as colours, additives, labels and glues that are not compatible with recycling need to be phased out. Plastic destined to be composted must break down into microbe-digestible particles, without environmental side effects, at home, in landfill and in sea or river water. It needs to be easy to differentiate between recyclable, non-recyclable and compostable plastic (e.g. a universal colour for each type of plastic).

4. **Ensure that recycling infrastructure meets domestic demand and is streamlined to enable a circular system for plastic** We must ensure that the plastic that remains in the system is recyclable – and recycled! Plastic recycling collection must be streamlined, with clear and well-enforced rules. Recycling infrastructure must meet demand and be appropriate to local needs, and recycling technologies must be combined to maximise the materials that can be recycled. World-wide, only 14% of plastic packaging is recycled and only 2% of plastic packaging is currently recycled back into its original form – it is primarily ‘downcycled’ into e.g. benches or building materials. This is partly due to limited recycling capacity and technology and partly due to a lack of responsibility for waste. In the UK, for example, recycling, rules differ from borough to borough, with 39 different sets of rules across the UK, and two-thirds of plastic recycling is exported. Transporting exported plastic has additional emissions impacts and control over the final destination of the waste is lost.

5. **Create a cultural shift in terms of how we value and consume plastic, particularly packaging, and end our throw-away culture.** Refills and reusable containers must be available, affordable, desirable, convenient, and properly incentivised by policy and commercial products/services. Whilst convenience is still important, we must think about our time and how we spend it differently, for example: valuing cooking and reducing reliance on ready-meals that come in plastic trays and film. It should be easy for the public to make sustainable choices.
The story of change so far

There has been a burgeoning amount of action on plastic waste over the past two to three years, from campaigns like Greenpeace’s Plastics Pledge, to documentaries like Blue Planet 2, ambitious corporate pledges like Sky’s target to phase out single-use plastics, and policy changes like the microbead and plastic bag bans. But how much transformational change has this really created? Our research and analysis shows that only a small proportion of this activity has the transformative potential that will lead us to the desired changes articulated in the previous section.

In fact, some of the responses to the plastic pollution problem that we have seen over the past few years could arguably be described as reinforcing or appeasing the status quo rather than pushing for transformational change.

Increasing levels of recycling, for example, will not create a systemic change without a corresponding shift in the underpinning infrastructure, product design and behaviour change – something we are not currently seeing much of. It will also not fundamentally change the massive throughput of material and energy circulating in our economies. Given that we need to see a profound shift in how we think about the items we buy and consume, there is a risk that measures like these reinforce the idea that we can continue to consume massive amounts of goods encased in ‘throw-away’ packaging. Similarly, solutions like beach clean-ups and ocean cleaning technologies are important but also band-aids for the current system, where plastic packaging is thrown away as waste, and leaks into the environment.

We conclude therefore that we are currently in the start-up phase of change in tackling the plastics problem, but with the potential to edge into the acceleration phase if we play things right. The innovations and improvements to services we have been seeing are truly impressive but will only create a systemic transition if we use them as part of a coordinated broader change.

Nine strategies for system change

Through Forum’s experience in system change strategy design, the research done on this project, and existing theories and frameworks, we have identified nine strategies that we believe have the potential to achieve systemic transformation in plastics, and which could also be utilised in tackling other sustainability challenges. We have mapped the current activity going on in plastic against these nine strategies in order to identify where we are in the change process.
Systemic change is rarely a sequential process. It involves multiple stages of learning, testing and reiterating in order to achieve an outcome that is both transformational and that takes into account the interrelationships present. In our visual representation (Figure 2) and written section below, however, we have demonstrated that some of the nine strategies are more applicable early on in the process of change, whereas others are more important for helping to consolidate the change at a later stage. Some of the strategies are also more relevant to areas of emerging innovation, and some more relevant to mainstream actors. It is also critical to note that they exist as a set. Choosing which ones to use is dependent on where we are in the process of transformation. This is why it is so critical to have a good - and ongoing - diagnosis of the challenge. Real change happens when interdependent forces occur simultaneously so multiple strategies will need to be activated at the same time.

1. **Create a robust case for change by generating science-based information.** This ensures that the right data is available to help stakeholders understand how the problem affects them, and forms the basis of the case for change.

One of the critical things to observe about how the plastic problem has changed is that, compared with a few years ago, there is now a lot of information about the state of global plastic pollution. Seminal research has included the 5 Gyres collaboration to calculate the extent of ocean plastic pollution and International Marine Litter Research Unit work on the effects of plastic on human health. We can now estimate how much plastic has entered the ocean, how much more enters every year, and how little we recycle. The Ellen MacArthur Foundation research on plastic packaging waste not only informed the sector but provided an evidence-based starting point for important conversations. There have been many significant calls to action on plastic pollution in conjunction with this data, including the UN #CleanSeas campaign, WRAP’s Plastic Pact, the civil society collaboration that demanded a stand-alone Sustainable Development Goal on Oceans and Seas – and many more.

A great deal of information has now been gathered on the plastic pollution problem but there are still gaps. Lack of data is still a big barrier to implementing the EU’s Marine Strategy Framework Directive, for example. On the whole, there is far less information and data collection around solutions. While some collaborations have been working on this, such as the Mermaids Good practice guidelines for the textile industry, this is rarer. In particular, the potential consequences of many of the different interventions currently being planned and piloted remain unknown, such as understanding and comparing the impacts of alternative packaging materials on the environment and human health.
2. **Make the information widely accessible.**

This helps raise awareness and develop a broadly shared understanding of key issues, challenges, and solutions.

The story of ocean plastics pollution has succeeded in capturing the public imagination in an almost unprecedented way. In part, we have to give credit here to the graphic imagery of the documentaries broadcast on Sky and BBC, in printed and in digital media, including poignant images of wildlife choked to death by plastic debris. The key to achieving this level of awareness has been the link between the challenge and people’s everyday lives: we all use plastic, every day and most people have an emotional connection with wildlife and the ocean. Celebrity involvement has lent weight to awareness raising and there has been an array of passionate and influential people at the forefront of plastic pollution campaigns including Dame Ellen MacArthur, Sir David Attenborough and European Commissioner Karmenu Vella.

One great example of this is the story of microbeads. This was widely picked up by the media, for whom the attractive hook was both the graphic nature of the problem (i.e. the ‘plastic soup’ floating around in the ocean and being ingested by fish) and the very personal connection it could have with many consumers (that microbeads in their exfoliating facewash could be ending up in their fish dinner). In 2012, the Plastic Soup Foundation started campaigning against plastic microbeads, and eventually 90 NGOs from 38 countries joined the Beat the Microbead campaign. The campaign put pressure on businesses and governments, and influenced Unilever and other major brands, as well as a number of governments including Canada and the UK, to commit to a ban.

3. **Create collaborations to align mindsets and goals, enable shared learning, and spark new innovations.** Collaborations are critical for tackling complex challenges like plastics pollution, which have a range of impacts and involve a large number of stakeholders.

Based on the sheer amount of activity around tackling plastic pollution, you might assume there has been a great deal of collaboration going on. And there are definitely some early examples of initiatives that seek to align mindsets and goals. The New Plastics Economy, run by the Ellen MacArthur Foundation, is a 3-year initiative which brings together key stakeholders to rethink and redesign the future of plastic packaging. WRAP’s UK Plastics Pact brings together businesses across the plastics value chain with UK government and NGOs to commit to a shared vision for plastic packaging. World Economic Forum’s Global Plastic Action Partnership (GPAP) will translate commitments into action by fast-tracking circular economy solutions in coastal countries battling plastic waste. There have also been a number of individual corporate commitments on reducing single-use plastic that have, no doubt, required a great deal of behind-the-scenes work with suppliers.

![Black plastic is not currently recycled. While some brands and supermarkets have started to abandon it, others support initiatives to make it widely recyclable. Even where initiatives have enhanced design or infrastructure to recycle black plastic, doorstep recycling hasn’t necessarily been coordinated to collect it. And it leaves a vital question unanswered: whether producing and using opaque and coloured plastic—which has fewer recycling applications and is more likely to be downcycled—should be part of a better packaging system at all?](https://example.com/black-plastic-facts)

While this has been really important, collaboration to transform the plastics problem is not widespread and there is still a gap in connecting the dots across the breadth of what’s been happening. Many stakeholders are making commitments, but few are joining forces to ensure that those commitments add up to a commonly held vision for change, and to genuinely share approaches and learning.
Due to its pervasive and often single-use nature, packaging has been at the forefront of collaboration around the plastic challenge. Plastic microfibres from synthetic clothing are starting to gain attention, but efforts to understand and address this challenge are still fragmented. Microplastic pollution from car tyres and ‘city dust’ - both of which implicate most, if not all, industries but currently experience a low level of consumer awareness - are even further from coordinated action. And collaboration regarding the many non-packaging products we currently make out of plastic is still pending - building materials, kitchenware, carpets and more – is still pending.

4. Create new, disruptive innovations.
This is about developing alternative, sustainable solutions that have the potential to mainstream - whether that’s products, services, or a new way of operating. It is critical for demonstrating the art of the possible, and providing the ingredients for the system to reconfigure around.

There has been no shortage of innovation to replace virgin, petroleum-based plastic products; from the Delta, Evoware and Ooho seaweed-based pouches, which can be eaten alongside their contents, to compostable TIPA packaging and Ecovative’s mycelium (fungus fibre) based products. Some innovation has focussed on repurposing waste plastic, such as ECONYL® regenerated nylon from landfills and oceans. Brands such as Adidas and Ecover are overcoming the technical challenges of incorporating recovered plastic waste into their product lines and some companies are innovating plastics that have positive environmental impacts, such as Interface’s carbon capture floor tiles. However, some of these solutions are expensive alternatives, face other barriers to scale and in some cases have unintended negative consequences that need to be carefully thought through (see insight box).

Potential consequences of different interventions and local contexts need to be understood before new methods are rolled out and innovation needs to emphasise behaviour change rather than plan around it. For example, clear and streamlined information and labelling is needed to ensure new materials are easily distinguishable, and don’t contaminate existing plastic recycling streams (which could damage recycling infrastructure and also make recycled plastic flawed and unusable).

Every time a synthetic garment goes through the spin and rinse cycle in a washing machine, it sheds thousands of plastic microfibres, which are then swept through the sewers and eventually end up in the ocean. Companies creating or selling apparel made from reclaimed plastic waste help to raise awareness of the plastic pollution problem and do create a market incentive to remove plastic from the oceans and reuse it instead of relying only on virgin plastic. However, like most companies selling plastic-based apparel, they also inevitably continue the release of microplastic particles - from washing clothes or from wear and abrasion of shoe soles on city streets. How can reclaimed and recycled plastic be put to use without perpetuating the release of microplastics into the air, soil, rivers and oceans?

Microplastics, which may pose the greatest environmental threat, cannot yet be cleared from the ocean, air or the land and, currently, most ocean cleaning efforts focus on beaches or the ocean surface, while an estimated 94% of ocean plastic is on the sea floor.

Also, using plastic alternatives that are made from natural materials may require growing these materials in huge quantities – which could have big implications for land use, monoculture and deforestation. And transitioning to compostable packaging runs the risk of reinforcing throw-away culture.
Another key category of innovation has focused on dealing with existing plastic waste. This includes the Guppy Friend washbag, which traps microfibres from clothing inside the washing machine and prevents them being washed into water systems, and SeaBin, which collects ocean surface plastic debris. Bacteria with enzymes that can digest plastic have also been discovered and enhanced as a potential solution to dealing with plastic waste. These innovations are an important part of the picture because they can support the removal of the plastic currently in the environment, but negative impacts may just be relocated if the plastic waste collected just ends up in landfill. It is arguably more important to focus efforts on innovations aimed at ‘turning off the tap’ on plastic pollution flowing into the ocean. Not to mention that the last thing we would want to do is institutionalise the notion that this problem can just be cleaned up, potentially reinforcing our throw-away culture.

5. Create routes for new innovations to scale and mainstream. This strategy supports new innovations to scale: for their elements to diffuse into the mainstream regime, or to replace it altogether.

A number of funds have been set up to finance solutions focused on reducing plastic pollution. These are vital for early-stage innovations where costs are still a major barrier. The EU’s Blue Invest and LIFE funds, the New Plastics Economy Moonshots fund, Circulate Capital, Sky Ocean Ventures and JLAB’s Plastic Challenge are among these. The #OneLess Design Fellowship is a multi-stakeholder initiative supporting designers to develop innovations aimed at helping London phase out disposable plastic water bottles. Crowdfunding has also been leveraged, such as in the $2.2 million financing of the Ocean Cleanup, a foundation that develops technologies to extract and prevent plastic pollution.

However, most of the focus here has been on financing mechanisms for new materials innovation. In order to achieve transformational change, it is imperative that scaling mechanisms are systemic: understanding the plastic problem as a whole instead of focusing on only part of the challenge, and backing only part of the solution. Such mechanisms include financing, but also an enabling policy environment, new standards to raise the playing field, supporting infrastructure for product/service innovations, behaviour change initiatives with consumers, and collaborative platforms.

6. Create the right incentives, business models and financing to help the mainstream adapt to change. This strategy area focuses on changing the way the mainstream operates to allow it to respond to some of the pressures from the landscape and the niches.

Much of the activity to tackle the plastic problem has, so far, has been focused on supply chain incentives. To some extent what we are witnessing here is businesses keen not to be left behind on plastics targets. This, in many ways, is great news and means that businesses are seeing action on plastics as part of their leadership positioning. A number of plans and targets have been introduced to reduce or eliminate plastic packaging. In addition to Sky, the BBC, UK retailer Iceland, Ekoplaza, and Ikea have all made commitments to become single-use plastic free. These companies have now effectively shifted the incentives for how they work with their suppliers, and are collaborating with them to make alternative solutions to plastic available.

Collaborative initiatives like the WRAP UK Plastics Pact are also shifting incentives. To date, almost 100 brands, retailers and packaging companies have committed to the pact and to its targets, which include 100% reusable, recyclable or compostable packaging by 2025. Deposit return schemes (DRS) – which are currently in place across 38 countries, and about to be introduced in the UK - shift consumer incentives with regards to packaging waste, by adding a value to something previously treated as worthless and ‘throwaway’; achieving return rates of up to 90%. In cities like Beijing, Jakarta and Istanbul, people can now pay for public transport by trading their plastic waste for credit through reverse vending machines.
Develop policies that facilitate and reinforce systemic transformation. This is about using economic tools like taxation and subsidies, as well as political influencing, to gradually shift goals and behaviours. Initially, it might involve ‘micro policies’ which support the growing change and, at a later stage of change, policies can help reinforce the new mainstream.

There have been a number of notable policy changes in the plastics space. This includes bans by several governments on plastic microbeads, straws and cotton buds, not to mention the plastic bag charge in the UK, and an outright ban in countries including Bangladesh and Kenya. The UN Sustainable Development Goal on oceans has set a mandate for action and all 193 UN member countries have signed a (non-legally binding) resolution to eliminate plastic pollution in the sea. Some governments have already announced or even implemented bans on single-use plastic altogether: Taiwan by 2030, and Costa Rica and India by 2021 and 2022, respectively.

However, many of the policies that have come into force have focused on individual products like plastic bags or straws, which may only represent a small percentage of the plastic waste problem, rather than putting in place policies designed to create a bigger shift in how we produce, consume and manage end of life in plastic. This also allows issues to be seen as ‘resolved’ when they are not; for example none of the numerous microbead bans do not apply to every product that contains microbeads (suncream, makeup and paint are generally exempt, for example).

8. Shift culture and behaviours to enable a new mainstream. Perhaps the hardest of all the system change strategies, this is also potentially the most powerful due to its ability to profoundly shift the big picture context within which the system operates, and which fundamentally drives the way things work.

Despite many commitments and policies based on ‘single-use’ plastic, there has been no agreed definition of what it actually means. Is ‘single-use’ about putting a time limit on how long a consumer uses something? Does ‘single-use’ only apply to things like straws and drink bottles, or does it also include a shampoo bottle you use for 3 months, or a pen that can’t be refilled with ink? Or is it about identifying the plastic items that are least often recycled or recyclable? “Does it include your polyester T-shirt that might last 5 years but releases microfibres into the environment every time you wash it? Or the tyres on your car and the shoes on your feet that shed microplastic particles every day?” If we are seeking to build transformational policy and business practices we must answer this fundamental question.

This strategy area is most powerful when it influences behaviour, as the plastic bag charge did in England, resulting in an 86% reduction in the number of plastic bags issued by major retailers in 2017/18 compared to before the charge. But a UN study of over 60 national bans and levies on plastic bags found that only 30% had evidence of a positive impact. Lack of enforcement, affordable alternatives, or impact measurement were key reasons for this low reported success rate. In India’s Maharashtra state, which implemented a ban on all single-use plastic earlier this year, many small businesses had relied on plastic bags to package liquid products at the point of sale. The quick roll-out of the ban, combined with limited consumer behaviour change, resulted in high levels of food waste as well as damage to smallholder livelihoods as many vendors became unable to operate their businesses overnight. The many exceptions to the ban have also raised questions and created confusion.
The flashpoint issue in the plastic problem is arguably consumerism: high levels of consumption, the drive for convenience, and our throw-away culture all ensure that high and growing volumes of plastic packaging cycle through our economy at a very rapid pace, and end up in landfills and oceans. The key to tackling consumerism is in changing mindsets and behaviours amongst consumers.

Education is a powerful tool to influence behaviour. Many initiatives offer practical tips on how the public can reduce their use of plastic. Italian NGO Legambiente brings education directly into schools and their programmes include education on water management, recycling of old tyres and school litter monitoring. Ambitious campaigns such as Plastic Free Parliament tackle behaviour change directly by demanding commitments around reducing plastic use. Behaviour change can also be supported through products (such as KeepCup) and services (Pret a Manger offering coffee discounts to customers bringing their reusable cups, Coca-Cola's microchipped refillable bottles combined with ‘smart’ drink dispensers) and supporting infrastructure (Reverse Vending Machines provide consumers with value in exchange for plastic waste, and The Greater London Authority is partnering with the #OneLess campaign to pilot the installation of public water fountains in the city).

An even more ambitious level of shifting mindsets focuses on changing consumers’ perception of and relationship with plastic: Precious Plastic, for example, has created at-home plastic recycling and 3-D printing machines, along with design templates that provide guidance for people on what they can remake their plastic waste into. They even host an online marketplace for the objects created by their customer base, which range from flowerpots to wall clocks.

New business models centered around shifting consumer behaviour are also beginning to emerge. One example is Cupclub, a circular-economy service that aims to eliminate single-use coffee cups: it supplies reusable RFID-tagged plastic cups to cafes where customers use them and then drop them off at collection points, from where they are taken to a washing centre before being redistributed back to outlets.

These initiatives are still rare, yet they are critical to systemic change because of their focus on changing how we use packaging and think about waste. But are they resulting in lasting, meaningful mindset shifts amongst consumers? We need to understand the impact they are having by designing learning and scale mechanisms into the process at the outset.

9. Develop rules, measures and standards for the new mainstream. This focuses on setting the baseline for the ‘new normal’. Typically, this strategy is used in the later stage of the change cycle, once a new system is beginning to emerge.

We are arguably seeing some signals of the coming change in plastics through this strategy area. Bold changes to the regime status quo have included China’s recent ban on waste imports, the commitments to nationwide single-use plastic bans in Taiwan, Costa Rica and India, and business targets to phase out all single-use plastics.

This strategy also includes certifications such as the ‘Plastic-free’ label which denotes plastic-free packaging and the ‘Zero plastic inside’ label which guarantees that a product is 100% microbead-free. While labels like these are indicators in and of themselves that systemic change is yet to occur (in a sustainable mainstream no products would contain plastic microbeads), they are important signals that change is both desirable and possible. They are also important in helping to educate consumers as well as allowing them to be part of the solution.
As part of this project, Forum collaborated with Sky to analyse its Ocean Rescue campaign as an example of a systemic intervention aimed at tackling ocean plastics. We have looked at the range of activities undertaken by Sky as part of Ocean Rescue, and mapped them across the MLP and the strategies for system change – with a view to understanding the potential of this work to shift the system, but also to provide Sky with insights about how to move Ocean Rescue forward into the next phase.

Sky has a history and culture of being an environmentally-minded business. Ten years ago, it became the world’s first carbon neutral media company, and soon after that, launched the Sky Rainforest Rescue in partnership with WWF, raising public awareness of sustainability challenges in tropical forests through a series of documentaries, as well as £9 million for rainforest protection.

Launched on 24th January 2017, Sky Ocean Rescue is the next instalment in that campaigning history. But it is more than that: it is a multi-pronged approach that activates a number of the strategies for real system change. The Sky Ocean Rescue campaign has committed to:

1. **Eradicate single-use plastics from Sky’s operations, products and supply chains by 2020**

2. **Establish a new innovation fund – Sky Ocean Ventures – which is anchored by Sky’s own funding and will help find solutions to the plastic pollution problem**

3. **Use Sky’s voice to inspire and encourage others to make a difference, through programming**

Through Ocean Rescue, Sky has emerged as a sort of ‘activist business’, a breed of corporate changemaker not just focused on creating positive impact within its corporate borders, but also on influencing the wider system to follow its lead.

An issue like ocean plastics might seem far removed from a broadcasting corporation. But, for a business that wants to make – and document – positive change in the world, it makes sense. Sky knows that its greatest opportunity for creating impact lies in the reach and influence of its programming. From previous campaign experience with Rainforest Rescue, Sky has also learned that to create real change it must focus on a specific issue with an immediate and emotional connection with people’s everyday lives.

The Bigger Picture team (Sky’s sustainability team), had wanted to do work on ocean ecosystems for some time. Then, in 2016, the Sky News team, who were doing unrelated research in Bermuda, came across plastic pollution in the ocean. Helen-Ann Smith, a Sky News producer, was so gripped by the global magnitude of the ocean plastic problem that she successfully pitched the idea of producing a series of programmes around it to John Riley, the head of Sky News, and Jeremy Darroch, Sky’s CEO. The News and Bigger Picture teams then came together to conceptualise the campaign and programming about ocean plastics. But this proved difficult, not least because the two teams needed to align their vision around the campaign and the way they work. The Sky News team works at hyper speed (they can pull out a documentary in ten weeks) and they were keen to capitalise on the public momentum around plastic pollution.
Bigger Picture, a corporate team, wanted to get everything from the branding down to the nature of each intervention just right. However, this collaboration eventually proved essential to the success of the campaign. In the words of Fiona Ball, head of the Bigger Picture team, “we never could have launched a campaign this quickly without Sky News”. For Sky News, the learning was about being deliberate about impact: the conversations the Bigger Picture team initiated with the NGO community helped them understand that raising public awareness on ocean plastics more broadly was more important than campaigning on a specific issue (in this case for a DRS scheme in Scotland and Wales, a piece of work the NGO community had progressed quite far already).
Sky’s Story of Change so Far

Our analysis of the work that Sky has done through Ocean Rescue so far indicates that it has been systemic: set of interventions for change working together. Sky identified its unique strengths - its broadcasting voice and reach - at the outset of the work, and has harnessed them to raise awareness of the issue across its audience base. Sky has used these strengths as key leverage points to effect change in the wider world: to lead by example by setting a bold corporate target, to mainstream the key messages about the challenge through its broadcasting arm, to influence its suppliers and partners to follow suit, and to activate behaviour change amongst its employees. Sky engaged widely with stakeholders to be able to conceptualise and implement the campaign properly, actively talking to the NGO community working on the challenge, as well as key suppliers whose support it needed to achieve its corporate target, and the staff members whose involvement was instrumental to making the campaign a success. Culture is critical. Sky’s corporate culture, which is ambitious, sustainability-literate, dynamic, and focused on doing the right thing, was a key enabling factor.

Below we have outlined some of Sky’s key initiatives and how they map against the MLP and the nine strategies for system change. Sky’s Ocean Rescue work has been critical in the start-up phase of the change we’re in right now, particularly in terms of making information more accessible and creating and advocating pioneering practices. The next challenge for Sky will be to help drive the acceleration of the change by supporting deeper collaborations and knowledge sharing mechanisms across the business community, which can help us align and scale the huge range of initiatives currently out there; and by continuing to create pioneering practice in this space that others can learn from and replicate.

1. **Create a robust case for change by generating science-based information**
   Sky Ocean Rescue is partnering with National Geographic to give three ‘Ocean Scholars’ the opportunity to drive new research. The research will cover: technologies for capturing micro fibres from washing machines, micro plastic hazardousness, and the decline in puffin populations. They aim to advance our knowledge of the impact of plastic pollution in the ocean in critical areas which can then enable better decision-making and policy-formulation.

2. **Make the information widely accessible**
   Sky’s strength as an organisation, and its focus in the Ocean Rescue Campaign, is centred on Sky’s ability to reach and influence their audience: 23 million homes across Europe. Sky has drawn on this strength to spread and amplify the plastic pollution message, as well as educate audiences on what they can do to help. Sky News made itself into a platform for campaigners and experts to spread their knowledge, effectively making messages about plastic pollution in our oceans ‘mainstream’.

“[We gave] a platform to the experts in the space who you wouldn’t normally see in mainstream news – like Greenpeace and Plastic Planet. Suddenly these voices became mainstream.”

Marianne Matthews - Senior Inspirational Business Manager
Sky News produced its first video piece on plastic pollution in Bermuda in 2016. It then launched the Ocean Rescue campaign in January 2017 with a documentary Special Report: A Plastic Tide. Since then, Sky has produced several full-length documentaries including A Plastic Whale – which gained particular traction due to its graphic and tragic subject matter. This was followed by A Plastic Voyage, Arctic Peril, Dirty Business – which looks at how our plastic gets recycled – and, most recently, Turn the Tide on Plastic. These have been accompanied by many short clips and videos which raise awareness about ocean plastic, provide information on how it might affect members of the public and discuss what they can do about it.

Sky has also engaged in several awareness-raising activities outside of broadcasting, particularly in the UK and in Italy. Sky created Plasticus the plastic whale as a visual representation of the ocean plastics problem, to build mass awareness in their target demographic: young people and mums. Plasticus, who is made using the same amount of plastic that enters the ocean every second, made a tour of the UK and was experienced by 3 million people across 25 locations. Since then, thousands of UK schools have written to Sky asking for Plasticus to visit them.

Plasticus also visited the NatGeo Science Festival in Rome in April 2018 where around 51,000 people are expected to have seen him – including 250 students participating in a Sky Academy special session on oceans. In Italy, Sky also had a presence at the Giffoni film festival, which had 300,000 visitors including 5,600 young people who were specifically targeted with Ocean Rescue messaging and single use plastic free tips, and the Milano Food Week. Sky also harnessed enormous audiences through Ocean Rescue branding and messaging at the Grand Prix in Misano and through an ocean plastic themed episode of the Italian X Factor – which involved recycled plastic stage sets, ocean plastic messaging and audience responses to the issue, reaching over 1.7 million people.

3. **Create collaborations to align mindsets and goals, enable shared learning, and spark new innovations**

Collaboration with others has been a key element in the Sky Ocean Rescue campaign.

Sky Ocean Rescue is a partnership with WWF. The two organisations work together to produce programming, and to raise awareness and funding. The National Geographic has also been an important partner. It is providing funding and expertise to Ocean Ventures, the Sky-founded venture fund for solutions to plastic pollution, and is working with Sky on the Ocean Scholars programme.

“We need to find the right partners who are the right fit. We aren’t going to work with people who want to do things in 5 years.”

Fiona Morgan - Group Head of Inspiring Action mentioned

Achieving Sky’s corporate target of going single-use plastic free depends on collaboration with their suppliers. It hasn’t been an easy process but it helps being Sky – a big company with massive influence. And some suppliers have gone the extra mile. One of Sky’s office stationary suppliers, Commercial, was inspired by Sky’s single-use plastic free target and is now working with Sky to reduce single-use plastics across its own supply chain. Similarly, WNC – a manufacturer in China – is learning about Sky’s phase out and doing the same for itself, putting Ocean Rescue posters all over its offices and implementing employee incentive programmes. Sky’s logistics partner Unipart recently held a big event on the
topic with all their own employees where the CEO, inspired by what Sky had done, made the single use plastics-free pledge for their own business.

Going forward, this will become even more important to Sky as it thinks about expanding its advocacy around this issue – particularly in areas where Sky has less traditional influence, and going beyond one-to-one collaboration. This year, for example, Sky Mobile – a fairly small player in the mobile telephone space - sponsored the first plastics-free mobile phone awards and issued a call to action at the event for other mobile phone companies to limit their plastic packaging. Sky has also initiated the Sky Ocean Rescue Mobile Forum, a collaboration to raise awareness and tackle the issue of plastic packaging pollution across the industry.

4. Create new, disruptive innovations
Although Sky is neither a plastics packaging producer, nor one of the heaviest users, it is using its voice and influence to create pioneering practices that inspire others, such as by producing the first SiM card that is packaged without a plastic surround. Sky is also working on innovating the solutions to particularly thorny problems in its supply chain: finding alternatives to polystyrene, a key (and difficult to replace) material in creating TV sets, and cling film, which is used globally to wrap and secure pallets of goods during transport.

5. Create routes for new innovations to scale and mainstream
Very quickly after the launch of Ocean Rescue, Sky realised that it would struggle to meet its target to phase out single-use plastics (from its operations, supply chain and products by 2020) unless it helped co-create the solutions this target demanded. It was in part that realisation that led to the launch of Sky Ocean Ventures – an impact fund focused on incubating and accelerating solutions to the challenge of plastics pollution to market. Sky Ocean Ventures was set up with an initial commitment of £25 million from Sky, with a view to scaling that to £100 million over time through the contribution of other organisations. It focuses on early/seed stage innovation in materials, responsible consumption technologies, ocean clean-up technologies, and circular economy solutions. The fund will host ‘innovators in residence’ at Sky’s London campus, offering businesses the opportunity to pilot and test the practicality of their solutions in a live environment. So far, Sky has focussed mainly on material innovation. The first residency is Skipping Rocks Lab, a start-up that is pioneering Ooho, which uses materials extracted from seaweed to make edible packaging solutions.

Sky is also pursuing a parallel stream of work bringing solutions to scale within its own supply chain. It is currently working with TIPA, the producer of biodegradable compostable flexible packaging, to help them scale their production to bring the cost down (currently 3-4 times the cost of mainstream packaging). It is also collaborating with Cupcycling who take back items like coffee cups and upcycle them into paper. Sky is using this upcycled product as packaging for the Sky Soundbox, which is now packaged in corrugated board rather than polystyrene.

6. Create the right incentives, business models and financing to help the mainstream adapt to change
Sky’s single-use plastic target is a means of modelling a different way for businesses to operate. And that target has cascaded a new set of incentives up and down the value chain. For example, Sky has been demanding single-use plastic-free events at all the conference venues where it has a presence. This has benefits beyond Sky as the venue operators demands then have a new offering for other customers, or even a new way of operating. Sky has
also got a commitment from Waitrose that the mywaitrose shop inside Sky’s office complex will be single-use plastic, and Sky has offered to help Waitrose test all new packaging-free products at that store, and Sky has in other locations.

7. Develop policies that facilitate and reinforce systemic transformation
Sky has been very deliberate about influencing plastics policy from the outset of the campaign. In the UK, Sky has been working closely with DEFRA from the beginning of Ocean Rescue, responding to key consultations as well as having ongoing conversations on the topic. After Sky Ocean Rescue kicked off, the UK and EU commissions both spoke to Sky about how they could work with business on plastics. Inspired by these conversations, the annual Our Oceans conference included representatives from business as well as policy for the first time in 2017. Being able to connect with a number of key influencers, including Commissioner Vella, Therese Coffey, and Peter Thompson, opened lots of doors for conversation.

Sky’s European team was working closely with the EU on plastics already, and, following the conference, they linked up with UK policy counterparts as well. Since then, the UK government has made a number of key commitments, including the introduction of a deposit return scheme, and a ban on several key plastic items such as straws.

8. Shift culture and behaviours to enable a new mainstream to emerge
Sky’s efforts to shift behaviour began internally, largely influenced by their CEO Jeremy Darroch. Darroch has driven the change by committing Sky to ambitious targets (such as being single-use plastic free by 2020) and linking the KPIs of a number of employees to the Ocean Rescue aims. Every top executive has been devolved responsibility for the campaign and they all have a sense of ownership towards it, from property right through to finance.

“Unless you’re living in a hole, if you’re a Sky News employee, single use plastics is very front of mind.”
Marianne Matthews - Senior Inspirational Business Manager

The pre-existing corporate culture within Sky made creating this mindset shift easier; employees expect that when Sky sets a target, they will fully commit to it. There was huge appetite for people inside the business to ‘own’ the campaign because the problem of plastic pollution in the oceans feels so immediate, personal and relatable. Sky’s head office convey how live the ocean plastic issue is throughout the company. Ocean Rescue marketing is everywhere, from the giant whale sculpture in the main courtyard, to campaign branding all over the lobby, to the advertised reusable coffee cups and water bottles at the café - even the campaign images that pop up on everyone’s screens when they lock their computers. The experience of seeing that things can be done differently and realising this is achievable has been a motivator for employees.

“Our goal was to raise the public awareness and interest to such an extent that we would get cut-through on these issues.”
Fiona Ball - Group Head of Inspirational Business and Sky Ocean Rescue

As well as internal mindset shift, Sky has been focused on raising awareness and changing the behaviours of millions of people through its activities and programming. For Sky, the Ocean Rescue campaign is not just about ocean plastics, it is about the health of the ocean.
ecosystem more broadly, and the company will be launching other workstreams around this broader agenda. But Sky understood early on that the consumer activation campaign needed to be about something that directly connects to their lives, as a way in to a broader level of awareness about ocean health. Within 6 months of the campaign kick-off, over 110 million people had watched Sky Ocean Rescue coverage and 9 million took action. The effort has included a series of documentaries on the topic of ocean plastics pollution broadcast on Sky News, as well as a children’s TV programme which teaches 6-10 year olds about single-use plastic and how to avoid it. Sky Ocean Rescue has a dedicated website which reports on the latest news in ocean plastic and they also run campaigns like the recent #passonplastic, which operated an immersive ocean-themed pop-up space on Carnaby Street in Central London, and made a successful push to get members of UK and European parliament to give up single-use plastics.

“We described the disaster and put stark content in front of people. Again and again. We went to sport, did lots of activation, putting the issue into different areas –the premier league, cricket, etc.”

Fred Michel - Sky Ocean Ventures

Sky has also engaged children in their work on behaviour change through their partnership with the UK’s Premier League. Premier League’s Primary Stars programme reaches 15,000 schools in the UK and it will now include an ocean curriculum and lessons on being single-use plastic free.

Sky also advocate to its customers like UK pubs and clubs, positioning a single-use plastic free commitment as an opportunity to get on top of incoming legislation like the plastic straw ban - through this, Sky is effecting change up to two years before it is enshrined in law. Sky is also partnering with the Premier League to phase out single-use plastics from stadiums and raise awareness about single-use plastics and inspire clubs and fans to reduce their usage.

9. Develop rules, measures and standards for the new mainstream
Through the collaborative nature of the Ocean Rescue Campaign, Sky has been able to exert some influence in this area. Sky has advocated for a plastic tax and has collaborated with DEFRA, with whom it maintains a regular dialogue, on research which was an input into the UK Government’s plastics tax consultation.

Sky’s systemic impact
Through its multipronged approach, Sky Ocean Rescue is triggering most, if not all, of the strategies for system change. From the start of their campaign, Sky has really understood its leverage point as an international broadcasting platform and a large, influential business. And it has played to their strengths. Sky has used its position to speak to millions of people - supply chain partners and policy makers as well as viewers - and has led by example to demonstrate to other businesses that change is possible. On top of this, Sky has leveraged key partnerships to increase its reach even further, both in demographic and in number. Through the policy Sky business endorses, the messages Sky News broadcasts and the investment choices Sky Ocean Ventures makes, Sky has the opportunity to shape the plastics agenda, as well as amplify it. Sky’s best chance to advance the change needed in plastics will be to understand the plastic challenge as a whole to best direct its attention and priorities, and to collaborate with others in the space to drive shared messages and resources.
Lessons for changemakers

Our experience in writing this case study has led us to compile a set of lessons for system change. These are lessons that we think are useful when applying systems thinking to complex sustainability challenges in general, although they are certainly relevant to plastics pollution. We also hope that all actors looking to tackle plastic pollution will find them relevant, whether they are policy makers, brands, packaging producers or none of the above.

Diagnose the system. The best way to understand where to start is to map the different elements of a system - by articulating what the main activities of the system are, who are the key actors are, where the centres of power are, what the key challenges and trends driving change are, and where the windows of opportunity for action are opening up. This is a way of learning about the system, and the beginning of understanding how to be effective in changing it. Your map of the system needs to be 'living' analysis - constantly iterated - so that you can understand how the system is changing and what the emerging patterns are. This will, in turn, influence the strategies you choose to use. For example, the diagnosis that tackling the plastics challenge really required increased public awareness on the issue of plastic pollution was what helped Sky to pitch its campaign the right way.

Understand your leverage points. How might you mobilise your resources to most effectively impact the plastics challenge? What strategies might you use? We have, in this publication, identified a number of strategies that we think can be used to leverage transformational change systems. Not all, however, will be relevant to each and every stakeholder. In the process of trying to change a system, it is critical to understand what unique role you as an individual or organisation can play. For instance, Sky realised that its own leverage point was using the voice and reach of its programming and media platforms to effect change. A business that is a much heavier user of plastic might that as its leverage point for change.

Be bold in ambition (and flexible). It is critical to set ambition based on the change we need to see. The critical question here is: what is the role of plastic in a sustainable future? This is about a sustainable outcome for society and the environment broadly, and it transcends the perspective of a single organisation. When Sky set its single-use plastic target, they did this because they knew they wanted to run the business without contributing to the tide of single-use plastic entering our oceans. When they made the commitment, they didn’t know how they were going to achieve it, it was a leap of faith. For this reason, it is also important to be flexible in your approach to cracking the challenge: sense-check that your activities and targets are transformational enough in the face of the change we need.

Plan for disruption. There have been signals of change in the plastics space which suggest that we might be entering a phase of accelerated change, including more meaningful policy moves, as well as shifts in consumer attitudes to plastic packaging. Earlier in 2018, activists in the UK began organising “plastic attacks,” where customers unwrap their shopping in a supermarket and return single-use packaging to the store. The movement snowballed when videos of the first plastic attacks started being shared on social media. Now there have been well over 100 plastic attacks around the world, mostly in Europe, but also in Hong Kong, South Korea, Canada, Peru and the United States. A recent UK survey found that 84% of consumers said they would show more loyalty to a brand or organisation that was taking clear action on plastic. Their report also concluded that retailers
did not seem to be aware of the growing public pressure on plastic use and showed a degree of complacency. This pattern could eventually result in a backlash toward business models that rely on plastic packaging, and the need for business to operate in a radically different way. In this context, businesses with incremental targets for recycling and recyclability, or ones which are not moving fast enough, are likely to be disrupted.

Create experiments with an active learning component. These should balance the short-term need to act with the importance of implementing long-term changes to the system that stand the test of time. This is critical to ensure that the solutions which get scaled up are systemic. The risk of not doing this is that we ‘roll out’ solutions that have unintended consequences. For instance, today there is a lot of focus on substituting plastic with plant-based materials. However, there is a finite amount of land which is already under pressure, and demand for plant-based plastic substitutes runs the risk of exacerbating deforestation and therefore climate change. We must ensure that whatever solutions we design don’t increase emissions, damage world ecosystems and human livelihoods, or result in more waste. Right now, we are in a phase where a lot of potential solutions to the plastic pollution problem are being touted and piloted – which is the right approach, because it will help us prototype the ‘new order’. But it is just as important that we ensure these experiments have a learning and re-design component to them, and that those lessons are shared widely, in order to ensure that we combine and scale the right ones.

Collaborate with others. This is vital to align and complement existing activity and to amplify change. Engage leaders from a diverse set of organisations who might be able to build a different type of system. Establish what the common ground and shared challenge is. Create a network for change that identifies, designs and pilots solutions together, and shares learning from that process widely. Create open innovation and learning support structures that help key lessons from that process diffuse into the mainstream.

Tackle the elephant. How can you drive mindset and behaviour shifts? Without this focus, it will be difficult, if not impossible, to resolve the plastic challenge. This is true of working with most systems, but it is particularly relevant for plastic because the massive amounts of plastic packaging that flow through our economies are intrinsically linked to high levels of consumption, the growing demand for convenience products, and a ‘throwaway’ culture. To make meaningful change, you will need to question business models that rely on pumping out greater and greater volumes of ‘stuff’. Like Sky, businesses can play a key role in educating consumers - as well as shareholders and investors. Interventions that tackle behaviour change can be some of the toughest, which is why we see so little of this type of activity today. Very often these interventions need to carefully examine the goal of the system, and redefine it, in order to be able to create meaningful change. The #OneLess campaign, for example, convened its stakeholders to define the goal of the bottled water system. Through doing this, they reimagined its goal from selling large volumes of bottled water, to hydrating people. That was the breakthrough point in the collaboration which allowed them to design their first experiment – the installation of a network of water fountains across London.

Stick it out. Change is hard and slow, particularly transformational change that profoundly shifts the way the mainstream operates. We see this through historical examples of transformational change, such as the industrial revolution or the shift from horse to car. There will be a need to weather conflicts and make collaboration work. We have seen this in the collaboration between the Bigger Picture team and Sky News, for instance, where overcoming the tensions in the relationship and achieving alignment on key issues has been instrumental to running a successful campaign.

Start now! Throughout this work, we have heard a number of people say ‘we can’t start until we have all the data’. And, when working on systemic change, there is often resistance to taking action until something else changes first – whether that be policy or business or culture. There will never be a ‘perfect’ moment for action in a system which is constantly and rapidly changing, as plastics is today. For this reason it is important to start now, and to learn from and evolve interventions for change as you go.
“A lot more businesses need to step up to the plate now. And I don’t mean in 5 years. If you’re gonna make the change, do it now!”

Fiona Ball – Group Head of Inspirational Business and Sky Ocean Rescue

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