



VALUING PLASTIC

The Business Case for Measuring, Managing
and Disclosing Plastic Use in the
Consumer Goods Industry



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KLIMA- OG MILJØDEPARTEMENTET

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ABOUT UNEP

Established in 1972, the United Nations Environment Programme is the voice for the environment within the United Nations system. UNEP acts as a catalyst, advocate, educator and facilitator to promote the wise use and sustainable development of the global environment. UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was adopted by the international community in 1995 and "aims at preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment."

ABOUT THE GLOBAL PARTNERSHIP ON MARINE LITTER

The Global Partnership on Marine Litter (GPML) is a new global partnership that acts as a coordinating forum, bringing together diverse organizations working in the same field and encouraging governments, non-governmental organizations, scientists and academics to collaborate on marine litter issues. The new partnership, led by UNEP, was announced in June 2012 at a launch event during the Rio+20 conference in Rio de Janeiro. It builds on the Honolulu Strategy and seeks to protect human health and the global environment by the reduction and management of marine litter as its main goal. To join or learn more about the GPML visit www.gpa.unep.org or contact the secretariat (UNEP/GPA) at gpml@unep.org

ABOUT PLASTIC DISCLOSURE PROJECT

The Plastic Disclosure Project asks organisations to measure, manage, disclose and benefit from more sustainable use of plastic. It seeks a world in which plastic adds value for consumers and businesses without negatively impacting the environment. The PDP requests annual reporting regarding the production, use, handling and management of plastic and plastic waste by organisations. By measuring the amount of plastic that flows through an organisation, efficiencies can be gained in cost and waste reduction, new design, new materials, and better recycling. By reviewing how the material is managed, organisations can recognise risks and seize opportunities that their competitors may miss. By disclosing, organisations demonstrate leadership, and attract benefits in employee engagement, supplier management, customer loyalty, and access to capital. Initially designed for large corporates, institutions such as hospitals, universities, government offices, stadia, clubs, facilities, events, sports associations and teams participate and benefit. Interested parties are welcome to contact PDP at info@plasticdisclosure.org.

ABOUT OCEAN RECOVERY ALLIANCE

Ocean Recovery Alliance is a not-for-profit organisation based in Hong Kong and California. It is focused on bringing innovation, technologies, creativity and collaborations together to address some of the challenges that face the ocean and our broader environment. The Ocean Recovery Alliance has three global projects focussed on plastic waste issues, namely the PDP and Global Alert - both of which were announced as Clinton Global Initiatives; and the Plasticity Forum - a creative discussion on how to harness plastic in new ways, both "pre" and "post" consumer use.

ABOUT TRUCOST

Trucost has been helping companies, investors, governments, academics and thought leaders to understand the economic consequences of natural capital dependency for over 12 years. Our world leading data and insight enables our clients to identify natural capital dependency across companies, products, supply chains and investments; manage risk from volatile commodity prices and increasing environmental costs; and ultimately build more sustainable business models and brands. Key to our approach is that we not only quantify natural capital dependency, we also put a price on it, helping our clients understand environmental risk in business terms.

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MESSAGE FROM UNEP

It is estimated that 10 to 20 million tonnes of plastic is finding its way into the world's oceans each year, costing approximately US\$13 billion per year in environmental damage to marine ecosystems. This includes financial losses incurred by fisheries and tourism as well as time spent cleaning up beaches.

The total natural capital cost of plastic used in the consumer goods industry is estimated to be more than US\$75 billion per year. The cost comes from a range of environmental impacts including those on oceans and the loss of valuable resources when plastic waste is sent to landfill rather than being recycled. The most significant upstream impact is greenhouse gas emissions released from producing plastic feedstock, which is responsible for almost a third of the total natural capital costs.

Oceans are critical to sustaining life's natural support systems. They contribute to the livelihoods, culture and well-being of communities around the world. They also play a vital role in the global economy by providing food and a source of income for millions of people. Yet, with a fast-growing world population, the production of waste continues to increase faster than the efforts to curtail it and prevent it from degrading the environment. More waste means more marine litter; and one of the main types of marine litter is plastic debris.

About 280 million tonnes of plastic is produced globally each year and only a very small percentage is recycled. As society has developed new uses for plastic, the variety and quantity of plastic items found in the environment, and this includes the marine environment, has increased dramatically. Once in the ocean, plastic does not go away: it fragments, eventually breaking down into smaller pieces known as microplastics, and acts as a vector for chemicals such as persistent organic pollutants that may be transferred into the food chain upon ingestion by marine organisms. Transported by ocean currents, few places around the globe have not been infested by this material.

Proper measurement, management and disclosure of information on the use and disposal of plastic will help companies to optimize its use and reduce its end-of-life impacts by fully incorporating environmental management within their business frameworks.

Forward-looking companies can improve their management of plastic by, for example, cutting costs through their more efficient use, developing "closed loop" business models that recover the resources locked up in plastic, and winning customers by creating sustainable products. Good management of plastic could save consumer goods companies up to US\$4 billion per year.

Valuing Plastic: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry is a highly informative publication on the valuation of plastic that allows us, for the first time, to put a figure on the costs companies would incur if the damage caused by waste plastic was included in their accounting. The report highlights the urgent need for businesses to measure, manage and disclose information on their annual use and disposal of plastic, as many companies already do with carbon emissions. It also provides a series of recommendations for companies that are designed to help ensure a sustainable future for plastic.

The report additionally provides companies with guidance on how to achieve the same economic output with fewer inputs and less waste, leading to greater cost savings; all of which can further expand the global economy in years to come.

Through the Global Partnership on Marine Litter and other relevant initiatives, UNEP is committed to working with all stakeholders to reduce the influx of waste into the ocean and to prevent plastic from getting into the environment in general. Progress on plastic pollution will require companies to work in partnership with other stakeholders. This includes collaborating with governments to develop effective legislation and waste management infrastructure, especially in developing countries.

I encourage all involved parties, particularly businesses, to fully digest the findings of this report and consider appropriate actions aimed at implementing the recommendations in order to save money, boost profits and reduce the impact of plastic waste on the environment.

Achim Steiner

UN Under-Secretary General and Executive Director, UNEP

MESSAGE FROM PLASTIC DISCLOSURE PROJECT

Andrew Russell, Director, Plastic Disclosure Project

The Plastic Disclosure Project (PDP) is delighted to share the findings in this report.

The findings reveal concerning impacts to natural capital stemming from plastic use in the consumer goods industry. The true impacts are likely to be much more severe, as the report calculates only those that can be quantified. As science catches up with plastic use, the magnitude of impacts omitted or conservatively assessed will surely increase.

Moreover, this report highlights the risks and opportunities that plastic poses to business. The objective is to help companies respond to these challenges and become more sustainable businesses.

There is an opportunity at hand for businesses to act before legislators, consumers, investors, and community and activist NGOs force action, eroding business value. Sustainable use of plastic, as with many other resources, makes good business sense.

Business opportunities will be unique from company to company. Reviewing how plastic and its waste are managed; the design of products or packaging, including its recycled content or recyclability; and reducing the impacts of plastic on operations, communities and society at large, can unlock previously unrecognised benefits.

Such benefits are often good for business, for example, saving input costs and recovering value from waste; customer loyalty, such as preferred products and enhanced brand value; employee engagement; community satisfaction, and improved access to capital.

The failure of a business to consider these benefits and/or to demonstrate action on these issues may bring about negative impacts. Regulatory risk, reputational damage and loss of competitive advantage are all very real threats.

Companies in plastic intensive sectors theoretically have the most value-at-risk, and greatest opportunities ahead of them. Yet all companies are in a position to mitigate risks and seize opportunities in relation to proactive plastic management. Indeed, PDP recommends that all organisations measure and manage their 'plastic footprint'.

Disclosure is an important step towards sustainable plastic use. This can be accomplished through a standalone declaration, or as part of a sustainability report. Such action demonstrates an organisation's commitment to the issue and demonstrating year-on-year progress.

Whether a company chooses to formally sign on to the Plastic Disclosure Project, or follow its guidance informally, we ask companies to become more aware of their plastic footprint. Measure it, consider the implications and explore better management practices.

We hope this report is a clarion call for action on plastic, and that it compels organisations to take action.

We wish to thank UNEP, Trucost, all the contributors and reviewers, and the Oak Foundation for their support.

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