



MINISTRY OF
ENVIRONMENT
AND ENERGY

BEAT PLASTIC POLLUTION

59

Pemphis



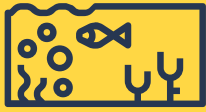
MINISTER'S NOTE

Plastic with its extremely versatile character has become an intricate part of our lives. However, it has also been immensely detrimental to our natural environment. Nature is unable to cope with the huge amount of plastic waste we generate everyday. Our fragile and once pristine environment has become polluted and now threatens our biodiversity and human health.

Being a nation dependent upon its natural environment for survival and in particular where the marine environment largely determines our economic and social well-being, it is important we ensure that our actions are in line to minimize the use of plastics, and adopt pollution management best practices.

The success of such efforts will be dependent on the co-operation and participation of all stakeholders. I urge everyone to take individual responsibility and work collectively to address this urgent environmental issue.

PLASTIC POLLUTION: STATUS



Every year, up to 13 million tons of plastic leak into our oceans, where it smothers coral reefs and threatens vulnerable marine wildlife.

UNEP



Half the world's plastics are made in Asia

NATIONAL GEOGRAPHIC



The plastic that ends up in the oceans can circle the Earth four times in a single year, and it can persist for up to 1,000 years before it fully disintegrates.

UNEP



Unless we take appropriate action, our oceans will contain more plastic than fish by 2050.

UNEP

It is estimated one million metric tons of e-waste is produced every year. That's equivalent to 125,000 jumbo

UNEP



X 12,500



By 2050, with respect to the current trend, an estimated 99 percent of seabirds will have ingested plastic.

UNEP

Plastics: A brief in today's context

The word plastic originally was a term to relate the feature of mould-ability and pliability of an object or substance. The word is derived from the Latin word plasticus and the Greek word plastikos, where both refers to the ability to be moulded. Earliest use of plastics dates as far back to 3,500 years ago, when the Olmec Civilization of Mexico used naturally occurring plastics to create rubber balls. During the 19th century the first synthetic plastic was invented which was developed from phenol and formaldehyde.

The plastics we see today are mainly sourced from petrochemicals. On a molecular level, plastics are made from polymers which are long flexible chains of chemical compounds. This structure allows the plastics its distinct feature of being easily moulded and shaped especially under heat and pressure.

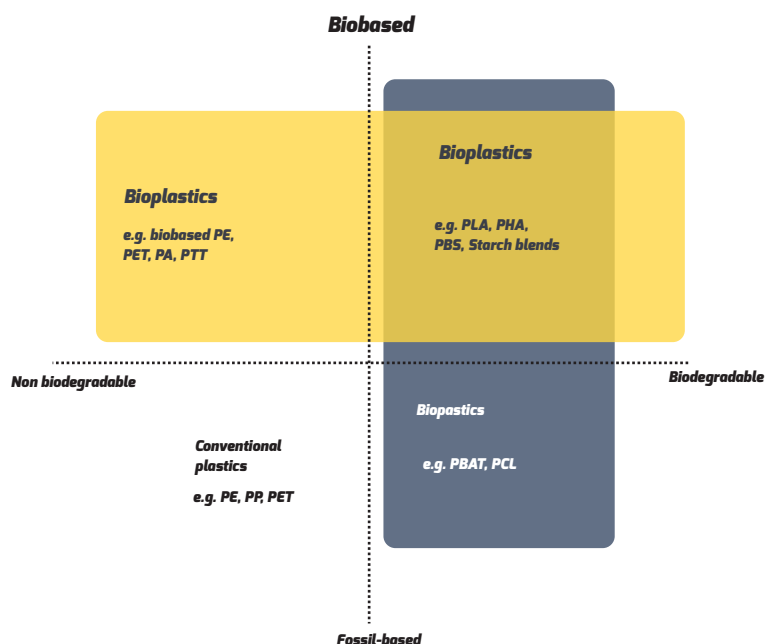
Common terminology used in the manufacturing and branding of plastics

Additives: Chemicals added during the manufacture of plastic products to add desired characteristics.

Biodegradable: Used to describe the ability of the product being decomposed naturally by biological processes. The word biodegradable is often misleadingly labelled by manufactures as they just breakdown to smaller fragments depositing itself in the environment as 'micro-plastics'.

Biosplastics: The term accounts a wide range of plastics, encompassing both petroleum based and biologically based plastics that are biodegradable and biologically-based plastics that are not biodegradable.

The following illustration lists the main type of bioplastics.



reff: European-bioplastics

Compostable: for a substance to be compostable it must break down into its natural element within a reasonable composting environment.

Ghost nets/fishing/ gear: Fishing gear, much of it made of plastic which has been abandoned, discarded, or lost.

Ocean garbage patches: Due to ocean currents, marine debris often get collected within ocean gyres, forming large garbage patches. Majority of it being plastics, these garbage patches can span a million square miles.

PET: Polyethylene terephthalate, is one of the most common thermoplastic polymer, or plastics and is widely known in the textile industry by its trade name 'Polyester'.

Single-use plastics: Plastics which is produced to be used once, such as thin film shopping bags, film packaging used to seal commodities. Around 40 percent of all non-fibre plastics produced are used for packaging.

Ocean gyres: An ocean gyre is a large system of circular ocean currents formed by wind patterns and forces created by the Earth's rotation.



PETE/PET

Polyethylene terephthalate:
Examples: Soft drink bottles,
mineral water, juice containers.



HDPE

High-Density Polyethylene:
Examples: milk jugs, cleaning
agents, detergent containers



PVC

Polyvinyl chloride:
Examples: Sweet trays, bubble
wrap, plumbing pipes



LDPE

Low-Density Polyethylene:
Examples: shopping bags, highly
resistant sacks, wrapping



PP

Polypropylene:
Examples: furniture, consumer
luggage, car manufacturing



PS

Polystyrene:
Examples: toys, hard packing,
refrigerator, toys



OTHER

Other plastics including acrylic, polycarbonate, polyactic fibres, nylon, fiberglass:

Plastics being cheap, light, durable and easy to make have led to a boom in the plastic production. Most of the plastics produced are designed to be single use, resulting plastic packaging to account for about half of the plastic waste in the world. Most of the plastics in use, are not truly biodegradable, but rather slowly breaks down to smaller fragments, often referred to as micro-plastics. This characteristic encourages ingestion of plastics by the wildlife and pass it on through the food chain and eventually adversely effecting humans and the ecosystem as a whole.

So what are the alternative materials?

Natural polymers

In contrast to synthetic and semi-synthetic polymers, most natural polymers biodegrade very rapidly when not maintained by a living organism. These materials have provided many of society's domestic needs.

Biomass-based compostable bio-polymers

Starch: The wide availability of starch has generated considerable interest in the potential for starch-based products to replace conventional plastics. Thermoplastic starch is already used to protect packaged goods in transit. Need to ensure, that scaling up their manufacture means that the food production is not put at risk, as starch based agricultural produce serves as an important staple food in many parts of the world.

Non-starch thermoplastic bio-composite:

Non-starch thermoplastics such as alginate-based thermoplastics are under development but shows great potential.

Synthetic biomass-based polymers:

Synthetic polymers based from plants and animals where cellulose, starch, proteins and fats are used. It is becoming a popular substitute for conventional plastics in the catering sector.

Reusable objects: Reusable materials can be used instead of single use plastics such as clay, leather, metal, glass, etc.

WORLD ENVIRONMENT DAY THEMES

1974	Only one Earth during Expo '74
1975	Human Settlements
1976	Water: Vital Resource for Life
1977	Ozone Layer Environmental Concern; Lands Loss and Soil Degradation
1978	Development Without Destruction
1979	Only One Future for Our Children – Development Without Destruction
1980	A New Challenge for the New Decade: Development Without Destruction
1981	Ground Water; Toxic Chemicals in Human Food Chains
1982	Ten Years After Stockholm (Renewal of Environmental Concerns)

1983	Managing and Disposing Hazardous Waste: Acid Rain and Energy
1984	Desertification
1985	Youth: Population and the Environment
1986	A Tree for Peace
1987	Environment and Shelter: More Than A Roof
1988	When People Put the Environment First, Development Will Last
1989	Global Warming; Global Warning
1990	Children and the Environment
1991	Climate Change. Need for Global Partnership
1992	Only One Earth, Care and Share
1993	Poverty and the Environment – Breaking the Vicious Circle
1994	One Earth One Family
1995	We the Peoples: United for the Global Environment
1996	Our Earth, Our Habitat, Our Home
1997	For Life on Earth
1998	For Life on Earth – Save Our Seas

1999	Our Earth – Our Future – Just Save It!
2000	The Environment Millennium – Time to Act
2001	Connect with the World Wide Web of Life
2002	Give Earth a Chance
2003	Water – Two Billion People are Dying for It!
2004	Wanted! Seas and Oceans – Dead or Alive?
2005	Green Cities – Plant for the Planet!
2006	Deserts and Desertification – Don't Desert Drylands!
2007	Melting Ice – a Hot Topic?
2008	Kick The Habit – Towards A Low Carbon Economy
2009	Your Planet Needs You – Unite to Combat Climate Change
2010	Many Species. One Planet. One Future
2011	Forests: Nature at your Service
2012	Green Economy: Does it include you?
2013	Think.Eat.Save. Reduce Your Foodprint
2014	Raise your voice, not the sea level

2015	Seven Billion Dreams. One Planet. Consume with Care.
2016	Zero Tolerance for the Illegal Wildlife trade
2017	Connecting People to Nature – in the city and on the land, from the poles to the equator
2018	Beat Plastic Pollution

World Environment Day is the United Nations paramount for encouraging worldwide awareness and action for the environment. Over the years it has grown to be a broad, global platform for public outreach which is widely celebrated by stakeholders around the world.

It also serves as the 'people's day' to contribute positively to the environment, galvanizing individual actions into a collective power that generates an exponential impact in favour of the wellbeing of this planet.

INDIVIDUALS: ACTIONS TO REDUCE PLASTIC POLLUTION



SEPARATE WASTE FOR
RECYCLING



AVOID SINGLE-USE GOODS LIKE
CUTLERY AND CUPS



AVOID BUYING OVERPACKAGED
PRODUCTS



USE FEWER SINGLE-USE
PLASTIC BAGS



ASK FOOD DELIVERY
COMPANIES TO EXCLUDE PLASTIC
CUTLERY FROM DELIVERIES



USE RE-FILLABLE CONTAINERS
FOR FOOD AND DRINKS



CHECK HOW RECYCLABLE
PRODUCTS ARE BEFORE YOU BUY
THEM



ENCOURAGE LOCAL SCHOOLS TO
EDUCATE THEIR PUPILS ABOUT
PLASTIC

EVENTS

June 3, 2018:

Bike ride, organized by the Ministry of Environment and Energy in collaboration with Bike Maldives, to mark the first World Bicycle Day.



EVENTS

June 5, 2018:

Launching of World Environment Day photography competition.

Launching of Baa Atoll Biosphere Reserve survey

Exhibition of the ongoing protected birds drawings.



EVENTS

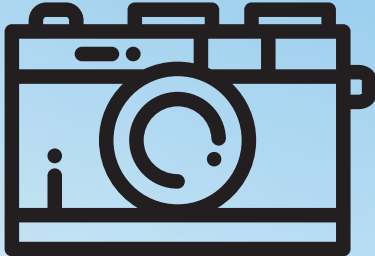
June 5, 2018:

'Roadside Dustbin Pilot Project' launched on the occasion of World Environment Day.





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DEADLINE: 31 JULY 2018

PHOTOGRAPHY COMPETITION

CATEGORIES:

- COASTAL AND REEF ECOSYSTEM
- ENVIRONMENTAL IMPACTS

PRIZE MONEY

1st: 10,000 MVR

2nd: 7,500 MVR

3rd: 5,000 MVR



INFO & FORMS

www.environment.gov.mv/v2/en/download/7457



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