

World Environment Day

5 June 2018



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- We would like to note, with thanks, the use of visual, textual and video inputs utilized from the internet (too many sources for individual mention!)

Prepared by:

Mrs Ruchika Rishi, Director, IORA Secretariat

Ms Daniëlla Smit, Project Officer, IORA Secretariat

WORLD ENVIRONMENT DAY

~ JUNE 5 ~



World Environment Day 2018

- The celebration began in 1972, and has grown to become one of the main vehicles through which anyone and everyone can take positive action for the environment.
- It is one of the largest global platforms for public outreach, celebrated by millions of people in over 100 countries, every year on 5 June.
- Each World Environment Day is organized around a theme that focuses attention on a particularly pressing environmental concern. This year, the theme is **#BeatPlasticPollution**.

**BEAT
PLASTIC
POLLUTION**



**WORLD
ENVIRONMENT
DAY**



**Why should we
care?**

○ Plastic harms us ...and that's ALL of us

Plastic kills

It **affects** at least **700 marine species**, while some estimates suggest that at least **100 million marine mammals are killed** each year from plastic pollution.

- Every minute, we dump one whole garbage truck of waste plastic into our oceans. So...how many minutes are there in a day?
- Each km² of the ocean has 13,000 pieces of plastic litter
- By 2050, there will be more plastic in the oceans than fish.
- 70 per cent of our oxygen is from the oceans...but in the ocean's most polluted places, the mass of plastic is six times the mass of plankton

HOW MUCH PLASTIC HAVE WE PRODUCED?


1950 | **2M**
METRIC
TONS


2017 | **8.3B**
METRIC
TONS


2050 | **34B**
PROJECTED
METRIC TONS

HOW HEAVY IS 8.3 BILLION METRIC TONS?



160,985 X
SYDNEY HARBOUR
BRIDGE
(58,200 metric tons)



4 MILLION X
LONDON EYE
(2,100 metric tons)



75 MILLION X
DREAMLINER
(110 metric tons)



1 BILLION X
ELEPHANT
(7.5 metric tons)





CHOOSE TO STOP POLLUTION



PLASTIC

ISN'T FOR THE BIRDS

99% of the world's seabird species will have plastic in their stomachs by 2050.

(Wilcox, Hardesty and Seville, 2015)



Its everywhere...!

- **Plastic chokes the land**
 - **Up to 1 trillion plastic bags are discarded every year**
 - Most plastic bags have a 'working life' of 15 minutes
 - Over the past 10 years we have produced more plastic than during the entire last century
 - 50 per cent of plastic is used once and thrown away
 - It takes an estimated 20 years for a plastic object to travel from the coastline to the centre of the ocean
 - **It takes 500 to 1,000 years for plastic to degrade**



Land pollution

leads to the
loss of
24 billion tons of
topsoil every year.



- **Plastic is Destroying our Waterways**
- Plastic litter breaks down into microbeads. Many personal care products already have these!
- Once in the water supply (by way of your drain), the beads collect toxins.
- These toxins soak into the earth, and get into our freshwater supply, into our food crops and livestock.
- Marine life, too, is exposed to these micro plastics and the toxins enter the food chain through our favourite seafood dishes.
- Each year, 11,000 pieces of microplastic are ingested by humans who consume seafood

Plastic is destroying our food too!

OCEANS WILL HAVE

By 2025:

1 tonne of plastic for
3 tonnes of fish



By 2050:

1 tonne of plastic
for 1 tonne of fish





So...what about its effects on humans...on us, personally?

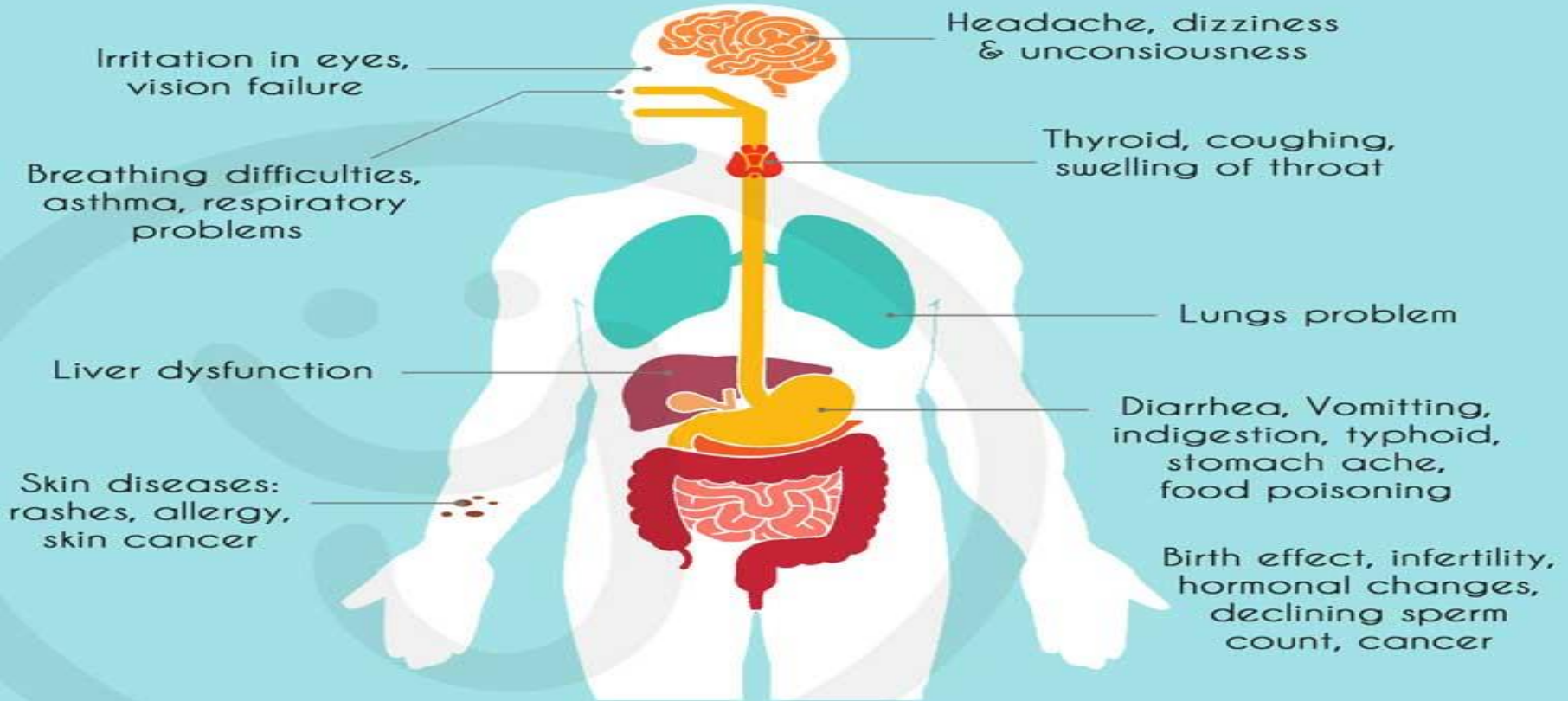
WAYS:

- Food and water
- Exposure to harmful chemicals during manufacturing,
- Leaching in stored food items kept in plastic containers -- plastics break down over time, releasing a chemical called Bisphenol A (BPA) into the water.
- This chemical is also deliberately added to many commercial products, including food containers and hygiene products
- chewing of plastic teethers and toys by children

EFFECTS:

cancers, birth defects, impaired immunity, endocrine disruption, obesity, diabetes, asthma, behavioural disorders, hormonal imbalances, developmental and reproductive effects etc.

PLASTIC *Impact on Human Health*



SOIL POLLUTION



AIR POLLUTION



WATER POLLUTION

- Lets face it, plastic is cheap, convenient, has multiple uses, durable, easily accessible - and so difficult to avoid!
- The problem is that it gets where it shouldn't.





1 reusable bag

OR



1 trip



1 week



1 month



6 months

**THIS PIECE OF PLASTIC TRASH WAS
RECENTLY FOUND ON THE BEACH
-IT WAS THROWN AWAY IN 1976**



**THIS IS WHY PLASTIC
IS A PROBLEM**



THERE IS NO SUCH
THING AS "AWAY".

WHEN WE THROW
ANYTHING AWAY IT
MUST GO SOMEWHERE.

- ANNIE LEONARD

THE STORY OF
STUFF
PROJECT

What
can
we
do?



Here's a Challenge:

A call to action for all of us to come together to combat one of the great environmental challenges of our time, we are all invited to consider how we can make changes in our everyday lives with a view to:

- ❖ Reduce the heavy burden of plastic pollution on our natural places,
- ❖ Our wildlife – and
- ❖ Our own health



#BeatPlasticPollution



A healthy planet

**DEPENDS ON
ALL OF US**



*Photo Credits to the UN

What do we do with this Villain?!!





The IORA Secretariat took up the challenge and came up with 4 areas of action:

- 1. **Individually** – including a “Plastic Pledge”;
- 2. **Internally** – efforts within the Secretariat;
- 3. **Locally** –for instance, sharing information on recycling; and
- 4. **Globally** – a wish list.

Individually - Be hep!

- Do all kinds of classy things:
- Say NO to plastic straws
- Use reusable shopping bags
- Use a reusable, refillable water bottle
- Bring your own thermos or mug to the coffee shop.
- Use glass containers
- Avoid snacks or food with excess packaging
- Avoid using plastic cutlery
- Choose metal over plastic razors.
- Get the hang of using wire hangers.
- Switch to e-billing - eco-friendly way to pay bills.
- Swap out your plastic toothbrush (extra funky option!)
- Avoid cosmetic products that contain microbeads.
- Look for BPA-free on the label of products







use **it** up
wear **it** out
make **it** do *or*
do **with**out



IORA Secretariat

Internally



- Wise up!
- When hosting events, have glass jars and glasses to serve water instead of plastic bottles.
- Use the eco-friendly shopping bag provided in the Secretariat kitchen to use when shopping at the supermarket.
- Mugs, Spoons and Straws.
- Hands on activities.
- Take a pledge!

IORA Secretariat in Mauritius

– the local chapter

- Awareness programs in collaboration with local schools, supermarkets and business complexes
- Posters with 'fun facts' about the upcoming WED 2018 and tips on how to reduce the use of plastic in our environment.
- Joining hands with relevant authorities – local ministries, municipalities and other agencies
- Hand on activities: Beach Clean Up's, Tree Planting Initiatives and more!



YOU are invited to....

Initiatives by the Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping, Government of Mauritius

- **Friday 08 June 2018**

Exhibition and talks at the University of Mauritius in collaboration with the Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping; and

Cleaning of Beach front from Mauritius Maritime Training Academy and Fisheries Training and Extension Centre , Pointe aux Sables by Students, Fishers of the locality, NGOs and Officers from the Ministry.

- **Saturday 09 June 2018**

Cleaning of Sea at Mahebourg and Blue Bay Marine Park by Divers of the Ministry; and

Cleaning of Beach at Mahebourg and Blue Bay Marine Park by Officers from the Ministry, Fishers in the locality and NGOs.

- Ministry of Social Security, National Solidarity, and Environment and Sustainable Development

Wednesday, 13 June 2018

Monday, 18 June 2018

Beach Clean up (details awaited)

- **Personal initiatives by IORA staff members:**

Visit and Clean
Up activity
at the Eau Blue
Waterfall (Cluny,
Mauritius)

- Black River Gorges



"IT ALWAYS SEEMS
IMPOSSIBLE UNTIL
ITS DONE."

~NELSON MANDELA

IORA -- Internationally

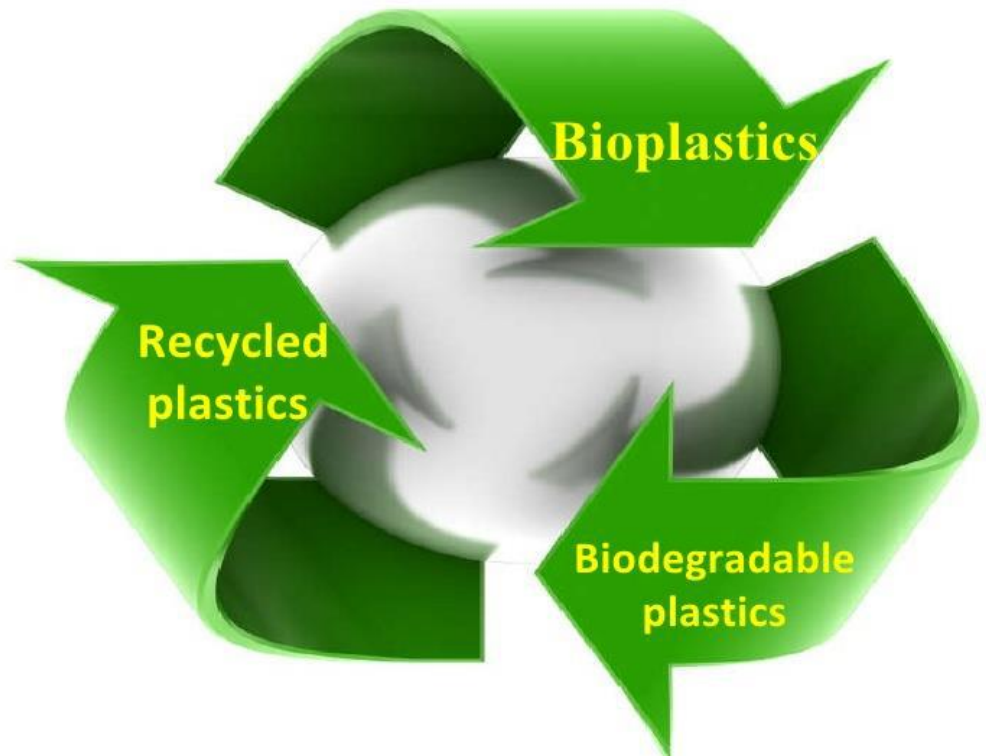
IORA is built around the Indian Ocean – literally!

The Blue Economy binds us all. If we are to talk about IORA initiatives, whether in innovation or SME's, ocean health, or food security, water as a proposed focus area or renewable energy, the environment has a role to play in all of them.

- **Ideas and Wishes:**
- IORA Regional Project on Marine Plastic Debris – Indonesia
- IORA Renewable Plastic Expedition
- Potential collaboration with NGOs tackling marine pollution (such as 4Oceans)
- Opening up to innovation technologies. GrahamTek?
- Supporting research on alternate uses and materials
Such as: Global Challenges Research Fund (GCRF)

BioPlastics

BioPlastics are made from renewable resources such as vegetable fats and oils, corn starch, etc.



originate from a renewable resource



are biodegradable



are renewable and biodegradable

Why think about this at an organizational level?

- ✓ Sustainable food and water management
- ✓ Enhance employment opportunities
- ✓ Cut carbon emissions
- ✓ Reduce waste
- ✓ In alignment with all of IORA's Priority and Focus Areas



**Innovative
ideas
for the**



#BeatPlasticPollution

Say Yes to Innovation!
Say Yes to Plastic Fuel!



**PLASTIC
TO FUEL**



Researchers calculated the energy requirement, water consumption, and greenhouse gas emissions of converting non-recycled plastics into ultra-low sulfur diesel, the primary diesel fuel used in today's vehicles.

Then they compared those calculations to the conventional process for making diesel fuel.

The results?

- **Diesel fuel made from non-recycled plastics results in significant energy and environmental advantages.**
- When compared to diesel made from conventional crude oil, the manufacturing process for plastic diesel shows reductions of up to:
 - 14% in greenhouse gas emissions,
 - 58% in water consumption, and
 - A whopping 96% in traditional energy use

Recycling a single plastic bottle conserves enough energy to light a

60
watt
bulb

for up to **6** hrs



Alternative Energy

LISTEN UP, YOU
COUCH POTATOES:
EACH RECYCLED
BEER CAN SAVES
ENOUGH ELECTRICITY
TO RUN A TELEVISION
FOR THREE HOURS



Institute of
Scrap Recycling
Industries, Inc.



Earth911
More Ideas, Less Waste

Commercial Uses



Furniture



Roads



Our long range objective is a PlasticRoad that is...



**3x
LONGER**

The expected lifetime of the PlasticRoad is two to three times as long as that of traditional road paving.



**70%
FASTER**

The expected construction time of a new road will be reduced by approximately 70%.



**4x
LIGHTER**

The PlasticRoad is four times as light as a traditional road structure.



**100%
CIRCULAR**

The PlasticRoad is 100% circular and is made from recycled plastic as much as possible.

Boats



Houses



Handicrafts



Cash
for
Trash



D.I.Y.





**And for people who
cannot do any of those
things?**

IF YOU CAN'T REUSE IT, REFUSE IT

HOW IS PLASTIC USED?



Agriculture

3.3%



Electronics

5.8%



Automotive

8.9%



Building and
construction

19.7%



Consumer and
household goods,
furniture, sport,
health, safety

22.4%



Packaging

39.9%



KEEP

CALM

AND

RECYCLE

CRAB ENT

Mauritius Recycling

Want to recycle in Mauritius?

BUT HOW and WHERE?

- Visit the following link provided by the **Ministry of Local Government and Outer Islands**, to find out where is the nearest recycler to you!

<http://localgovernment.govmu.org/English/Local%20Government/Units/Pages/List-of-Recyclers.aspx>

- Mr Julien Lafresiere
Collect recyclable items for Rs900 per month.
Tel: 5793 5092/ 5942 7343

**Don't be
Trashy
Recycle**

Sloganshub.com





Mission Verte (Green Mission) Mauritius

The following collection points are accessible to the public, and in some cases to authorized persons only (schools and universities, Belle Rose Convent, Cyber Tower II).

- Caudan Waterfront / Food Court (petites poubelles – bouteilles plastique PET et canettes seulement)
- Couvent de Belle-Rose
- Curepipe (plastiques et canettes seulement) / En face de la Municipalité – Trou aux Cerfs – Loreto College – Cité Casernes
- Ebène / Cyber Tower II
- Flacq / Parking Winner's (près du KFC)
- Flacq / Parking Spar
- Forest Side / Parking Winner's
- Grand Baie / Parking Super U
- Labourdonnais / A côté de l'École du Nord

- Mahébourg / Parking London Way
- Mare Tabac / Social Welfare Centre
- Moka / Le Bocage International School
- Moka / École du Centre
- Péreybère / Parking Winner's
- Phoenix, Pont Fer / Mauritius Glass Gallery
- Phoenix, St Paul / Parking Winner's
- Plaine Magnien / Parking Winner's
- Quatre Sœurs / Village Hall
- Réduit / Université de Maurice
- Rivière Noire / Village du Tamarinier (plastique et canettes seulement)
- St Antoine / Zone Industrielle
- Tamarin / École Paul & Virginie
- Tamarin / Parking Centre Commercial La Place Cap Tamarin
- Terre Rouge / Parking Winner's
- Vacoas, Réunion / Parking Winner's





**Dude, Recycling is
not that hard**



Sloganshub.com

Video

- Are you ready to breakup?



CleanSeas Break-Up PSA Its not me its you.mp4

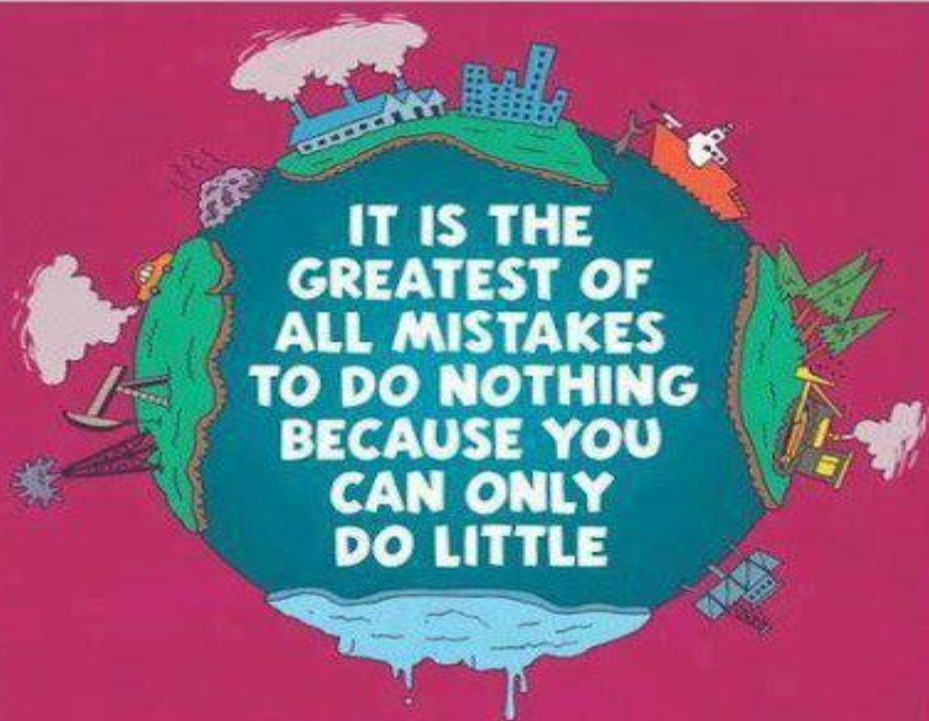
*This short UN Environment #CleanSeasvideo take a lighter look at the issue of marine litter and asks everyone around the world to break-up with single-use plastics and make their pledge at cleanseas.org.

IORA Secretariat Pledge

On this World Environment Day, 5 June 2018:

We take the pledge
To save our planet from the edge.
We'll say no to plastic to set the tone.
For bags, bottles and cutlery, We'll bring our own.
We won't buy veg and fruit sealed within.
We'll slow down and instead dine in.
We'll pack a lunch and bring a cup if we go far.
We'll store our leftovers in a jar
and instead of straws or cutlery, We'll bin or lose.
We'll opt for ones we can reuse.
Much of our plastic ends up in our oceans.
Make a change and take on the onus.

#IORAReuse #BeatPlasticPollution #ChooseReusables



**IT IS THE
GREATEST OF
ALL MISTAKES
TO DO NOTHING
BECAUSE YOU
CAN ONLY
DO LITTLE**

DO WHAT YOU CAN

- SYDNEY SMITH



Your 'No Plastic' Mantra

REUSE 
REDUCE
RECYCLE

- **REFUSE** disposable plastic whenever and wherever possible. Choose items that aren't packaged in plastic and carry your own bags, containers and utensils. Say 'no' to plastic straws, too.
- **REUSE** durable, non-toxic straws, utensils, takeaway containers, bottles, bags and other everyday items. Choose glass, paper, stainless steel, wood, ceramic and bamboo over plastic.
- **REDUCE** your plastic footprint. Cut down on your consumption of goods that contain excessive plastic packaging and parts. If it will leave behind plastic trash, don't buy it.
- **RECYCLE** what you can't refuse, reduce or reuse. Pay attention to the entire lifecycle of items you bring into your life, from source to manufacturing to distribution to disposal.

Hope.....

