



LEARNING SERIES

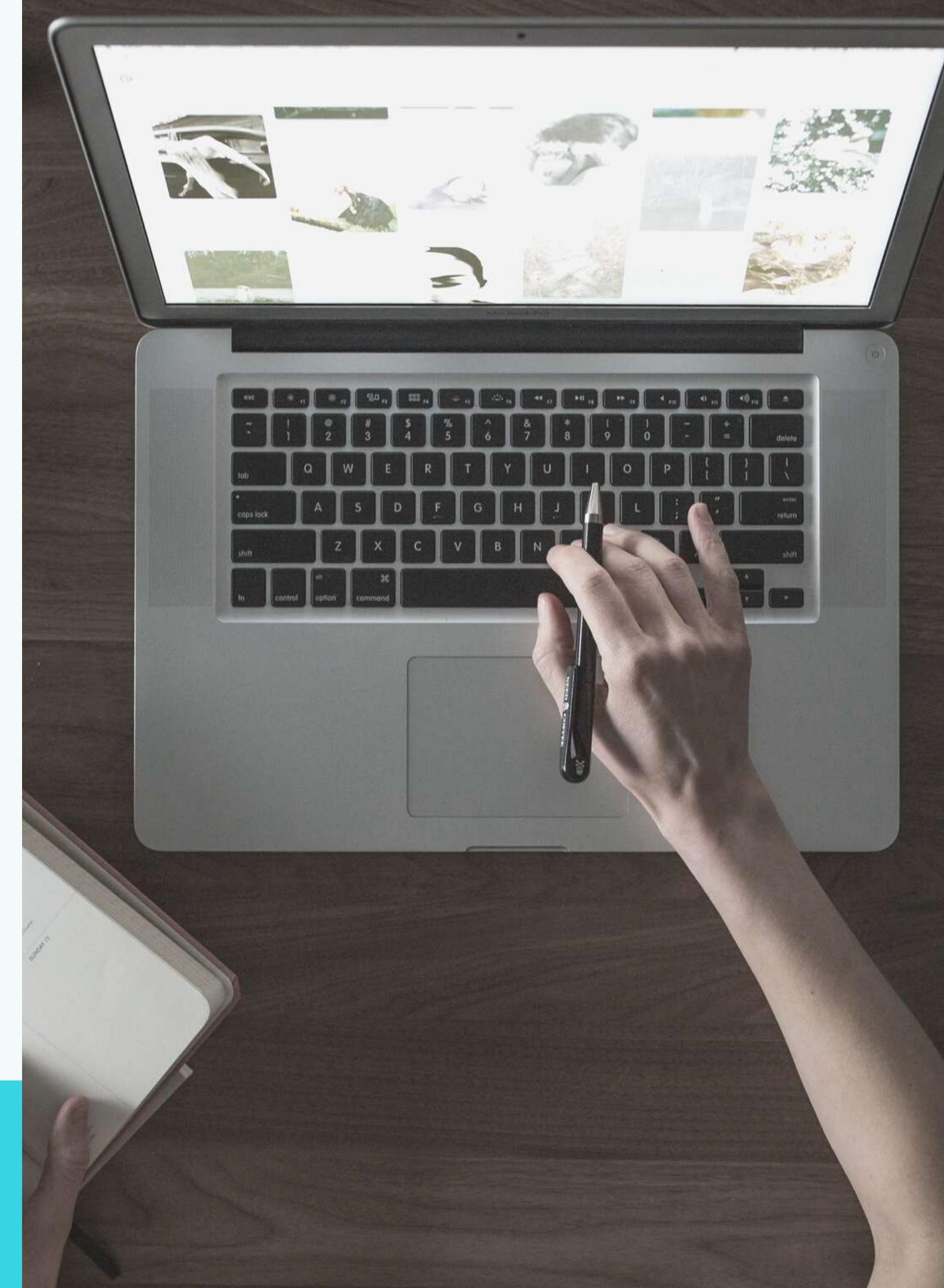
# WASTE MANAGEMENT & THE SDGS

RUWANTHI MIGNONNE HALWALA

# AGENDA

## Topics to be Tackled

- Shanthi Sustainable Development
- Your Speaker
- About the Session [Interactive]
- Ice Breakers!
- Intro : Waste & Management
- Waste & Impacts
- SDGs & WM
- Now What?
- Q & A



# RUWANTHI M HALWALA

Studied/ Volunteered :- Oman | Canada | U.K | France | Nicaragua  
(Central America)

Worked :- Canada | Oman | Sri Lanka  
60+ sustainability projects in Sri Lanka

10 years of experience in Environmental and Sustainability Education and Awareness, Project Management, Communication, Client/Community Engagement, Capacity Building and Institutional Strengthening.

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## Profile

15 SECONDS..



# ice breaker

*1/ Your name*

*2/ What do you know about waste management & its connection to climate change?*

IT'S OKAY IF YOU HAVE NO CLUE!

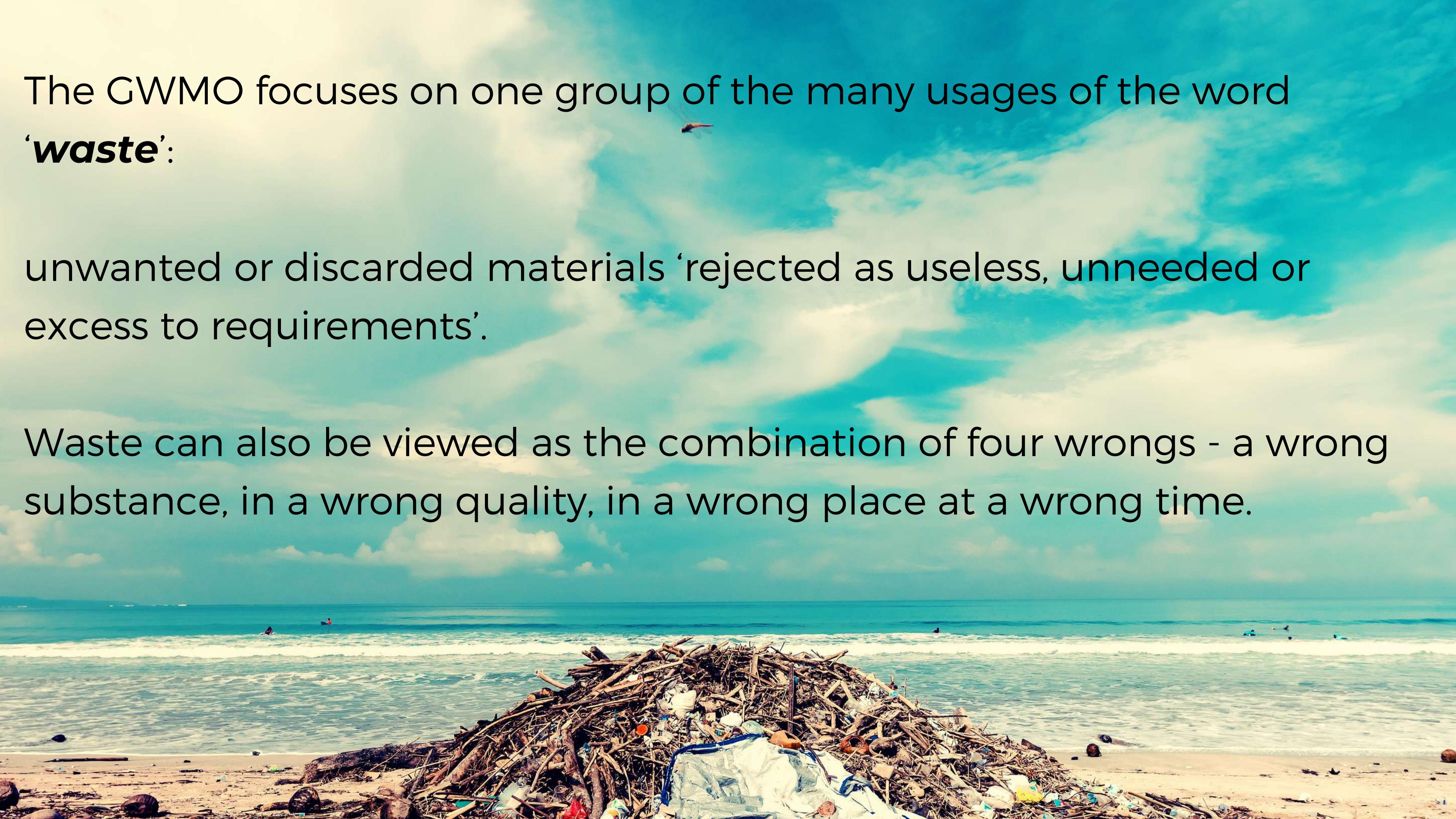
***THAT IS WHY WE ARE DOING THIS SESSION***



The GWMO focuses on one group of the many usages of the word '**waste**':

unwanted or discarded materials 'rejected as useless, unneeded or excess to requirements'.

Waste can also be viewed as the combination of four wrongs - a wrong substance, in a wrong quality, in a wrong place at a wrong time.



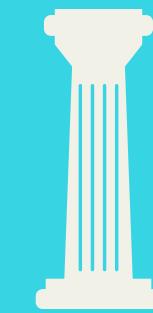


# WASTE

## A SERIOUS GLOBAL ISSUE

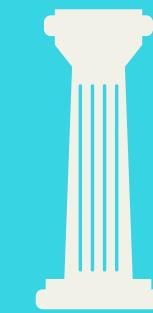
- 7 B Population
- Affects public health and the environment [land, ground water etc.]
- Sanitation = human right
- Long-term impacts = flooding, economic damage, diseases, socioeconomic issues, damages to homes etc.





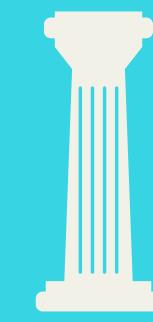
## Environmental

3% OF GLOBAL GHG EMISSIONS [METHANE], PRODUCTION OF GOODS/SERVICES, INCINERATORS, TRANSPORT



## Social

GOVERNANCE, PUBLIC HEALTH [UNCONTROLLED DUMPING, OPEN BURNING ETC/], CLEAN CITIES, INFORMAL SECTOR COMMUNITY



## Economic

DAMAGE CONTROL/ INSURANCE, BUSINESS, TOURISM ETC.

# SUSTAINABILITY & WASTE MANAGEMENT

the three pillars



impacts  
of open  
burning?





**MV  
Express  
Pearl**  
SRI LANKA



# BREAK-OUT ROOM!

*1/ Break into groups*

*What do you know about waste management in Sri Lanka?*

*Who collects your waste? Do you know what happens to it when it leaves your home?*



# small island developing nations

climate impacts & waste management

- Poor infrastructure for SWM
- Low capacity and rural awareness
- Poor waste segregation
- Good legislation but inadequate implementation of pollution
- Higher climate risk vulnerability
- Concentrated urban areas, shift from rural
- Landuse changes - wetland towns like Bataramulla etc.

# Plastics in the ocean

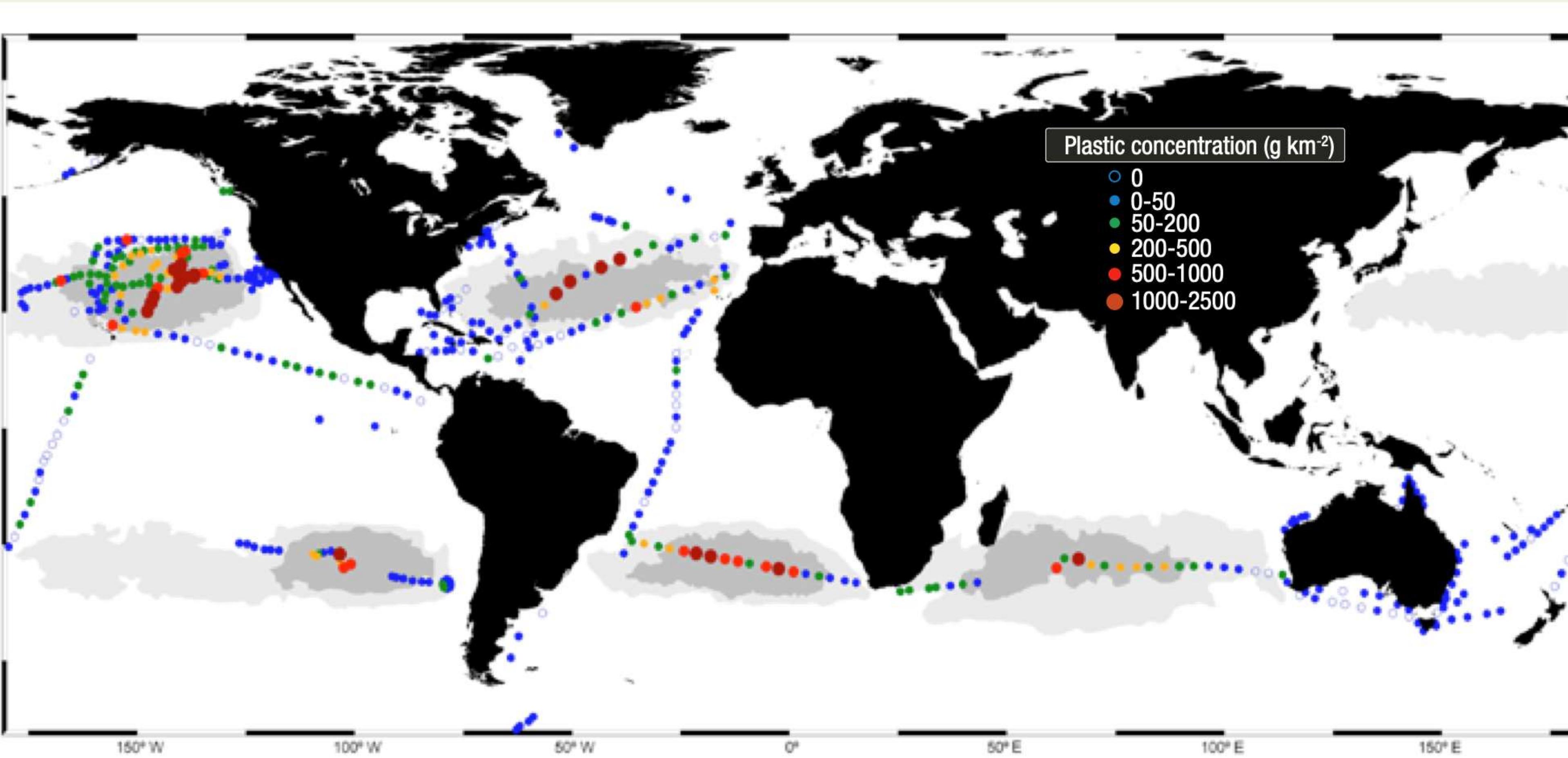
BIOACCUMULATION IN FOOD CHAINS -LINKS TO  
NEW DISEASES, CARCINOGENS

NOT ENOUGH RESEARCH

IMPACT TO BIODIVERSITY

MIGRATION OF ALIEN-INVASIVE SPECIES  
ATTACHED TO PLASTICS







**129-year-old humanitarian vessel Vega sails through plastic waste in the Java Sea**

**When deliveries of donated educational and medical supplies began in 2004, most of the area was still relatively clean. Now the patch of plastic waste stretches for at least a kilometre and is a good 100 metres wide.**

PHOTO BY MARGARETE MACOUN



# the informal waste sector



# Waste Management & Governance

<https://www.youtube.com/watch?v=MAKGMdVq5q4>

# BREAK-OUT ROOM!

*1/ Break into groups*

*Think outside the box!*

*What are some real-life impacts of unregulated waste management?*

*Examples & Case Studies welcome :)*



NO  
POVERTY



2 ZERO  
HUNGER



3 GOOD HEALTH  
AND WELL-BEING



4 QUALITY  
EDUCATION



5 GENDER  
EQUALITY



6 CLEAN  
WATER AND  
SANITATION



AFFORDABLE AND  
CLEAN ENERGY



8 DECENT WORK AND  
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



10 REDUCED  
INEQUALITIES



11 SUSTAINABLE CITIES  
AND COMMUNITIES



12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



13 CLIMATE  
ACTION



14 LIFE BELOW  
WATER



15 LIFE  
ON LAND



16 PEACE AND JUSTICE  
STRONG INSTITUTIONS



17 PARTNERSHIPS  
FOR THE GOALS



THE GLOBAL  
Goals  
For Sustainable

# The UN SDGs

## United Nations Sustainable Development Goals

UN SD Summit - 2015

17 SDGs, 169 targets and 244 indicators

Ex. Goal 2 = Zero hunger,

Target 2.1 = ensure access by impoverished communities to safe & nutritious food,

Indicator = prevalence of undernourishment



# BREAK-OUT ROOM!

*What SDGs do you think are connected to waste management?*

*1/ Break into groups*



# True long-term sustainable development

PEOPLE  
PLANET  
PROSPERITY (PROFIT)  
PARTNERSHIP  
PEACE



# WASTE & THE UN SDGS

- Over 75% of the open dumps in the world are on the coast, leaching hazardous materials into our oceans, suffocating marine life (SDG 14). Large marine mammals are washing up on shore dead, bellies so full of plastic and starved to death
- Life on land (SDG 15) can only be healthy when waste is properly managed.
- SDG 1 aims for No Poverty. 1% of the global urban population make their living from recovering recyclable materials from waste (SDG 8).
- Informal waste champions provide a valuable and often no-cost service, and it is important that we recognise their role in urban sanitation and resource efficiency (SDG 10).
- The formal waste management sector, employing another 20 million globally, is a current hotbed of inspiration and innovation (SDG 9).
- Waste management provides excellent opportunities in science, technology and engineering, humanities, business studies and IT (SDG 4), and can stimulate economic growth (SDG 8)

# Goal 1

End Poverty

Goal 2  
End Hunger



Goal 12  
Ensure Sustainable Consumption and Production



Goal 3  
Ensure Healthy Lives



Achieve Gender Equality



Goal 14  
Conserve Oceans



Goal 11  
Make Cities Sustainable



Goal 4  
Ensure Education

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Goal 13  
Combat Climate Change

|   |   |   |   |   |
|---|---|---|---|---|
| <b>1 NO POVERTY</b><br>                            | <b>2 ZERO HUNGER</b><br>                                   | <b>3 GOOD HEALTH AND WELL-BEING</b><br>      | <b>4 QUALITY EDUCATION</b><br>                         | <b>5 GENDER EQUALITY</b><br>               |
| Jobs in waste collection and recycling  | Reduced food waste, more use of organic waste   | Less disease caused by open dumping & burning   | Environmental and health training and awareness   | Women often bear most of the impact of bad waste mgt  |
| <b>6 CLEAN WATER AND SANITATION</b><br>            | <b>7 AFFORDABLE AND CLEAN ENERGY</b><br>                   | <b>8 DECENT WORK AND ECONOMIC GROWTH</b><br> | <b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b><br>   | <b>10 REDUCED INEQUALITIES</b><br>         |
| Better SWM goes hand in hand with better WASH   | Bioenergy opportunities from organic waste  | Waste management is the world's largest industry  | Recycling innovation is growing and scalable  | The poorest are harmed the most by poor waste mgt   |
| <b>11 SUSTAINABLE CITIES AND COMMUNITIES</b><br> | <br><b>SOLID WASTE MANAGEMENT</b><br>a key to delivering |   | <b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b><br> | Need to shift from waste to resource management   |
| <b>13 CLIMATE ACTION</b><br>                     | <b>14 LIFE BELOW WATER</b><br>                           | <b>15 LIFE ON LAND</b><br>                 | <b>16 PEACE AND JUSTICE STRONG INSTITUTIONS</b><br>  | <b>17 PARTNERSHIPS FOR THE GOALS</b><br> |
| Reduced methane & CO2 from dumping & burning  | Less plastic pollution in the oceans & sea life   | Less pollution on the land, healthier environments  | Producer responsibility and governance  | Working together: formal & informal, wealthy & poor   |

## THE GLOBAL GOALS

For Sustainable Development

*problem*



*solution?*

Prevention

Minimization

Reuse

Recycling

Other recovery including  
energy recovery

Landfill

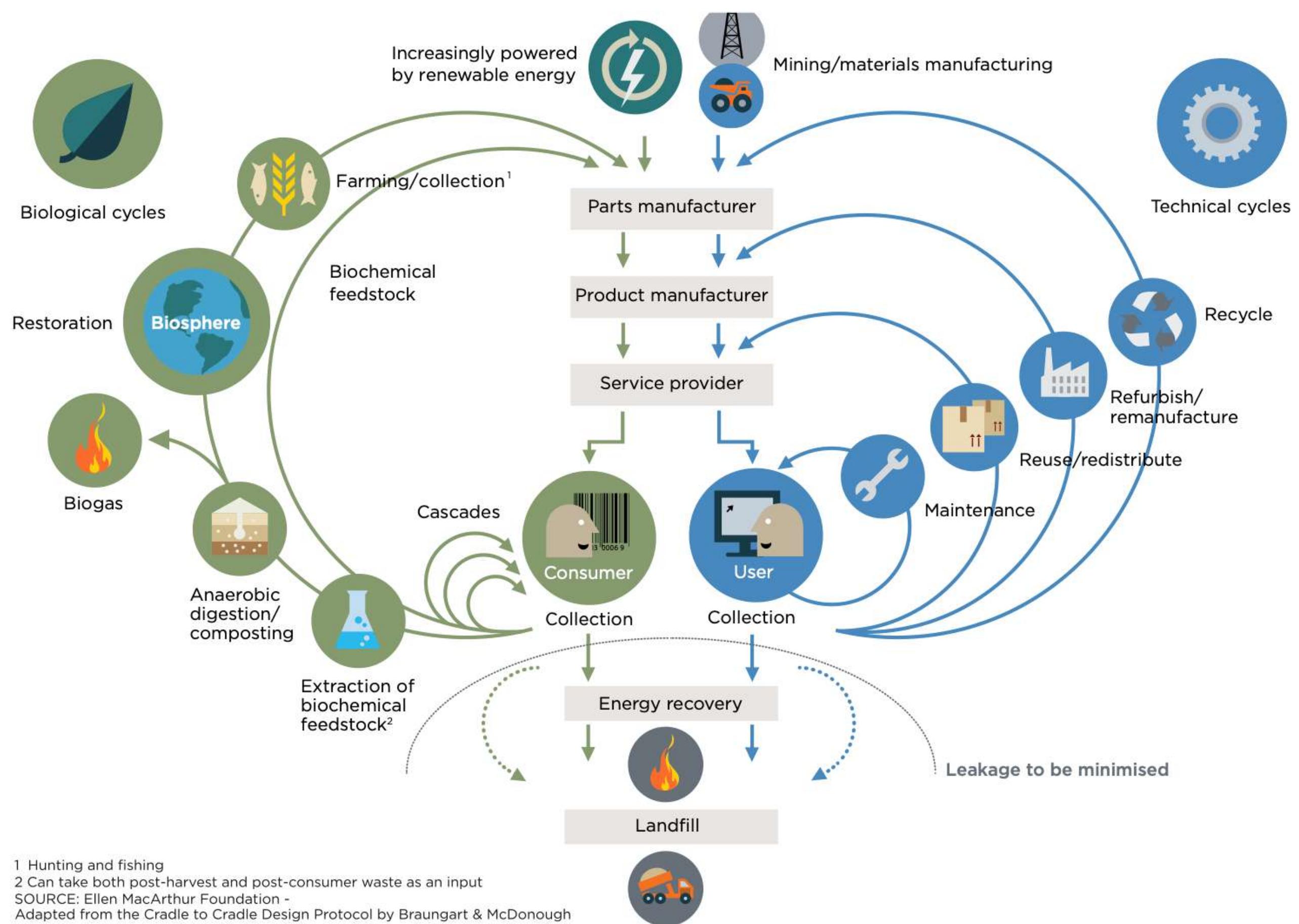
Controlled  
disposal

Uncontrolled  
disposal

# WASTE MANAGEMENT HIERARCHY

move toward 'prevention'

## Circular economy – an industrial system that is restorative by design



# the shift away from linear economies

REUSE, REDUCE, RECYCLE, RECOVER

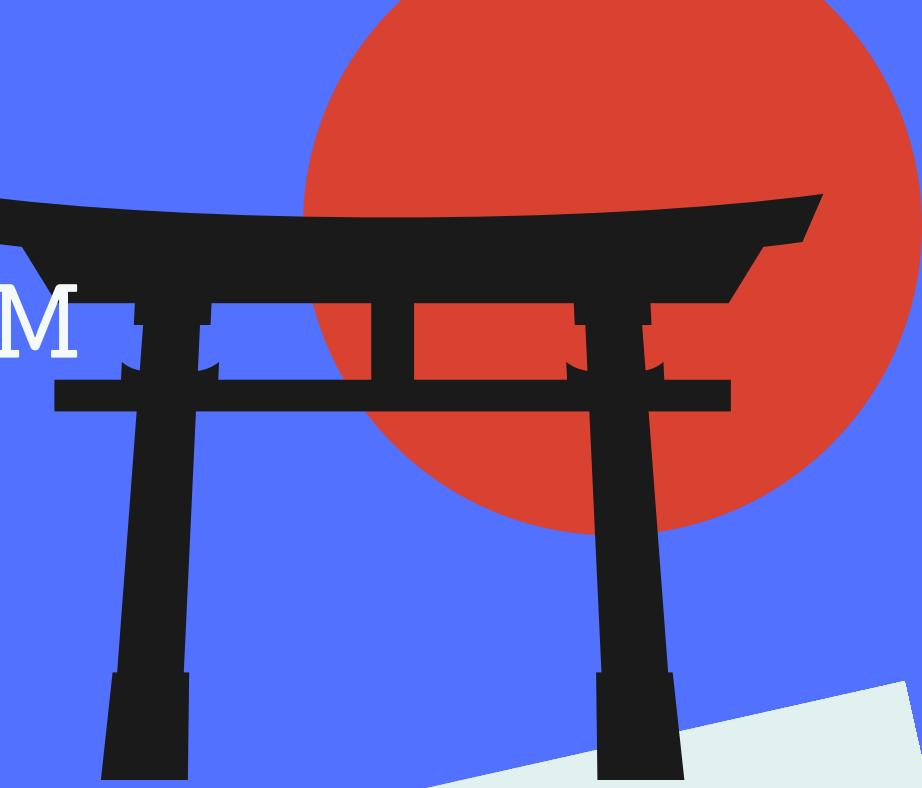


## CHANGE OUR WAY OF LOOKING AT & THINKING ABOUT WASTE

- From 'Waste' to a 'Resource' with potential
- Focus upstream - Extended Producer Responsibility, Circular Economy
- Sustainable consumption and production patterns
- Awareness and education
- Developing effective legislation
- Implementation and monitoring

# CASE STUDY

## JAPAN - "TOP RUNNER" PROGRAM



This programme sets energy efficiency standards for products in 21 categories (for example, vending machines, air conditioners, TVs) in Japan. On a regular basis, officials test all the products available on the Japanese market in a given category, determine the most efficient model, and make that model's level of efficiency the new baseline. Manufacturers have the obligation to make efforts to achieve the new baseline within four to eight years. Products that meet the energy efficiency standard receive a Top Runner label. If a manufacturer does not meet the target or fails to make a good faith effort, this fact gets publicized.



# LET'S TALK SOLUTIONS



**What are you doing in your field and how can you help develop solutions for waste management?**

# Thank You

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