



# Drowning in Plastic

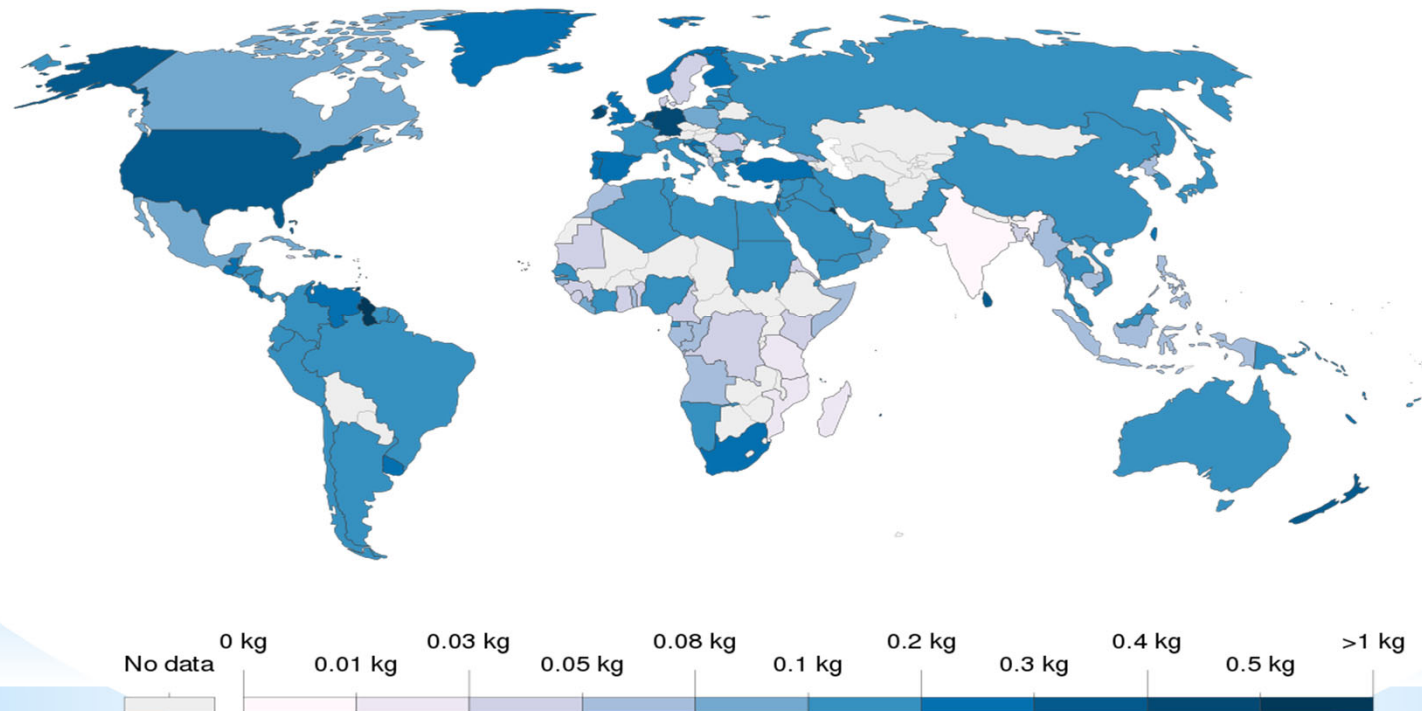
## Introduction:

Since the 1950s, the production of plastic has outpaced that of almost every other material. Much of the plastic we produce is designed to be thrown away after being used only once. As a result, plastic packaging accounts for about half of the plastic waste in the world. Most of this waste is generated in Asia, while America, Japan and the European Union are the world's largest producers of plastic packaging waste per capita. (from: UN Environment: Single Use Plastics)

### Per capita plastic waste generation

Daily per capita plastic waste generation, measured in kilograms per person per day.

Our World  
in Data



Source: Plastic Waste - Jambeck et al. (2015)

# Prayer



*Leader:*

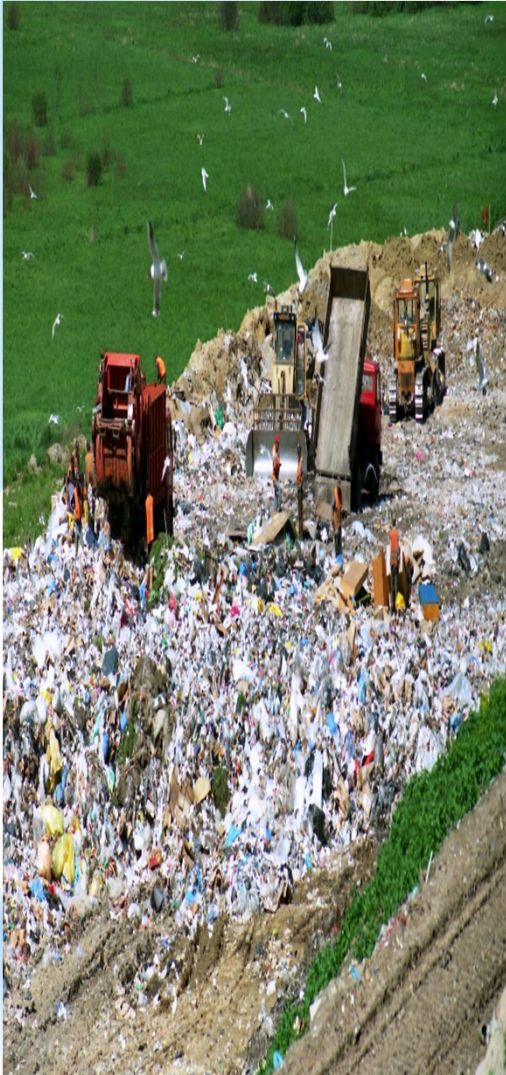
We exalt Your Providence O God and we submit to all  
Your Decrees.

God of all affection, at the dawn of creation, you  
placed a hunger and thirst for the beauty of the  
Earth and its creatures.

We give you thanks for all your gifts to us.



*Reading: from Laudato Si (Adapted)*



Account must also be taken of the pollution produced by residue ... Each year hundreds of millions of tons of waste are generated, much of it non-biodegradable, highly toxic and radioactive, from homes and businesses, from construction and demolition sites, from clinical, electronic and industrial sources. The earth, our home, is beginning to look more and more like an immense pile of filth. In many parts of the planet... once beautiful landscapes are now covered with rubbish.



These problems are closely linked to a throwaway culture which affects the excluded just as it quickly reduces things to rubbish. ... We have not yet managed to adopt a circular model of production capable of preserving resources for present and future generations, while limiting as much as possible the use of non-renewable resources, moderating their consumption, maximizing their efficient use, reusing and recycling them. A serious consideration of this issue would be one way of counteracting the throwaway culture which affects the entire planet, but it must be said that only limited progress has been made in this regard.



WORLD  
ECONOMIC  
FORUM

Listen to the cry of the earth and the cry of the poor, who suffer most.

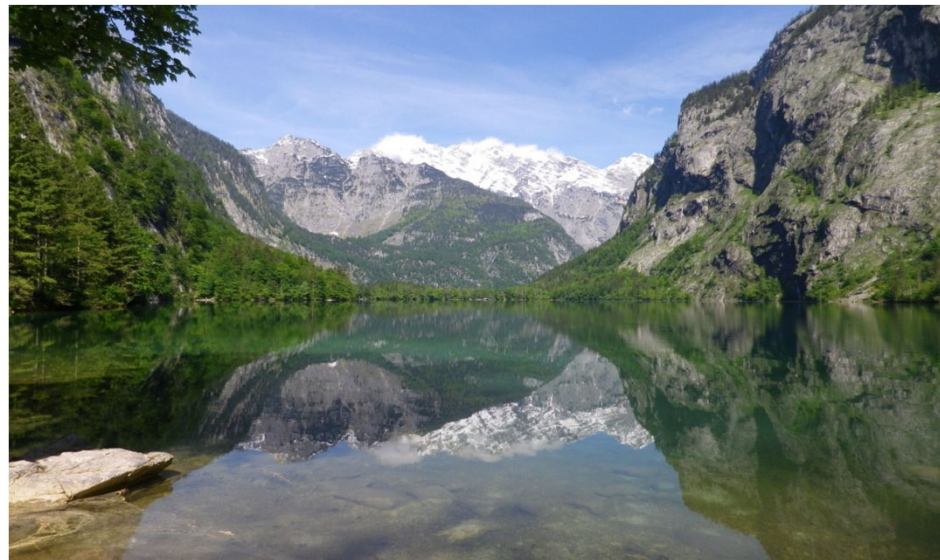
Pope Francis



*Response by ALL:*

All that we have comes from your loving hands. Help us to protect the gifts of nature and the beauty of our world. May we be ever mindful of the damage we have created by our disregard for the pollution of our land and water with the mountains of discarded plastic containers, glasses, and bags.

Pour out upon us the power of Your love, that we may protect life and beauty. Touch the hearts of those who look only for gain at the expense of the earth



## *Details:*

Our ability to cope with plastic waste is already overwhelmed. Only nine per cent of the nine billion tons of plastic the world has ever produced has been recycled. Most ends up in landfills, dumps or in the environment. If current consumption patterns and waste practices continue, then by 2050 there will be around 12 billion tons of plastic litter in landfills and the environment. By this time, if the growth in plastic production continues at its current rate, then the plastics industry may account for 20 per cent of the world's total oil consumption.

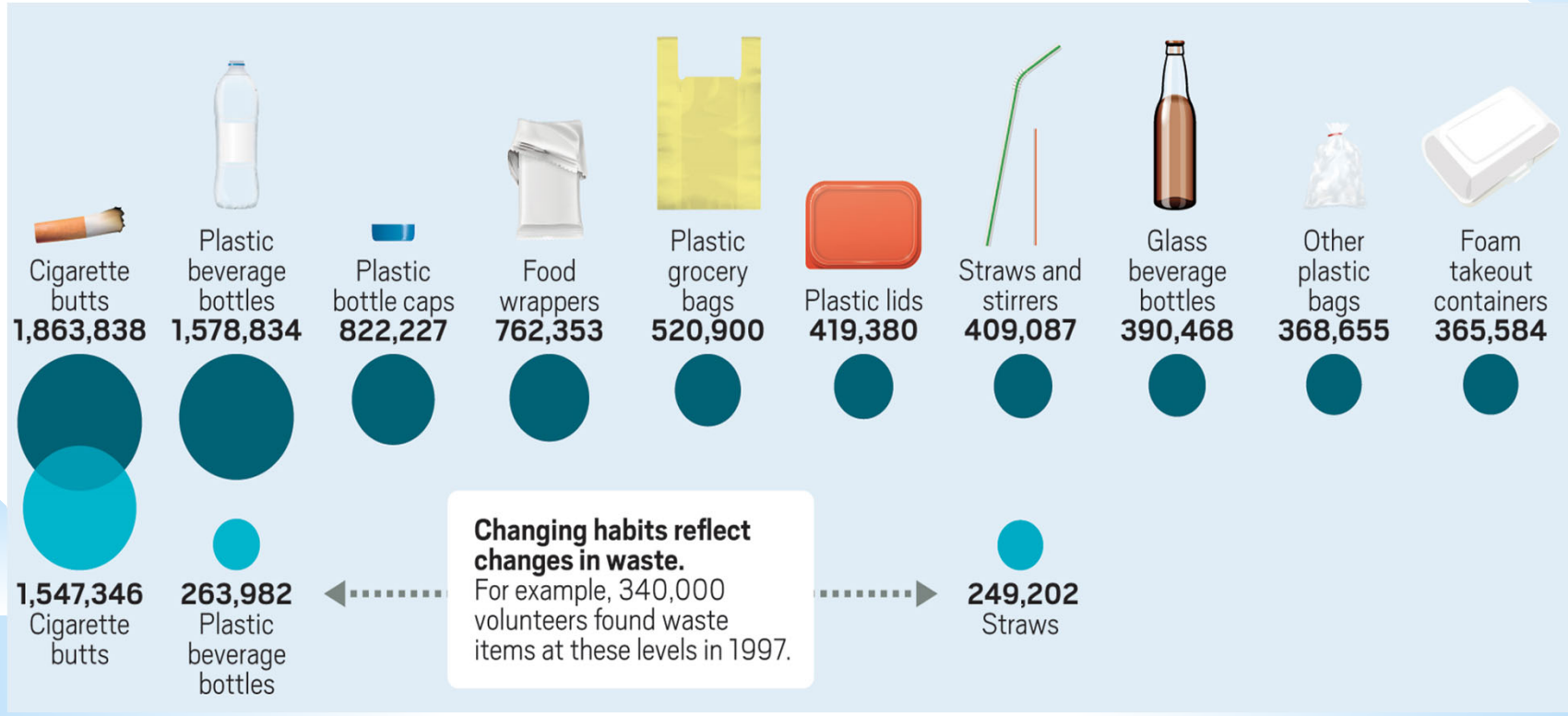






Most plastics do not biodegrade. Instead, they slowly break down into smaller fragments known as microplastics. Studies suggest that plastic bags and containers made of expanded polystyrene foam (commonly referred to as “Styrofoam”) can take up to thousands of years to decompose, contaminating soil and water.

The most common single-use plastics found in the environment are plastic bottle caps, food wrappers, plastic grocery bags, plastic lids, straws and stirrers, other types of plastic bags, and foam take-away containers. These are the waste products of a throwaway culture that treats plastic as a disposable material rather than a valuable resource to be harnessed.



Plastic waste causes a number of problems when it leaks into the environment. Plastic bags can block waterways and exacerbate natural disasters. By clogging sewers and providing breeding grounds for mosquitoes and pests, plastic bags can increase the transmission of vector-borne diseases like malaria. High concentrations of plastic materials, particularly plastic bags, have been found blocking the airways and stomachs of hundreds of species.

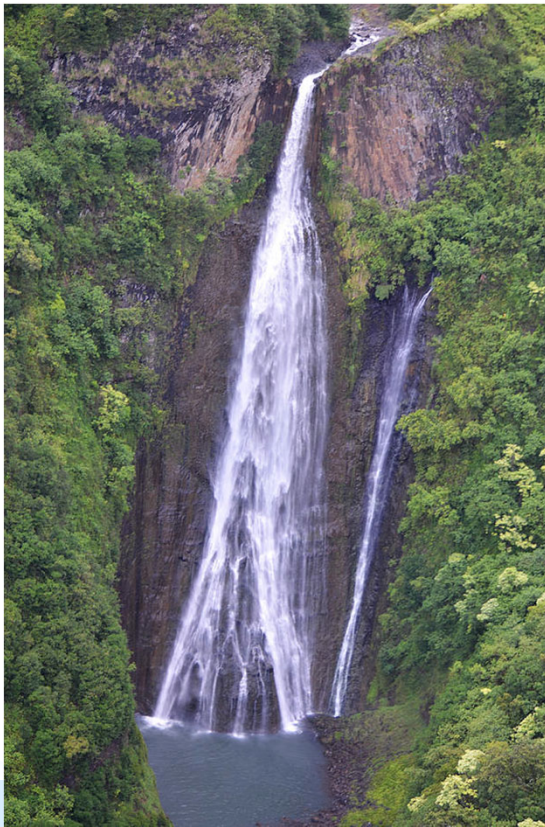


Plastic bags are often ingested by turtles and dolphins who mistake them for food. There is evidence that the toxic chemicals added during the manufacture of plastic transfer to animal tissue, eventually entering the human food chain.



**Leader:**

**“The poor and needy search for water,  
but there is none; their tongues  
are parched with thirst. But I the LORD  
will answer them.” *Isaiah 41:17***



**Waters come from high mountain  
sources; Waters run deep in the Earth  
Miraculously, water come to us and  
sustains all life. My gratitude is filled to  
the brim.**

***Thich Nhat Hanh***

***Response by ALL:***

Bring healing to our lives, that we may protect the world and not prey on it, that we may sow beauty, not pollution and destruction. Touch the hearts of those who look only for gain at the expense of the poor and the earth.

Pope Francis - Laudato Si



Whatever befalls the earth  
befalls the sons and daughters of  
the earth.

We did not weave the web of  
life; We are merely a strand in it.  
Whatever we do to the web,  
we do to ourselves....

*Chief Seattle*

We thank you for being with us each  
day. Encourage us, we pray, in our  
struggle for justice, love and peace.

*Pope Francis - Laudato Si”*

**Use the following  
slides for reflection  
prior to discussion.**



**I give thanks to God for creation and  
for being wonderfully made**

**Where did I feel God's  
presence in creation today?**





**I ask for the grace to see creation as God does  
in all its splendor and its sufferings**

**Do I see the beauty of creation  
and hear the cries of the  
earth and the poor?**





**I ask for the grace to see closely to see how my life choices impact creation and the poor and vulnerable**



**What challenges or joys do I experience as I recall my care for creation?**

**How can I turn away from a throwaway culture and instead stand in solidarity with creation and the poor?**





**I ask for the grace of conversion towards ecological justice and reconciliation**



**Where have I fallen short in caring for creation and my brothers and sisters?  
How do I ask for a conversion of heart?**

I ask for the grace to reconcile my relationship  
with God, creation and humanity,  
and to stand in solidarity through my actions.

How can I repair my  
relationship with  
creation and make choices  
consistent  
with my desire for  
reconciliation  
with creation?



# Discussion:

What can I do to eliminate the use of any single-use plastics in my life?



# Closing Prayer

Loving God, Lord of heaven and earth, this earth, our home, belongs to you.

Give us grace to love it as you do.

Give us courage to give ourselves, as you do, for the good of all people and all of your creation.

Strengthen us to stand, as you do, with the vulnerable poor.

Give us wisdom to know when we have enough, and the voice to say “enough” to all that harms creation and hurts the poorest.

This earth, our home, belongs to you.

Amen.

OPTIMIZATIONS

REUSABLE WATER BOTTLES



GLASS OR STAINLESS STRAWS



SILICONE BAGS VERSUS PLASTIC ZIPLOCK BAGS



Opt out of plastic produce bags in grocery stores and **BRING YOUR OWN GROCERY TOTE BAGS**



# Ways to REDUCE PLASTIC

SWITCH TO GLASS TUPPERWARE



AVOID PLASTIC CONTAINERS OR PLASTIC BAGS OF FOOD WHEN SHOPPING



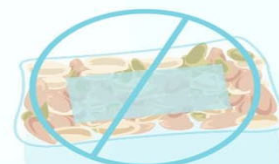
BUY CARTONS OR GLASS VERSUS PLASTIC WHEN POSSIBLE



USE CLOTH NAPKINS OR REUSABLE TOWELS IN THE KITCHEN to avoid extra trash (plastic garbage bags!)



USE/BUY LESS PACKAGED FOODS (bonus: you'll be eating less processed foods along the way!)



REUSABLE COFFEE MUGS OR A MASON JAR (to the juice or smoothie shop): you often get a discount when you bring these!



MAKE YOUR OWN HOUSEHOLD PRODUCTS like cleaning sprays, body scrubs, etc.



FIND LOCAL "BUY NOTHING GROUPS" to pass on your unused stuff to avoid waste.



SHOP IN THE BULK SECTIONS



## ARTICLES/BLOGS/READINGS

A Wonder Material You Can't Get Rid Of - Caitlin Johnson

<http://cbsn.ws/2I1BQjR> This article explains that plastic bags are very frequently used by consumers, but can be a material that is difficult to recycle. Most people are unbothered by plastics littering the environment and therefore have a false idea about the difficulties of getting rid of plastics due to their long-lasting nature.

Toward a Global Treaty on Plastic Waste - Nils Simon and Lili Fuhr

<http://bit.ly/2oJsWs2> According to these authors, plastic is a large part of the economy, though it is extremely harmful to the environment. This problem can be especially toxic to wildlife that is susceptible to having large amounts of plastic in their organisms. Plastic can also create toxic agents, which can cause public health issue.

Seven Charts that Explain the Plastic Pollution Problem <http://bbc.in/2C0wimT>

This article explains that 8.3 billion metric tons of plastic have been created globally, and less than half of this plastic is recycled. Most of this plastic accumulates in gyres in the sea and can therefore affect sea life.



The Environmental Toll of Plastics <http://bit.ly/2FRNzAI> This article encompasses the idea that dangerous chemicals such as BPA are found in more than 90% of the human population. Harm in reproductive development has been traced back to BPA, a component that makes up many plastics. Small plastics can be taken up by organisms and these plastics can accumulate in the food web, and eventually intoxicate organisms who are in high levels of the food chain.

## VIDEOS

Plastic Ocean - United Nations [https://youtu.be/ju\\_2NuK5O-E](https://youtu.be/ju_2NuK5O-E) This video explains the incredible impact that the millions of tons of plastic has had on the ocean, and its perpetual stay in the environment due to its durable nature. Plastic circulates around gyres and makes it easy for sea creatures to digest these toxic materials. Dr. Jennifer Lavers uncovers how plastic gets into organisms' systems and eventually leads to their death.

Why does Plastic Last 'Forever'? <https://youtu.be/kEEC6Z2vigU> This video explains that plastic is unable to be biodegraded because it is made up of man-made polymers. This means that it is resistant to oxidation, and to bacteria that are not able to break it down. Because this material is found commonly in the environment, many organisms mistake it for food and eat it, causing dangerous toxins to enter their system.

# CALCULATE YOUR PLASTIC CONSUMPTION

How many of the following items do you consume?

CHART 1 (Daily)	#/DAY		#/YEAR
Plastic bottles		x 365 =	
Plastic cups		x 365 =	
Straws		x 365 =	
Cotton swabs with plastic sticks		x 365 =	
Cigarette butts *		x 365 =	
Plastic resealable bags		x 365 =	
Plastic cling wrap		x 365 =	
Plastic silverware		x 365 =	
Plastic plates		x 365 =	
Food containers		x 365 =	

**CHART 1: Total # consumed / year:**

\*(Majority of cigarette butts or filters are made from fibrous material called cellulose acetates, a kind of plastic that are thin tows that are packed tightly to form a filter [source](#))

	Total # Consumed / Year
Chart 1	
Chart 2	
<b>GRAND TOTAL</b>	