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THE WHITE HOUSE  
WASHINGTON

White House  
Council on Environmental Quality  
Jonathan Black, Senior Director

The Environmental Law Institute, Monterey Bay Aquarium, WilmerHale  
Moving Beyond Plastics: The Environmental Justice Impacts of Plastic Pollution  
June 27, 2023

# Plastics and Environmental Justice

- Plastic pollution disproportionately affects communities with environmental justice concerns, often due to the close proximity to production and waste sites
  - Higher exposure to microplastics and hazardous chemicals can lead to health issues (e.g., cancer, asthma, skin issues, etc.) and lower property values
- The Biden-Harris Administration recognizes this connection and is committed to ensuring that federal actions to address plastic pollution prioritize public health, economic development, and equity to ensure that the benefits of combating plastic pollution are available to all



# White House Council on Environmental Quality (CEQ)

- CEQ is one of 17 policy councils within the Executive Office of the President (EOP)
- Chemical Safety and Plastic Pollution team - first time in EOP history that a dedicated team was created within CEQ to specifically address plastic pollution-related issues
- CEQ is partnering with other White House teams to coordinate an Interagency Policy Committee (IPC) on Plastic Pollution and a Circular Economy
  - The IPC aims to enhance federal efforts to address plastic pollution, recognizing that plastic pollution is a global problem that requires a broad and ambitious approach
  - Numerous federal departments and agencies are included in the IPC



# Executive Order 14096

- President Biden signed Executive Order 14096, *Revitalizing our Nation's Commitment to Environmental Justice for All*, on April 21, 2023
- The Order is part of the Administration's whole-of-government effort to confront longstanding injustices and inequities
- The President is calling on the federal government to bring clean energy and healthy environments to all, and to recognize, undo, and mitigate harm to those who have suffered from toxic pollution and other environmental burdens like climate change
- The Order will mean cleaner air and water; reduced risk for asthma, cancer, and other health burdens; and better access to parks, safe and affordable housing, and clean transportation across the country, especially communities that have been left behind for too long



# Executive Order 14096

- Embeds environmental justice into the DNA of federal agencies and creates a new Office of Environmental Justice in the White House to coordinate environmental justice efforts across the federal government
- Directs agencies to address gaps in science and data to better understand and prevent the cumulative impacts of pollution on people's health
- Requires agencies to notify nearby communities in the event of a release of toxic substances from a federal facility and mobilizes agencies to confront barriers to community participation in government decisions
- Helps ensure all of our nation's children will grow up experiencing the vital safeguards of our foundational environmental and civil rights laws



# Chemical Safety and Plastic Pollution: Guiding Principles

- Plastic pollution is an environmental justice issue
- Prioritize public health, economic development, and equity to ensure that the benefits of acting on plastic pollution are available to all
- Plastic and product manufacturers should bear responsibility for addressing plastic pollution
- Reduction of single-use plastics that are unnecessary, difficult to recycle, and cause harm in the environment should be prioritized to the maximum extent practicable
- Recognize the importance of effective recycling systems, but acknowledge that we cannot recycle our way out of the growing crisis through recycling alone



# U.S. Actions

- Lead by example with federal sustainability
  - EO 14057 - Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability
- Build on and support current federal actions
  - Support federal actions and objectives, like the EPA's National Strategy to Prevent Plastic, and foster cohesion and coordination among agencies
  - Looking into federal partnerships and solutions with non-government actors
  - Encourage and enhance federal actions that will also yield climate and justice benefits
- Participate in international legally binding instrument
  - U.S. is active player in negotiations; CEQ involved in international dialogues
  - Want innovative and ambitious agreement - outcomes will impact domestic work (and vice versa)

**\*Integration of environmental justice needs to be considered in all efforts\***







Thank you

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# MOVING BEYOND PLASTICS

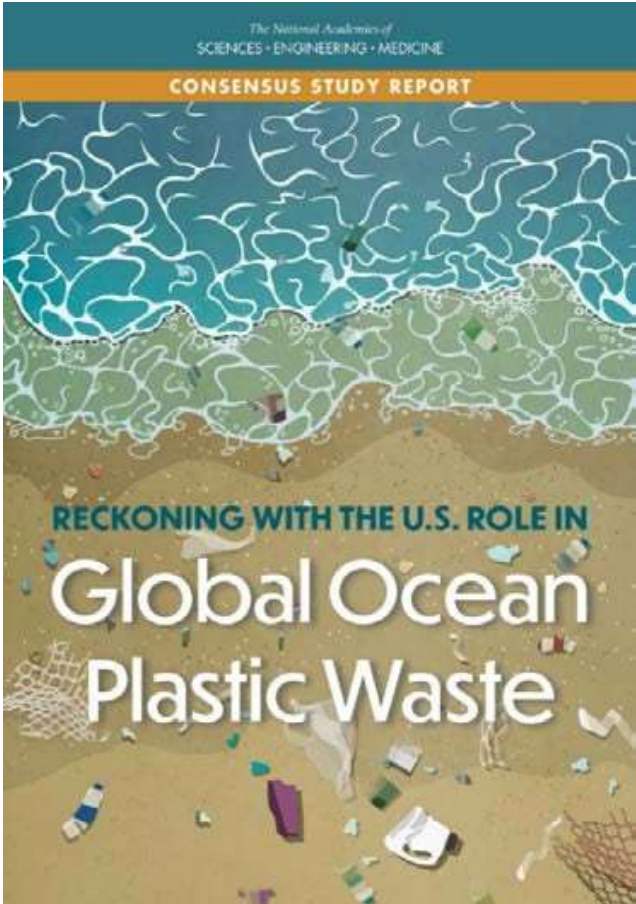
The environmental justice impacts of plastic  
pollution

An Environmental Law Institute  
Women in Environmental Law and Leadership Public Seminar

Margaret Spring | Monterey Bay Aquarium | 06.27.23



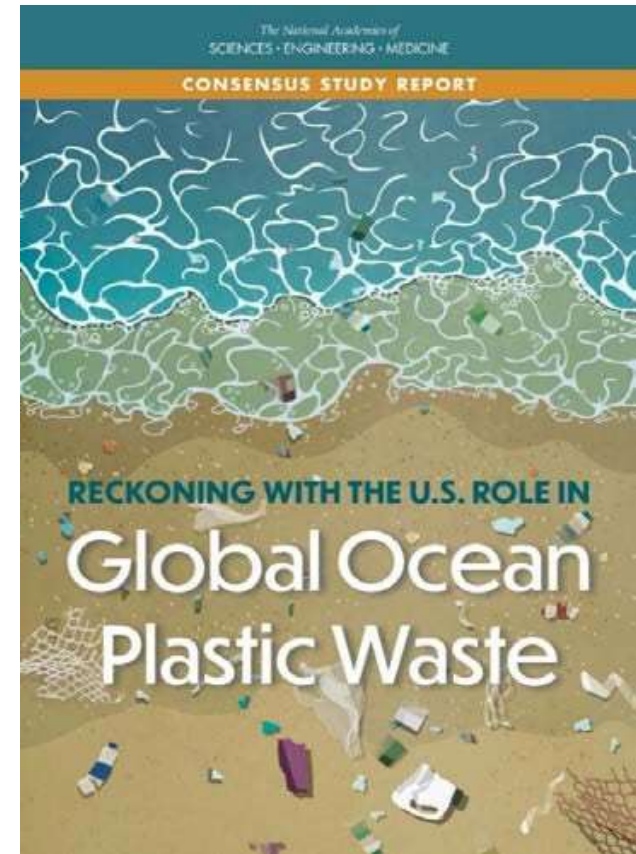
# Three recent reports assess the problem



# First synthesis of U.S. contribution to plastic pollution

- from bipartisan “Save Our Seas 2.0 Act” of 2020

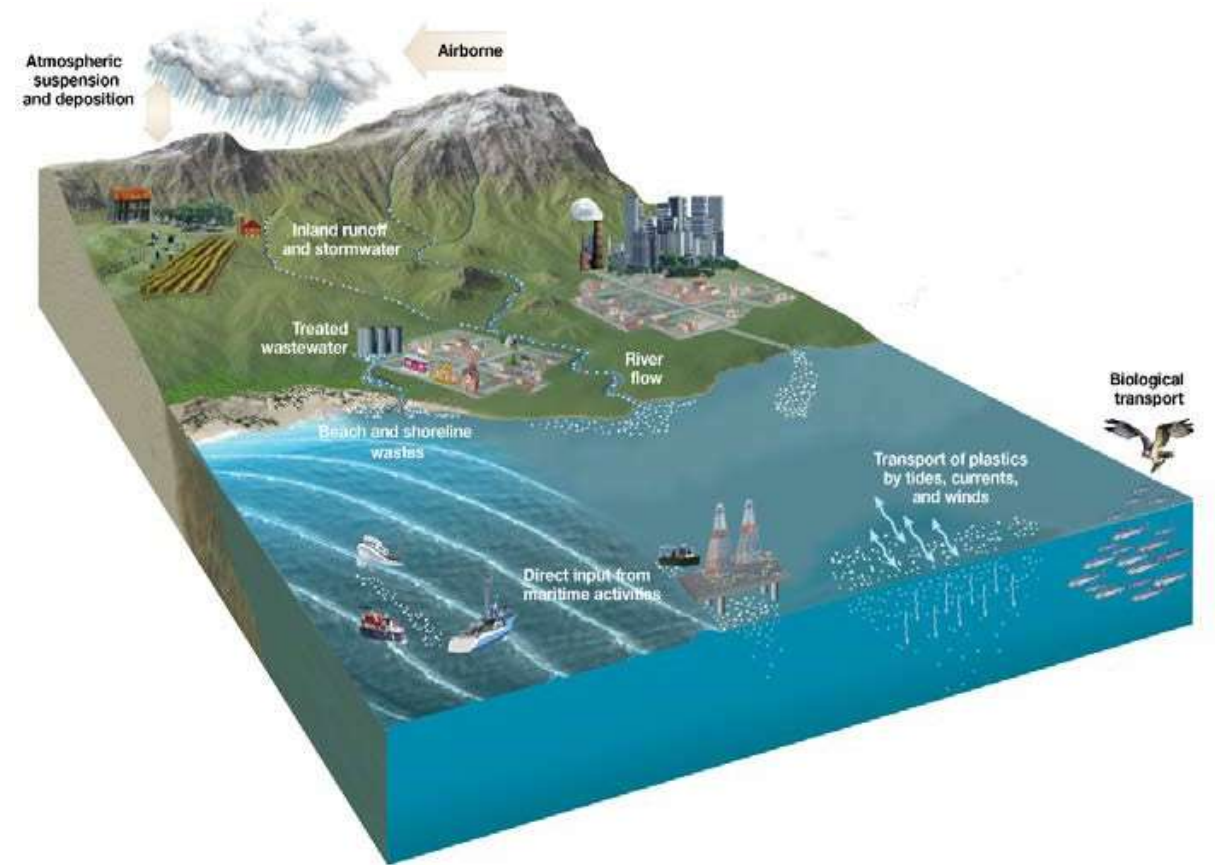
- Plastic being produced at unmanageable pace & U.S. plays a significant role (plastic production, waste generation, leakage).
- Disproportionately impacts vulnerable people and communities, at all stages of a plastic product’s life cycle.
- “Without modifications to current practices ...plastics will continue to accumulate ..with adverse consequences for ecosystems and society.”





# U.S. waste management and pollution controls insufficient

- Only 5% of U.S. plastic waste is recycled (down from 9%)
- Plastic “leaks” at every stage: production, use, disposal.
- In air, soil, water, food, people (rivers a major pathway)
- Not monitored/regulated as “pollutant” or “hazardous” (MSW)



# Action is needed *at each stage of the plastic life cycle* to reduce plastic waste entering the environment and ocean.

## Interventions



Source: NASEM

*Annals of*  
**Global Health**

Volume 89 | March 21, 2023  
SPECIAL COLLECTION



THE MINDEROO-MONACO COMMISSION ON PLASTICS AND HUMAN HEALTH

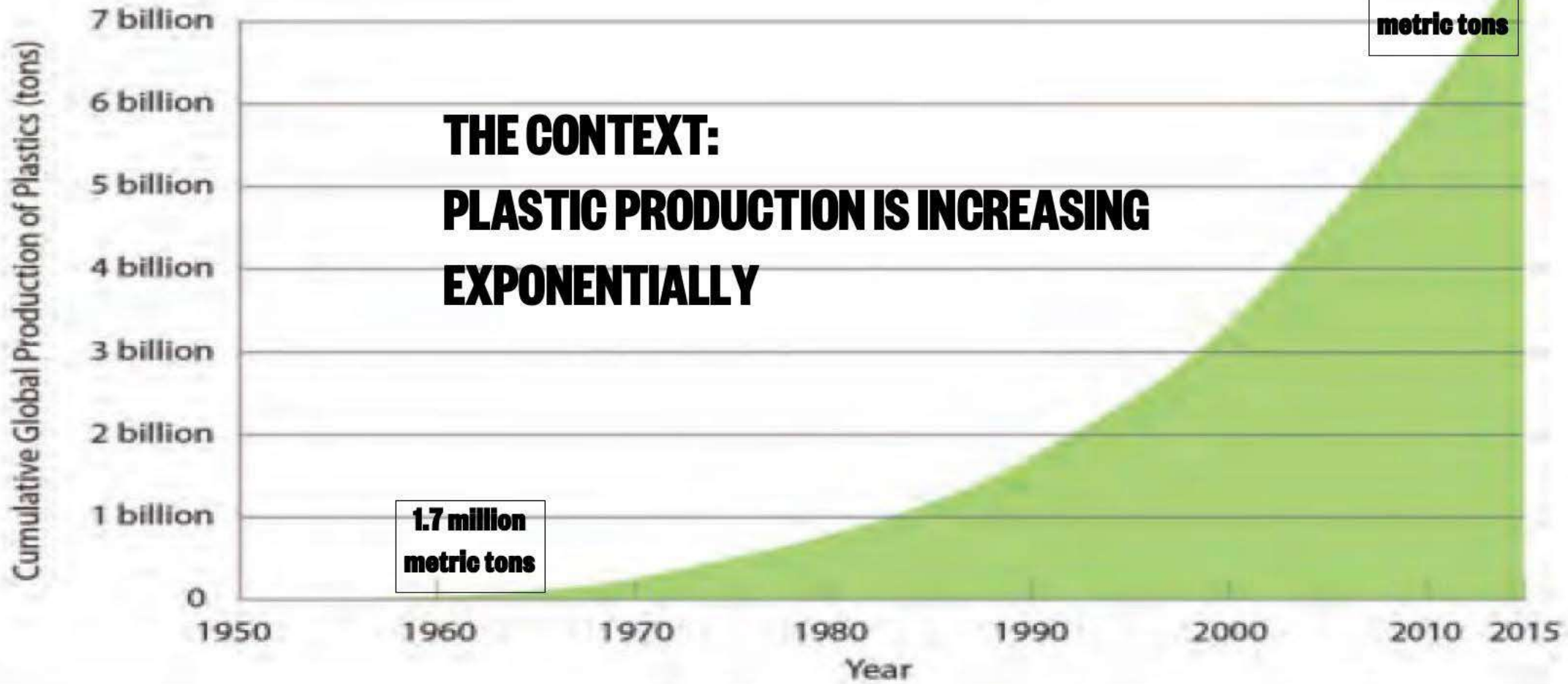


Philip J. Landrigan, Hervé Raps,  
**Maureen Cropper**, Caroline Bald, Manuel  
Brunner, Elvia Maya Canonizado, Dominic  
Charles, Thomas C. Chiles, Mary J. Donohue, Judith  
Enck, Patrick Fenichel, Lora E. Fleming, Christine  
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Haryanto, Richard Hixson, Hannah Ianelli, Bryan D.  
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Thompson, Andrea Vicini, Zhanyun Wang, Ella  
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Yousuf, **Sarah Dunlop**

doi: 10.5334/aogh.4056



# HEALTH IMPACTS OF PLASTIC



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# HEALTH IMPACTS OF PLASTIC



Plastic is associated with harms to human health at every stage of its life-cycle.

The more than 10,500 chemicals in plastic are responsible for the majority of these harms.

They include carcinogens, neurotoxicants and endocrine disruptors

Plastic's harms fall disproportionately on the most vulnerable people in society:

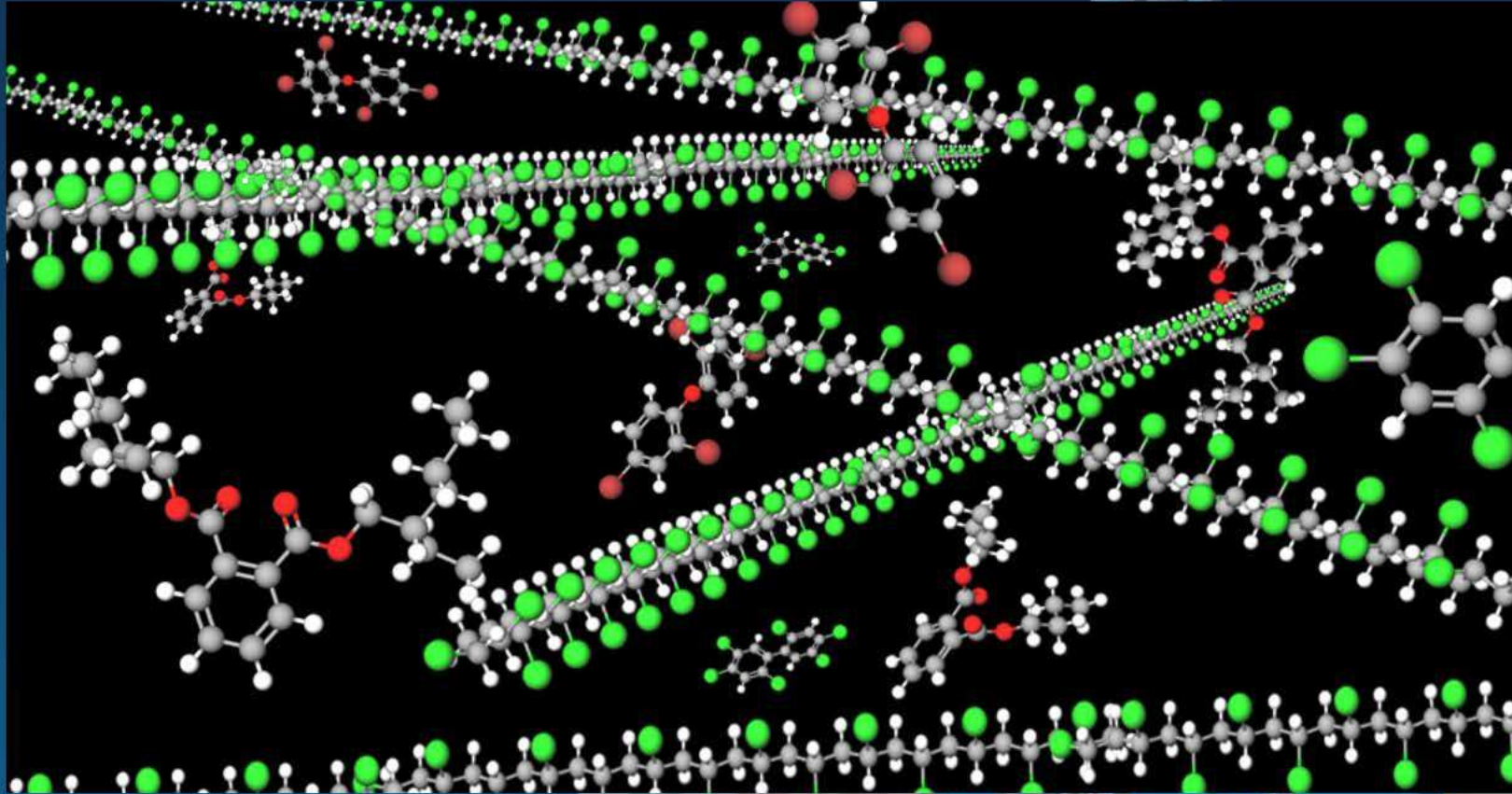
The poor  
The marginalized  
Minorities  
Indigenous populations  
*and*  
Our children.

In this section, we review current knowledge of plastic's harms to human health.

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# HAZARDOUS CHEMICALS IN PLASTIC



Plastic is complex

Monomers

Polymers

Additives

- plasticizers
- flame retardants
- uv stabilizers
- antioxidants

Processing aids

- catalysts
- solvents

Non-intentionally added substances (NIAS)  
(food contact materials)

- contaminants

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Complex in, complex out

- degradation products
- transformation products

**CHEMICALS LEACH OUT**



# HAZARDOUS CHEMICALS in plastic

## PRODUCTION

Toxic, mutagenic, and carcinogenic monomers are used to make plastic polymers<sup>2</sup>

PUR PAN PVC Epoxy resins  
Styrenic co-polymers

## USE

Of **906** chemicals associated with plastic packaging, **63** rank in the highest category for human health hazards<sup>3</sup>

**7/906** chemicals are PBT or vPvB  
**15** are EDC<sup>3</sup>

## DISPOSAL

Chemical additives in plastics can be released during recycling and recovery processes, and leach out from products made from recyclates<sup>5</sup>

Greater numbers of chemicals are found in recycled compared to virgin plastic<sup>6</sup>

Over **10,500** chemicals are used to make plastic, comprising monomers, additives and processing aids<sup>1</sup>

### HAZARD CLASSIFICATIONS

None reported  
**4,100**

High concern  
**1,254**

Medium concern  
**1,232**

Low concern  
**3,950**

Many chemicals in food packaging can leach out onto food, leading to human exposure<sup>4</sup>



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# MINDEROO-MONACO COMMISSION ON PLASTICS AND HUMAN HEALTH



## Social and Environmental Justice

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# “Social and Environmental Justice” for plastic means...

Reversing burdens in the geographies and among groups least responsible for it – and who lack the political power or resources to address the impacts.

This means taking action to reverse –

1. Unequal access to information and roles in decision making (**procedural**); AND
2. Unequal distribution of burdens on certain groups and people (**distributive**)

*Plastic and chemical pollution are adding to and worsening inequitable impacts from climate change, toxic and air pollution, loss of biodiversity, and ecosystem and species decline*

Source: NASEM

# Groups most affected by plastic pollution

Burdens and impacts are most keenly felt in the **Global South, in small island states, and in disenfranchised areas in the Global North**. These include –

- Indigenous populations
- Coastal communities (including Small Island States)
- Women, Children and Future Generations
- People of African descent
- Fossil fuel extraction workers; Chemical and plastic production workers
- Informal waste and recovery workers
- Residents of “fenceline” communities (also called “sacrifice zones”) near fossil fuel extraction, plastic production, and plastic waste/recycling facilities

Source: NASEM



# SOCIAL AND ENVIRONMENTAL JUSTICE

Vulnerable people, such as workers and fence-line communities, are disproportionately affected by:

## PRODUCTION



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### Fossil fuel extraction

Oil and chemical discharges

Resource and habitat loss

Soil and water contamination

### Petrochemical refining

Hazardous chemical releases

Resource and habitat loss

Soil and water contamination

### Prenatal exposure

Premature rupture of membranes

Premature births

Low birth rates

### Compounded inequities

Environment

Education

Employment

Housing

Healthcare

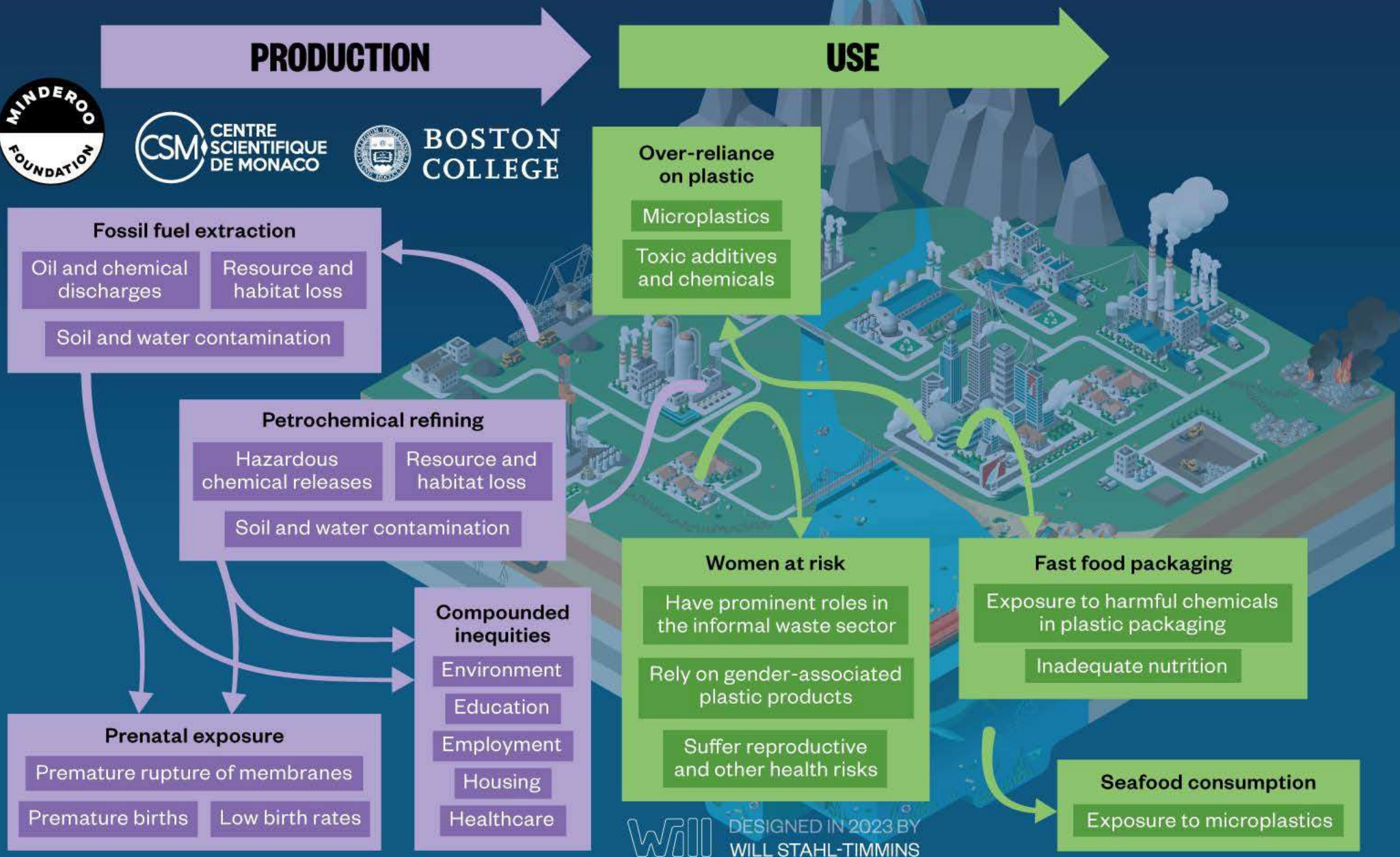


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# Social and Environmental Justice: Procedural

- Reduce sources and risks
- Hold producers accountable
- Equitable, inclusive participation and rights
- Transparency, access and right to information
- Full economic / social cost estimation



[Abir Abdullah / Climate Visuals Countdown](#)

# Stage-Specific Solutions: Distributive (examples)

- Equitable siting
- Safety, health measures
- Benign alternatives  
affordable and accessible
- Restrict toxic plastic  
imports
- Ban open burning
- Acknowledge and address  
societal roles



Jim Bowen, "[Baton Rouge Refinery](#)" via [CC BY 2.0](#)

# One EX: California SB 54 Plastic Pollution & Producer Responsibility Act

## Environmental justice and equity measures

- Source Reduction (2032 Targets)
- Producer Responsibility (\$)
- New Fund: Starting in 2027, producers must fund mitigation, affected low-income & disadvantaged communities = \$5 Billion/10 yr.
- Regs or new infrastructure must avoid causing disproportionate harm to those communities.



25% of Plastic Packaging cut by 2032



65% of Single-Use Packaging Recycled by 2032



100% Packaging in California Recyclable by 2032

<https://calrecycle.ca.gov/packaging/packaging-epr/>



# Contact Information



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THANK  
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## The Environmental Impacts of Plastic Pollution:

A Global and Domestic  
Environmental Injustice



# Plastic Pollution: A Global and Domestic Environmental Injustice

- Plastic Pollution and Global Environmental Justice
- Plastic Pollution and U.S. Environmental Justice
- Plastic Pollution and Solutions





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