



How To Solve The Plastic Problem In Houston

Brandy Deason, Climate Justice Coordinator
Dr. Inyang Uwak, Research and Policy Director

Everyone has a right to breathe clean air.

Introduction

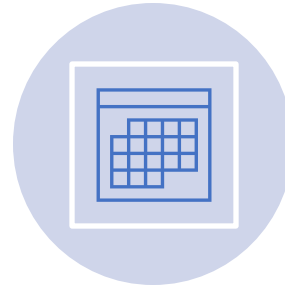
Thank you

- Why we are concerned about the Houston Recycling Collaboration
- Chemical or Advanced “Recycling”

Plastic Challenges



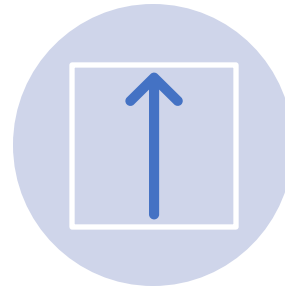
Single-use plastics make up more than a third of plastics produced today



Used for seconds, they take centuries to break down and many are not needed



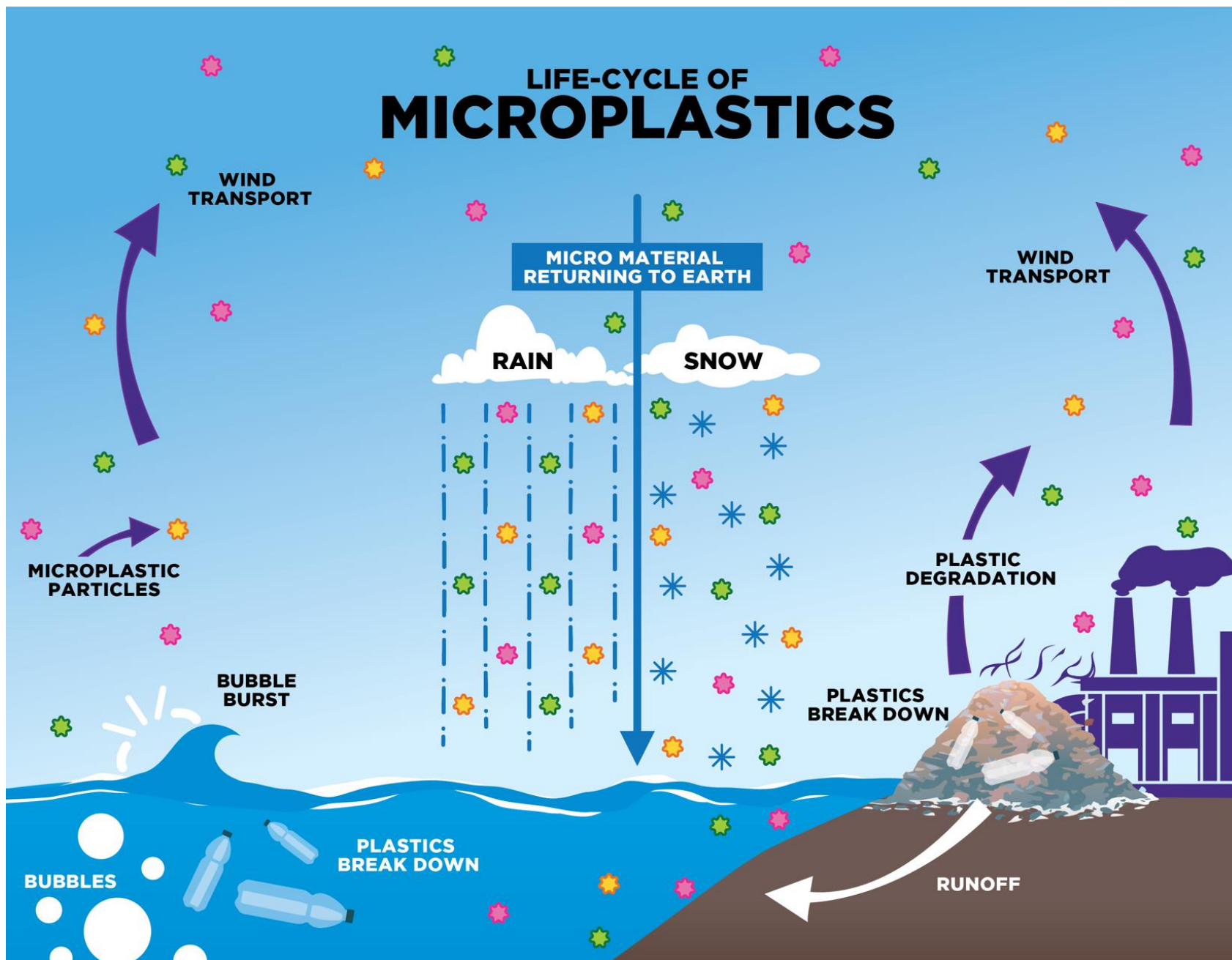
Half of all plastics ever made have been in the last 20 years



Production of plastics is increasing at a substantial rate

<https://www.sciencedirect.com/science/article/pii/S2772397624000042>

LIFE-CYCLE OF MICROPLASTICS



Sources of Microplastics

Tires

Paints

Textile

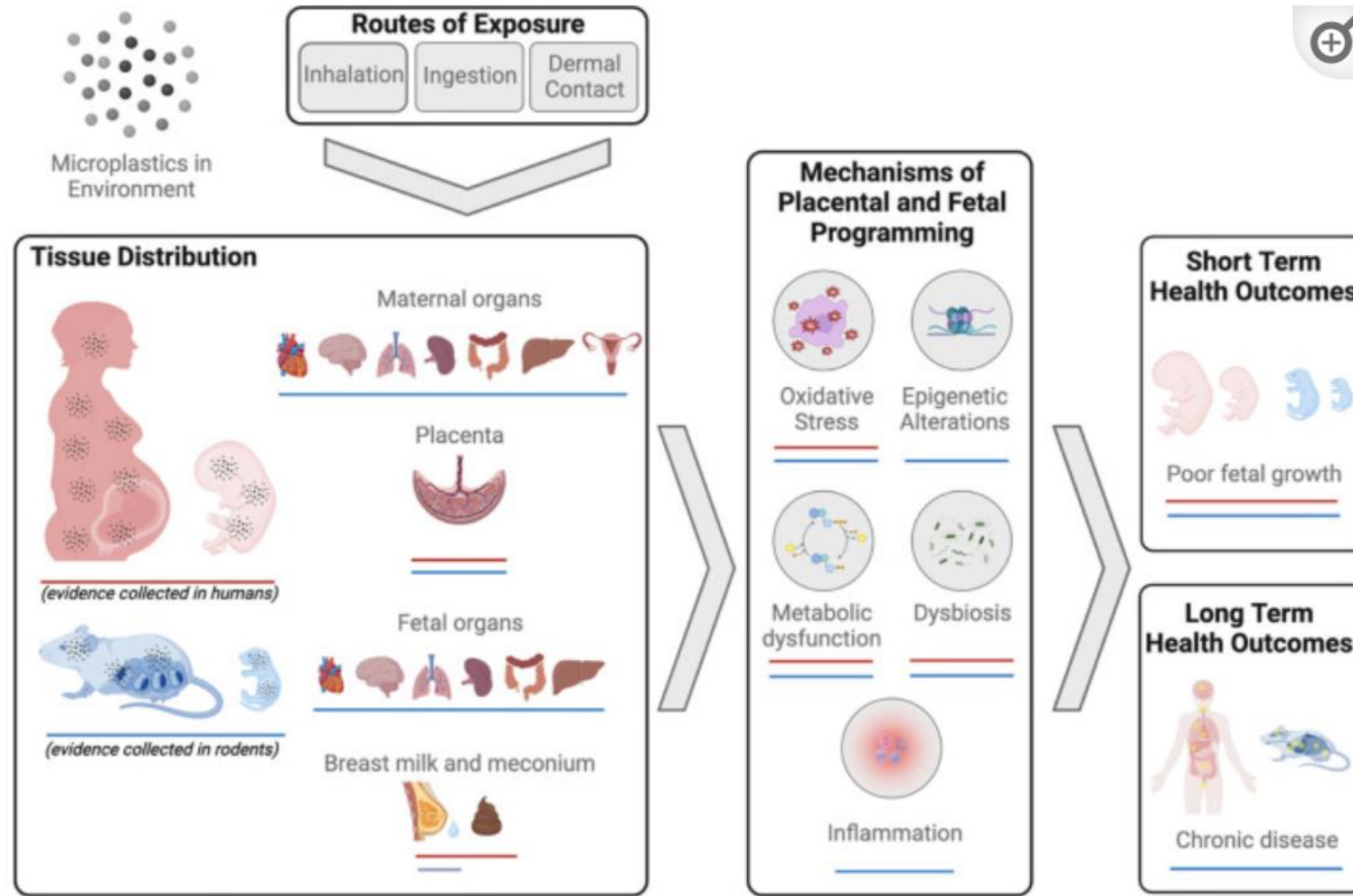
Pellets

Detergent capsules

Artificial turf

Also added to products like cosmetics & fertilizers+++

Figure 2



Summary of evidence of micro-nanoplastics (MNPs) exposure and impacts on reproduction and development in humans and mammals.

Recommendations

Install a water filter

Use reusable bags

Use reusable water bottles

Avoid microwaving food in plastics

Avoid Styrofoam packaged foods

Support a cap on plastic production





This Photo by Unknown Author is licensed under [CC BY-SA](#)

Plastics Are Made From Chemicals And Fossil Fuels



Fossil fuels = coal, oil and natural gas

Most plastics today are made from **ethane**, a byproduct of fracked gas

This photo by Unknown author is licensed under [CC BY-SA](#)

Houston Area Landfills

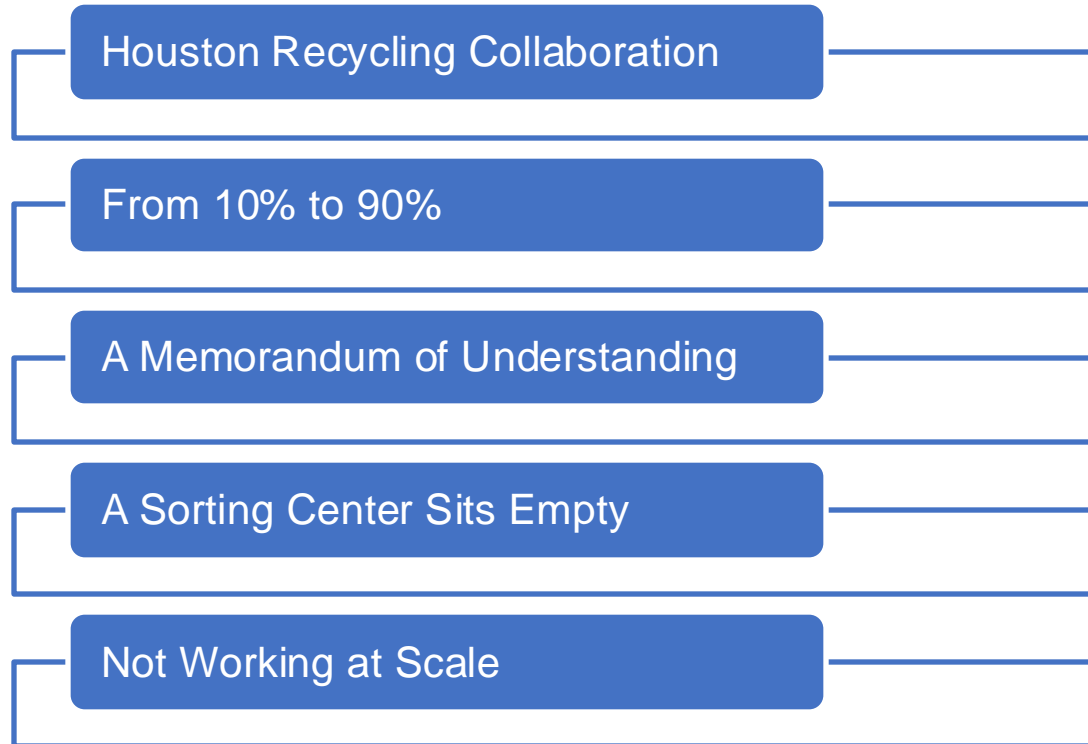
Plastics contribute to climate change

Plastics are made of ethane with added chemicals and colors

These differences in properties make plastics hard to sort for recycling

Houston Recycling Collaboration

What is the HRC?



InsideClimate News + CBS

- Dumped at Wright Waste Management
- Outdoors Near a Neighborhood
- No Fire Safety
- Not Permitted to Hold Plastics

Chemical or Advanced “Recycling”

A suite of processes that heats or chemically treats plastic to break it down into raw components to be used to make other plastics or, in large part, fuel.

Chemical/Advanced “Recycling”



Requires large amounts of energy which contributes to climate change



Creates hazardous waste, greenhouse gas and air pollution



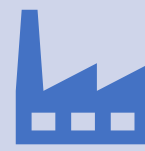
The plastics used contain multiple compounds that can be toxic to humans



An untold amount is turned into diesel fuel and aviation fuel and burned



Encourages a continued increase in plastic production



Has not been shown to work at large scale but is promoted as part of the solution

Moving Forward Together



Rescind the Memorandum of Understanding



Support a garbage fee



Improve mechanical recycling



Eliminate single-use plastics in city buildings and events



Moving Forward Together

- Promote reuse and refill options
- Begin a composting program
- Support a state bottle bill



This Photo by Unknown Author is licensed under [CC BY-SA-NC](#)

Help Is On the Way

- Sysco“...This year’s Earth Day theme of ‘Planet vs. Plastics’ was a perfect opportunity to highlight how we are working ...to reduce plastics and packaging waste,” said Neil Russell, Sysco’s Chief Administrative Officer.”
- Sprouts has eliminated single-use plastic bags from stores
- Petco charges 10 cents for plastic bags
- Amazon has committed to plastic packaging reduction
- Target and Walmart have begun to allow people to bring their own reusable bags for grocery pickup

Summary

Plastics are made from chemicals and fossil fuels that are a source of pollution

Plastics contribute to climate change

Microplastics pollute our gulf, harm our seafood, and harm our bodies

Our landfills, full of plastic, need our help to last longer

Mechanical recycling of plastics has a lower "carbon footprint" than chemical "recycling"

Engaging in and promoting zero waste policies works

We need to end the Houston Recycling Collaboration

Chemical recycling is not real recycling, it is essentially plastic burning



Thank You

Questions?

Everyone has a right to breathe clean air.