



Ocean Plastics: Industry-led Initiatives to End Plastic Waste



Steve Russell, VP, Plastics
American Chemistry Council
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Plastics Division Members



BAYPOL



ExxonMobil





Vision:

A future where plastics deliver societal benefits such as efficiency, safety and sustainability, and after use/reuse they are captured for recycling or converted to other valuable products.



13 CLIMATE ACTION



15 LIFE ON LAND



12 RESPONSIBLE CONSUMPTION



2 ZERO HUNGER



11 SUSTAINABLE CITIES AND COMMUNITIES



6 CLEAN WATER AND SANITATION



Plastics Enable Sustainable Development Goals



Automotive

Support plastic/composite use
Generate safety & efficiency data



Packaging

Promote benefits & demonstrate sustainability
Increase recycling & recovery



Building & Construction

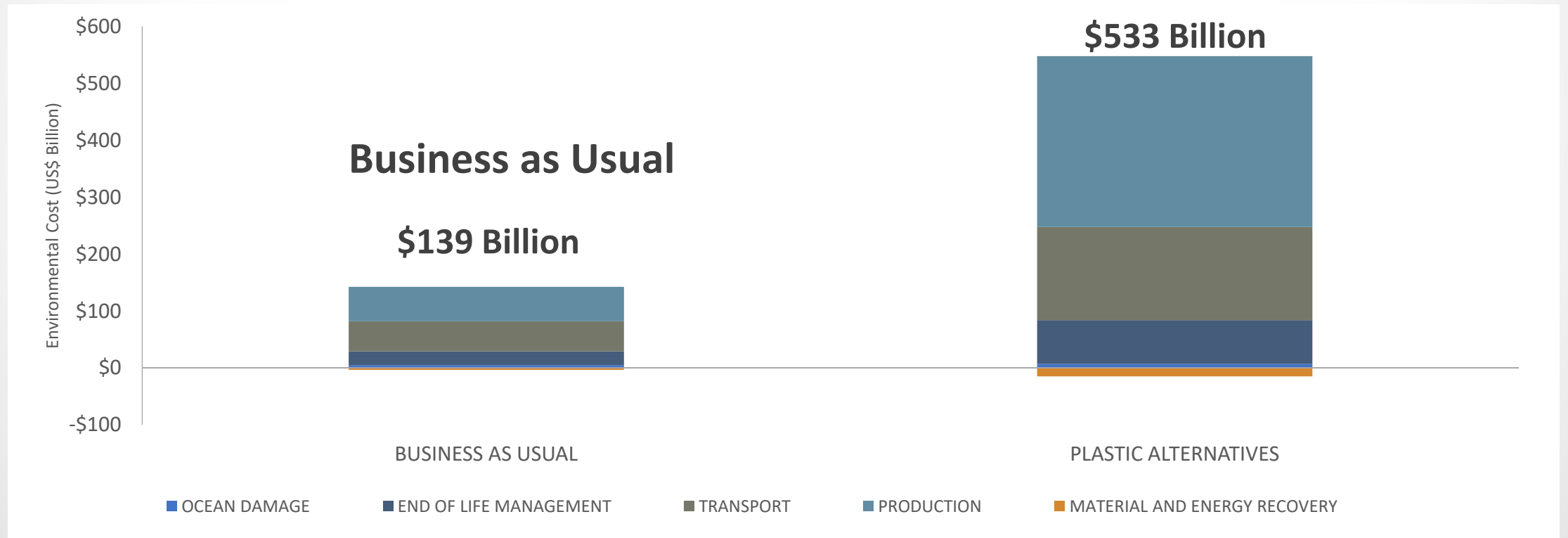
Promote energy efficiency
Pipe & insulation benefits

Packaging and Sustainability



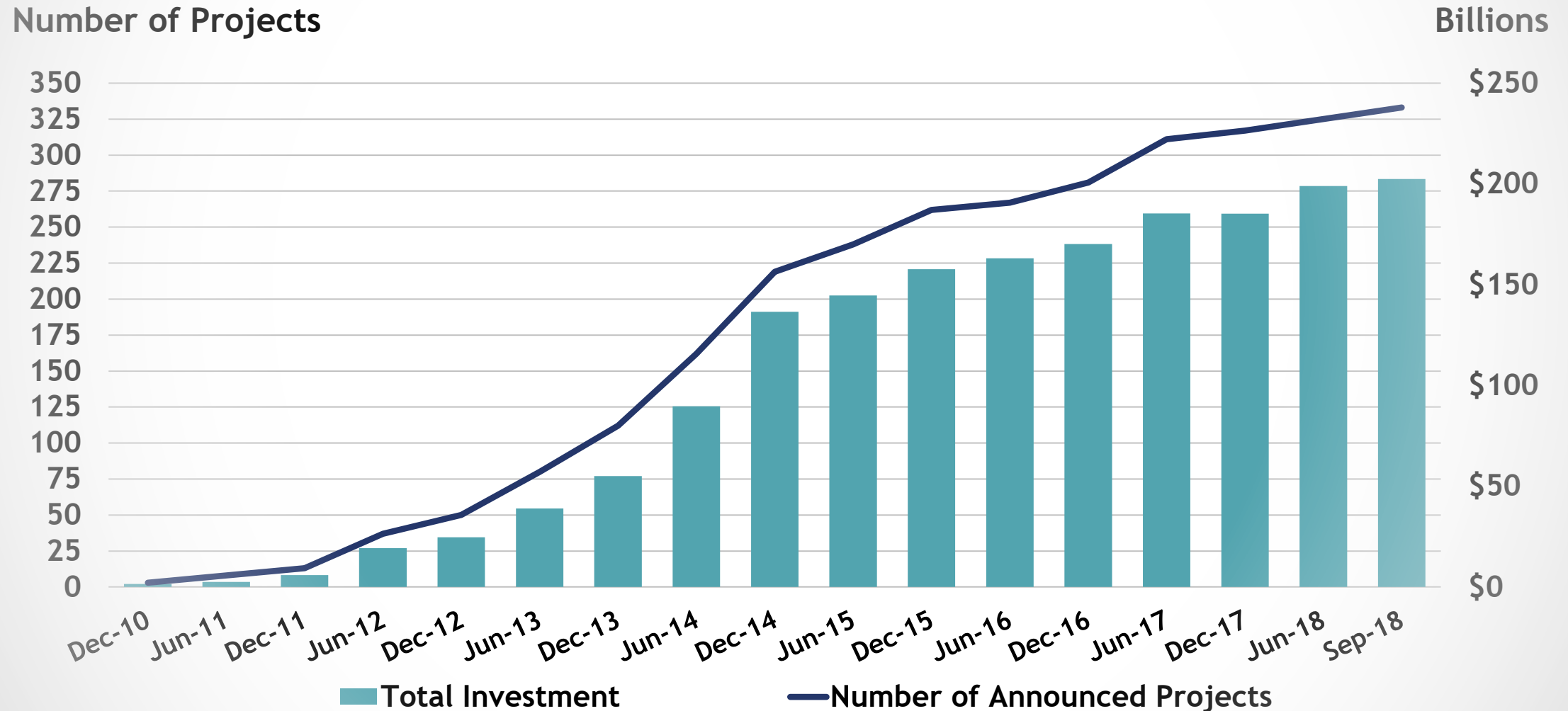
Natural Capital Costs

Plastic Alternatives



Trucost, Plastics and Sustainability: A Valuation of Environmental Benefits, Costs and Opportunities for Continuous Improvement, July 2016.

Cumulative Announced Chemical Industry Investments from Shale Gas



Source: ACC analysis



Pilot Program: Flexible Packaging Recycling



Helping Drive Federal Research

ACC involved in 3 funded projects to support recycling research with a total value of \$1.4MM



NEW OPPORTUNITIES FOR FLEXIBLE FILM RECYCLING



National, Multi-stakeholder Public Outreach & Education Initiative

Goal: Double film recycling by 2020 to **2 billion pounds**

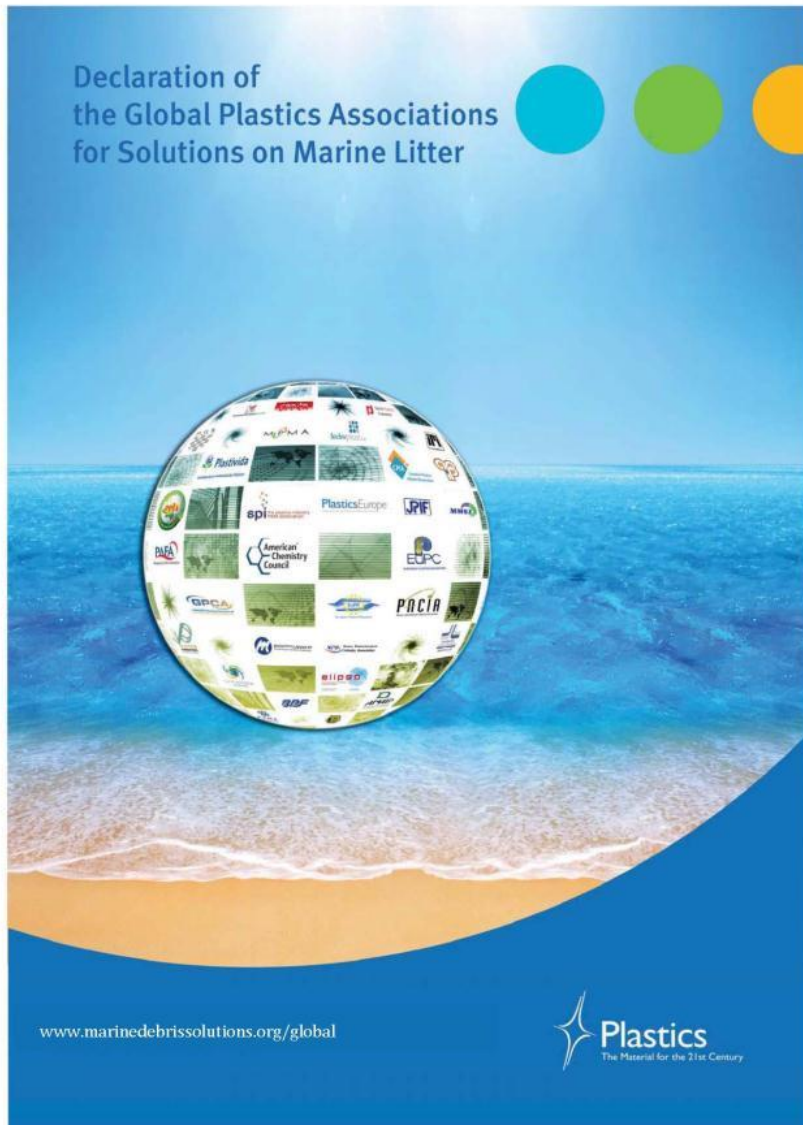
Partnerships are taking off!



Flexible Film Recycling Group



Created Global Association Alliance



“Global Declaration on Solutions”

- Launched in 2011
- Signatories launch projects on education, recycling, pellet control
- Encourages stakeholder engagement
- Transparently report progress

[illegible]

www.marinelittersolutions.com

2011		2013		2015		2017	
Members	47	Members	60	Members	65	Members	75
Countries	27	Countries	34	Countries	34	Countries	40
Projects	100	Projects	185	Projects	260	Projects	355

Plastics Division Circular Economy Goals

✓ 2040 Goal

- 100% of plastics packaging is reused, recycled or recovered

✓ 2030 Interim Goal

- 100% of plastics packaging is considered recyclable/recoverable

✓ Best Practice Goal

- 100% of Division's U.S. manufacturing sites participate in Operation Clean Sweep Blue by 2020, with all North American sites by 2022

Mechanical Recycling Challenges

Structural Challenges, Current Reality

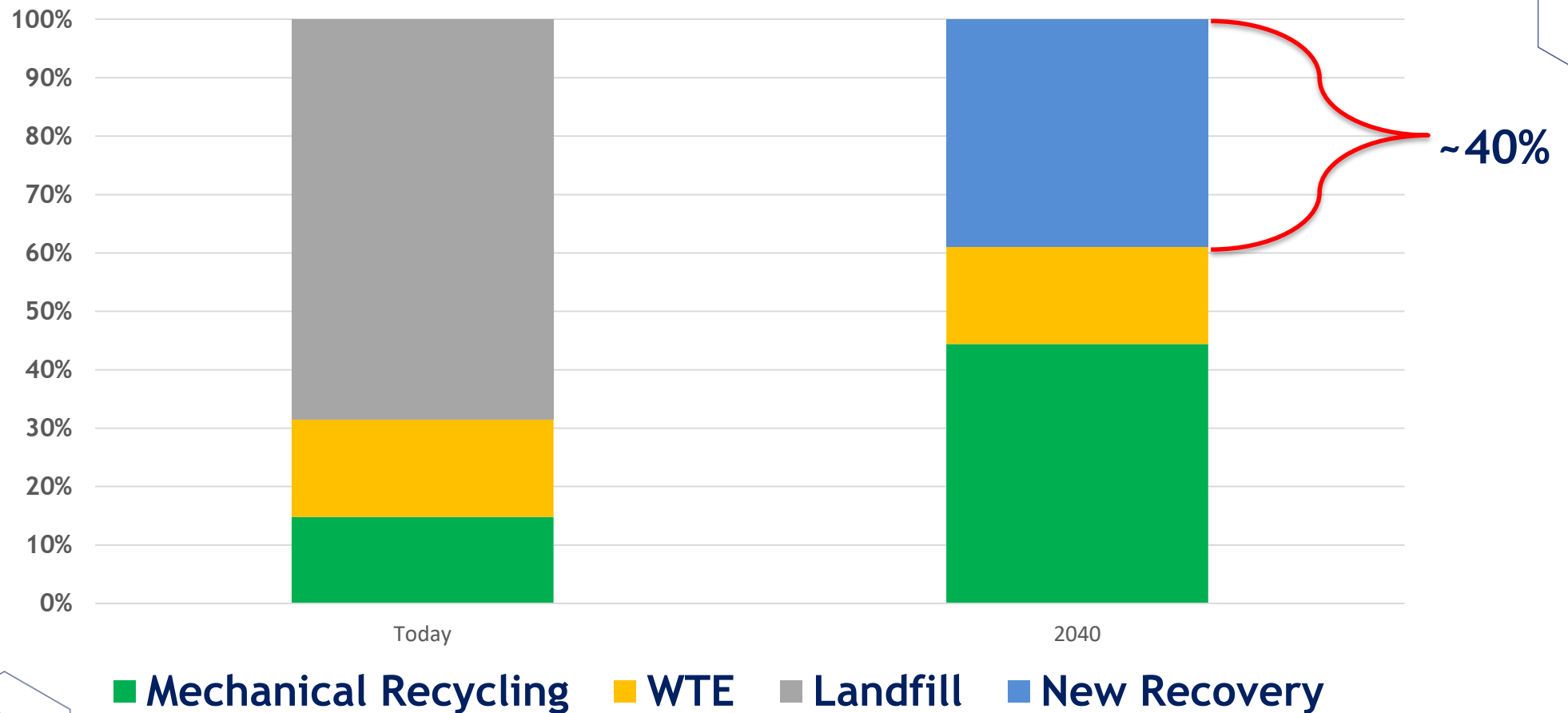
- Thousands of local systems - no national law
- Enormous material variability
- Performance/quality expectations
- Supply/demand of PCR
- Shale effect
- China's ban on materials



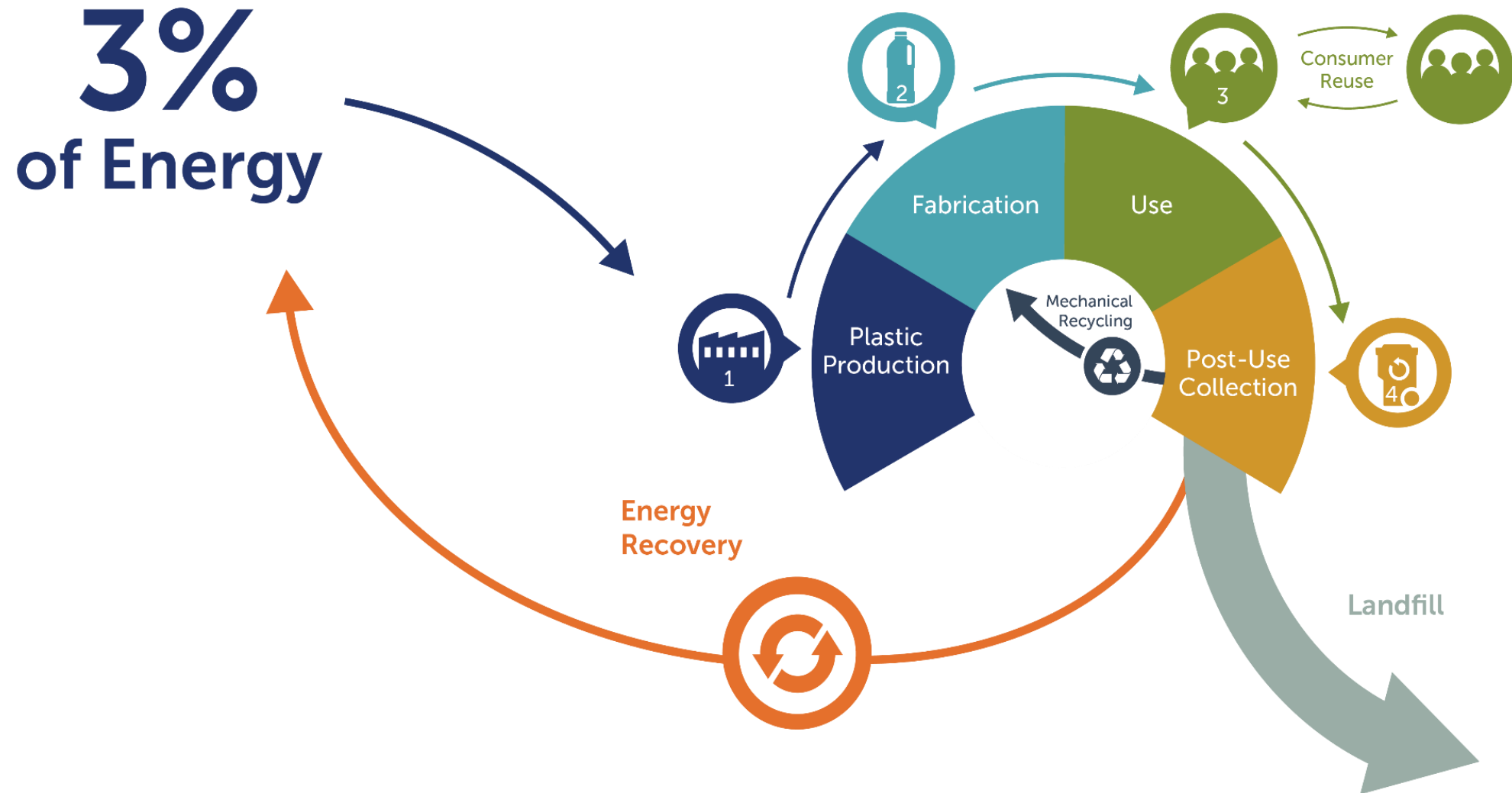
Bottom line: mechanical recycling has been resilient, but by itself will not get us to a true circular economy

New Recovery Solutions Required

Even if Mechanical Recycling of packaging grows 3-fold, 40% new recovery required

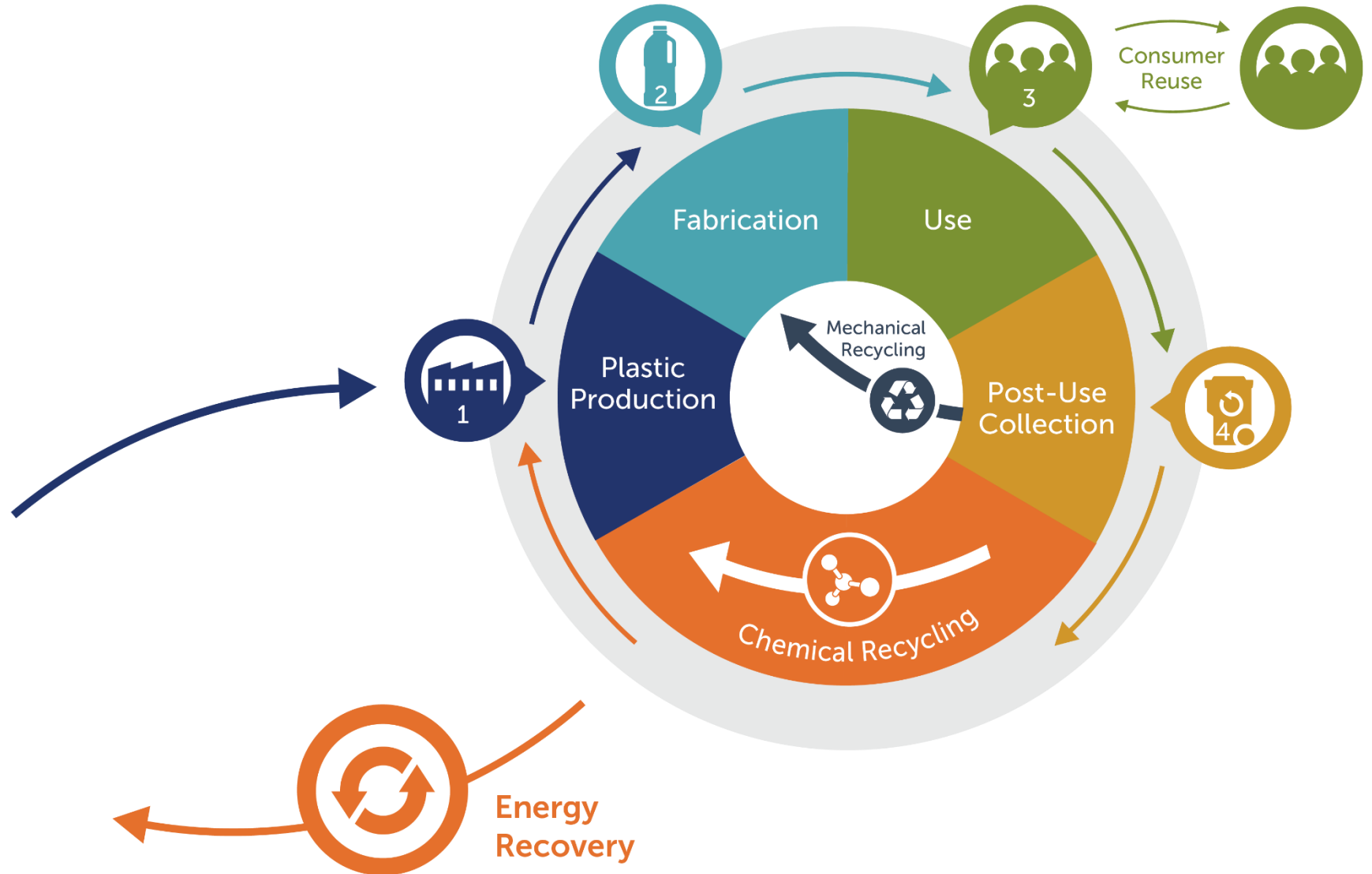


Plastics | The Current Model



Plastics | In A Circular Economy

3%
of Energy

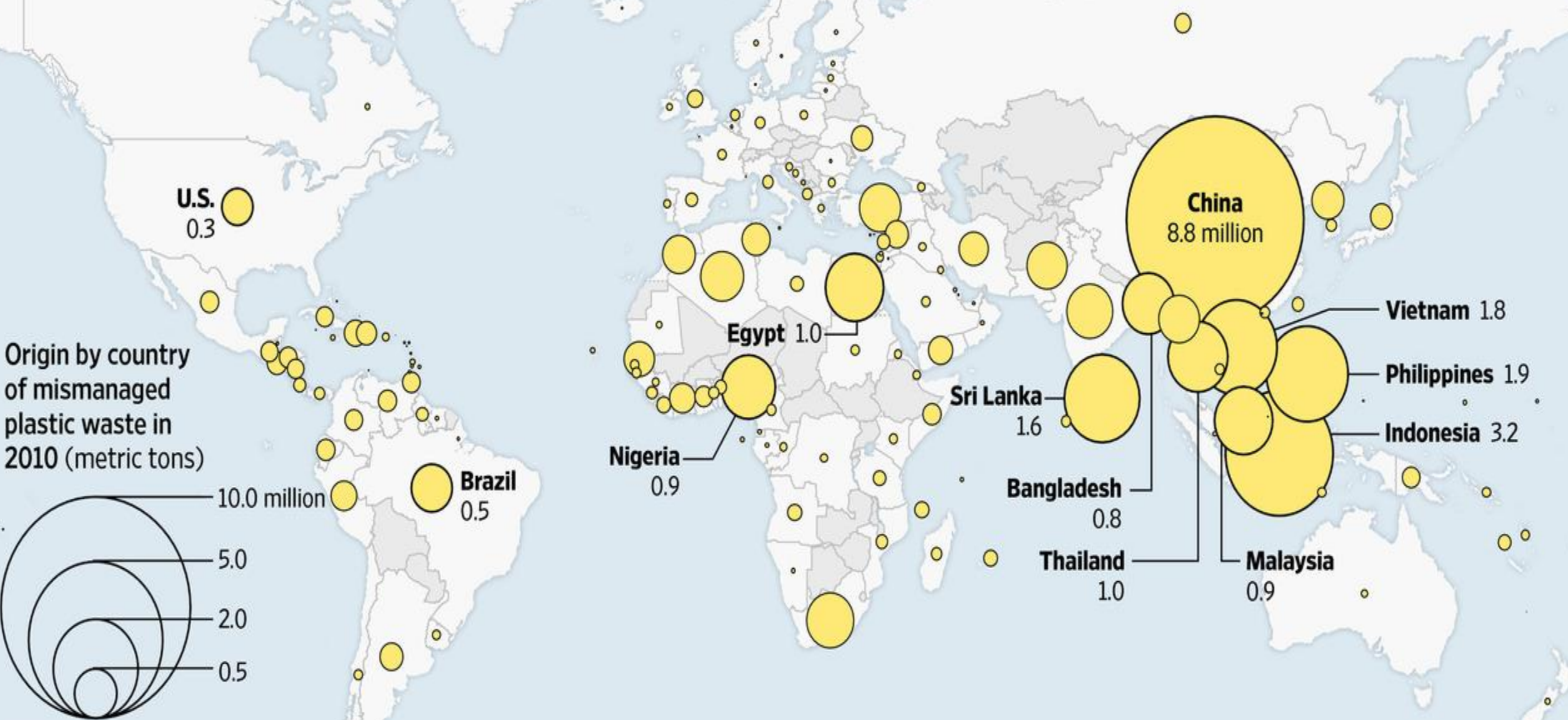


A Molecular Circular Economy

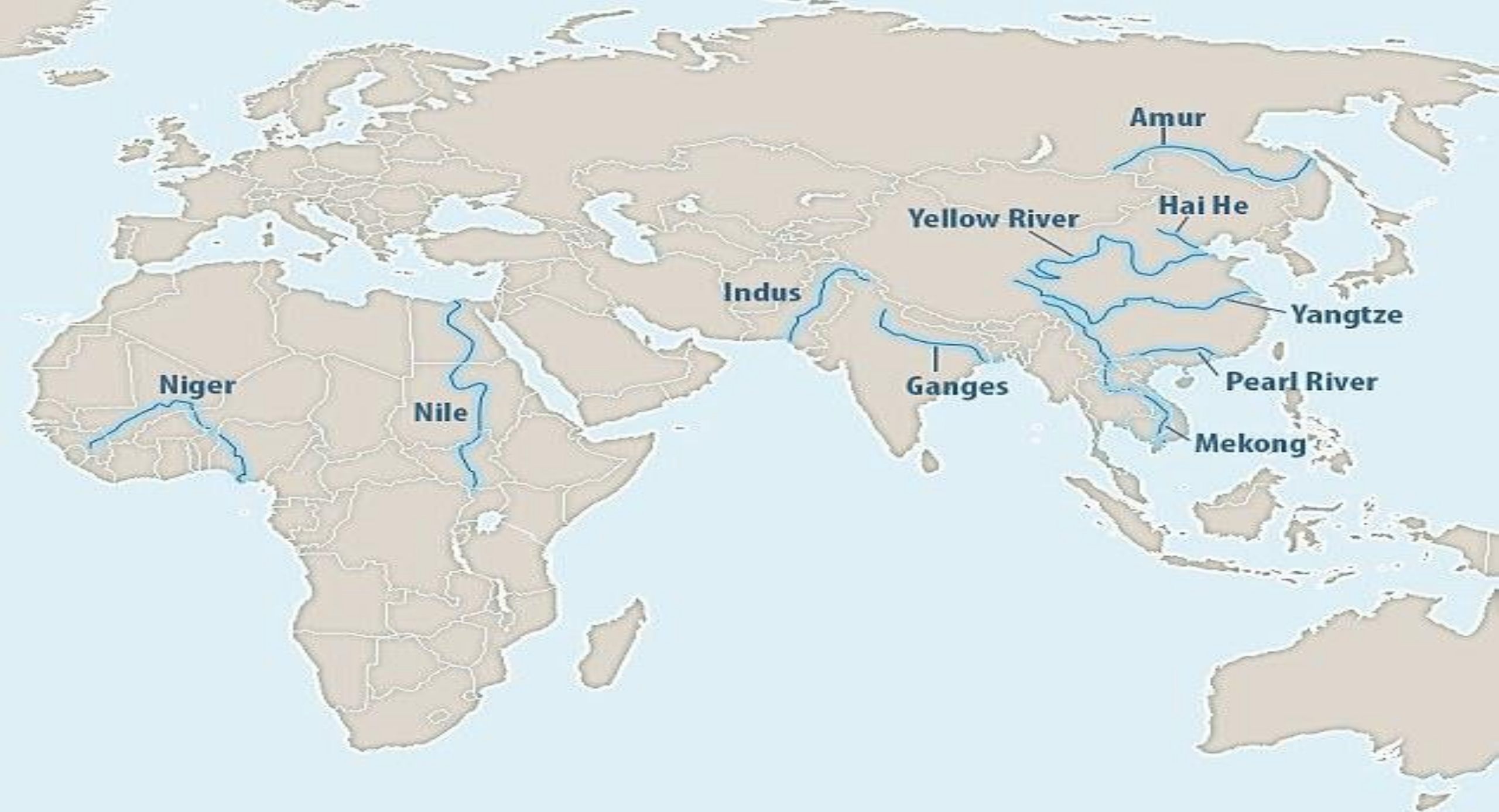
3%
of Energy



Ocean Detritus | Much of the world's mismanaged plastic waste ends up fouling global waters



Sources: Science; University of Georgia; University of California; Sea Education Association



A new global alliance to help end plastic waste

Information pack



Managing plastic waste is critical

About **200 MMT of plastic landfilled** or ending up as litter

Improper waste management leads to significant **leakage into oceans and seas** (~8 MMT per year)

By 2025, the ocean could contain **1 ton of plastic for every 3 tons of finfish**

By 2050 there could be **more plastic than fish** in the ocean

Plastic waste production is expected to **double in the next 15 years**

There is **untapped value in post-use plastic** that can be used to incentivize collection and reprocessing

The current landscape of efforts is *fragmented*, *overly-focused on developed countries*, and does not address the fundamental need for *infrastructure investment*





Solution:

A new & different approach

Strategic by combining the **expertise of the whole value chain** from raw material to manufacturing, to brand/retail, to waste management

.....

Comprehensive by focusing on the entirety of the challenge **from waste minimization to post-use solutions**

.....

Tangible by delivering **on-the-ground projects & investment** in infrastructure

.....

Market-oriented by deploying strategies to **increase the value of plastic waste streams** to support investment

.....

Collaborative by **bringing together industry, government, communities & civil society**



A new CEO led, cross-sector, not-for-profit organization with a clear mission to develop, accelerate & deploy solutions, catalyze public & private investment and engage communities to help end plastic waste in the environment

Alliance to End Plastic Waste

Four Part Strategy



INFRASTRUCTURE

Catalyze investment in enhanced waste infrastructure to prevent plastic from reaching the environment



INNOVATION

Innovate new materials, designs, technologies and business models based on science and economics



EDUCATION

Engage and collaborate with governments, businesses and consumers to drive effective solutions



CLEAN UP

Develop solutions to address and clean up areas of existing plastic waste in the environment

Investing \$1.5B USD over 5 years

Not for Profit 501(c)(3) status supports global operations, eligibility for foundation grants and potential tax benefits

FOUR PART STRATEGY



INFRASTRUCTURE



INNOVATION



EDUCATION



CLEAN UP

2 PATHS TO PROGRESS

PART A: \$0.5 B USD

Mutually-funded, philanthropic, alliance-branded programs

Part B: \$1B USD*

Aggregated company-sponsored & directed investments into waste management infrastructure or technologies supportive of the alliance mission

Officers

Representing each sector of the value chain



Executive Committee*



Board of Directors*

*Interest expressed, as of January 15, 2019



ALLIANCE MEMBERS

AND THEIR GLOBAL PRESENCE



FOR FURTHER INFORMATION ON PARTICIPATION, CONTACT:

Steve Russell

VP, Plastics Division

steven_russell@americanchemistry.com



Maria Mendiluce

Managing Director

Mendiluce@wbcsd.org

