HB 143 Advanced Recycling

House Resources Committee Bill

March 12th, 2023

What is "Advanced Recycling"?



RELATIVELY NEW TECHNOLOGY

ALLOWS INDUSTRY TO RECYCLE PLASTICS THEY ARE CURRENTLY UNABLE TO PLASTIC FEEDSTOCK CAN BE TURNED INTO PETROLEUM-BASED PRODUCTS

What is "Advanced Recycling"?

Leveraging chemistry to convert post-use plastics into valuable products which extend the life of plastic

Outputs:

- Basic building blocks for new chemicals
- Feedstocks for new plastics
- Plastic additives (e.g. for asphalt roads, roofing)
- Waxes
- Lubricants



How Does Advanced Recycling Work?

Multitude of processes that can break down plastic polymers into base chemical components

Gasification, pyrolysis, and solvolysis Non-combustive processes

Advanced Recycling Processes



Pyrolysis



Is Advanced Recycling Necessary?

Estimated that as little as 8.7% of recycled plastic is actually reused [1]

This does not fully account for the amount of plastic that is thrown away or ends up in the environment as pollution

Number expected to drop as more plastic is produced

[1] United States Environmental Protection Agency, 2018

"Circular Economy"



- Incentivize markets to reuse products
- Allows waste to be returned to economy or used more efficiently
- Issue transcends party lines must conserve space for waste & use resources wisely

Potential Economic Benefits

Assumptions:

- One Advanced Recycling facility in state
- 59,700 metric tons of landfilled plastics, 50% available for Advanced Recycling facility
- Use of IMPLAN economic modeling software

Economic Impact of Advanced Recycling and Recovery in Alaska

	Employment	Payroll (\$mil)	Output (\$mil)
Direct Effect	100	\$10.4	\$34.2
Indirect Effect	90	\$6.7	\$24.7
Induced Effect	60	\$3.8	\$11.3
TOTAL	250	\$20.9	\$70.2

1 For more information on the IMPLAN modeling process, visit IMPLAN.com

2 <u>https://www.americanchemistry.com/better-policy-regulation/plastics/advanced-recycling/resources/the-potential-economic-impact-of-advanced-recycling-and-recovery-facilities-in-the-united-states</u>

Why Advanced Recycling?



Low GHG process to create petroleum-based products



Decrease landfill space taken up by plastics



Greatly increase the percentage of plastics that are recycled



Economic benefits to Alaska

HB 143 – Advanced Recycling

- Delegates authority to the DEC to develop manufacturing regulations related to air emissions and water discharges from advanced recycling facilities
- Clarifies that advanced recycling facilities will be regulated as manufacturing facilities not as waste disposal facilities
- Clarifies that plastic feedstock and products will not be classified as industrial, solid, or other waste
- Defines terms