

At Chevron Phillips Chemical, we have a vision for every piece of post-use plastic to be recycled, reused or repurposed. Recycling gives valuable materials another life and keeps plastic waste out of the environment. We are actively working toward the American Chemistry Council (ACC) and PlasticsEurope pledges that state 100% of plastic packaging will be re-used, recycled or recovered by 2040.

## Traditional Recycling

Traditional recycling converts plastic waste into new objects through mechanical processes

like grinding and remolding recycled plastic into new objects. While traditional recycling has limitations, this method is built upon years of experience and constantly developing to meet the challenges of processing modern plastic waste streams. Traditional recycling will remain an important part of the solution to end unmanaged plastic waste.



### ADVANTAGES

- Lower carbon footprint
- Straightforward process
- Established technologies



### LIMITATIONS

- Items must be sorted, washed and dried
- Limited applications for recycled material
- Process hampered by contamination

## Advanced Recycling

Advanced recycling is an innovative technology that complements traditional

recycling by processing items that are difficult-to-recycle and not suitable for traditional methods. Through advanced recycling, our company can take waste plastics which would otherwise end up in a landfill or the environment and upgrade them into brand-new products that are clean and safe.



### ADVANTAGES

- Ability to process difficult-to-recycle items
- Extensive applications for recycled material
- Tolerant of contamination



### LIMITATIONS

- Increased energy required
- Sophisticated equipment
- Emerging technologies

All recycling technologies have a role to play in processing modern plastic waste streams. By leveraging the strengths of both traditional and advanced recycling, we are advancing the industry's transformation from a linear to circular economy.



## Take Action

More communities around the world are expanding their recycling programs. We encourage you to reach out to the waste management organization near you to learn more about your local recycling opportunities and which items can be processed in your area.

Recycling is becoming easier, but still faces limitations. In our efforts to improve how plastic is recycled, we are working toward the ACC and Plastic Europe pledges that 100% of plastic packaging will be re-used, recycled or recovered by 2040.

<sup>1</sup> N. Voulvoulis, R. Kirkman, T. Giakoumis, P. Metivier, C. Kyle and V. Midgley, Examining Material Evidence. The Carbon Fingerprint, Imperial College (London), 2020

<sup>2</sup> American Chemistry Council, Sustainability: Recycle, <https://plastics.americanchemistry.com/Recycling-Plastics/>