



**LEADING WITH
REAL SOLUTIONS.**

INVESTING IN REAL CHANGE.

Innovations to help achieve your decarbonization and sustainability goals.

Progressing the
**Circular Plastic
Economy**



**Advanced Recycling
for Plastics**



**Industry-leading
Investment**



**Solutions for Recycled
Plastic Feedstock**



**Partnership
Benefits**

Ethylene producers are rising to the **PLASTIC WASTE CHALLENGE**

**Global
demand
for plastic
INCREASING**

350
MMT

2020

950
MMT

2050

Government regulations, consumer behavior and industry emphasis on sustainability are driving unique solutions to

help reduce
plastic waste

LEARN MORE:

- [Alliance to End Plastic Waste](#)
- [The Ellen MacArthur Foundation](#)

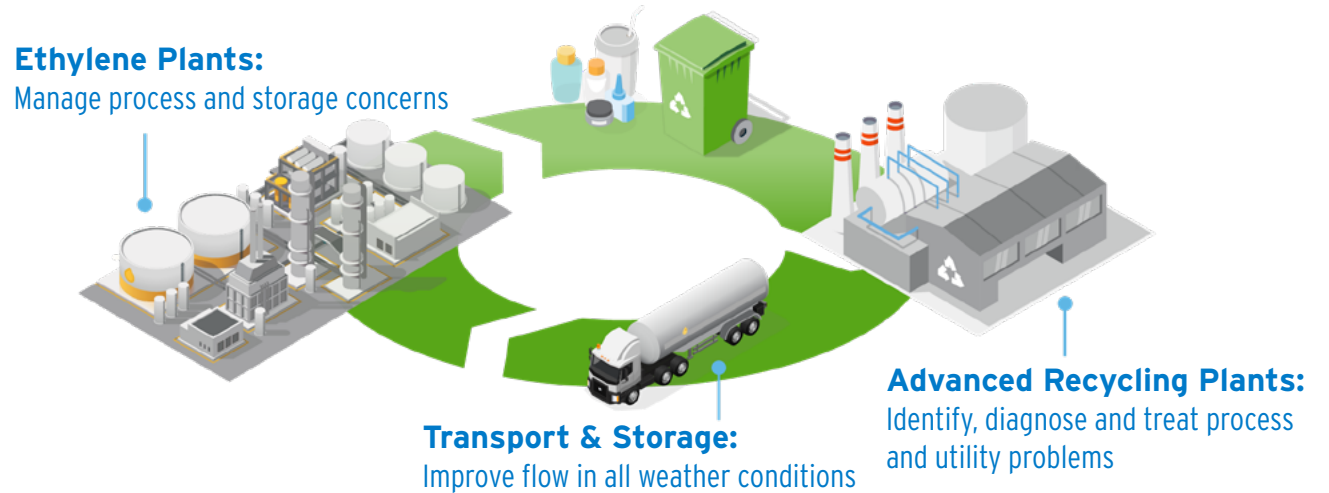
Advanced recycling methods

for plastic waste such as pyrolysis and other chemical recycling technologies are poised to grow – providing alternate feedstock to downstream industries, which can, in turn, provide virgin polymer resins.

Nalco Water recognizes these macro-trends and is addressing the **OPERATIONAL CHALLENGES** associated with the handling of new alternate feedstocks.



Take advantage of our **FULL-CYCLE EXPERTISE**



PROACTIVELY SOLVING YOUR CHALLENGES:

<p>Comprehensive, UNIQUE SOLUTIONS for recycled plastic waste streams</p> <p>➤</p> <p>Addressing stability, cold-flow & corrosion concerns</p> 	<p>30+ TYPES of recycled plastic waste feed streams sampled</p> <p>➤</p> <p>Providing safety, operational reliability & asset protection</p> 	<p>Successful ethylene and recycling FACILITY TRIALS across North America & Europe</p> <p>➤</p> <p>Defining key performance indicators and standards for feedstock quality</p> 	<p>Learning through OUR PRESENCE at over 80% of the ethylene plants worldwide</p> <p>➤</p> <p>Continually strengthening our solutions & on-site services</p> 	<p>Committed to GLOBAL SUSTAINABILITY & DECARBONIZATION</p> <p>➤</p> <p>Helping you achieve goals in a rapidly changing industry</p> 
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Learn how we solve the challenges of recycled plastic feedstock.



INNOVATIVE SOLUTIONS TO:

ENHANCE PRODUCT STABILITY

Unique extraction and stabilizing solutions remove film- and tar-forming compounds – enhancing short and long-term storage and making the oils fit for cracking in ethylene furnaces.

IMPROVE COLD FLOW PROPERTIES

Our innovative EVA-copolymer based improvers optimize flow year-round without costly heat-tracing equipment and transfer pipelines.

CONTROL ACIDIC CORROSION

Optimized neutralizer programs and online chloride monitoring provide valuable insights and control over potential acidic corrosion.

Products are proven safe for ethylene furnaces.



Our technologies make a
clear difference



Untreated



Treated with
Nalco Water
Solutions



LEARN MORE

ecolab.com/advanced-plastics-recycling

Discover how our industry-leading technologies can help your business recycle chemicals.



ACHIEVE your decarbonization and sustainability goals

Approach
plastic waste
recycling
**confidently,
safely and
reliably**

Minimize environmental impacts
with wastewater treatment strategies
and solutions for efficient cleaning



Help ensure ongoing profitability
through a tailored approach and
continuous R&D to optimize operations



Gain consistency and reliability
through personalized, close attention
to feed variability and performance



Protect and maximize asset integrity
with a partner who will help you reduce
unplanned downtime and expenses



ACTIVATE
ADVANCED
RECYCLING SOLUTIONS
FOR YOUR BUSINESS