WASTE AS A DOMESTIC ENERGY RESOURCE
Plastics industry is benefiting from significant increase in capital investments since 2012. 261 new plastics processor projects have been announced by over 200 companies in 37 states. As of Sept. 2014, 197 projects and $125 billion in potential capital investment have been announced, up from 97 projects and $72 billion as of March 2013. 64% of these projects and investments are by firms based outside the U.S.
Trends in Plastics Recycling

- Plastics recycling (tons) is **UP**.
- Consumer access to recycling is **UP**.
- Reasons to recycle plastics remain **strong**.
- State, municipal adoption of best practices is **UP**.
- Online resources for recycling professionals are **UP**.
Energy & GHG Reductions from Plastics

Greenhouse Gas

- Steel Can: 4377
- Plastic Canister: 3310
- Plastic Brick: 1051
Plastics are Captured Energy

- Natural Gas
- Crude Oil
- Non-Recycled Plastics
- Petroleum Coke
- High Grade Coal
- Low Grade Coal
- Wood

BTUs per LB

0  5,000  10,000  15,000  20,000  25,000
Versatility of Energy Recovery

Municipal Solid Waste

- Steam
- Energy
- Power
- Chemicals
- Substitute Natural Gas
- Transportation Fuels
- Crude Oil
Plastics-to-Oil Technologies Alliance

RES POLYFLOW™

Sealed Air
Re-imagine™

cynar®
PLASTICS TO FUEL

AmSty

agilyx
What Are Plastics-to-Oil Technologies?

**STEP 1:**
Plastics that can’t be economically recycled are delivered for processing

**STEP 2:**
Contaminants like metal and glass are removed from the plastic stream

**STEP 3:**
Plastics are heated without oxygen (pyrolysis)

**STEP 4:**
Gas is cooled and condensed into oil, fuels, and petroleum products

Fuels can power cars, buses, ships and planes

Petroleum products can then be used by manufacturers and industrial users
From Chemistry to Energy

Promote “all of the above” energy policy in Congress

Grow awareness of the role of chemistry in enabling energy efficiency

Increase education and advocacy focused on energy recovery
Promoting Sound Energy Recovery Policy

- Extend Definitions of “Clean Energy” & “Renewable Energy”
- Define Valuable Materials as Fuels
- Simplify State Permitting Processes, Include Energy Recovery as Part of Total Diversion Goals
States Take the Lead

Ohio

Massachusetts

Oregon

Maryland
Heightened Media Interest

Beyond Recycling: Recovering the Energy in Non-Recycled Plastics

Forget solar: New push for waste as renewable energy source
Thank You!

Craig Cookson
Director of Sustainability & Recycling
Plastics Division
craig_cookson@americanchemistry.com
202.249.6622