



Plastics Division

PLASTIC PIPES DELIVER (MORE THAN WATER)

COST SAVINGS, ENERGY EFFICIENCY, CARBON REDUCTIONS, DURABILITY, SERVICE LIFE

KEY TAKEAWAYS



Cost Savings

Installation and use of plastic pipes can significantly reduce upfront, operational and maintenance costs.



Energy Efficiency

Every 10 miles of pipe replaced with plastic = savings of 2,500 kWh of energy due to reduced friction. (Utah State University)



Carbon Reductions

Plastic pipes can deliver carbon reductions of up to 35% compared to alternatives (McKinsey).



Strength

Plastic pipes have break rates 3X lower than ductile iron and 12X lower than cast iron pipes. (Utah State University)



Service Life

Plastic pipes are designed to resist corrosion/tuberculation and are built to last... some in excess of 100 years.

\$\$

lifetime savings

10 miles plastic pipes

=

2500 kWh saved energy

up to 35% less CO₂

3X stronger than ductile iron

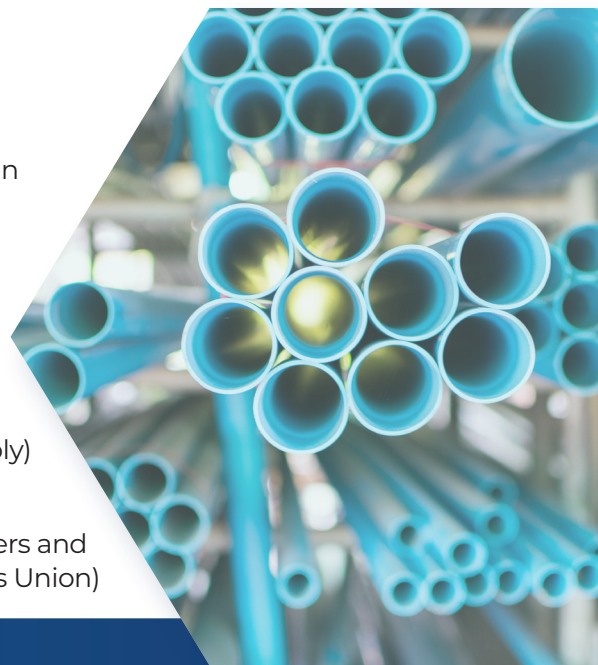
12X stronger than cast iron

± 100 years lifespan

U.S. POLICY

OPEN COMPETITION DELIVERS

- Eliminates outdated restrictions mandating legacy pipe materials in municipal water system construction projects.
- Allows local officials and project managers to choose materials based on cost and performance.
- Increases competitive bidding which saves community and federal tax \$\$.
- Transitioning to open competition could save **\$20.6 billion** (water supply) and **\$22.3 billion** (stormwater) over a ten-year period. (BCC Research)
- Switching from iron to plastic pipe nationally could save water ratepayers and taxpayers **≈\$371 billion** over typical life of materials. (National Taxpayer's Union)



Policy Ask

- Incorporate common-sense requirement for open competition when using federal \$\$.

AGRICULTURE WATER EFFICIENCY/FARM BILL

- Open irrigation agricultural canals lose up to **30%** of water to seepage and evaporation (canals provide $\frac{1}{2}$ of U.S. agricultural water).
- Inefficient irrigation systems waste **52%** of the energy they use... year after year.
- More efficient irrigation systems (pumps and pipes) could save **\$2.8 billion** every year in energy costs.
- Replacing existing U.S. irrigation pipes and canals with plastic pipes = saving **19+ million** metric tons of carbon over the lifetime of the system. Equivalent to annual carbon emissions of **2.4 million** homes.

(All: Cadeo Group)



Policy Ask

- Enhanced, robust funding for USDA (EQUIP) water and energy efficiency programs.
- Develop a calculator that allows farmers to readily quantify projected savings; plus tools and support to expedite program implementation.



Plastics Division

The American Chemistry Council (ACC) is a key stakeholder in U.S. infrastructure, providing critical solutions and jobs in construction, agriculture and water infrastructure. ACC member companies deliver cost-effective products and materials that improve the energy efficiency of our nation's water systems.

FOR MORE INFORMATION CONTACT

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