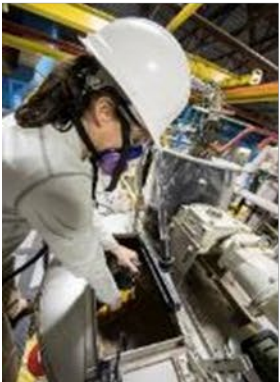


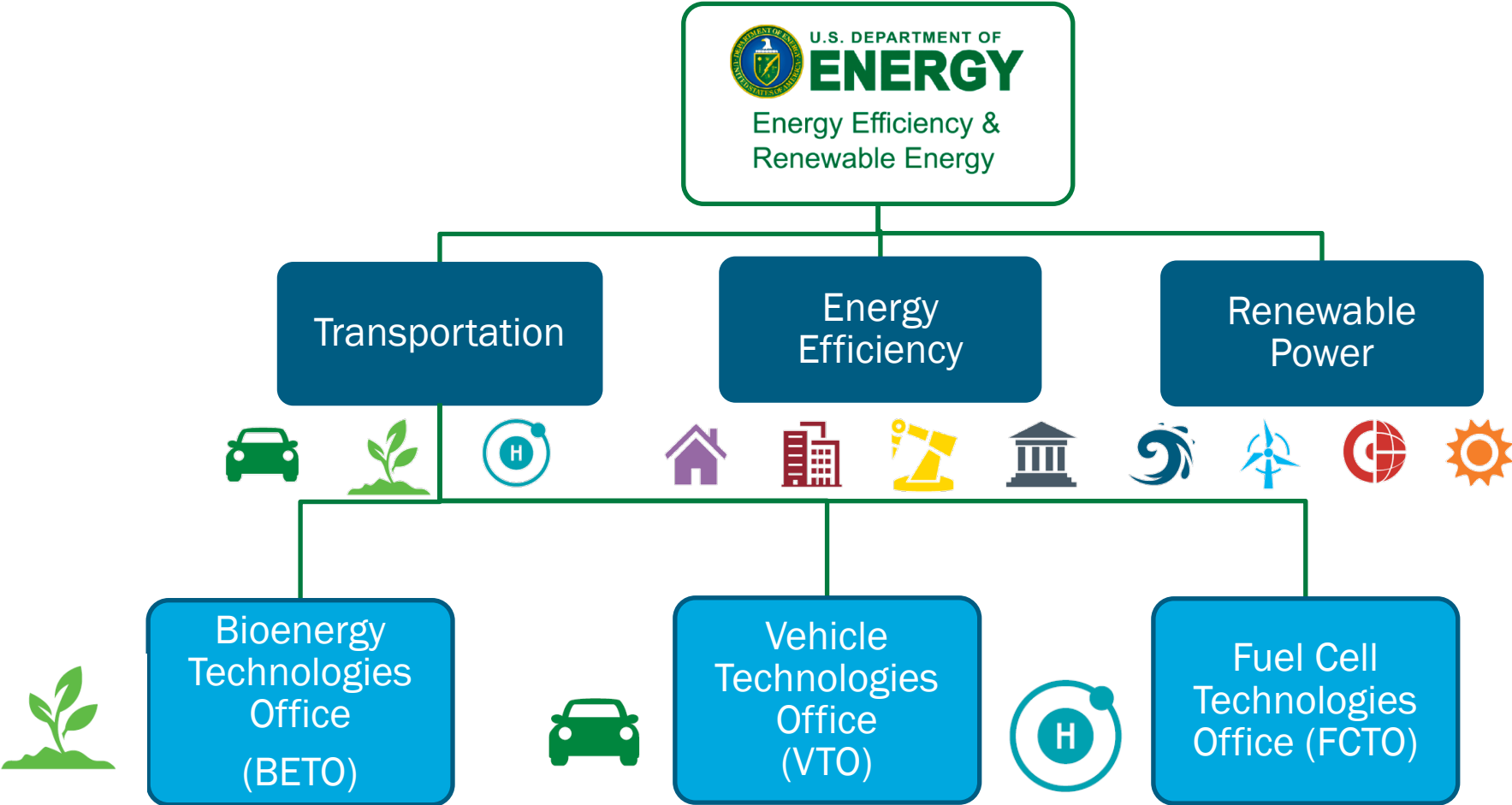
Bioenergy Technologies Office Overview

Valerie Reed, Acting Director

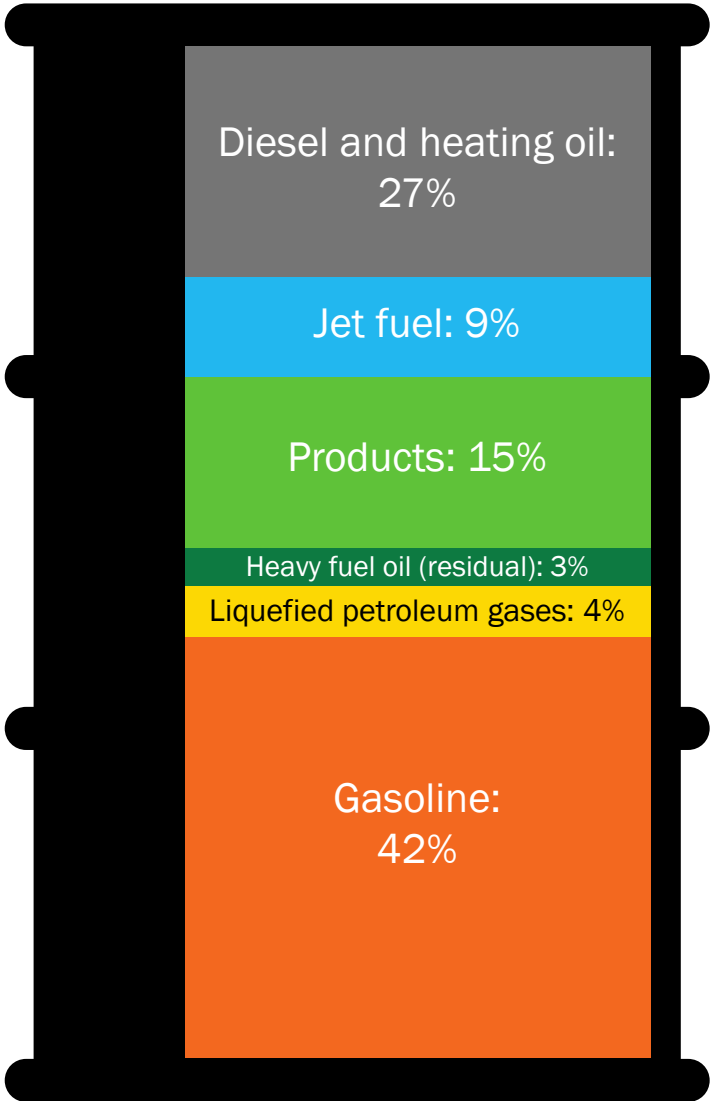
April 14, 2021



U.S. DOE Office of Energy Efficiency and Renewable Energy, Transportation Sector



Our Economy Is Built on Carbon



Photos by iStock

Bioenergy Delivers Unique Value



BETO research and development (R&D) enables:

- National security
- Jobs
- Economic growth
- Investment
- Competitiveness
- Resources
- Quality of life

Photo from National Biodiesel Board

BETO Mission, Vision, and Strategic Goals



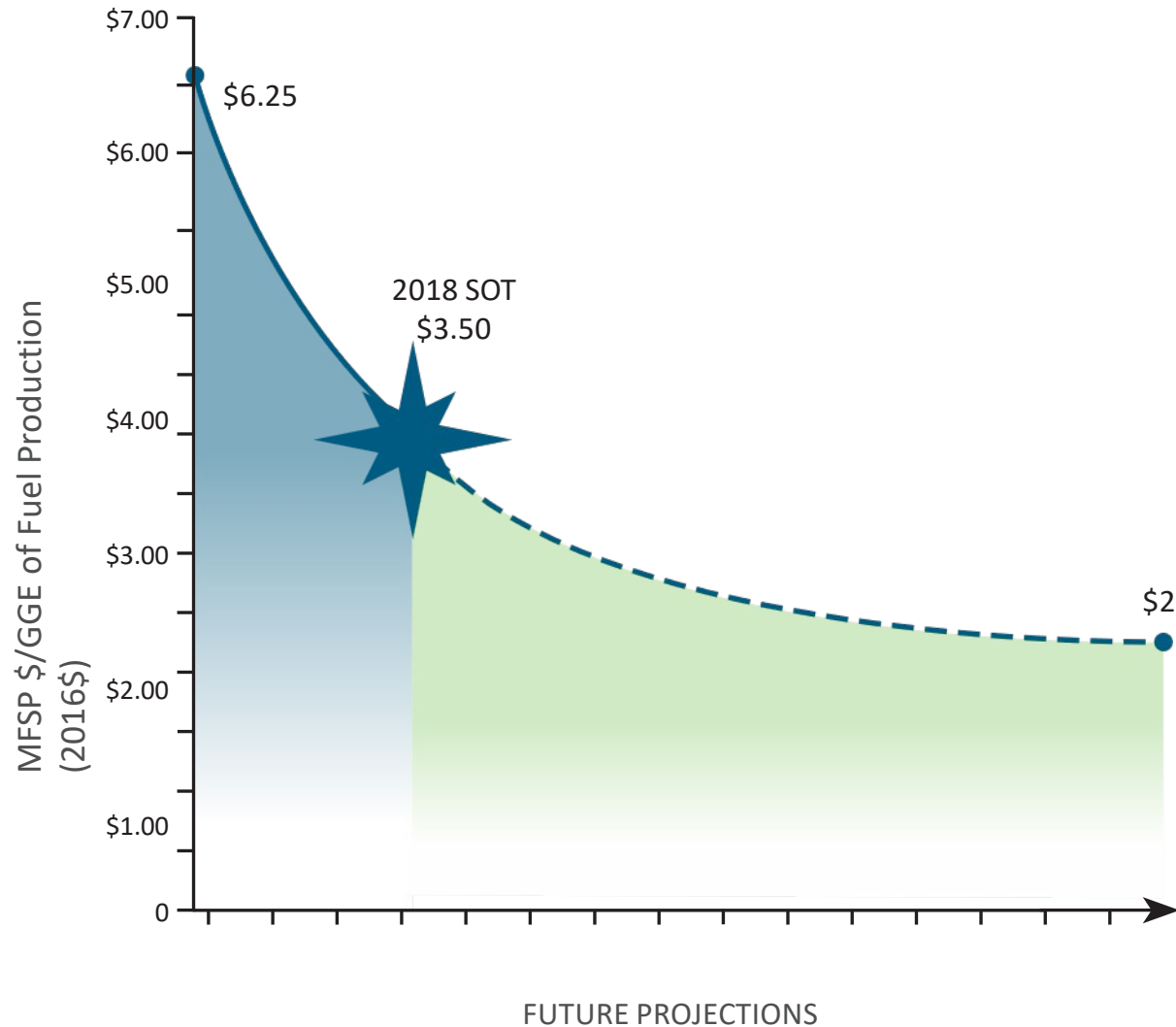
A thriving and sustainable bioeconomy fueled by innovative technologies

Developing transformative and revolutionary sustainable bioenergy and coproduct technologies for a prosperous nation

Develop industrially relevant technologies to enable domestically produced biofuels, biopower, and coproducts

Opportunities to Reach BETO Price Goals

BETO completed analysis of strategies to reduce biofuel costs toward \$2/GGE



Key Strategies for Price Reduction



Developing Efficient Biorefineries



Intensifying Process Designs



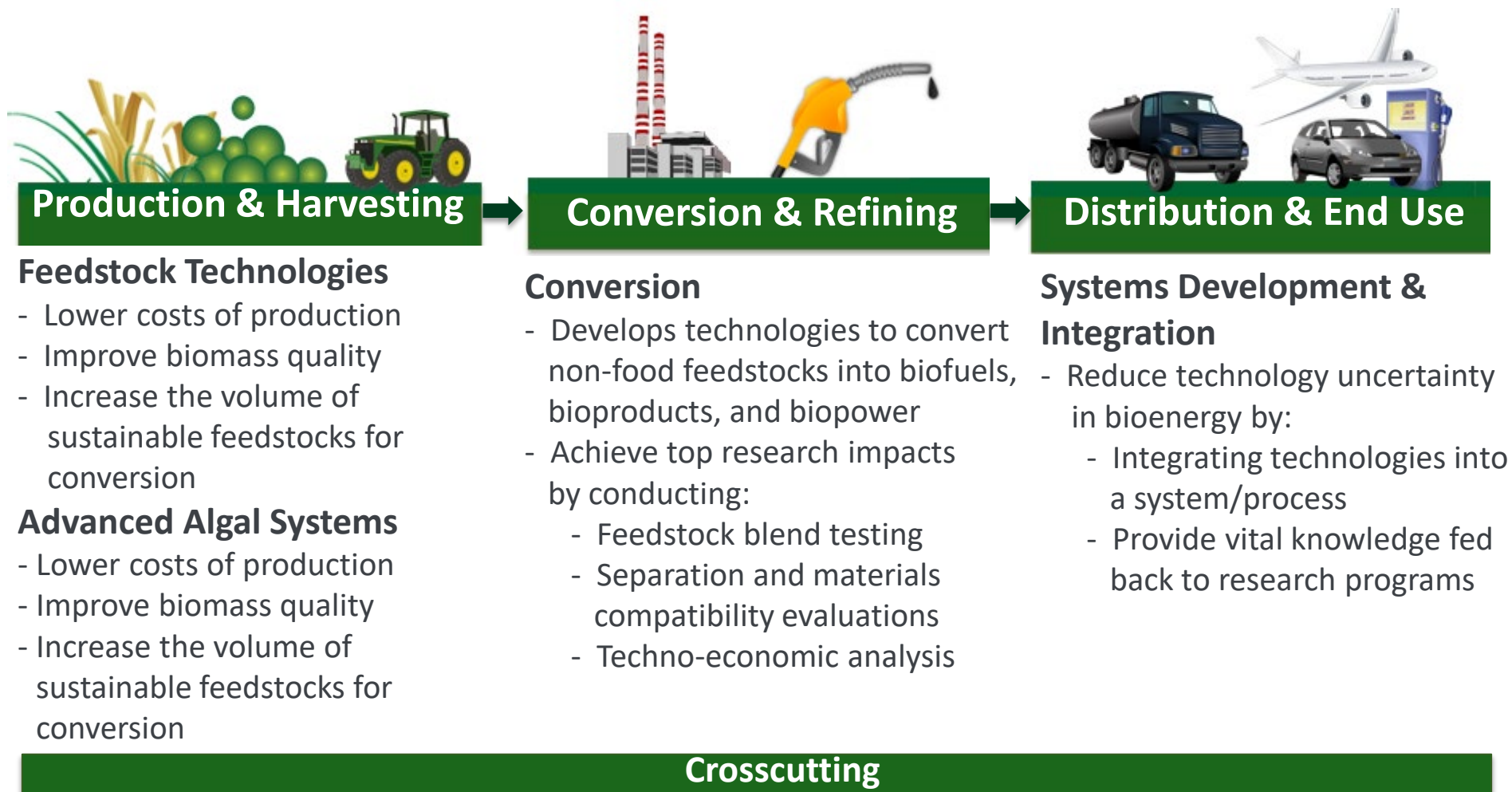
Increasing Feedstock Value



Utilizing Existing Infrastructure



Developing High-Value Products



Data, Modeling & Analysis

- Supports program decision-making
- Develops strategies to understand and enhance the economic and environmental benefits of advanced bioenergy

BETO Budget by Program Area

Program	FY19*	FY20*	FY21*
Advanced Algal Systems	32,000	40,000	40,000
Feedstock Technologies	30,500	40,000	40,000
Conversion Technologies	96,000	110,000	110,000
Systems Development & Integration	57,500	60,000	55,500
Data, Modeling & Analysis	10,000	9,500	9,500
Total	226,000	259,500	255,000

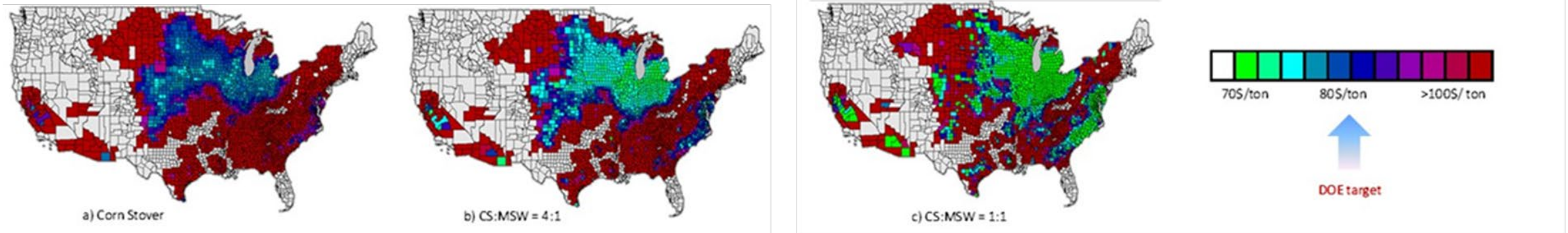
*dollars in thousands

Why Municipal Solid Waste?

- BETO Price Goals require to transform renewable carbon sources cost effectively into high quality, sustainable, energy-dense feedstocks for biofuels and bioproducts.

By 2030, develop science-based strategies and technologies to cost-effectively transform carbon sources into sustainable, energy-dense, and conversion-ready feedstocks at 90% operating effectiveness that meet a delivered cost of \$71/dry ton.

- Feedstock cost target of \$71/ dry ton is essential for cost-effective biofuels.
- Utilization of “Cost-advantaged” feedstocks, such as MSW, offers Economic, Environmental, and Social Sustainability Benefits.



Valerie Reed, Ph.D.

Acting Director Bioenergy Technologies Office

U.S. Department of Energy

valerie.sarisky-reed@ee.doe.gov

Learn more about **BETO**: energy.gov/bioenergy

