

DTE Customer Meeting

October 22, 2019



DTE

DTE overview – A Diversified Company



70% - 75% Utility

DTE Electric

- *Electric generation and distribution*
- *2.2 Million Customers*

DTE Gas

- *Natural gas transmission, storage and distribution*
- *1.3 Million Customers*

25% - 30% Non-utility

Gas Storage & Pipelines (GSP)

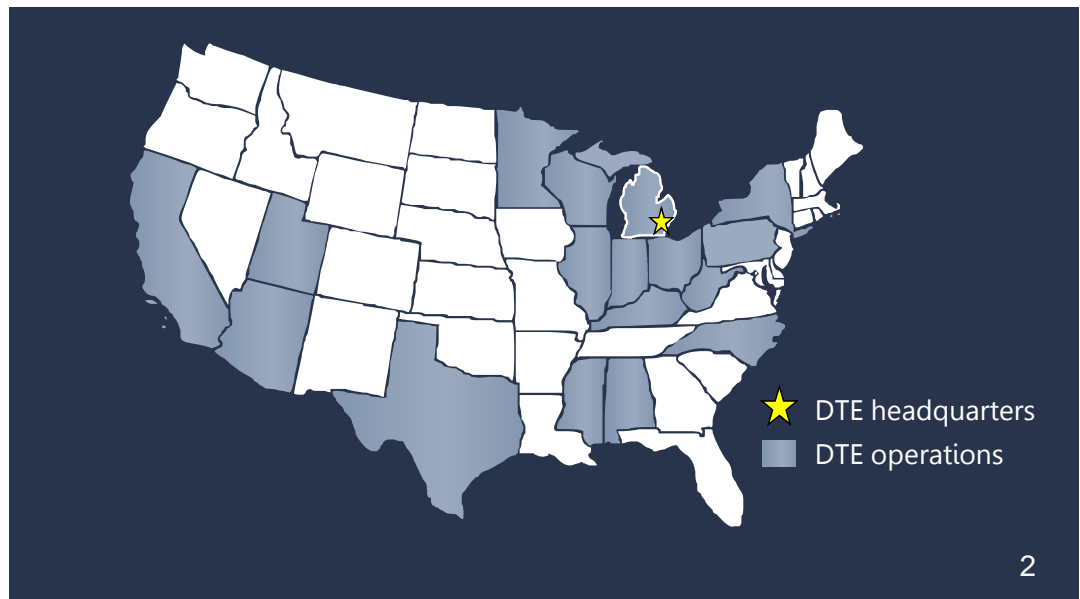
Transport, store and gather natural gas

Power & Industrial Projects (P&I)

Own and operate energy related assets

Energy Trading

Gas, power and renewables marketing



Blue Water Energy Center



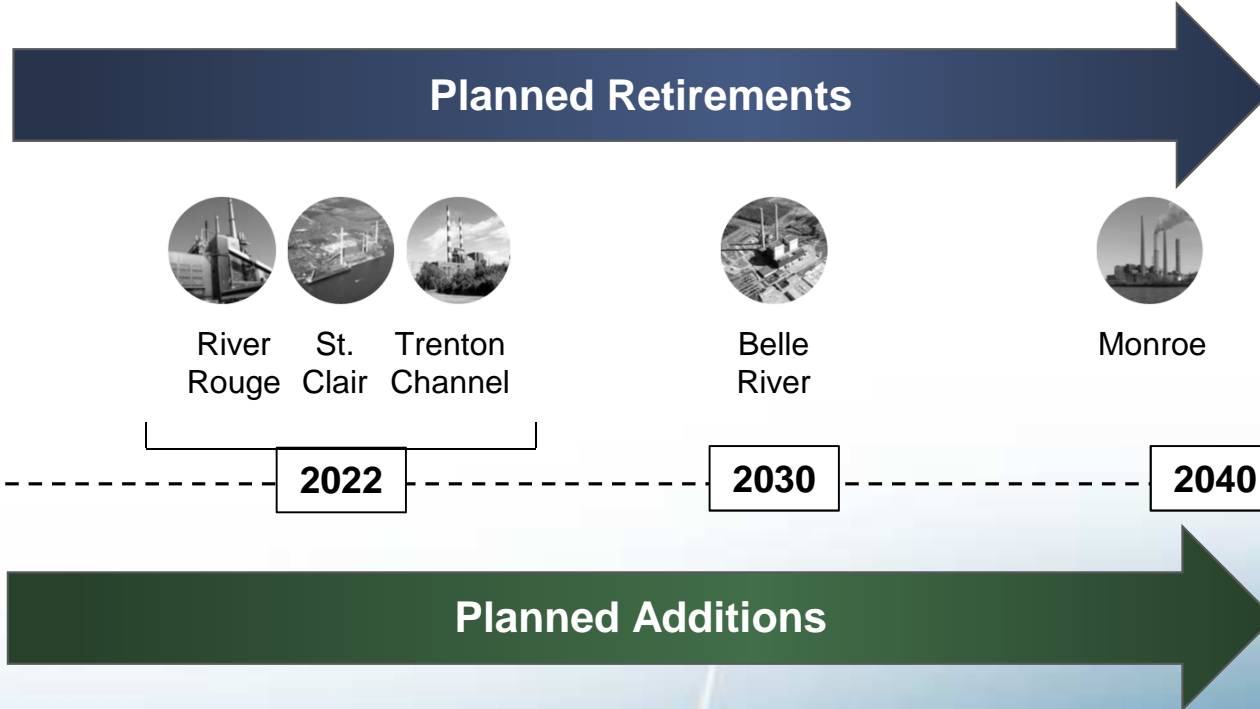
- \$1 billion investment in new natural gas plant
- Replacing three coal-fired plants and supporting DTE's goal to reduce carbon emissions
- Construction began spring 2019 with operations to begin spring 2022
- Over 20% complete with a significant amount of civil work completed

Nexus



- 50/50 Partnership between DTE and Enbridge
- In-Service 10/2018
- 255 Mile, 36 Inch Pipe, 1.5 Bcf/d
- Access to the Largest and Fastest Growing Basin in North America
- Reduces Prices and Volatility

Replacing Coal with Natural Gas and Renewables



- ✓ *Quadrupling renewables by 2040*
- ✓ *Increasing voluntary renewables up to 1,400 MW by 2030*
- ✓ *Additional natural gas if needed*
- ✓ *Net Zero Carbon Emissions by 2050*

A steady march toward zero-emitting and low-emitting resources

DTE Projects of Interest



DTE

Ford/DTE Partner on Ford Campus of the Future



Solar Turbines
A Caterpillar Company

TITAN 130
Gas Turbine Compressor Set

Oil & Gas Applications



DTE Projects of Interest



Compressed Natural Gas
– Increases Savings and
Reduced Emissions



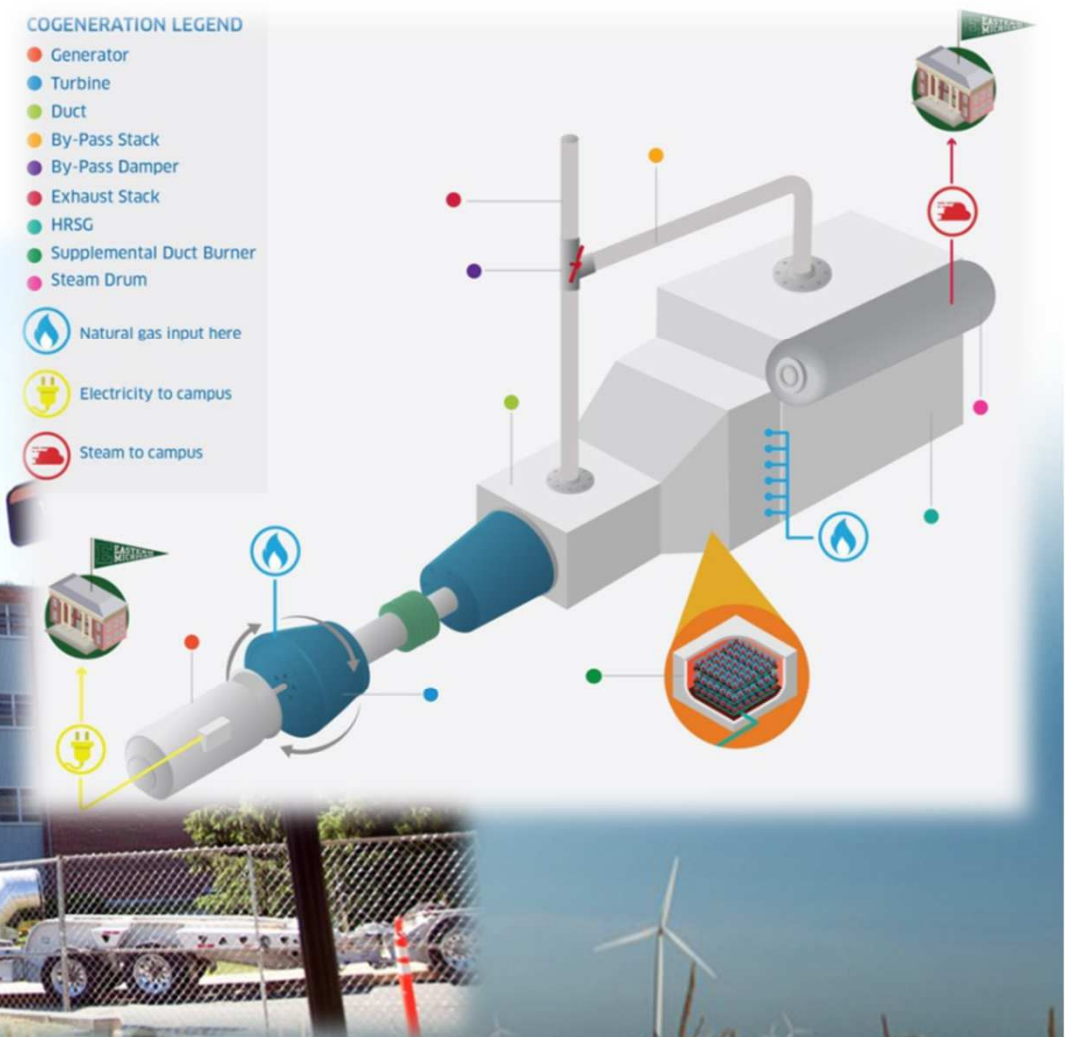
Compared to Diesel,
Natural Gas emits:

- 99% less sulphur oxide
(0.005% of diesel)
- 80% less nitrogen oxide
(18% of diesel)
- 40% less CO₂
- No heavy metals or
soot particles

DTE Projects of Interest



Camus Sustainability



DTE Projects of Interest



DTE

Amazon's Michigan Impact

- 4 Distribution Centers
- \$420M Invested
- 5,000 + Jobs



6/2/18



4/26/19



DTE Projects of Interest

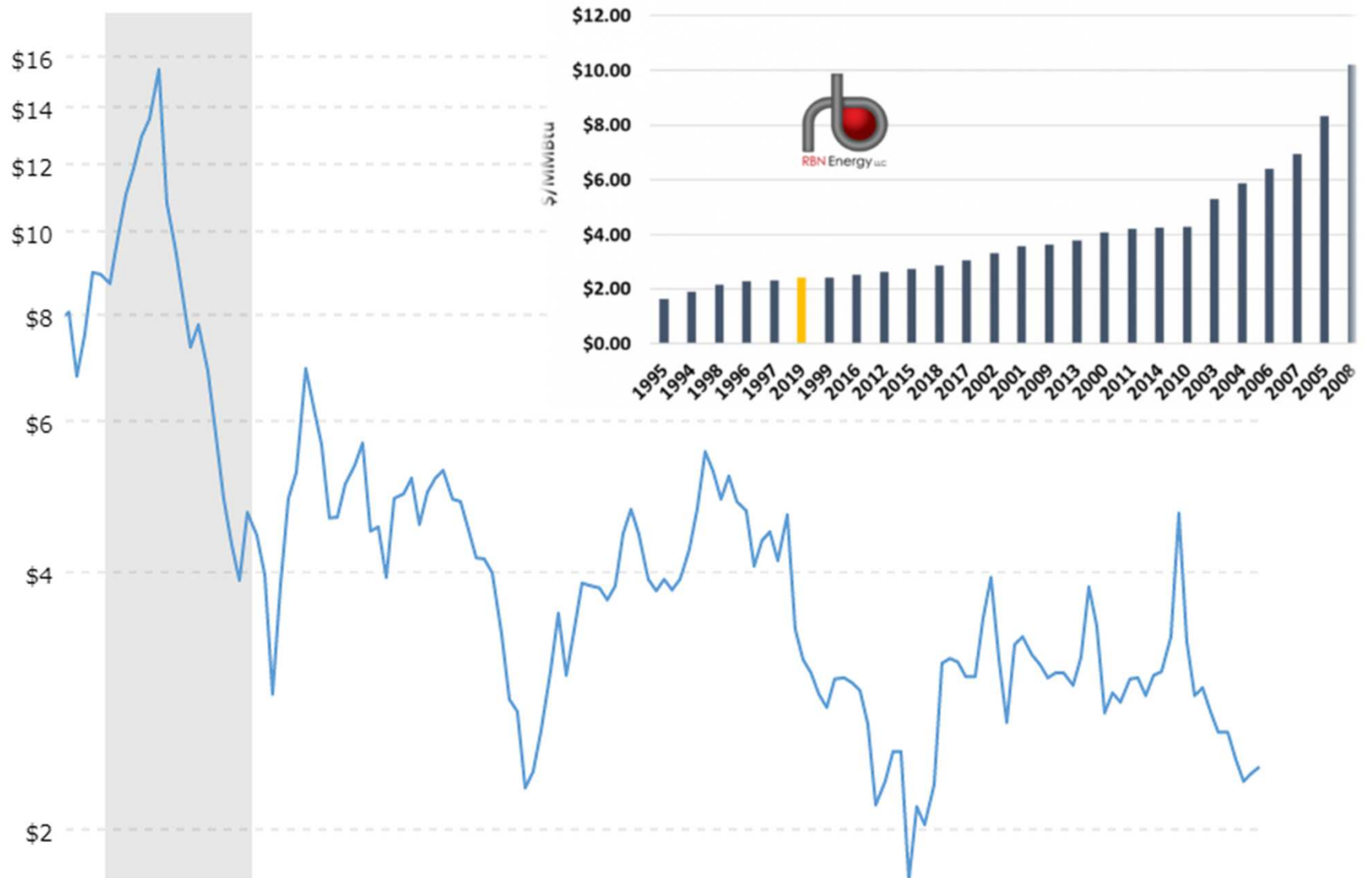
araucO **DTE**

Largest Particle Board Plant
in the World



Pricing & Production

Prompt Henry Hub Natural Gas Futures
(April to September)



Pipeline Exports

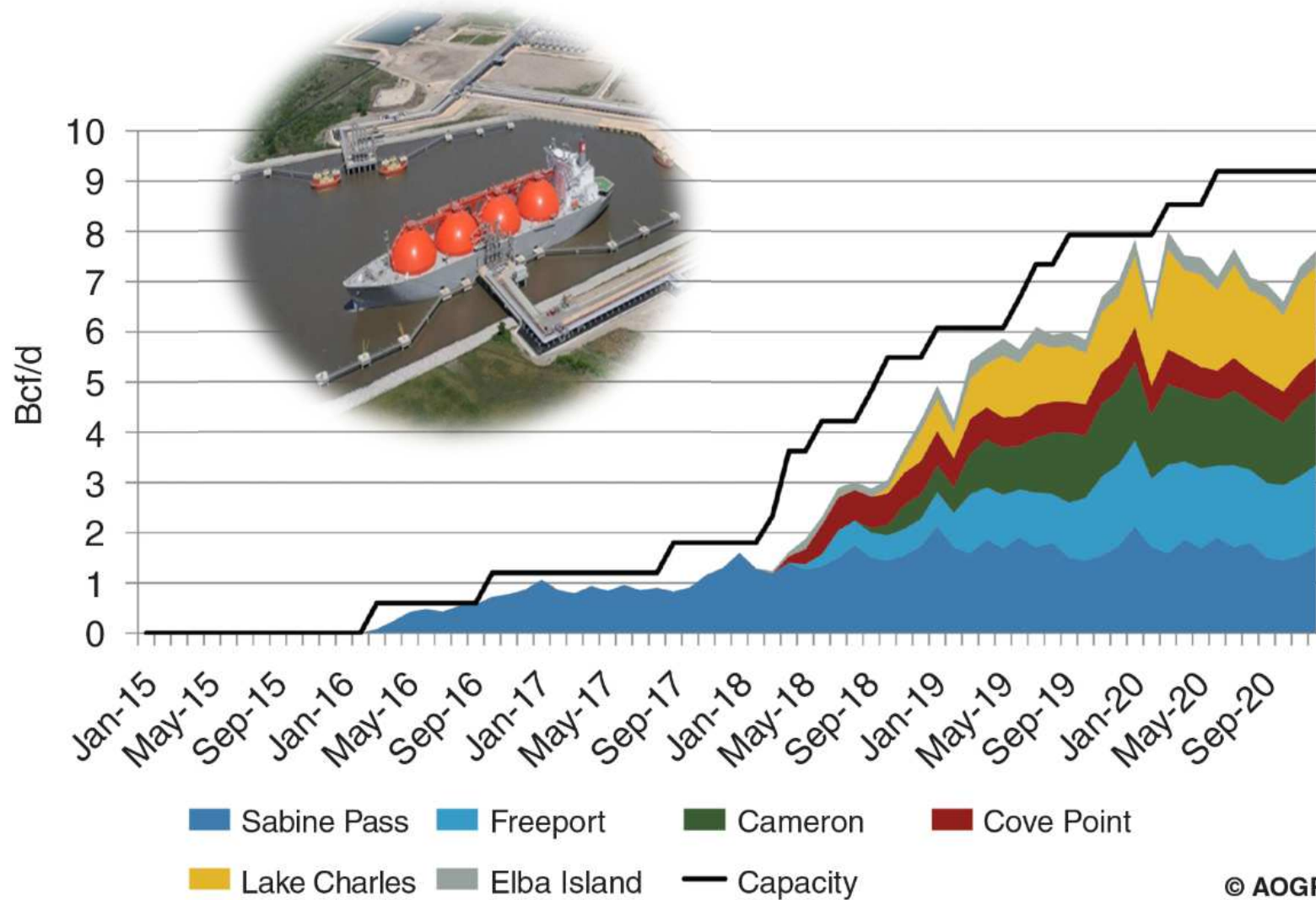
Monthly U.S. natural gas exports (2006-2018)

billion cubic feet per day

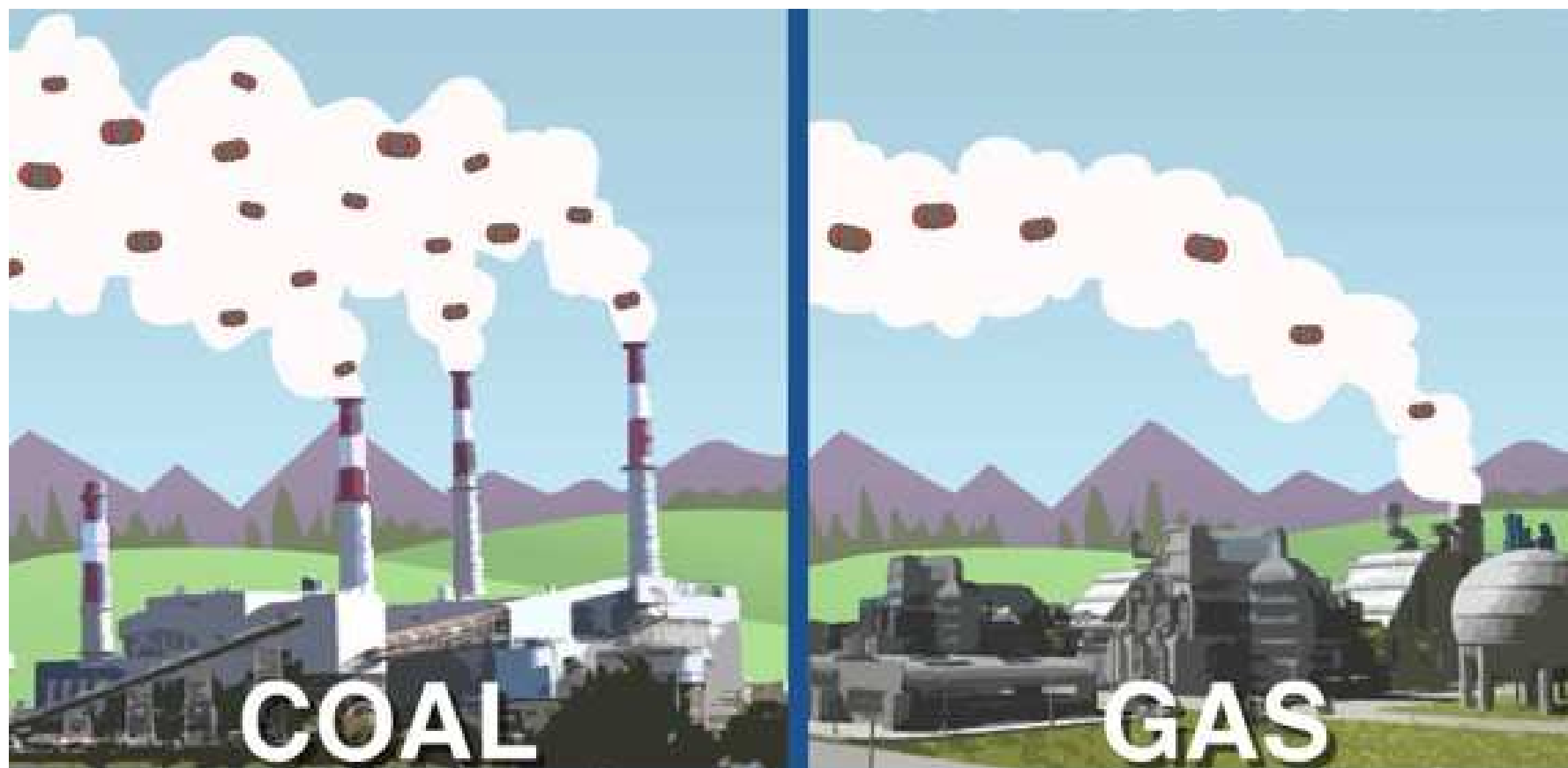


Source: U.S. Energy Information Administration, *Natural Gas Monthly*

LNG Exports – Import to Export



Coal to Gas Switching = 40% Reduction in Carbon Footprint



End User Demand for New Products

DTE

energir

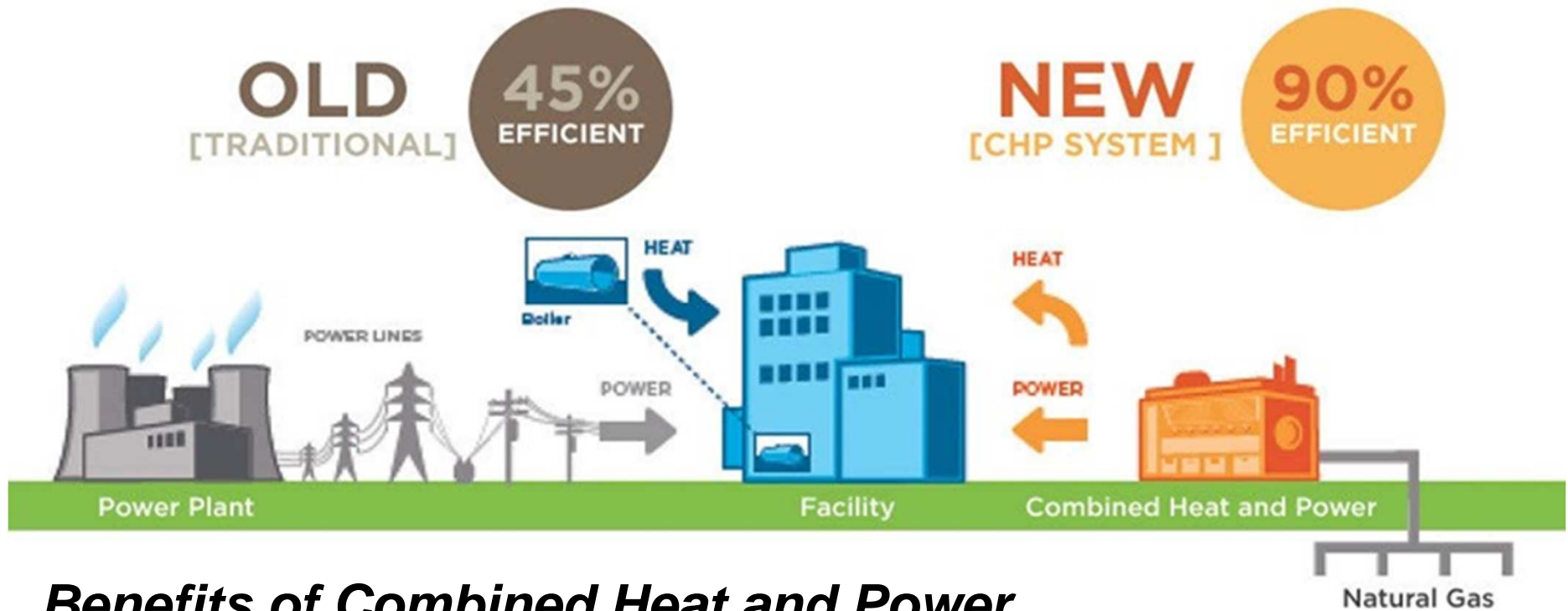
- Renewable Natural Gas Program



VGS Renewable
Natural Gas

- Sustainable Natural Gas Program

What is Combined Heat and Power



Benefits of Combined Heat and Power

- Efficient Use of Energy
- Reliability, Redundancy, and Resiliency
- Economics and Cost Stabilization
- Reduce Carbon Footprint
- Microgrid Anchor

CHP MicroGrid Compatibility



**OPTION #1 –
Baseline Utility
Supply**



Consumers Energy

OPTION #2 – All Solar



**OPTION #3
20% Solar, 80% Wind**



OPTION #4 - CHP



OPTION #5 – CHP + Solar PV



OPTION #6 – CHP + Wind



**OPTION #7 – CHP + Solar PV +
Wind + 20% Energy Efficiency**



Thank You!

DTE
