

TEMPERATURE CORRECTION FACTORS

What is Thermal Expansion?

Like all liquids, when refined fuels cool, they condense and occupy less space, and conversely, when fuels warm, they expand and occupy more space. The ultimate value of a fuel is based on the power it provides to an engine, which is driven by the fuel's mass. Think of mass as the number of molecules in a given amount of fuel regardless of the amount of space that fuel takes up. One gallon of gasoline at 40°F has 1.4% greater mass, 1.4% more molecules and 1.4% more ability to power an engine than one gallon of gasoline at 60°F.

Gross volume fluctuates due to temperature changes



The NET amount of fuel is what is available in the terminal

The "GROSS" volume of fuel is what leaves the rack in a truck

The NET amount of fuel is what is actually received by a customer

Best practices for using TCI



Research analytics for rendering quotes on RFPs



Establishing intelligent rack level pricing



Normalizing annual term contracts values



Increased rateability



Proper risk management practices



Buying and selling decisions can be optimized

	DTN	Combined Existing TCI Offerings
700+ Terminals	X	
City rack level reported	X	X
Based actual fuel temperature data	X	
Based on today's temperature	X	
Specific volumetric adjustment variables	X	X
Multiple daily assessments	X	X
3:00 daily report delivery	X	
Modality specific data	X	X
Report 7 days a week	X	