
Boise Flexible Packaging Papers

**Key Component Cost Perspective
Q4 2008 Update**

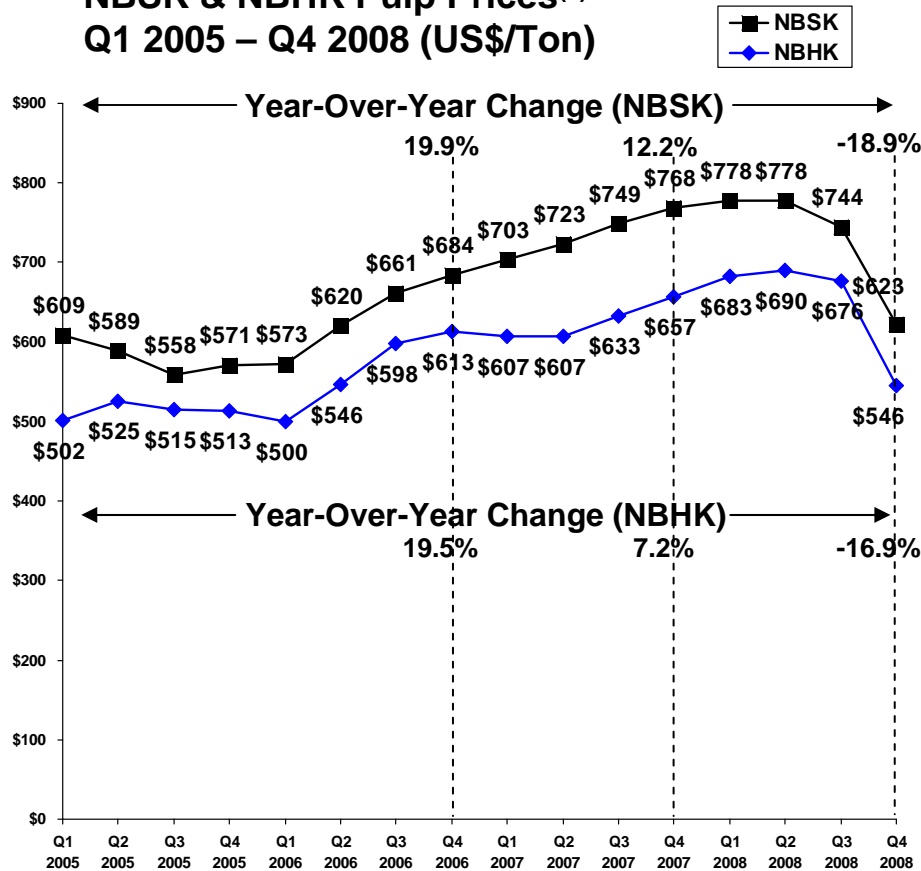


Summary

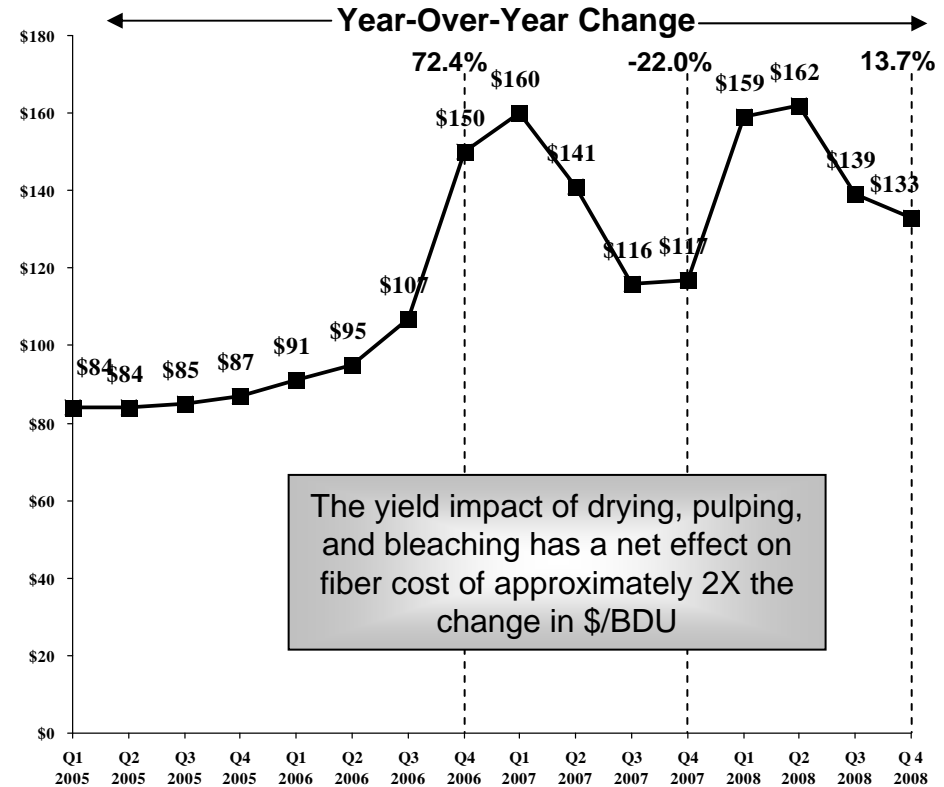
- The four key raw material costs components in paper manufacturing and distribution are: Fiber, Energy, Chemicals, and Transportation. We have provided the most relevant cost indices that impact the market for each of these cost components
- Boise is sharing this information as a part of our approach to deliver business and technical insights. Our objective is to align perspectives on the key drivers of change. This communication is not intended as a justification for price changes
- Boise remains committed to delivering the highest level of value among suppliers to the flexible packaging market. As such, we will continue to take actions to increase the value-to-cost relationship of our products including continuous efforts to drive costs out

Fiber Costs

**NBSK & NBHK Pulp Prices⁽¹⁾
Q1 2005 – Q4 2008 (US\$/Ton)**



**Northwest Chip Index⁽²⁾
Q1 2005 – Q4 2008 (\$/BDU)**



The yield impact of drying, pulping, and bleaching has a net effect on fiber cost of approximately 2X the change in \$/BDU

Key Insights

- NBSK & NBHK pulp are the key fiber components for non-integrated suppliers
- NBSK price decreased by US\$121/ton and NBHK price decreased by US\$130/ton in Q4 2008 in North America

Key Insights

- The average Lower Columbia River Douglas Fir price was down \$6/BDU from Q3
- Pulpmills in the Northwest have the highest inventories recorded in 13 years
- It is likely that prices will continue downward in the first Quarter of 2009

Notes: (1) NBSK/NBHK quarterly data reported is a straight average of the three months in the quarter

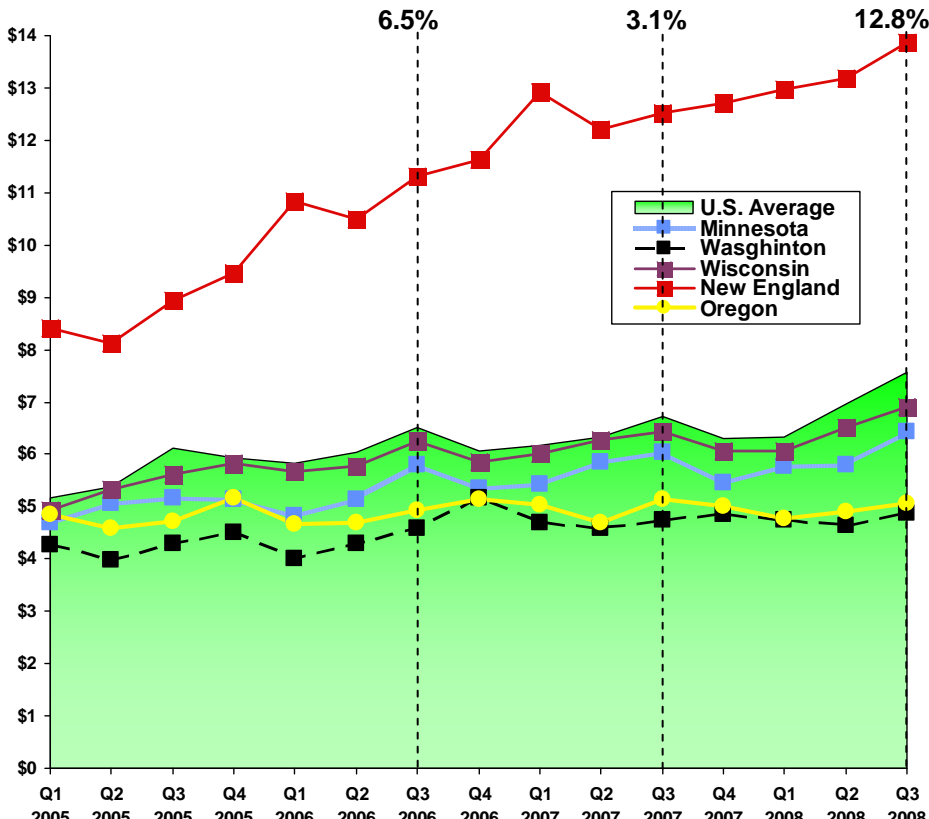
(2) Northwest Chip Index Lower Columbia River – Douglas Fir (SW Wa + NW Or) data are the most realistic representation for Boise

Energy Costs

Electricity Price Indices

Q1 2005 – Q3⁽¹⁾ 2008 (¢/Kilowatt Hour)

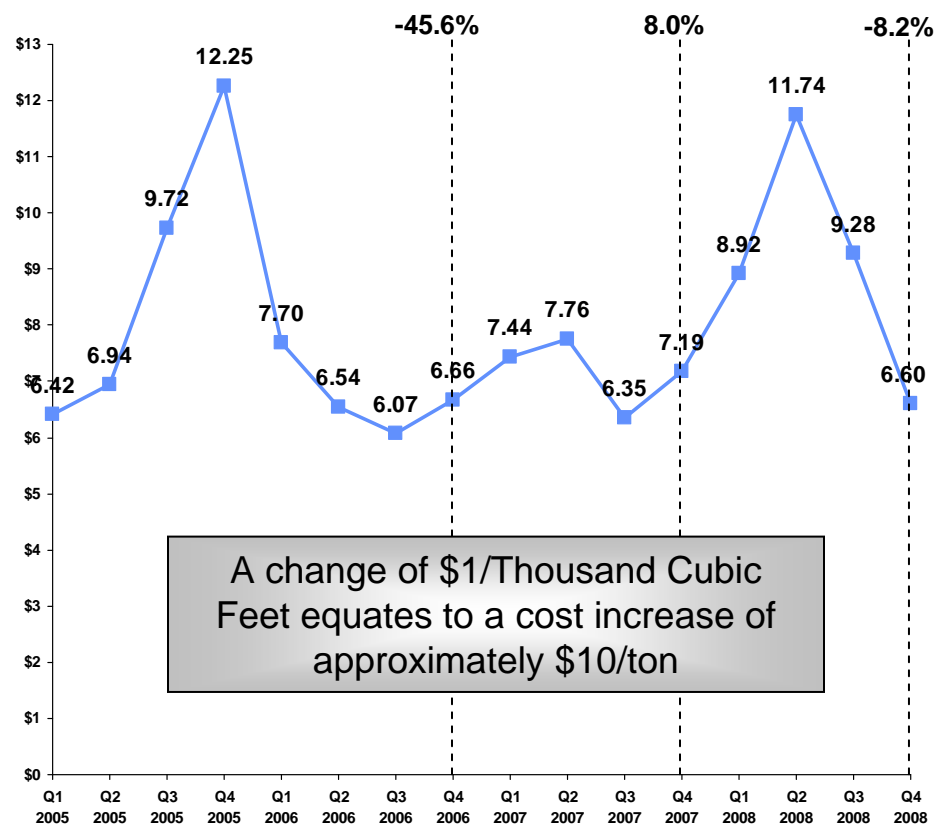
← Year-Over-Year Change (U.S.) →



Natural Gas – Henry Hub LA

Q1 2005 – Q4 2008 (US\$/Thousand Cubic Feet)

← Year-Over-Year Change →



Key Insights

- Total electricity consumption is projected to decline by 0.5 percent in 2009 (U.S.), with an expected 3.6% decline in sales to the industrial sector due to economic conditions, partially offset by slight growth in residential electricity sales

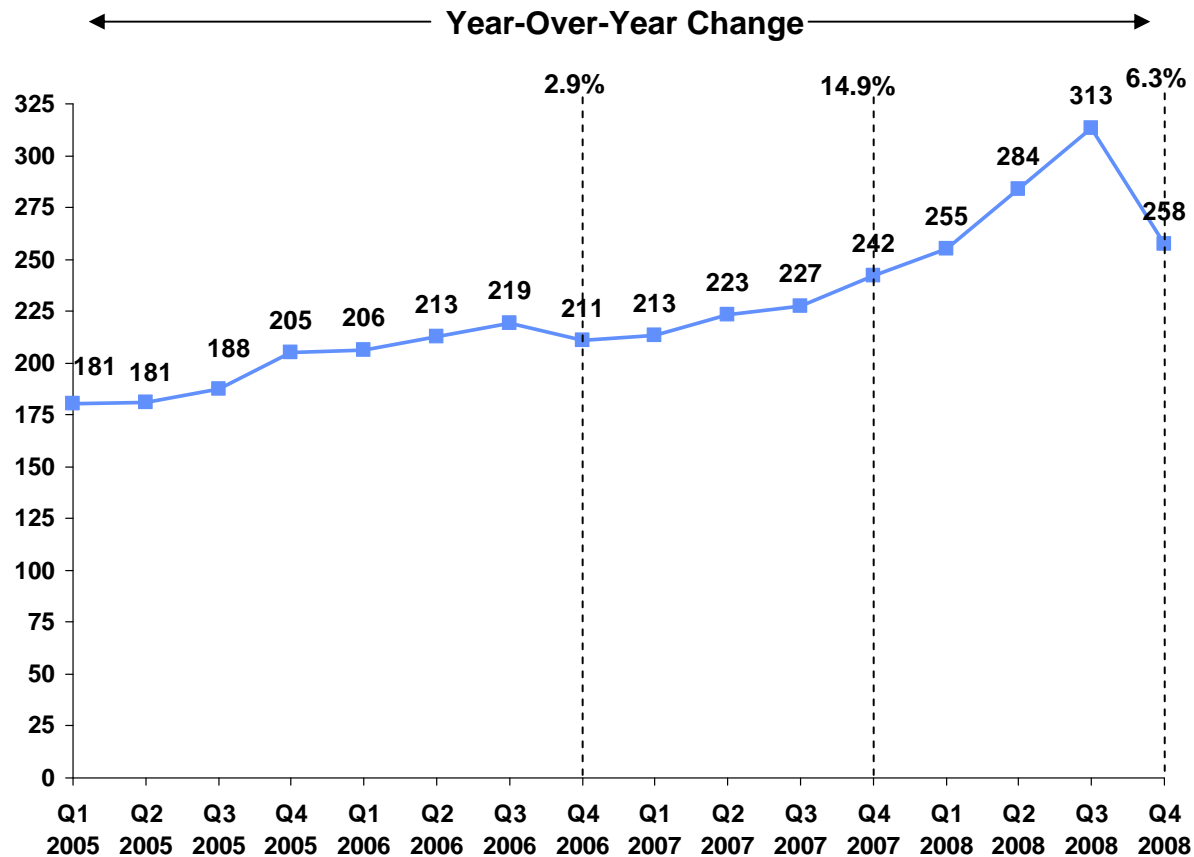
Key Insights

- The U.S. economic downturn is contributing to lower natural gas prices
- The Henry Hub natural gas spot price is projected to decline from an average of \$9.13 per Mcf in 2008 to \$5.78 per Mcf in 2009, but then increase in 2010 to an average of \$6.63 per Mcf

Note: (1) Q3 2008 Electricity Data – 3 month lag in data source
 (2) Q4 2008 Natural Gas Data is a straight average through 12/31 (December data forecasted)
 Source: U.S. Department of Energy/Energy Information Administration

Chemical Costs – Broad Representation of Chemical Components

Producer Price Index (PPI) – Industrial Chemicals
Q1 2005 – Q4 2008



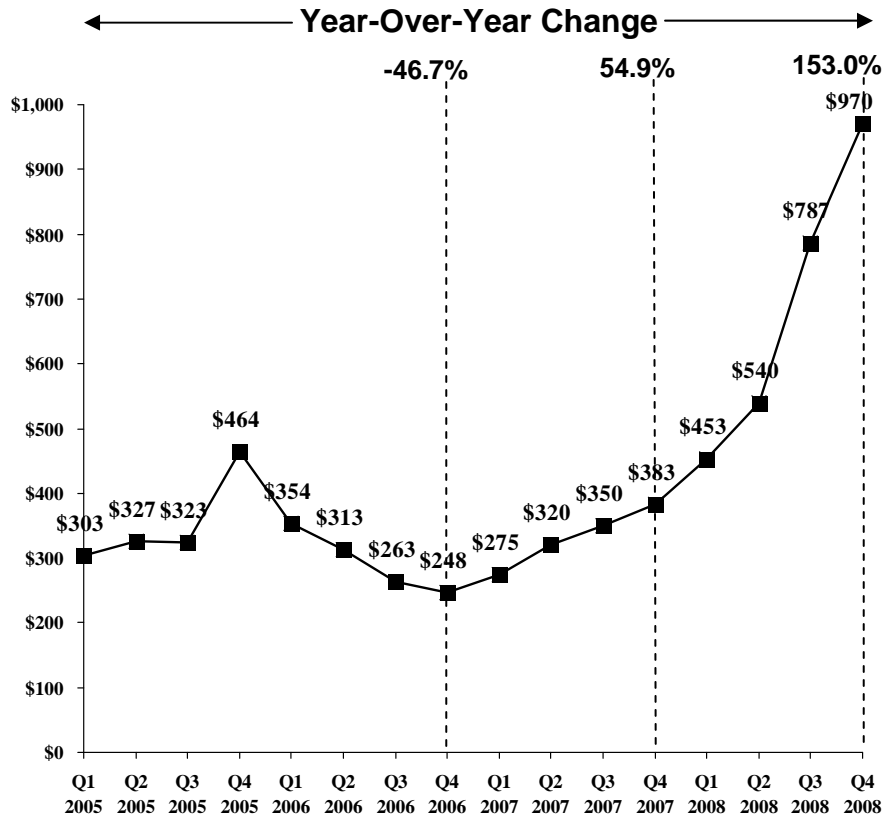
Key Insights

- Chemical suppliers are adjusting capacity to reduced demand. BASF stated global business declined significantly in December, and that in all regions, demand for chemical products has not picked up in the first half of January. BASF indicated it is running below 75% capacity and that only demand for crop protection and products for the food industry remain high
- Actions are being taken in manufacturing in response to current market conditions. Rohm & Haas taking actions in response to market conditions including; Adjusting production schedules in some manufacturing facilities to reflect current market softness; Realigning the manufacturing footprint to better utilize assets, including idling or closing underutilized plants

Demand has weakened in the specialty chemical industry

Chemical Costs – Market Reported Key Chemical Components

Caustic Soda Prices
North American Spot Average⁽¹⁾
Q1 2007 – Q4 2008 (US\$/Dry Short Ton)



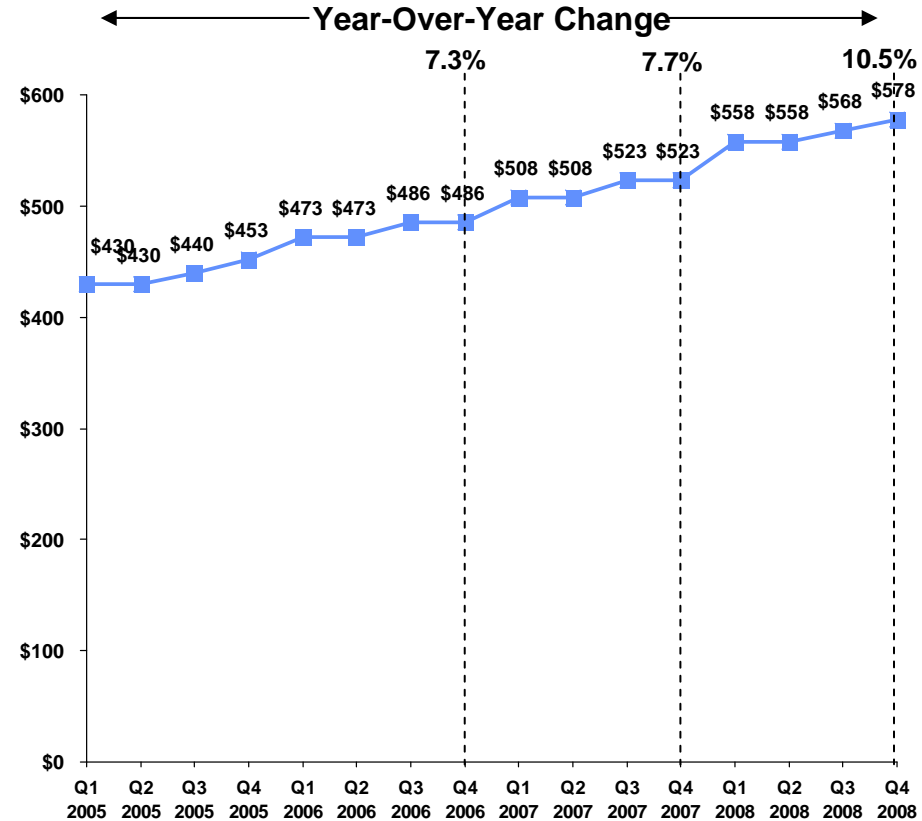
Key Insights

- Caustic Soda is up approximately \$183/ton from Q3 2008 to \$970/ton
- In Q4 2008 Caustic Soda approached almost three times the price it was in Q4 2007

Notes: (1) FOB U.S. Gulf Coast
 (2) Delivered United States

Source: CMAI

Sodium Chlorate Prices
North American Market Avg.⁽²⁾
Q1 2007 – Q4 2008 (US\$/Short Ton)

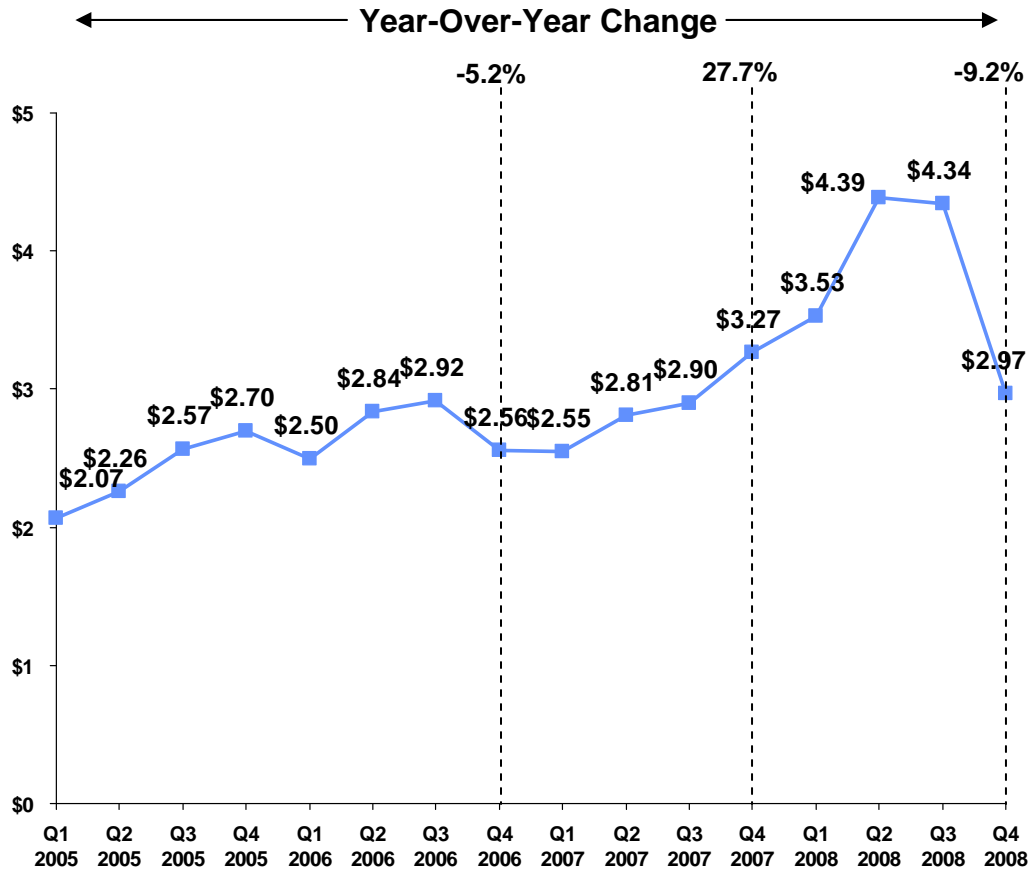


Key Insights

- Sodium Chlorate is up approximately \$55/ton from Q4 2007 to \$578/ton in Q4 2008
- The increase in electricity as well as several chlorate plant closures in the last two years have brought Sodium Chlorate prices up.

Transportation Costs

EIA Retail On-Highway Diesel Prices Not Including Fuel Surcharges Q1 2005 – Q4 2008 (\$/Gallon)



Key Insights	
■	On-highway diesel fuel retail prices, which averaged \$3.79 per gallon in 2008, are projected to average \$2.27 per gallon in 2009 and \$2.54 in 2010
■	The projected continuation of the decline in consumption of diesel fuel in the U.S. as well as a slowing of the growth in distillate fuel usage outside the U.S. are expected to result in a weakening of refining margins for distillate throughout the forecast
■	Transportation cost increases impact inbound costs of raw material in addition to outbound costs

Key Insights

Key Insights

- While chemical, fiber, energy, and transportation costs have come off recent highs, the paper industry continues to overcome the significant cost inflation in 2008
- Overall, chemicals costs are declining, however, caustic soda and sodium chlorate, two key chemicals in the paper making process, continue to rise
- These cost components systematically impact the paper industry
- Universal nature of these inputs results in a pervasive effect on paper substitutes and supply chain participants including printer/converters, and appliers/end users
- The dramatic downward shift in demand has created a divergence regarding fiber costs. Non-integrated supplier costs are going down creating a different competitive environment introducing more price competition
- Costs remain highly dynamic and future cost changes have become more difficult to predict