2017 FACT SHEET

PRODUCTION

The petroleum refining industry reported growth in physical output of refined petroleum products each year between 1996 and 2004, but since 2005 production levels have shown a declining trend. Now 14% below peak production in 2004 and almost stable from last year, production levels are still 6% above 1990. GDP generally declined over the last 12 years to a level 4% above 1990.

Canadian GDP and Production of refined products in Refining

Energy Intensity Indicators

ENERGY USE AND INTENSITY

Energy use, calculated using lower and higher heating values (LHV/HHV), generally follows the trend of total physical production. Using values based on LHV, total energy use has dropped 15% since the 2004 peak and is now about 10% below 1990 levels.

Total Energy Use

CO₂ intensity indicator trends follow total emissions for the industry. Intensities have dropped about 18% over the study period making 2014 and 2015 the least emissions intense years seen in the industry since 1990.

Total CO₂ Emissions

After four years of consistent increases in intensity, it dropped from 2009 to 2014, reaching near 2005. These data matched Solomon Associates Energy Intensity Index quite well up until 2006 when the SA EII methodology changed.

Carbohydrate Dioxide Emissions and Intensity

CO₂ emissions trends, calculated using coefficients supplied by the refinery and by Environment and Climate Change Canada, show total emissions 11%-13% lower than 1990 levels in 2015, depending on methodology.

Carbon Dioxide Emissions and Intensity

SA EII data are no longer available. This graph provides a comparison of various other energy intensity indicators. Indicators based on physical production follow the SA EII better than GDP indicators.

Solomon Index for Canadian Refineries

*The break between 2006/2007 indicates a change in SA EII methodology.

*As of 2014 SA EII data are no longer available.