

Refining and Chemicals

The company continued its good performance in refining and chemicals sector in 2017 by pushing ahead with a range of measures for business transformation and upgrading, production scheduling and optimization of processing plans and product portfolio. Production activities went on in a steady and balanced manner throughout the year and contributed significantly to the company's overall growth in profits.

We continued to optimize the allocation of resources in favor of revenue-generating refining facilities. By reasonably matching primary and secondary processing loads, ours integrated refining-petrochemical plants and efficient chemicals facilities operated at high utilization rate. In 2017, we processed 152.45 million tons of crude and produced 103.51 million tons of refined products and 5.76 million tons of ethylene domestically.

We continued to optimize product portfolio with output of high-value refined products accounting for more than 50%. High-grade gasoline production came close to 9 million tons; jet fuel production exceeded 10 million tons; the production of heavy-components oil products decreased by 225,000 tons; and the diesel/gasoline ratio was further reduced.



Crude runs (Domestic)

152.45

mmt



Refined products output (Domestic)

103.51

mmt

Refining and chemicals operating data (Domestic)

	2015	2016	2017
Crude runs (mmt)	151.32	147.09	152.45
Utilization rate of refining units (%)	84.5	80.9	80.8
Refined products output (mmt)	103.69	99.32	103.51
Gasoline	36.47	33.97	40.98
Kerosene	8.34	9.32	10.18
Diesel	58.88	52.03	52.35
Lub oil output (mmt)	1.21	1.16	1.64
Ethylene output (mmt)	5.03	5.59	5.76
Synthetic resin output (mmt)	8.32	9.20	9.40
Synthetic fiber output (mmt)	0.07	0.06	0.06
Synthetic rubber output (mmt)	0.71	0.76	0.81
Urea output (mmt)	2.57	1.90	1.44
Synthetic ammonia output (mmt)	1.85	1.53	1.36



Sichuan Petrochemical

Construction and Operation of Large Refining & Petrochemical Bases

In 2017, to achieve stable and efficient operation, we improved production management and reasonably arranged load of crude processing to minimize production fluctuation and improve long-term operation. Overall, 99.57% of our refining and petrochemical facilities operated at steady state, and 20 technical and economic indicators were improved significantly.

Major refining and petrochemical construction projects made headway smoothly. The 13 Mt/a refining facility at Yunnan Petrochemical was successfully put into commissioning and remained steady running for four months by the end of the year. Upgrading and expanding projects proceeded smoothly toward the tubing works at Huabei Petrochemical and Liaoyang Petrochemical. The integration project at Guangdong Petrochemical, reconfiguration project at Daqing Petrochemical and ethane, LNG and light hydrocarbon projects at Changqing and Tarim Oilfields advanced as planned.

Upgrading of Refined Products

Refined products upgrading schemes gathered pace in a bid to improve air quality in polluted regions, especially Beijing, Tianjin and Hebei. According to the national regulations, i.e. motor fuels should meet National V Standard, starting from January 1, 2017 and motor fuels sold in "2+26 Cities" should meet National VI Standard before the end of September 2017, we took the initiative to boost output of high-grade gasoline and diesel by adjusting production plans, replacing and upgrading refining facilities.

Development of New Chemicals

In response to changes in the market, we sped up R&D efforts of new chemical products, delivering 70 new brands of polyethylene, polypropylene and synthetic rubber and other products in 2017, with a total production of 1.14 million tons. Direct sales to key customers expanded, with the rate of direct sales increasing by 3 percentage points year-on-year. High-value products saw an 18% increase in sales volume. In total, we sold 27.98 million tons of chemical products throughout the year. A number of new products were successfully launched, including Dushanzi Petrochemical's metallocene linear polyethylene, Sichuan Petrochemical's low-melt anti-shock polypropylene, and Daqing Petrochemical's PERT pipe materials.