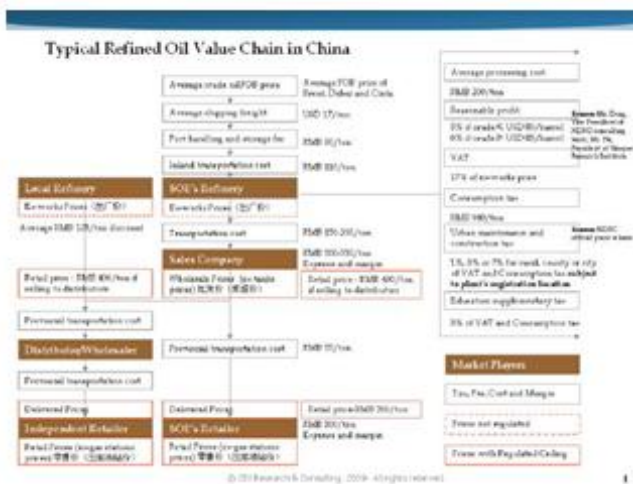


Unscramble China's Oil Products Pricing Mechanism

This report unveils the pricing elements in China's **gasoil, gasoline, jet kerosene and naphtha** pricing mechanisms. Based on intensive researches on these pricing parameters, it gives **pricing modeling** for domestic oil products with gasoil as an example.



Pricing elements apparently defined

- Taxes and duties
- Average processing cost
- Regulated ceiling prices sold to distributors
- Regulated retailers' expense and margin
- Trigger mechanism for price change

Pricing elements partially defined

- Crude oil base-price quote
- Port, handling and storage fees
- Crude oil inland transportation charge
- Reasonable Profit

Pricing elements not defined

- Crude oil base-FOB to CFR calculation
- Crude oil base-storage service related loss, and production loss
- Prices difference between ex-works and wholesales prices
- Transportation and distribution discounts in the target markets.
- Pricing possibility under high-crude scenario

Table 2: Crude oil storage loss rate (monthly) [Ⓢ]				
Temperature (C) [Ⓢ]	<30 [Ⓢ]		30~50 [Ⓢ]	
Table 3: Crude oil transit loss rate [Ⓢ]				
Category of storage tank [Ⓢ]	Floating-roof tank [Ⓢ]		Others [Ⓢ]	
Table 4: Crude oil loss rate in uploading truck (vessel) [Ⓢ]				
Truck (vessel) [Ⓢ]	Light and medium crude oil [Ⓢ]			Heavy crude oil [Ⓢ]
	Railway [Ⓢ] Truck-tank [Ⓢ]	Road [Ⓢ] Truck-tank [Ⓢ]	Oil tanker or [Ⓢ] barge [Ⓢ]	→ [Ⓢ]
Table 5: Crude oil loss rate in offloading truck (vessel) [Ⓢ]				
Truck (vessel) [Ⓢ]	Light and medium crude oil [Ⓢ]			Heavy crude oil [Ⓢ]
	Railway [Ⓢ] Truck-tank [Ⓢ]	Road [Ⓢ] Truck-tank [Ⓢ]	Oil tanker or [Ⓢ] barge [Ⓢ]	→ [Ⓢ]

Table 11: Diesel's Grade-Price Ratio

Grade	10#	5#	0#	-10#	-15#	-20#	-30#	-35#	-50#
Ex-work level	***	***	100	***	***	***	***	***	***
Wholesale level	***	***	100	***	***	***	***	***	***
Retail level	***	***	100	***	***	***	***	***	***

Data Source: Sinopec and Government policy

Gasoil pricing modeling and mechanism implementation

Table 14: Simulation of China average diesel prices

Unit: RMB/ton
Average international crude oil prices (USD/barrel)
Exchange rate
Ton-to-barrel rate
Average international freight (USD/ton)
Average China port handling fee and storage fee (RMB/ton)
Average China inland transportation fee from port to refinery (RMB/ton)
Crude oil base
Average refineries' processing cost
Reasonable profit (% based on crude oil base and processing cost)
VAT rate
Consumption tax (RMB/ton)
Urban maintenance and construction tax rate
Education supplementary tax rate
Ex-works price
Distribution, transportation cost to local tanks (Sinopec/PetroChina) and wholesales' margin
Wholesale price (ex-tanks fee)

Table 15: Comparison of simulated prices with real and regulated prices

Simulated Prices vs. Regulated Prices (Unit: RMB/ton)
Forward calculation - crude to ex-works
National regulated ex-works price
Gap (calculated vs. regulated)
Forward calculation - crude to wholesale price
National average regulated ceiling wholesale price
Gap (calculated vs. regulated)
Forward calculation - crude to retail price
National average regulated ceiling retail price
Gap (calculated vs. regulated)

Table 16: Backward calculation from regulated retail prices to crude oil prices

Unit: RMB/ton
National average regulated ceiling retail price
Distribution and transportation cost from tanks to gas
Gas station expenses and margin
Wholesale price (ex-tanks for Sinopec and
Distribution, transportation cost to local tanks (Sinopec/PetroChina) and wholesales margin
Ex-works price
Average refineries' processing cost
Reasonable profit (% based on crude oil base and
VAT rate
Consumption tax (RMB/ton)
Urban maintenance and construction tax rate
Education supplementary tax rate

Recently proposed stabilization fund

- The rumored stabilization fund - purpose and comments
- How will the stabilization fund operate?

Q&A for distillates pricing mechanism

Q: How to understand “supply prices”?

Q: “Government fixed price” is different from “Regulated price” above?

Q: How to understand moving average price?

Q: What is normal processing profit?

Q: How to deduct the profit margin?

Q: Reasonable transportation and distribution cost is unclear.

Q: How to determine “appropriate profits”?

Q: How to understand “supply prices”?

Q: Please define “social wholesale enterprises” in simple terms - SOE or independent or any wholesaler?

Q: Does this mean large SOE's? Are there any independent special customers?

How does the NDRC determine the list?

Can we see the list?

Q: What are the definition of ex-works price and supply price in the document?

Are they same?