**OPERATIONS UNDER REFINING**

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**PETROLEUM WATCH**

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**Hydrocarbon Separations Process**

- **Sorting**
  - Vacuum distillation
  - Fractionation
  - Reforming
  - Production of petrochemical feedstocks (ethylene, propylene, aromatics)

- **Breaking**
  - Catalytic cracking
  - Thermal cracking (coking)
  - Alkylation

- **Cleaning**
  - Hydrotreating
  - Zeolite cracking

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**Production Shares of Refined Products**

- **Gasoline**
  - Production: 42%
  - Consumption: 52%

- **Diesel**
  - Production: 23%
  - Consumption: 33%

- **Jet Fuel**
  - Production: 9%
  - Consumption: 12%

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**Sources:**

- Petroleum Administration for Defense Districts (PADD)
- California Governor’s Office
- BAAQMD
- CEC
- Reuters
- HYPERMART

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**California Gasoline Retail Prices by Brand**

- Unbranded
- Premium
- Regular

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**California Diesel Prices by Brand**

- Unbranded
- Regular

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**California Gasoline and Diesel Prices by Brand**

- Unbranded
- Regular

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**DECREASED PRODUCTION LEVELS**

- Martinez refinery
  - Responsible for 71.7% of California diesel production
  - Motivation: Demand
  - Response: Decreased production

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**Martinez Refinery**

- Responsible for 71.7% of California diesel production
- Decreased production in response to decreased demand
- Total crude oil inventories at an unprecedented high: 80,000 barrels per day

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**California’s Gasoline Inventory**

- High level at 80,000 barrels per day
- Low production levels: 71.7% for diesel and 76.8% for gasoline

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**California's Refineries**

- 11 refineries
  - California refiners
  - Different shapes and sizes
  - Different product lines
  - Product lines:
    - Vacuum bottoms
    - Refinery coke
    - Cat crackers

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**Calculation of Downstream Capacity Utilization**

- Crude units
  - Sorting
  - Breaking
  - Cleaning
- Vacuum distillation
- Catalytic cracking
- Thermal cracking

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**Downstream Capacity Utilization**

- Vacuum distillation percentage
- Catalytic cracking percentage
- Thermal cracking percentage

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**Share of Refined Products**

- Gasoline
  - Production: 42%
  - Consumption: 52%

- Diesel
  - Production: 23%
  - Consumption: 33%

- Jet Fuel
  - Production: 9%
  - Consumption: 12%

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**Production Percent**

- Gasoline
- Diesel
- Jet Fuel

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**Transportation Fuels Data Analysis Unit**

- CEC analysis of OPIS data
- Data collection: States
- Data analysis: States

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**Unbranded Gasoline**

- Average price: $3.20

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**Regular Gasoline**

- Average price: $3.80

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**Premium Gasoline**

- Average price: $4.20

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**Unbranded Diesel**

- Average price: $2.20

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**Regular Diesel**

- Average price: $2.60

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**Premium Diesel**

- Average price: $3.60

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**Source:**

- States are collected by the EIA.