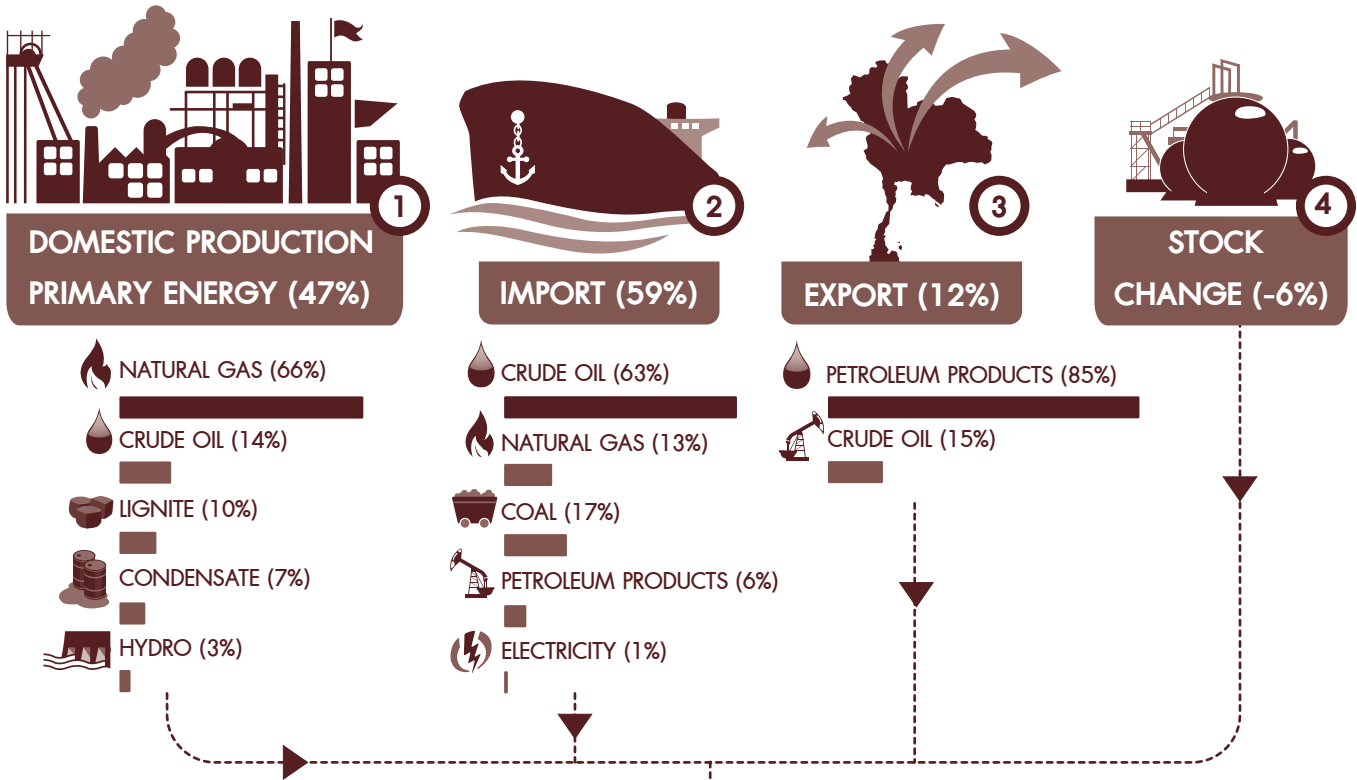
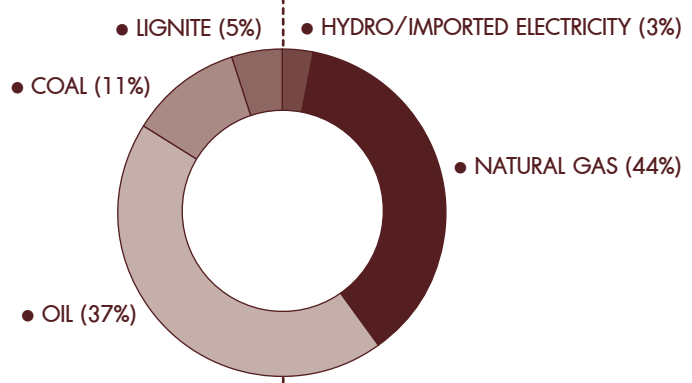


# Energy Overview 2012

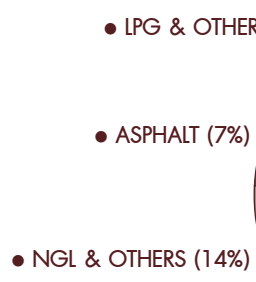


**5 = 1 + 2 - 3 + 4**

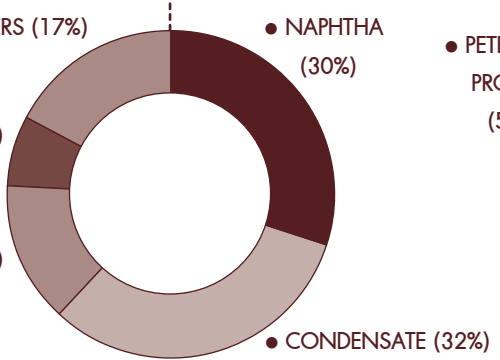
**TOTAL PRIMARY ENERGY SUPPLY (100%)**



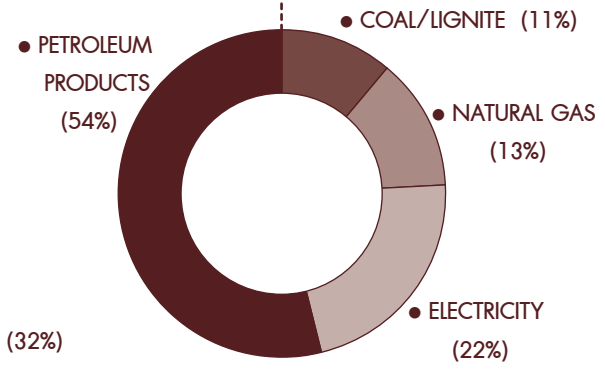
**OWN USE & LOSS (19%)**



**NON-ENERGY USE (17%)**

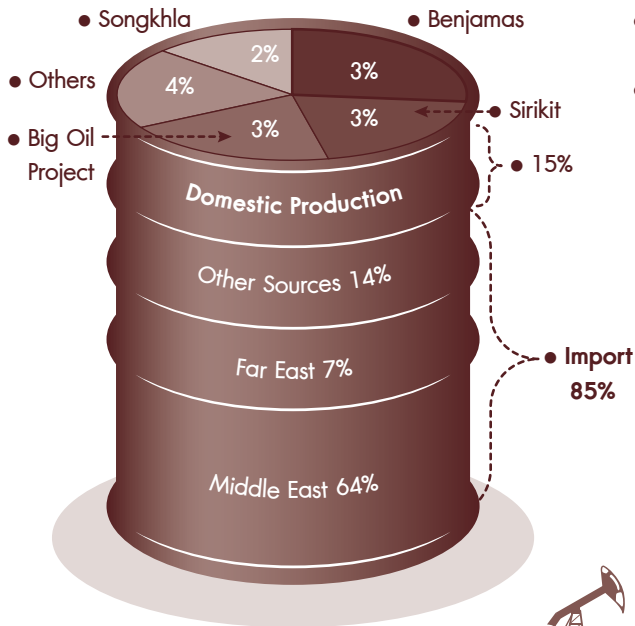


**FINAL ENERGY CONSUMPTION (64%)**



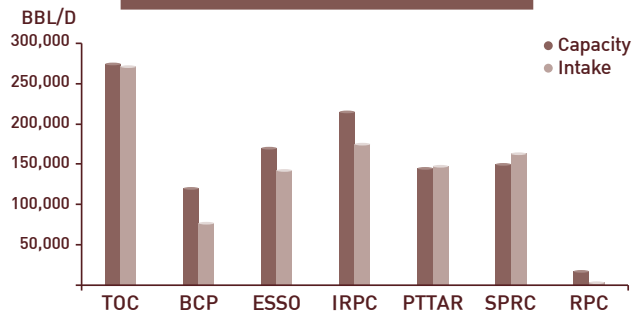
# Oil

## Crude Oil Supply 2012

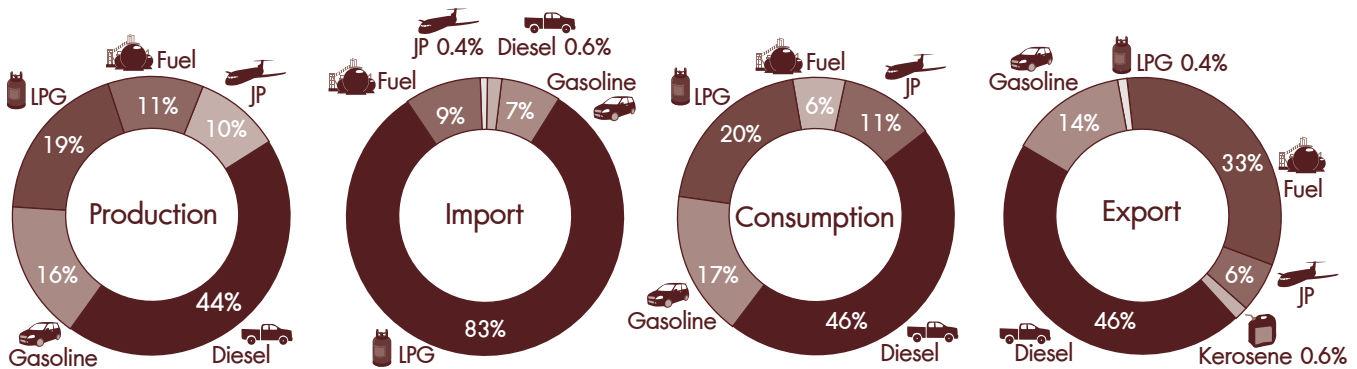


- Big Oil Project : Plathong, Plamuke, Kapong, Surat and Yala
- Middle East : United Arab Emirates, Saudi Arabia, Oman, Qatar and Others
- Far East : Malaysia, Indonesia, Brunei and Others

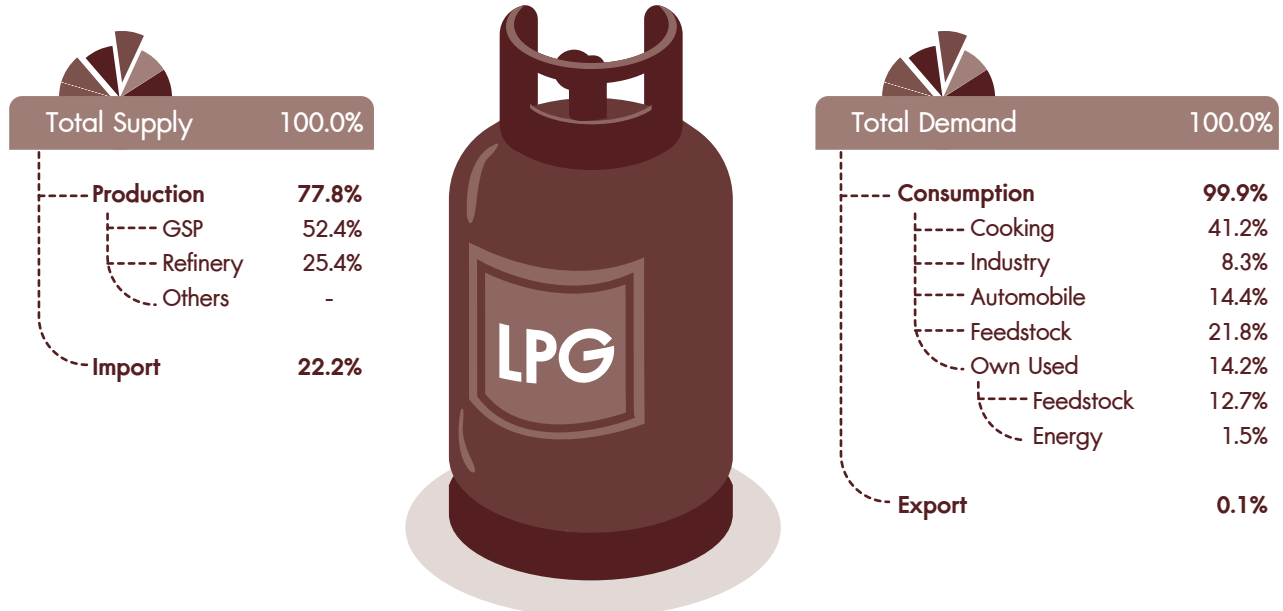
## Refinery Utilization Ratio 2012



## Share of Petroleum Products 2012

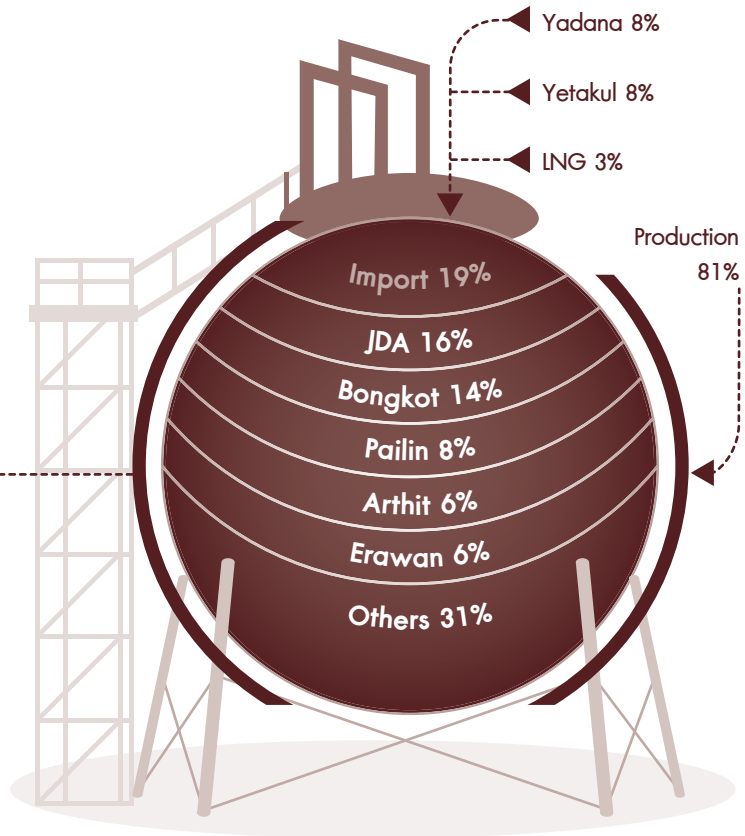
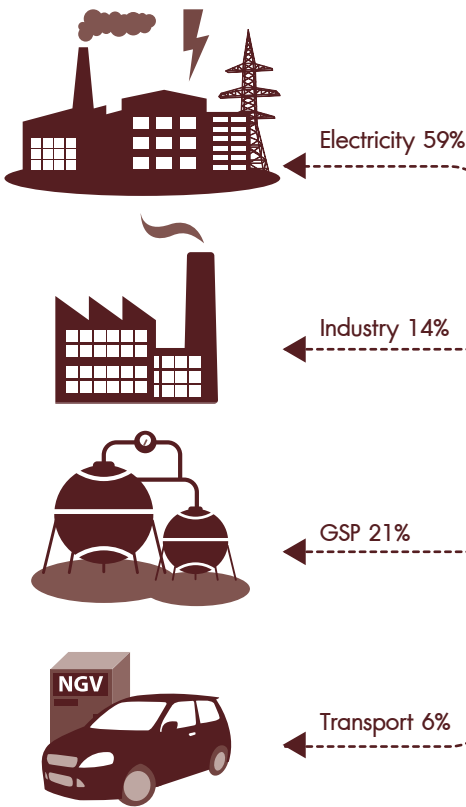


## Supply and Demand of LPG, Propane and Butane 2012

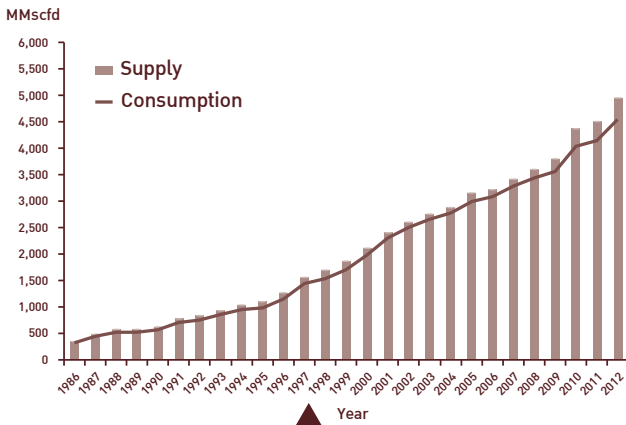


# Natural Gas

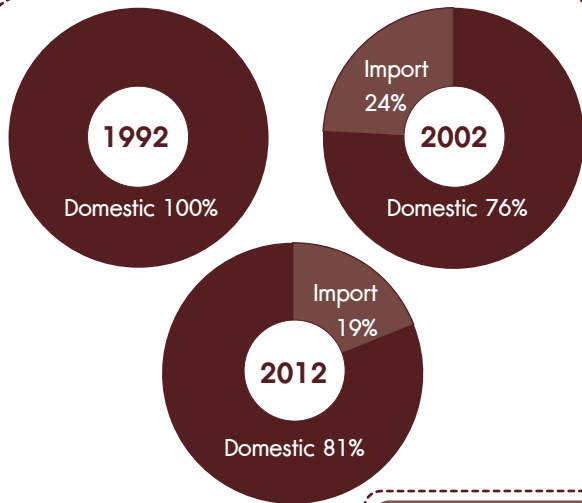
## Share of Natural Gas Consumption



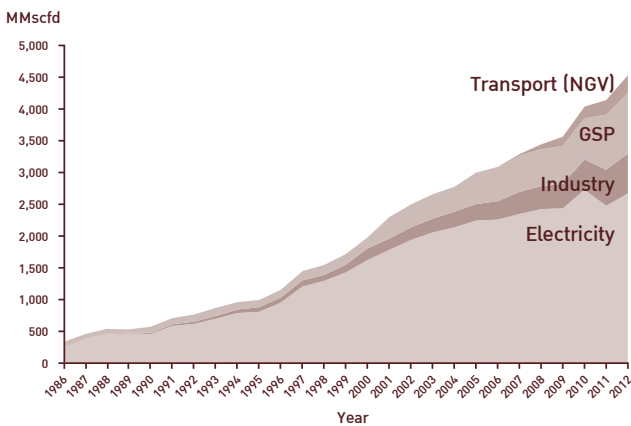
## Natural Gas Supply and Consumption



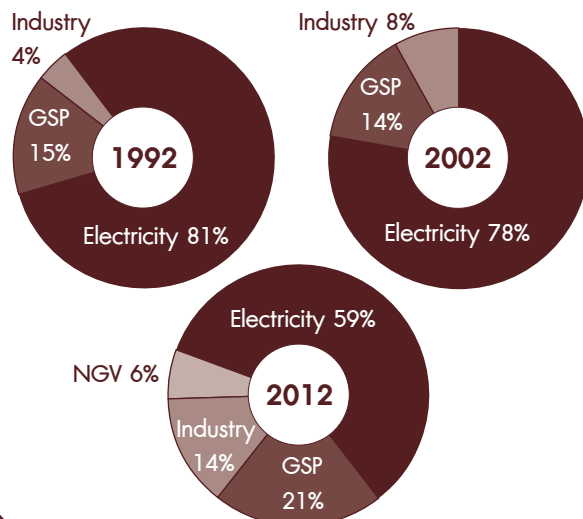
$$\text{Supply} = \text{Production} + \text{Import}$$



## Natural Gas Consumption by Sector



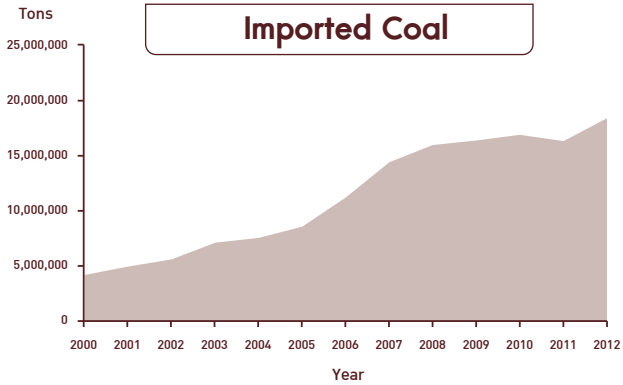
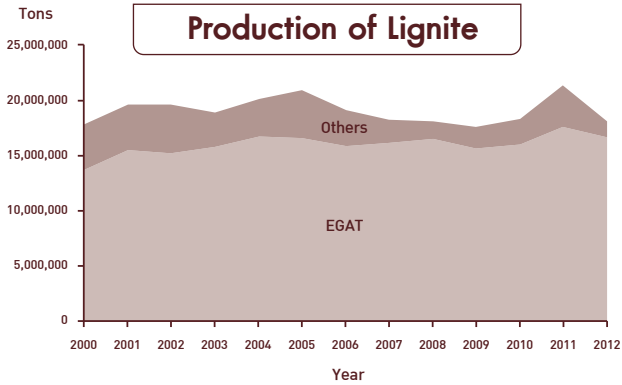
## Consumption



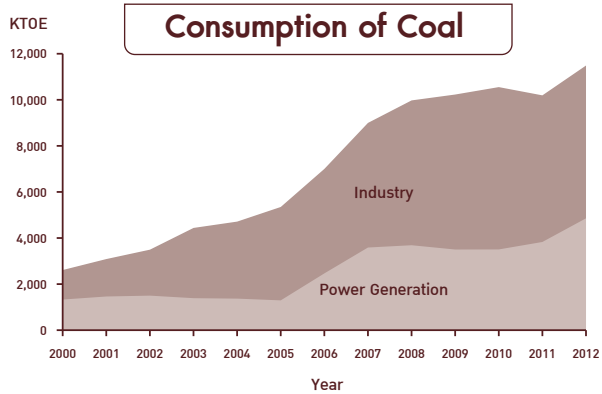
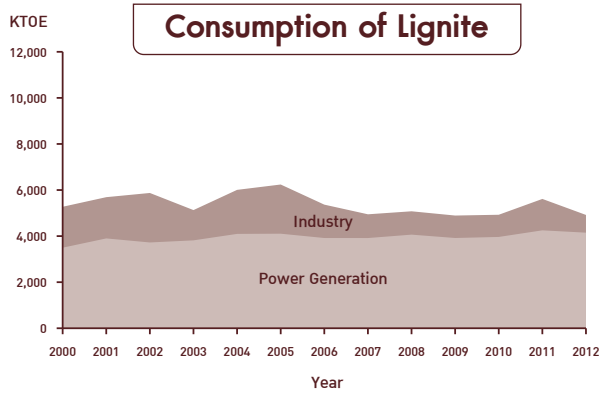
# Lignite/Coal



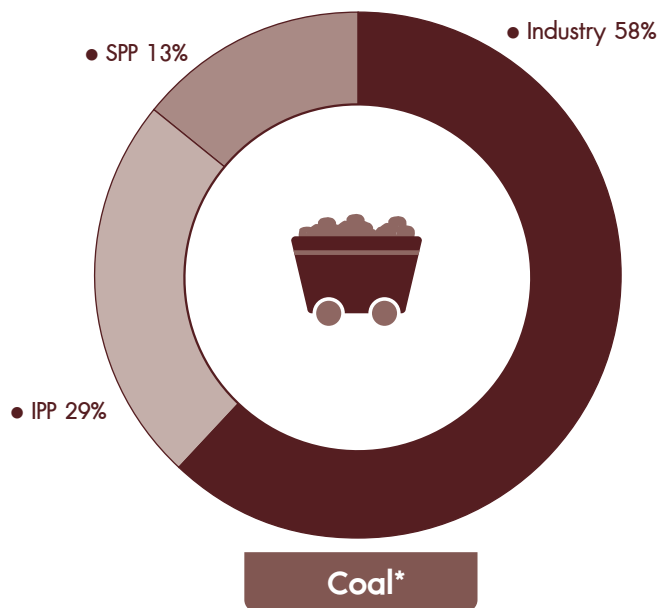
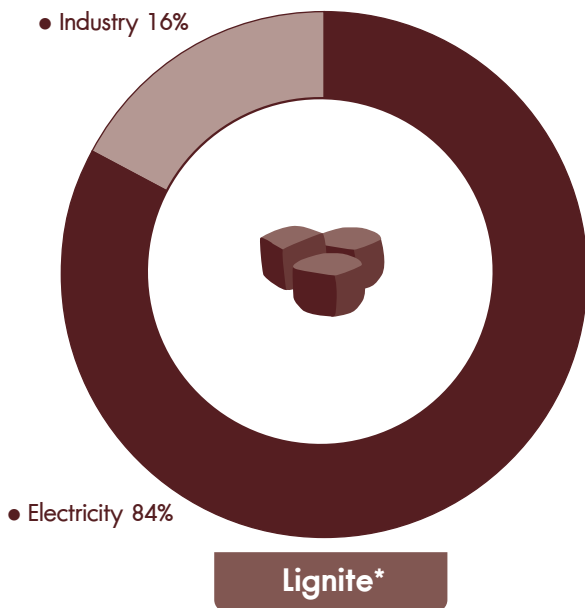
## Supply



## Demand



## Share of Lignite & Coal Consumption 2012

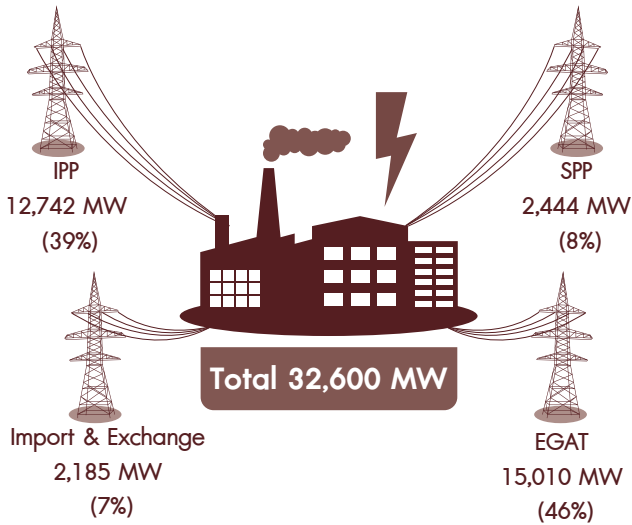


\*Based on the calorific value.

# Electricity

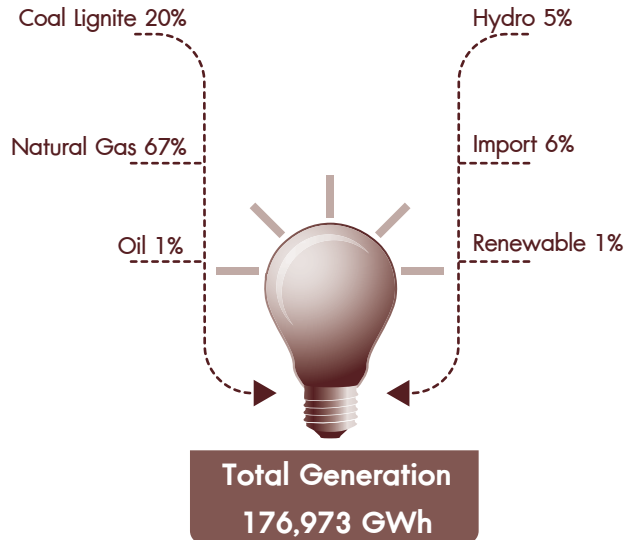
## System Installed Generating Capacity

As of December 2012



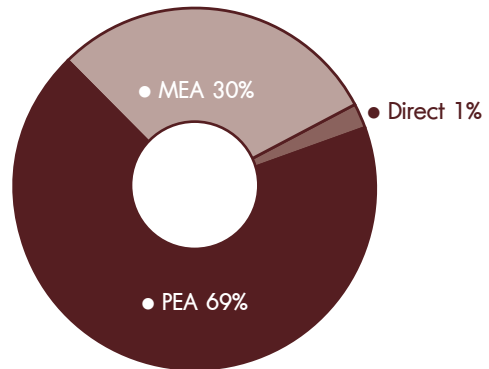
## Share of Power Generation

by Fuel Type in 2012



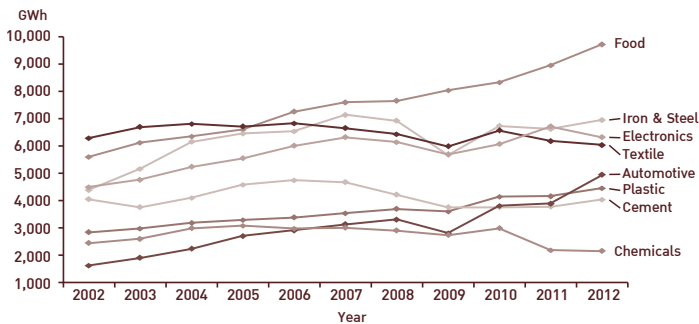
## Share of Electricity Consumption

by Sector 2012

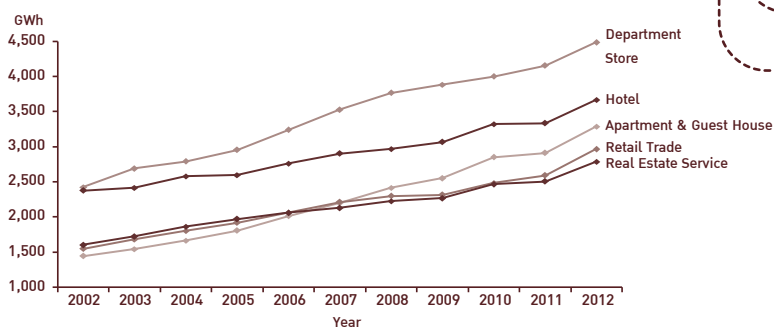


**Total Consumption: 161,778 GWh**

## Electricity Consumption by Industrial Cluster



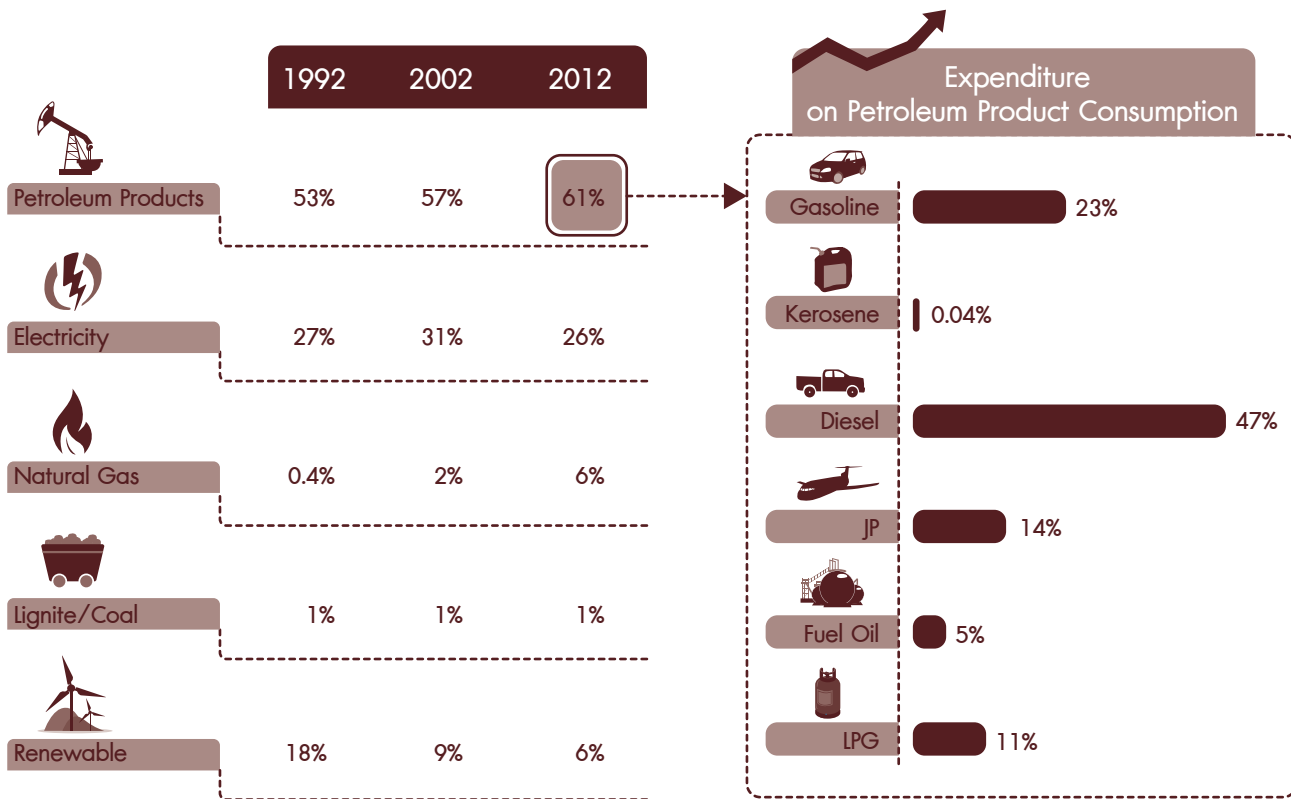
## Electricity Consumption by Commercial Cluster



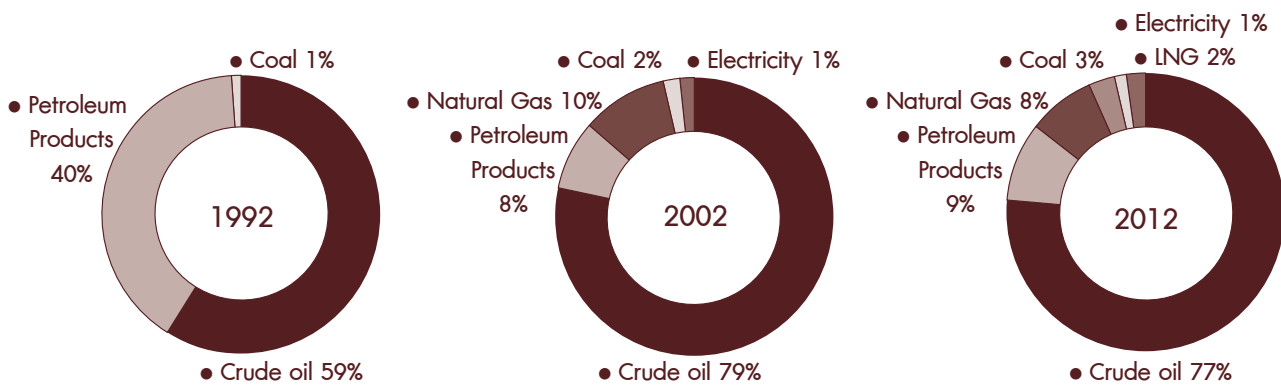
- Residential 36,447 GWh (23%)
- Small General Service 17,015 GWh (11%)
- Industrial 72,296 GWh (45%)
- Business 27,083 (17%)
- Government and Non-Profit 3,799 GWh (2%)
- Agriculture 377 GWh (0.2%)
- Free of Charge 2,191 GWh (1%)
- Other 2,570 GWh (1%)

# Energy Value

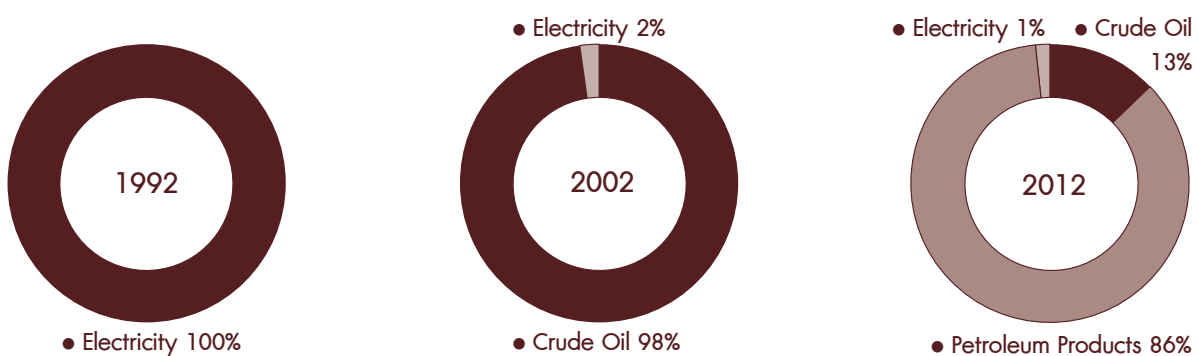
## Share of Expenditure on Final Energy Consumption



## Value of Energy Import



## Value of Energy Export



# Energy and Economics

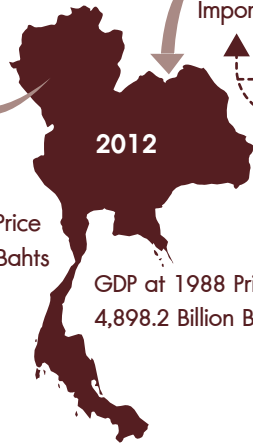
Export 7,091.3 Billion Bahts

Import 7,738.5 Billion Bahts

Goods and Services 6,315.7  
Energy 1,422.9

GDP at Current Price  
11,375.3 Billion Bahts

GDP at 1988 Price  
4,898.2 Billion Bahts

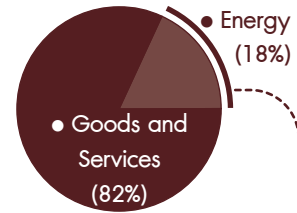


2012

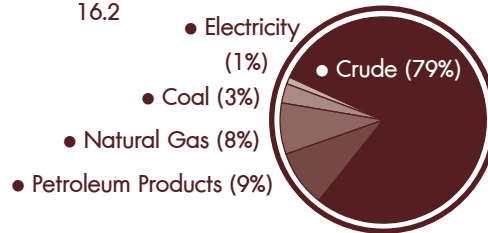
Crude 1,119.3  
Petroleum Products 124.3  
Natural Gas 116.3  
Coal 46.7  
Electricity 16.2

Unit : Billion Bahts

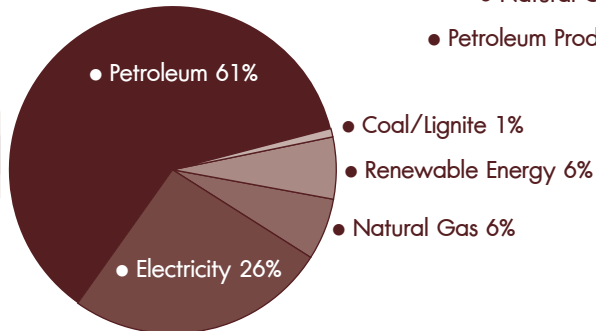
## Value of Import



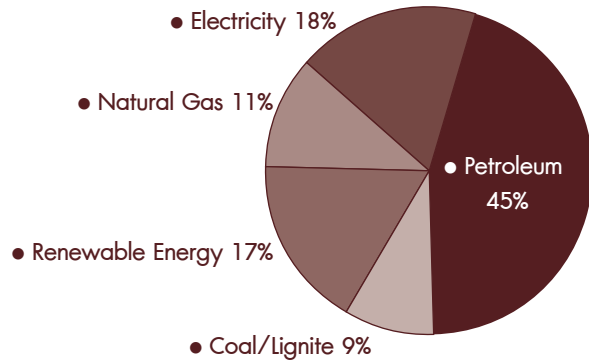
## Value of Energy Import



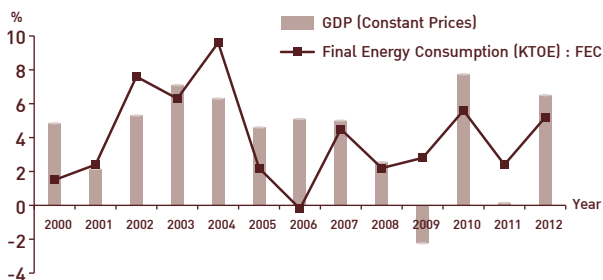
Value of Final Energy Consumption  
2,139.0 Billion Bahts



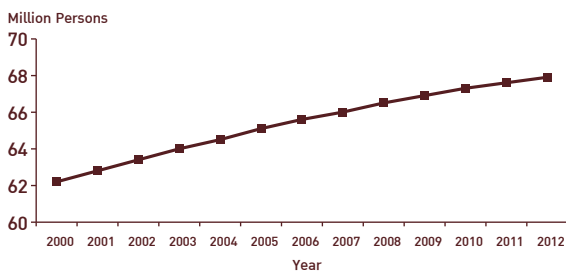
Final Energy Consumption  
78,393 KTOE



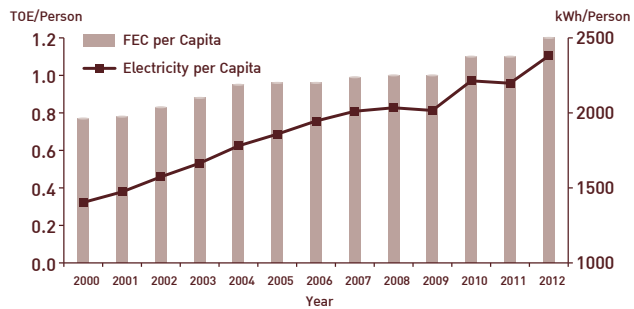
## Growth Rate (%)



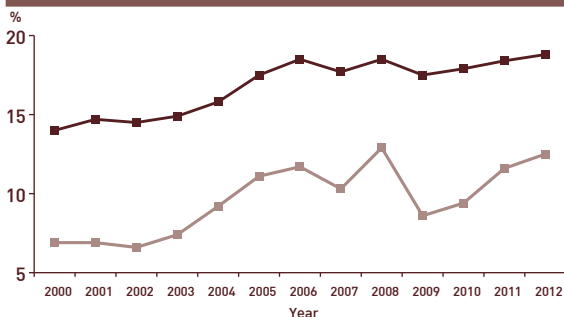
## Population (Million Persons)



## Ratios (%)



## Ratios (%)



## Ratios (%)



■ FEC Value : GDP at current Market Prices

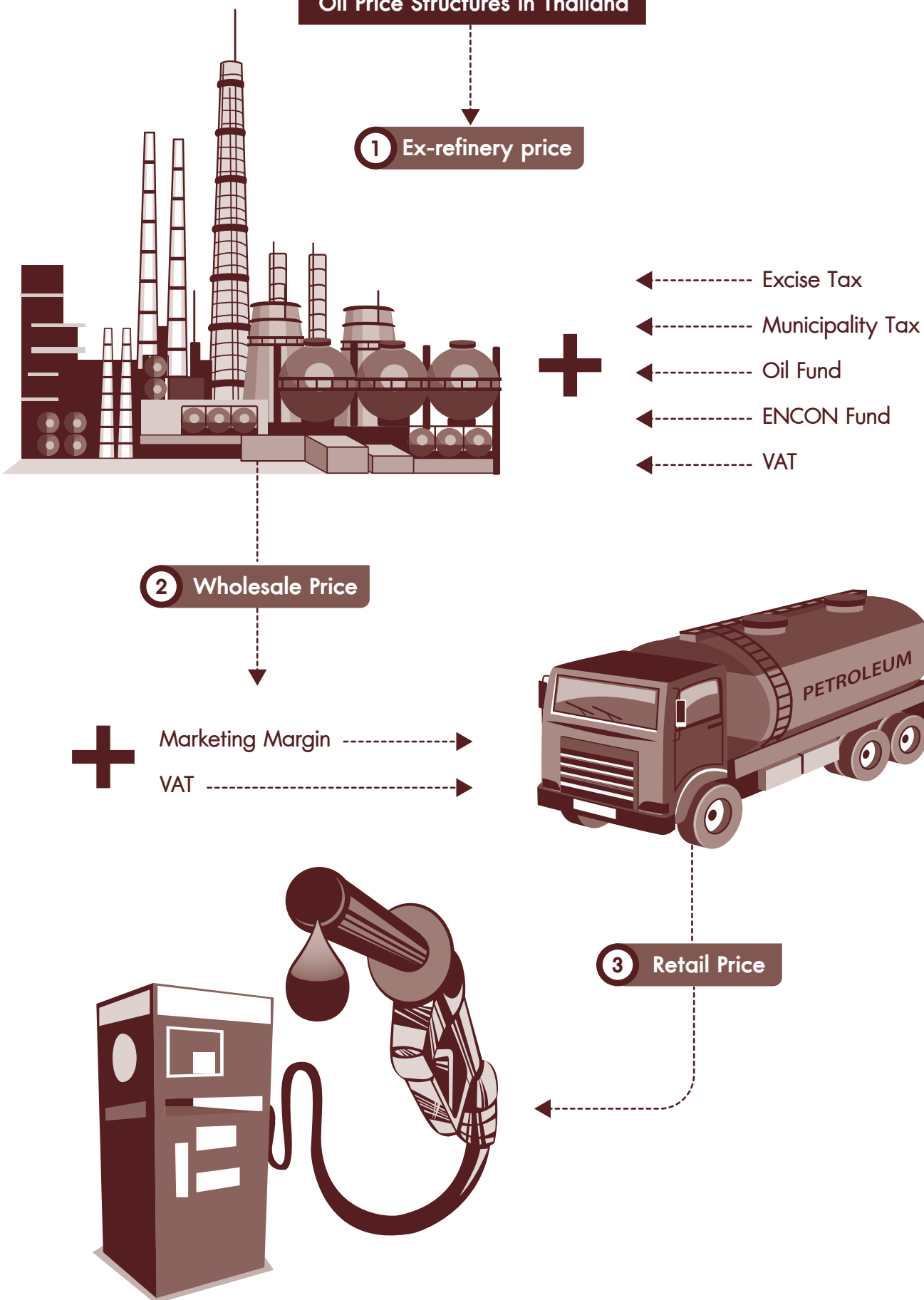
■ Value of Imported Energy : GDP at current Market Prices

■ Value of Imported Energy : Total Import

■ Value of Imported Petroleum : Total Import

# Petroleum Prices

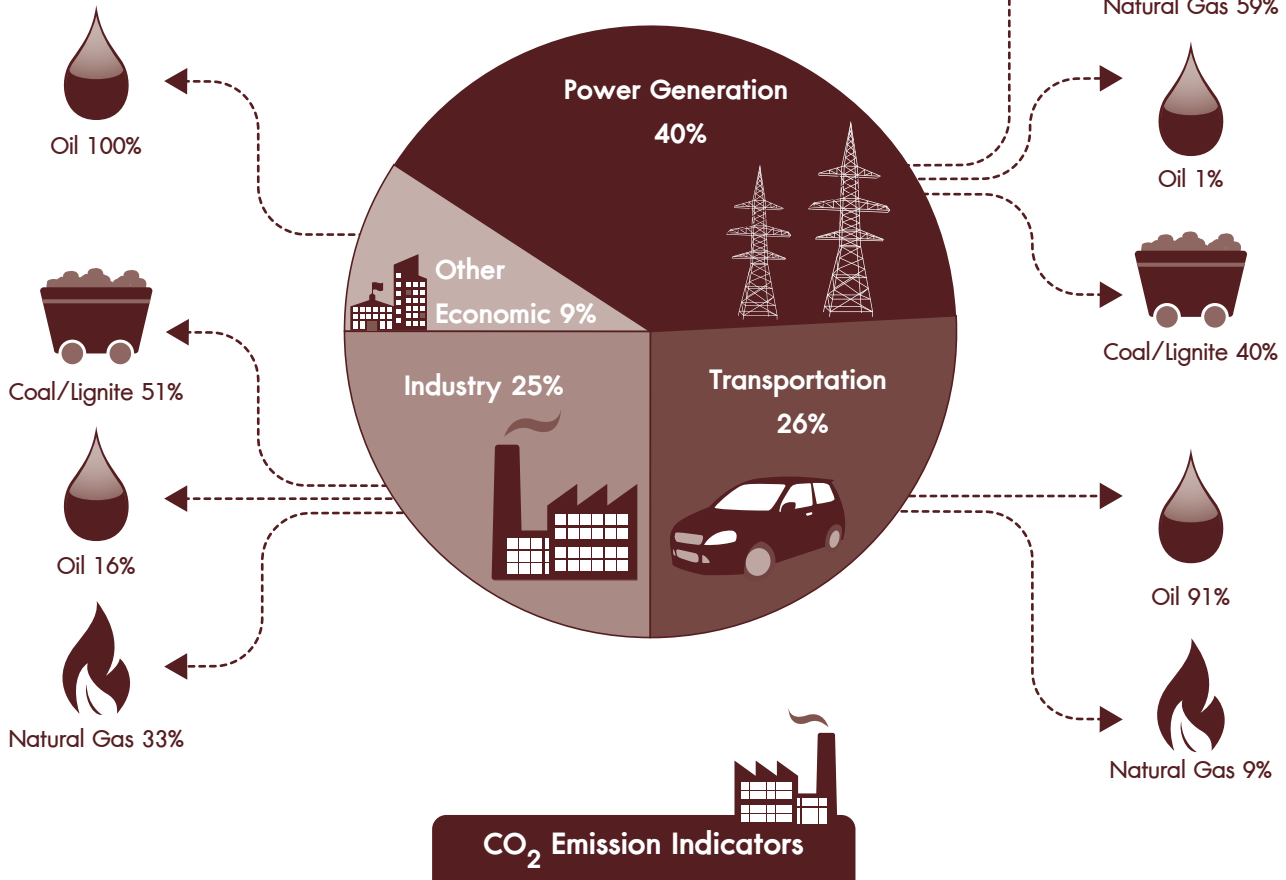
## Oil Price Structures in Thailand





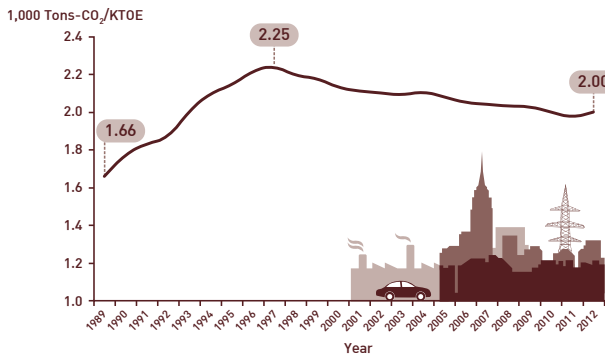
# Air Pollution Emission in The Energy Sector

## CO<sub>2</sub> Emission by Sector

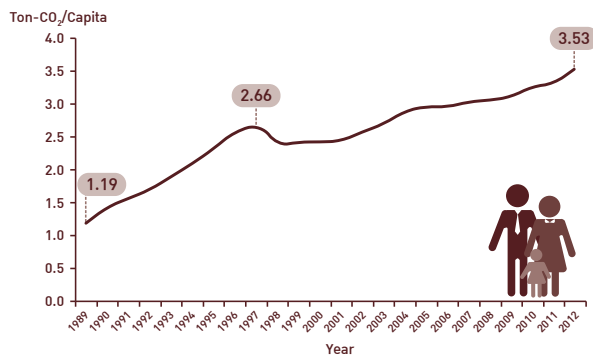


## CO<sub>2</sub> Emission Indicators

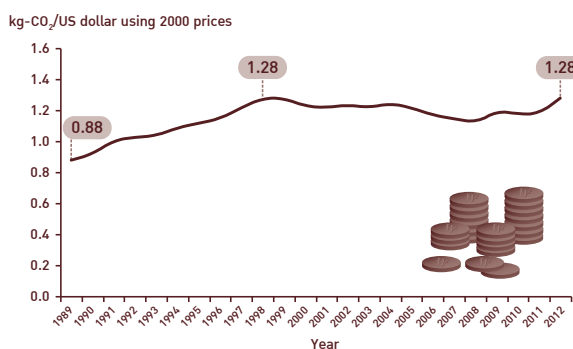
### CO<sub>2</sub> Emission per Primary Energy Consumption



### CO<sub>2</sub> Emission per Capita



### CO<sub>2</sub> Emission per GDP



### CO<sub>2</sub> Emission per kWh

