

The energy situation of Vietnam Status quo and challenges

Hoai-Son NGUYEN
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Outline

Country profile

Energy Sector

- Energy Demand
- Energy Supply
- Challenges for energy sector

Electricity Sector

- Electricity Demand
- Electricity Supply
- Challenges for electricity sector

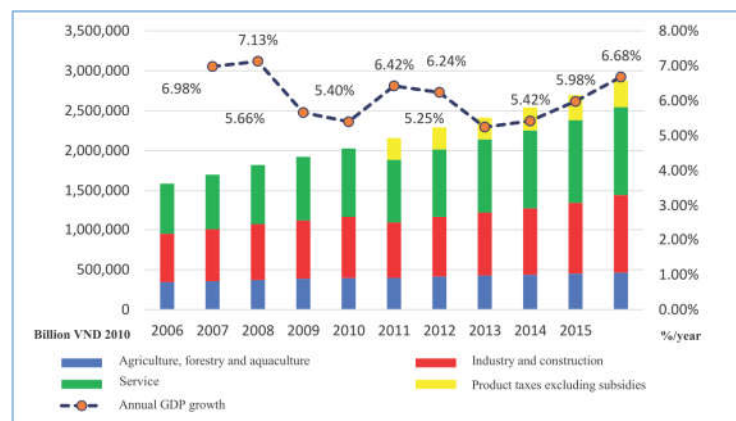
Country Profile



- **Population 2016:** 92.7 million
- **GDP 2016:** 202.62 billion USD
- **GNI per capita 2016:** 2,050 USD
- **GNI per capita 2016 (PPP):** 6,050 USD

Source: WDI

Economic Growth



Source: MOIT 2017

Energy Demand

54,080

Unit: Kilotonne of oil equivalent(KTOE)
Total final energy consumption in 2015

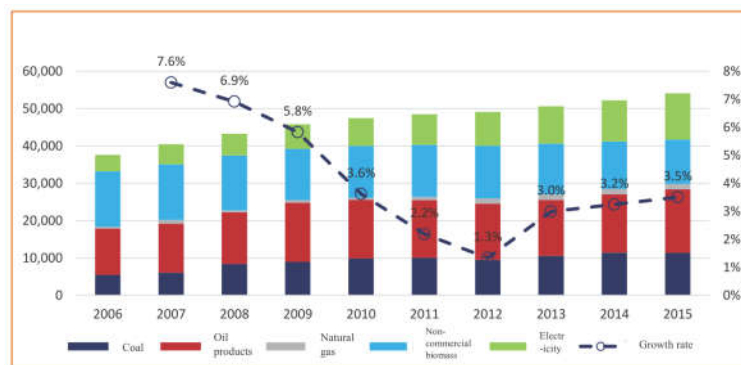
4.1%

The increase in growth rate of final demand between 2006 and 2015

273.3
454.8

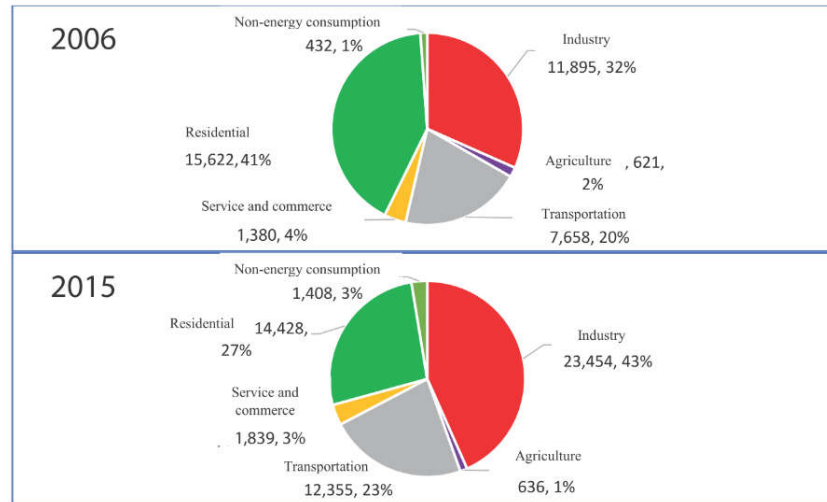
(kgOE/person). Commercial energy consumption per capita 2006/2015

Energy
consumption
by fuel type
(KTOE)



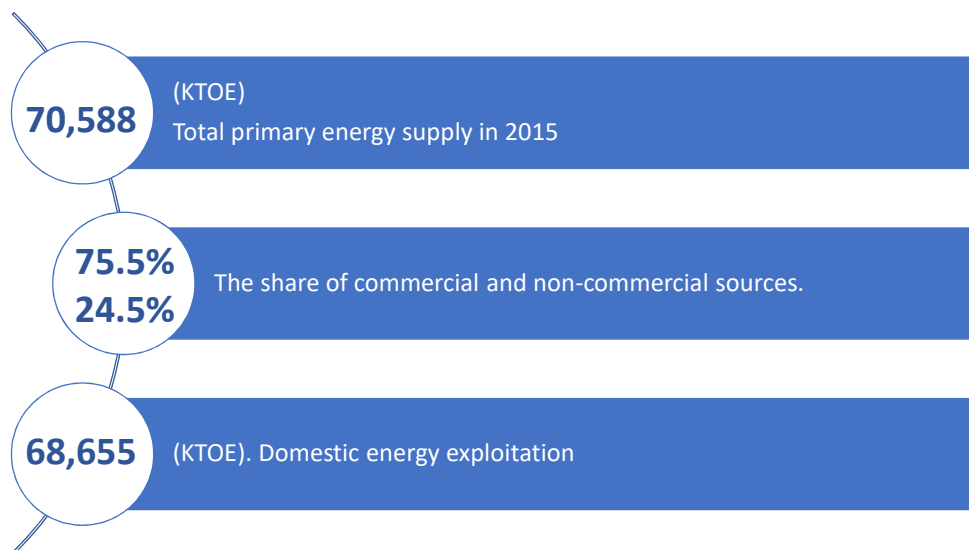
Source. MOIT 2017

Energy consumption by sector (million TOE, %)



Source. Institute of Energy 2016

Energy Supply



Primary Energy Supply (KTOE)



Source: MOIT 2017

1

Rapid growth in demand – especially for electricity

2

Becoming a net energy importer

3

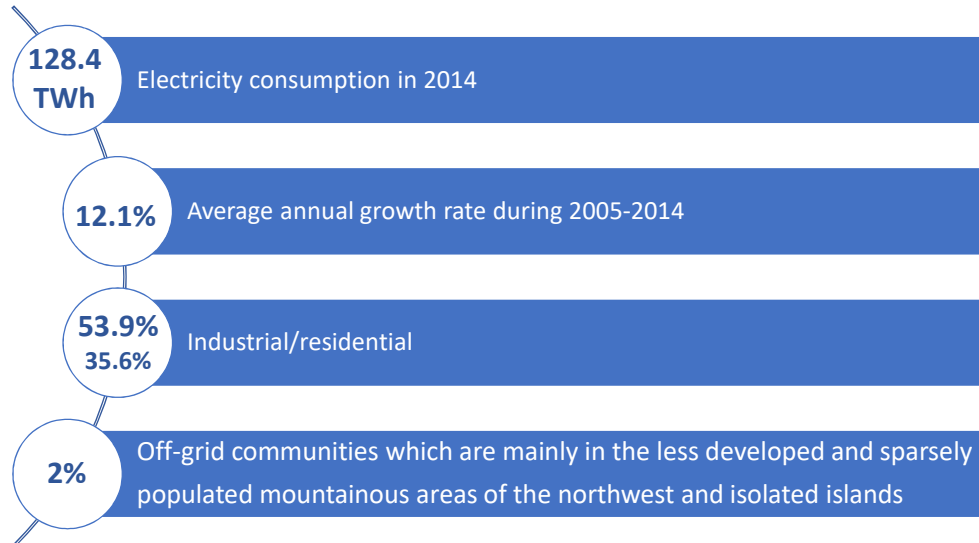
Traditional energy resources are being depleted

4

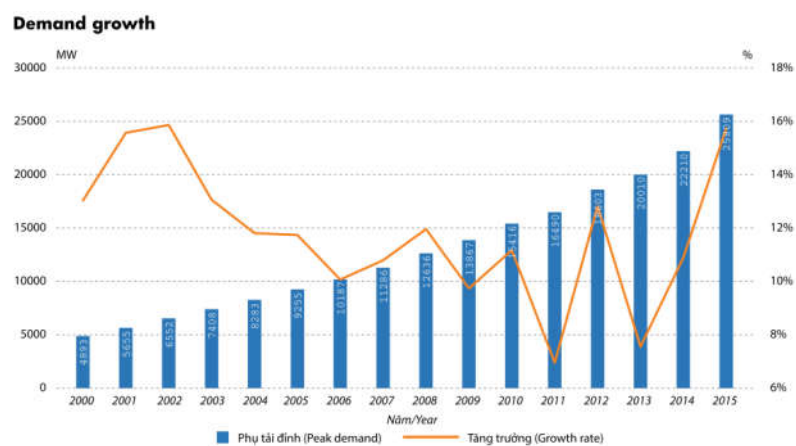
Stricter pollution requirements for energy sector

Challenges for energy sector

Electricity Demand

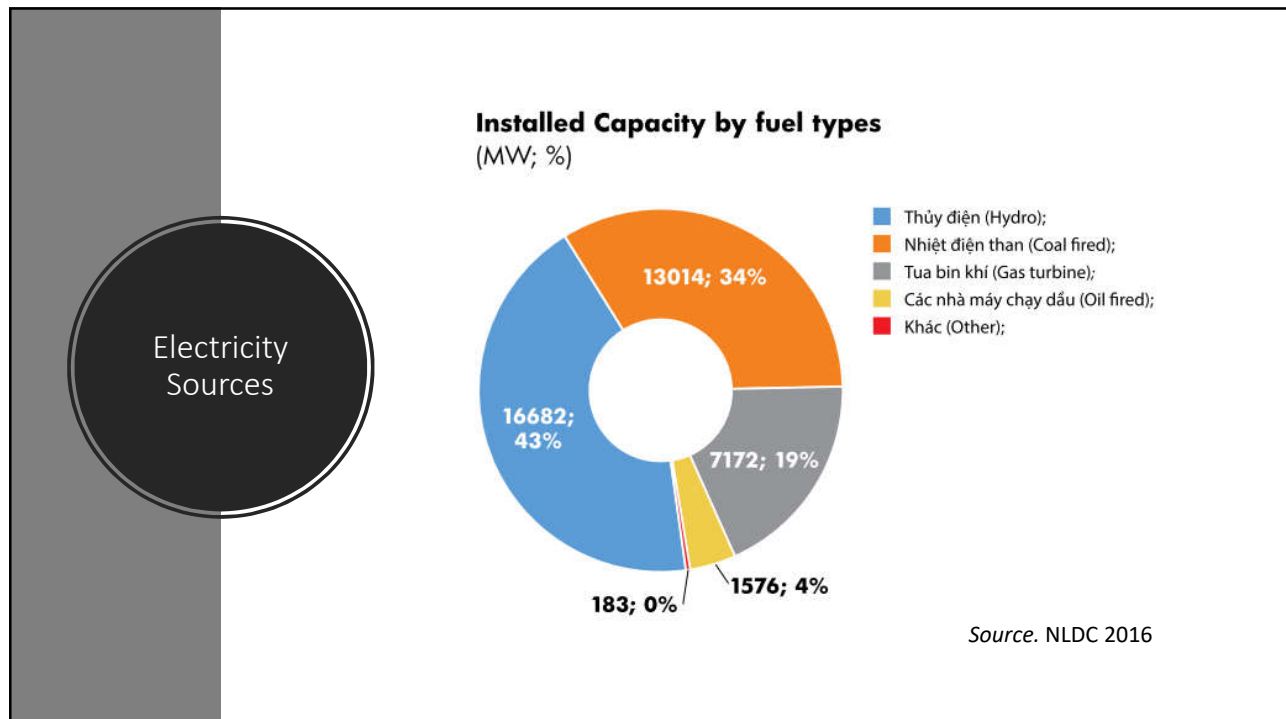
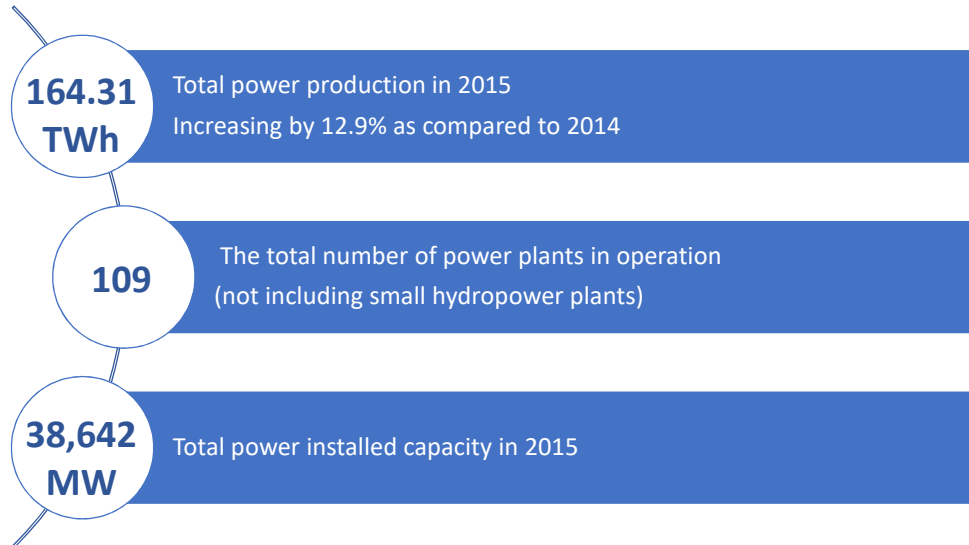


Demand Growth



Source: NLDC 2016

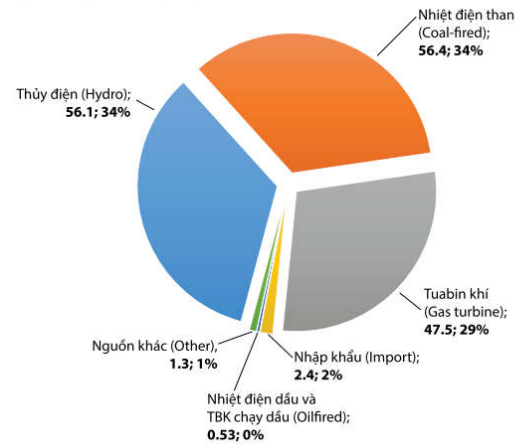
Electricity Supply



Electricity Sources

Share of power production by fuel type

Tỷ kWh (Bil. kWh; %)

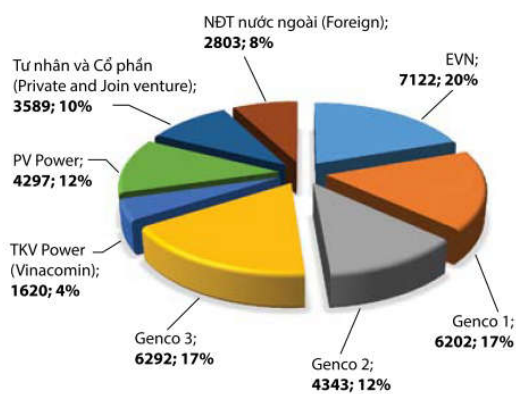


Source. NLDC 2016

Electricity Sources

Generation ownership share

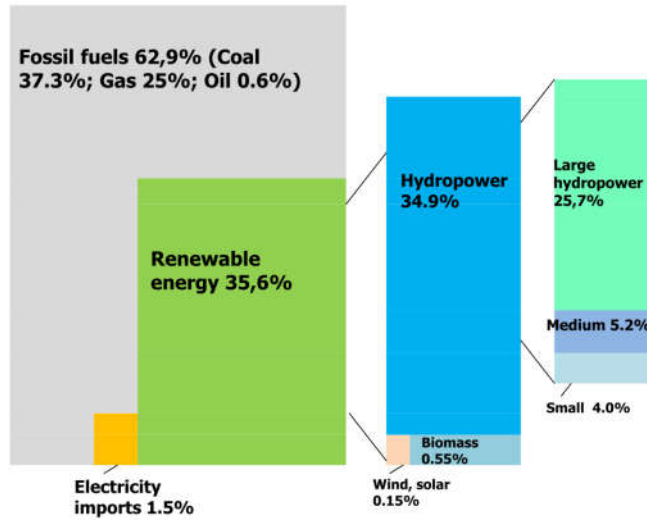
(MW; %)



Source. NLDC 2016

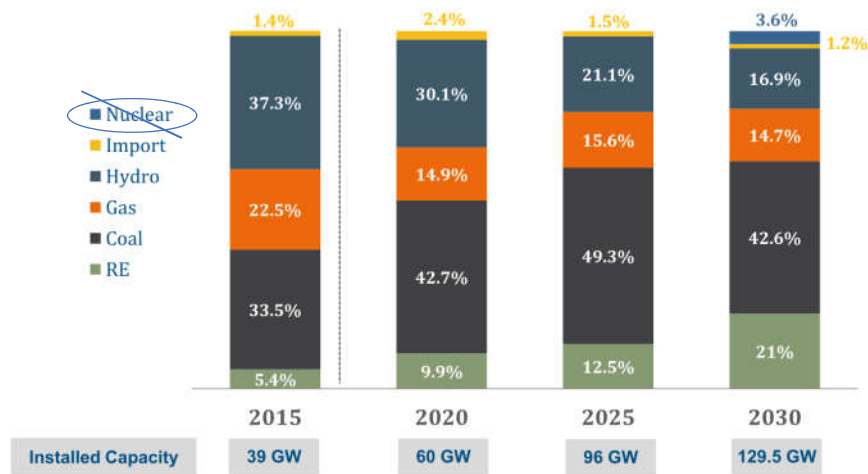
Renewable Sources

The Power Structure in 2015



Source. Nguyen Van Vy 2017

Power Development Plan VII revised



Source. Adapted from GIZ 2016

1

Gaps between
economic and
electricity growth

2

Elec. Security and
Impact on
Environment

3

Insufficient Public
Investment due to
high debt-to-GDP
ratio

Challenges for electricity sector