

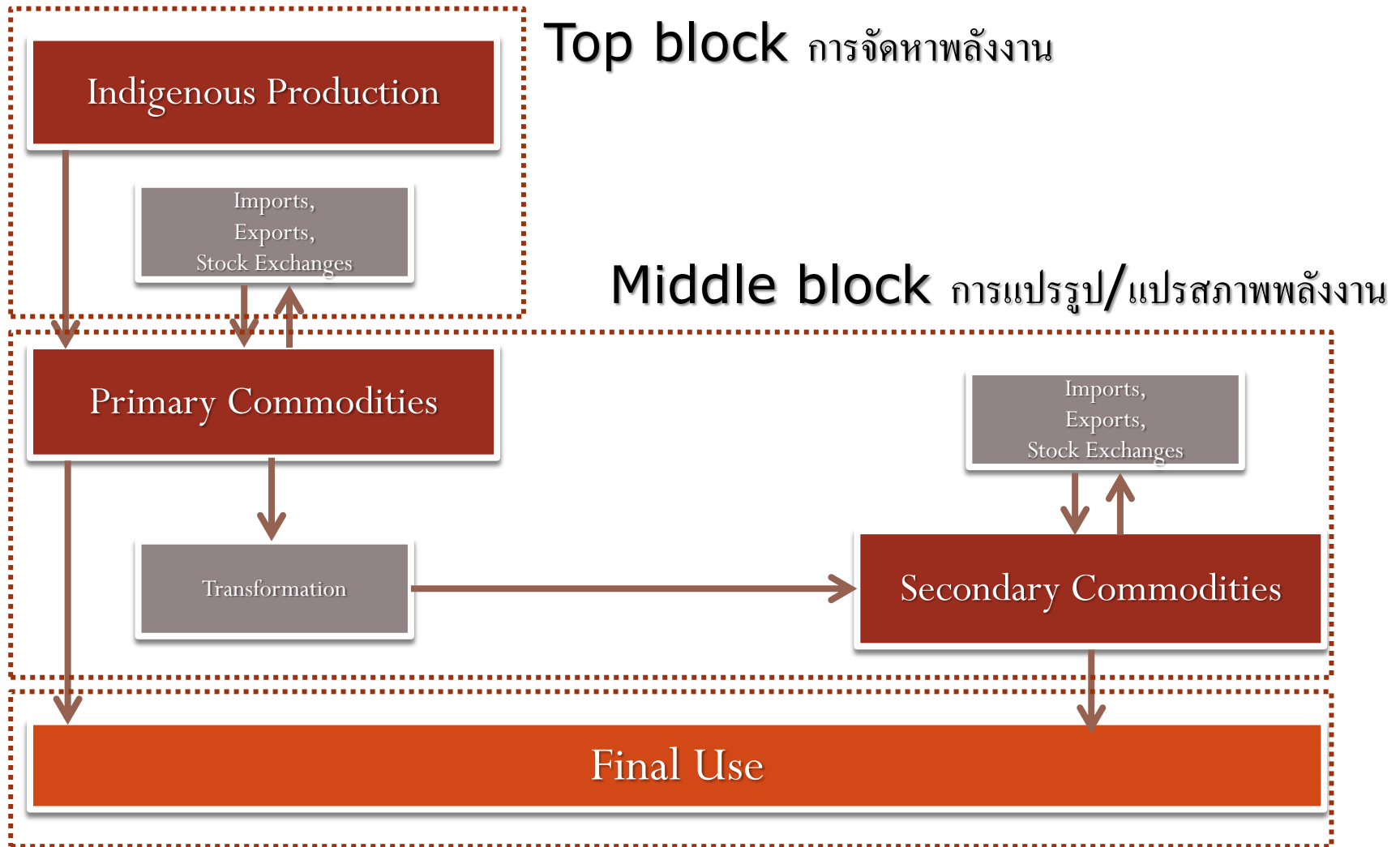
การออกแบบโครงสร้างแบบจำลองสำหรับการศึกษาสภาพอนาคตพลังงานไทย

ดร.สิริภา จุลกาญจน์

ห้องประชุม 5 ชั้น 15 Energy Complex อาคาร B กระทรวงพลังงาน

30 พ.ค. 2560

Generalized energy system

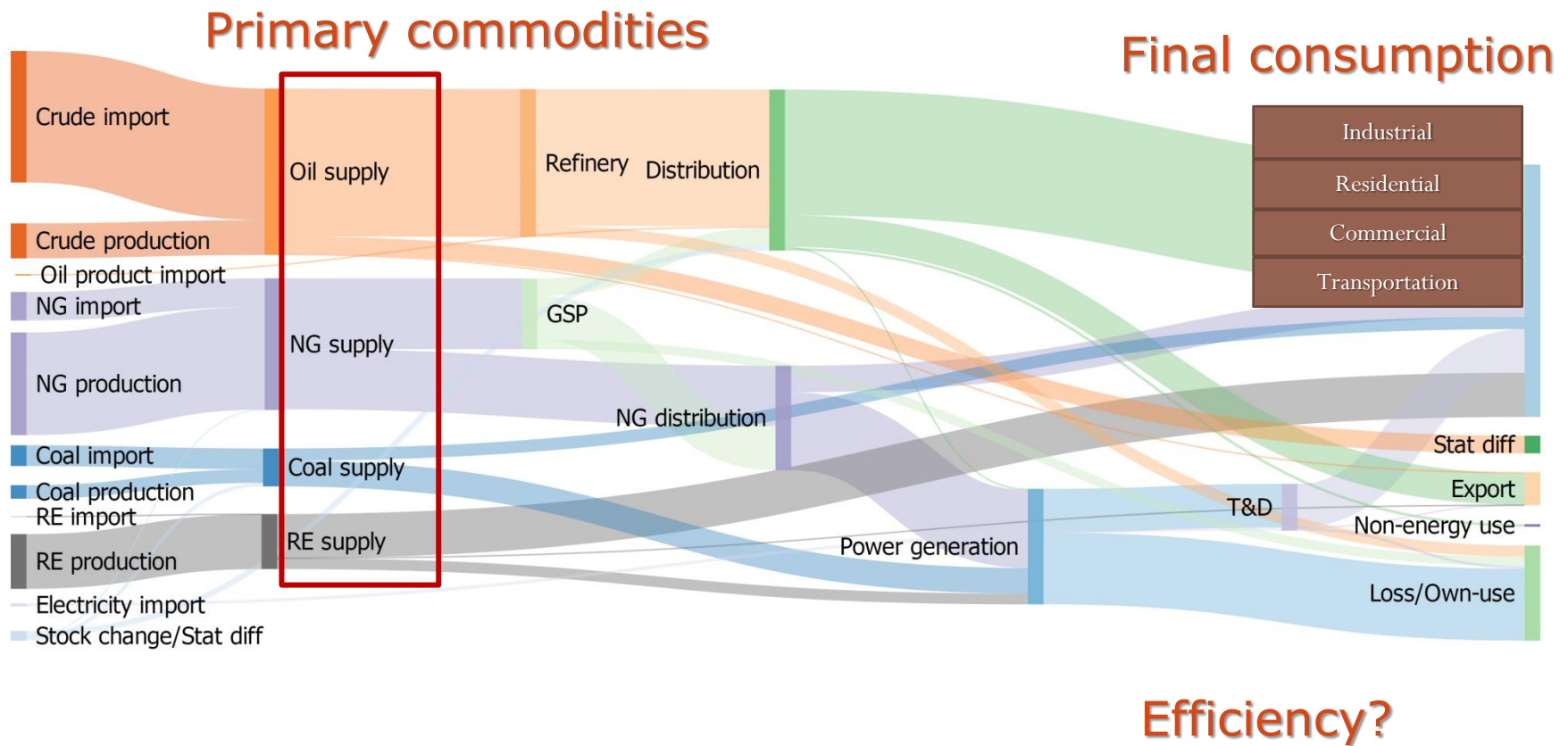


Generalized energy system



$$\text{Efficiency} = \text{Final use} / \text{Input}$$

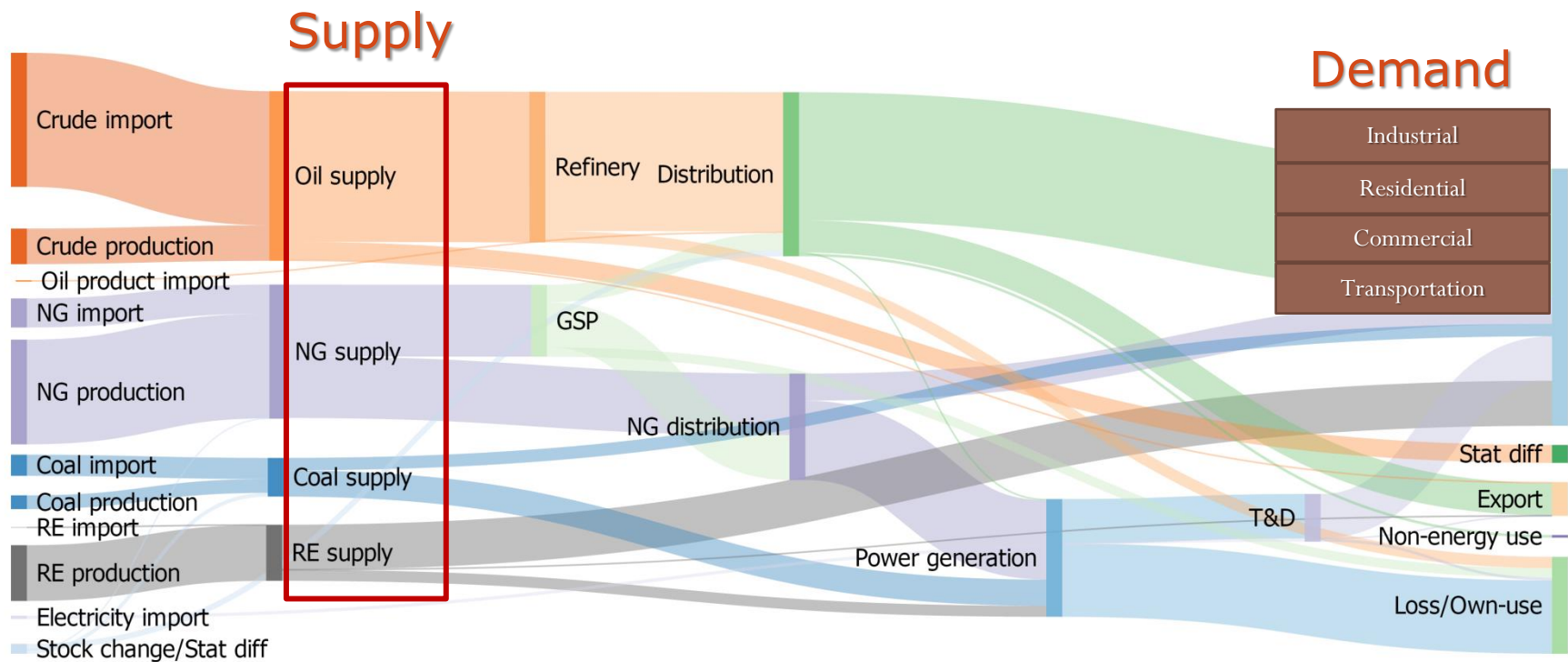
Thailand energy flow 2014



Middle block

- Transformation
 - Power plants
 - Oil refinery plants
 - Gas refinery plants
 - Others
- Secondary commodities
 - Petroleum products (from crude oil)
 - Electricity (from fuel oil, renewables)
 - Coke-oven coke (from coking coal)
 - Charcoal (from fuel wood), etc.

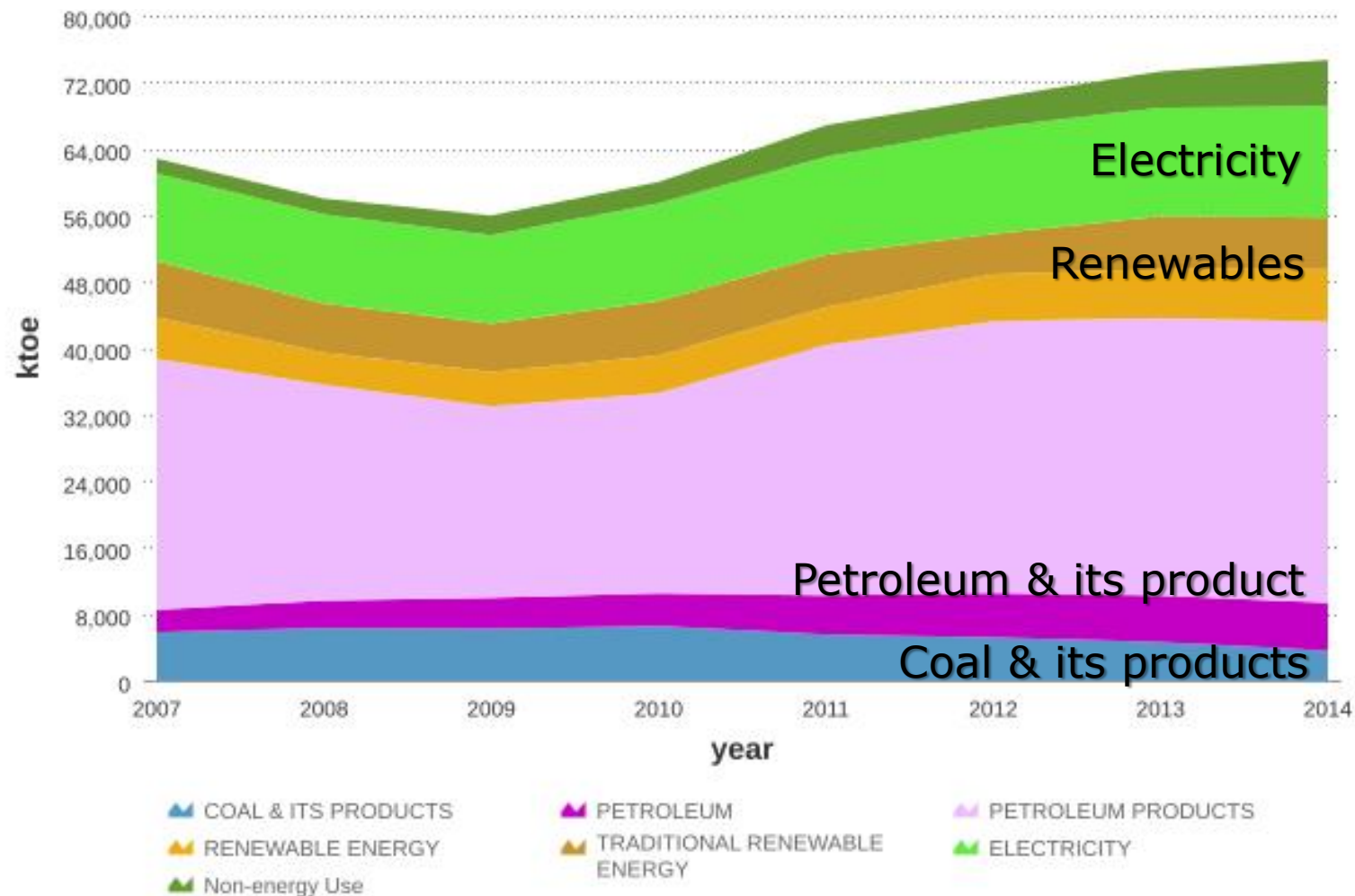
Thailand energy flow 2014



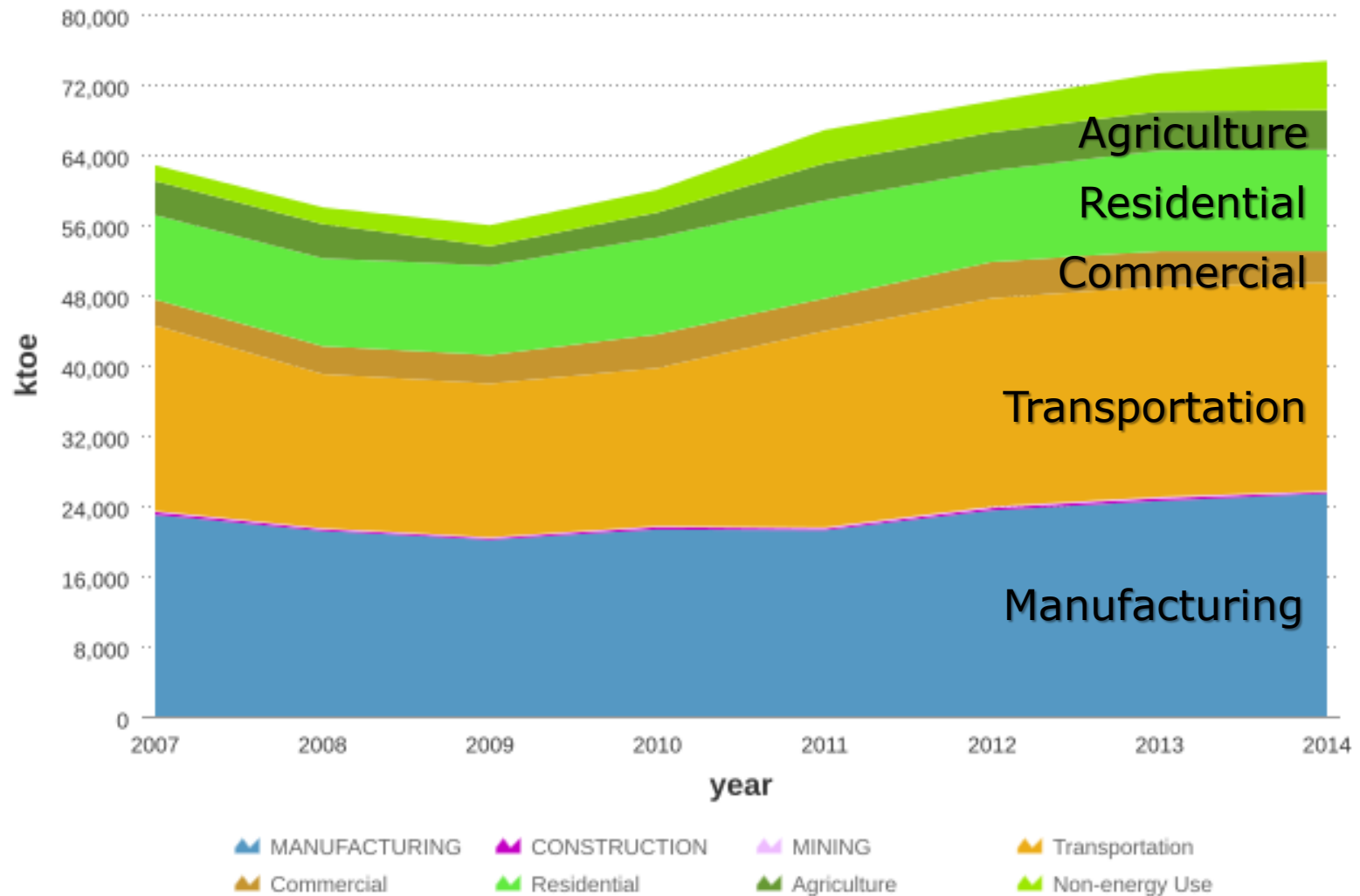
1. ด้านอุปสงค์รายสาขาเศรษฐกิจ (Demand)
2. ด้านอุปทานรายชนิดเชื้อเพลิง (Supply)

ด้านอุปสงค์รายสาขาเศรษฐกิจ (Demand)

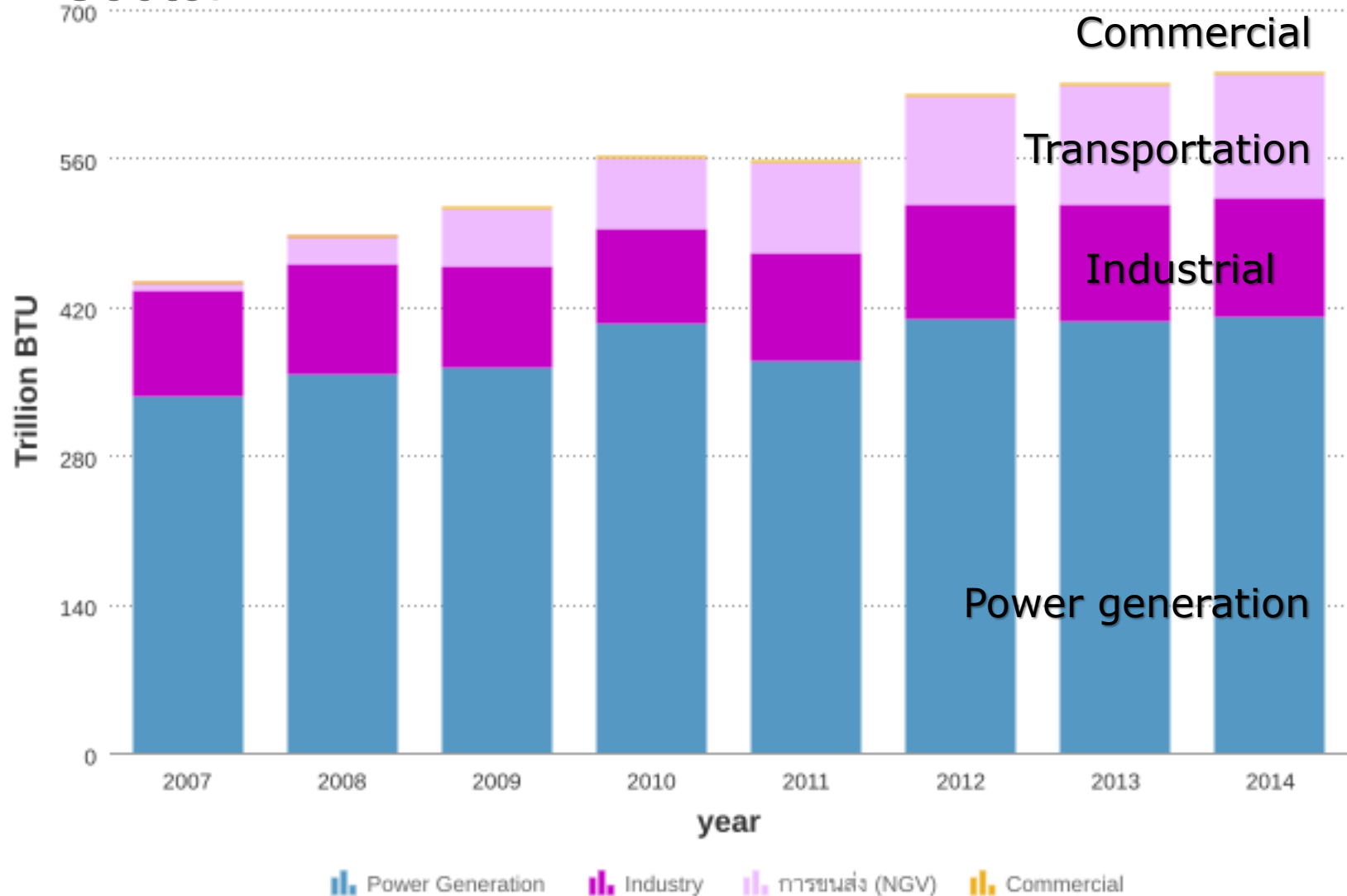
Final Energy Consumption 2007-2014 by Fuel Type



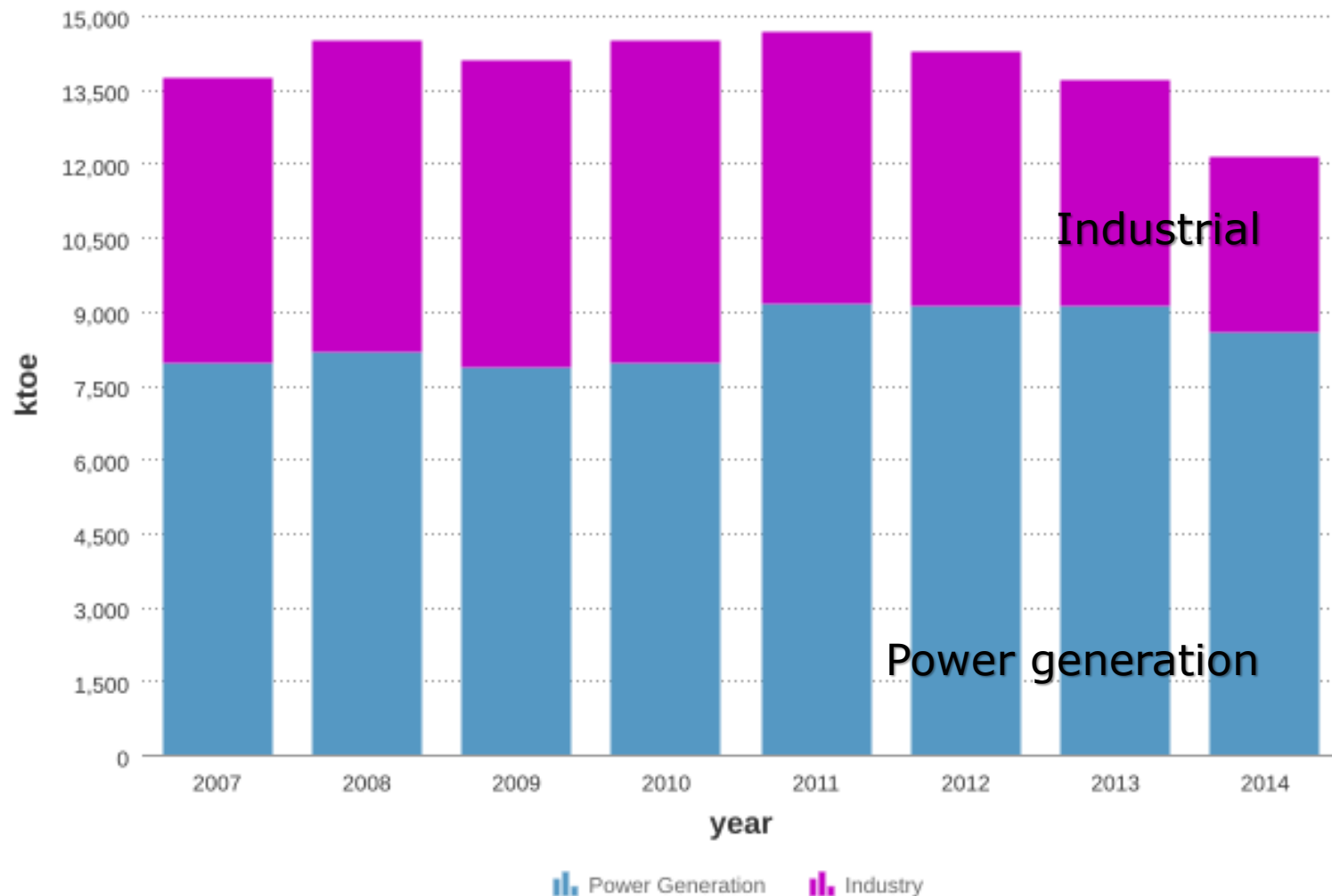
Final Energy Consumption 2007-2014 by sector



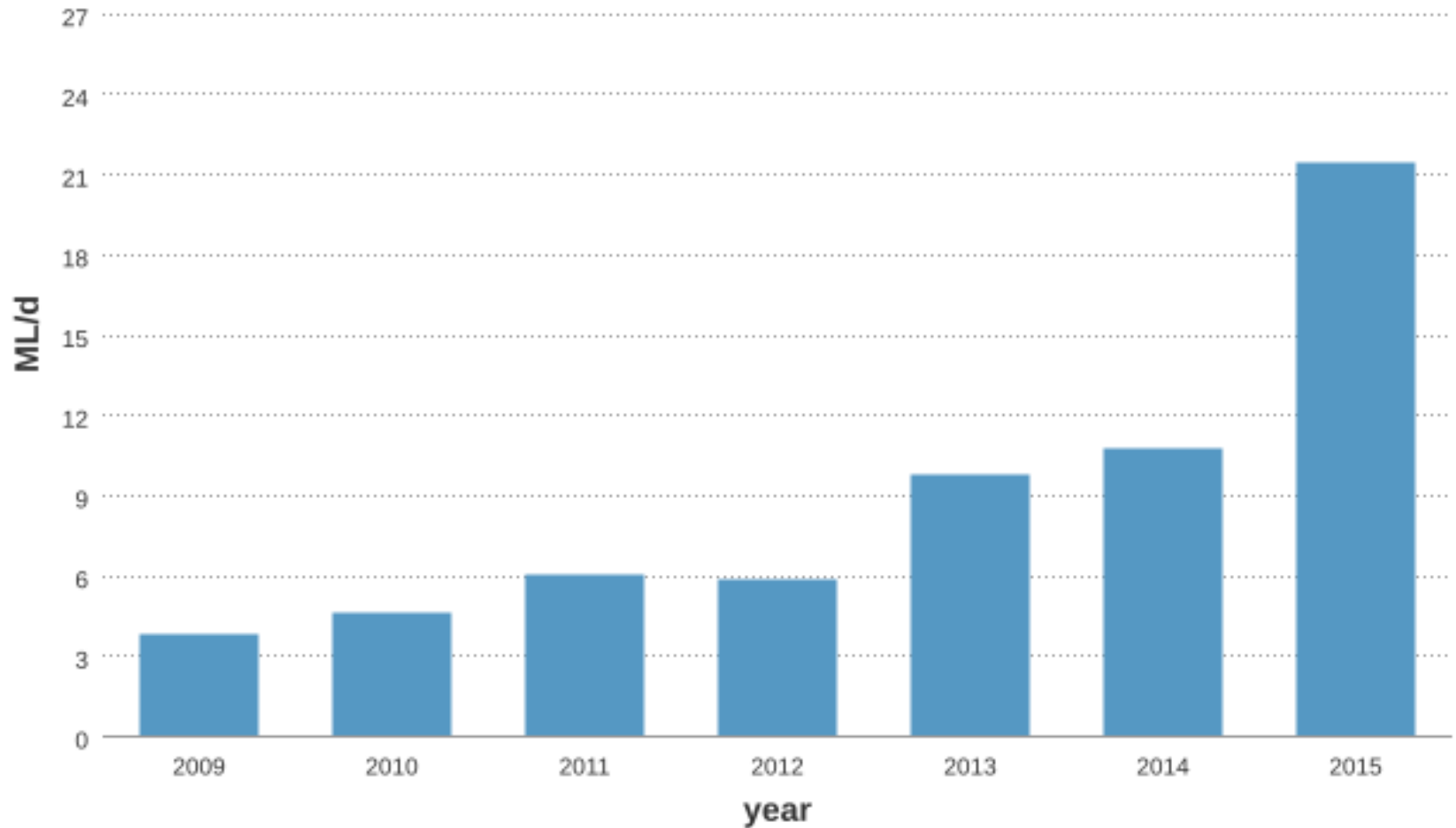
Final Consumption of Natural Gas 2007-2014 by Sector



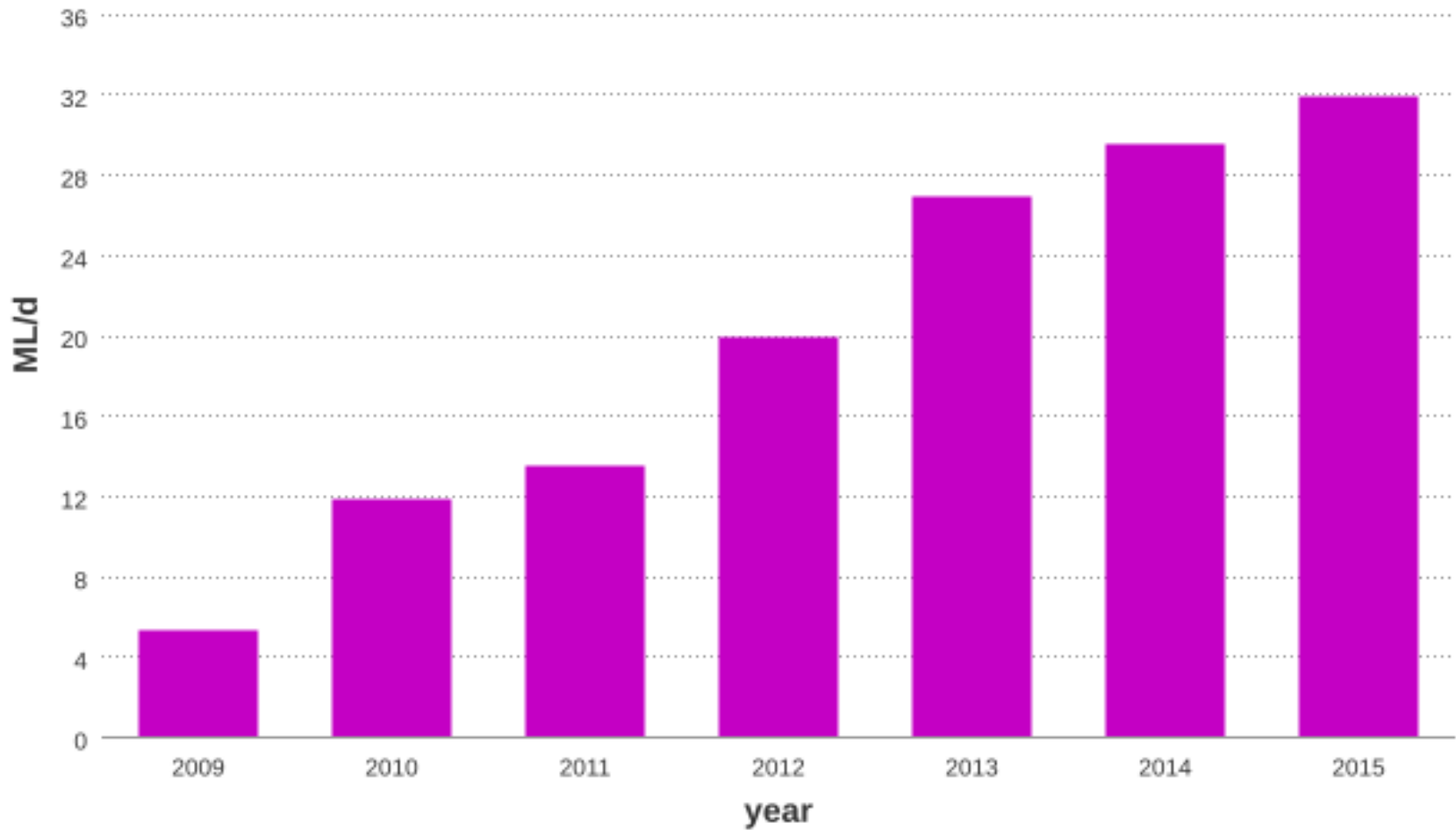
Final Consumption of Coal 2007-2014 by Sector



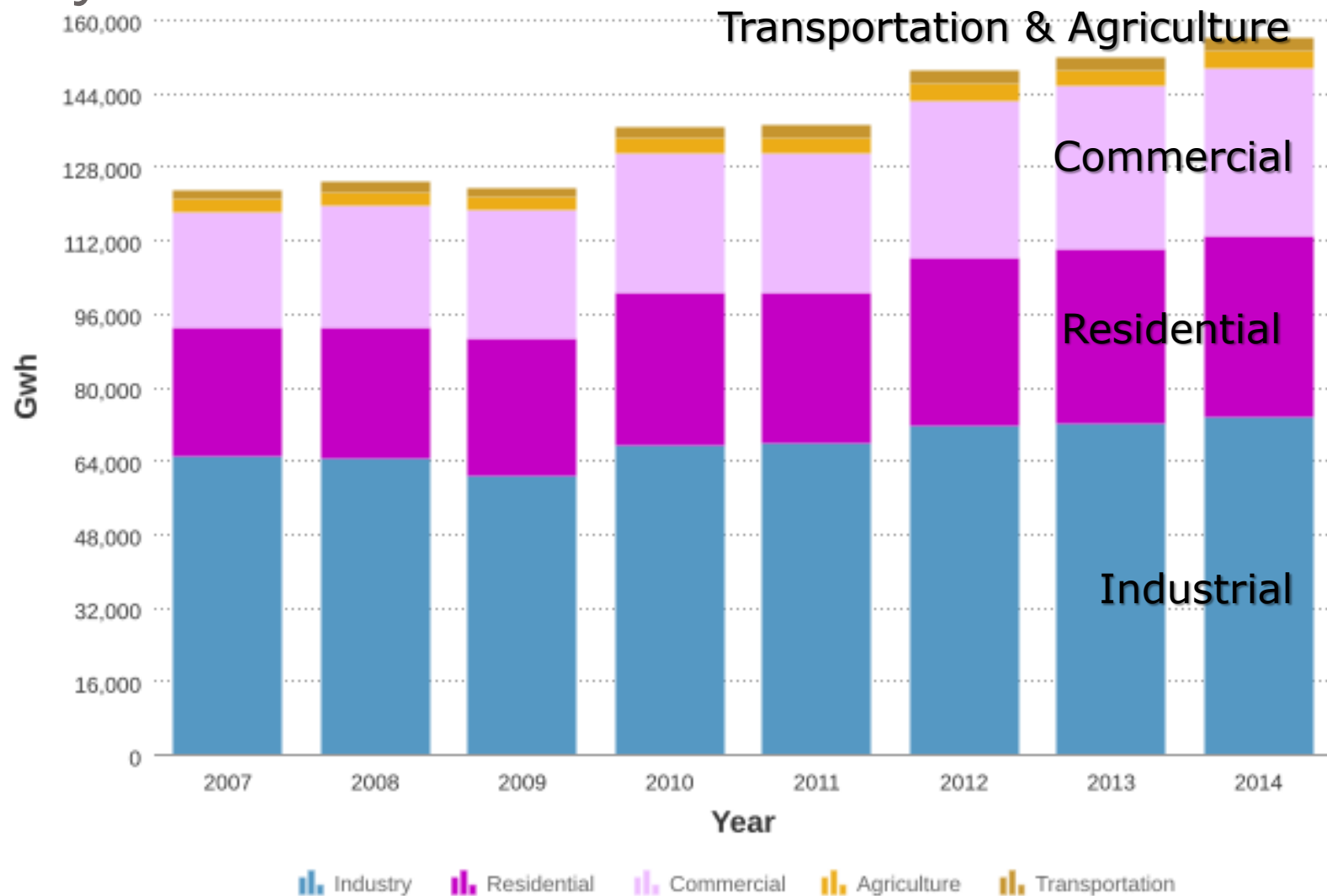
Ethanol Consumption in Transportation 2009-2015



B100 Consumption in Transportation 2009-2015



Electricity Consumption 2007-2014 by Sector

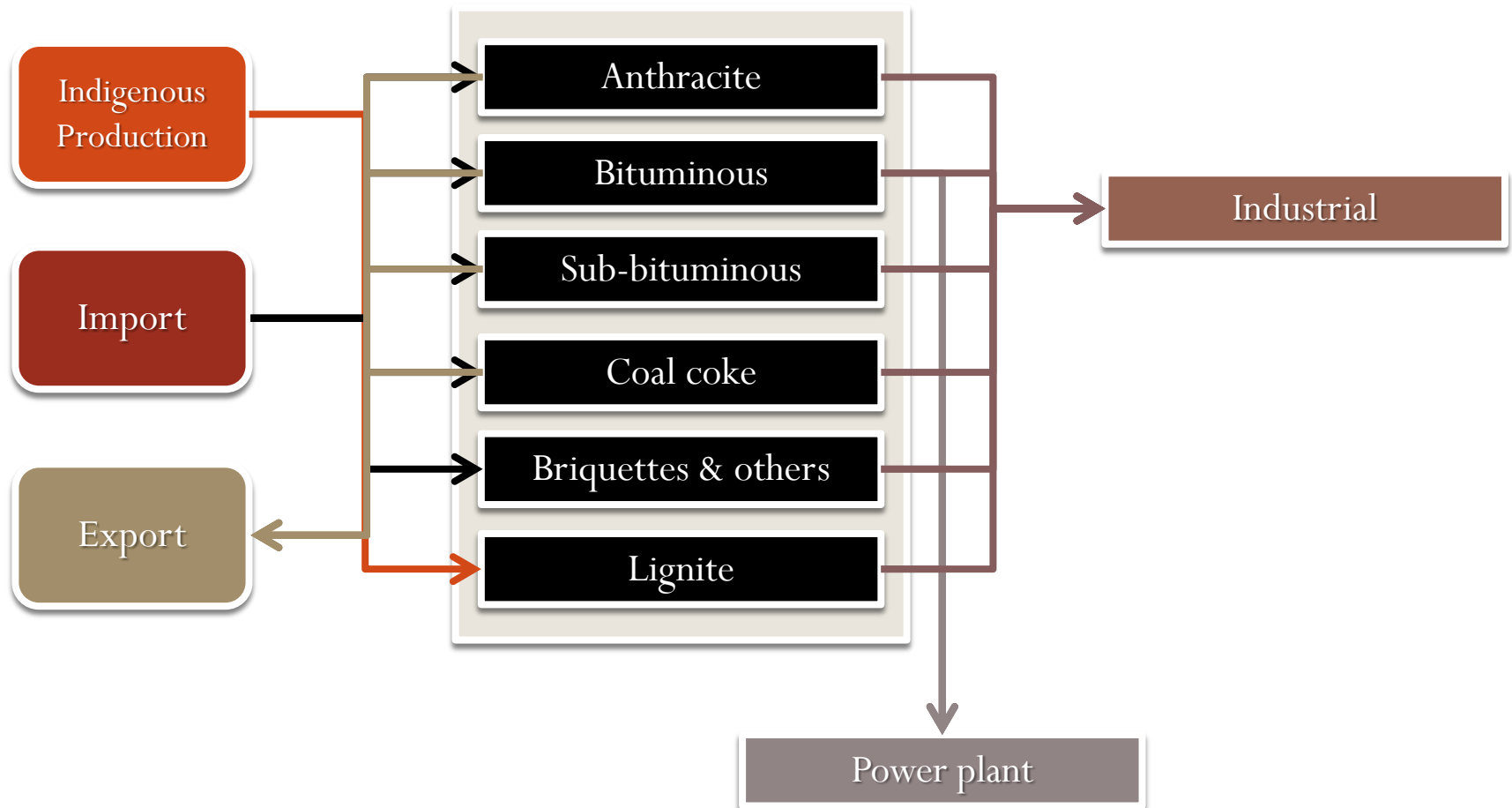


ด้านอุปทานรายชนิดเชื้อเพลิง (Supply)

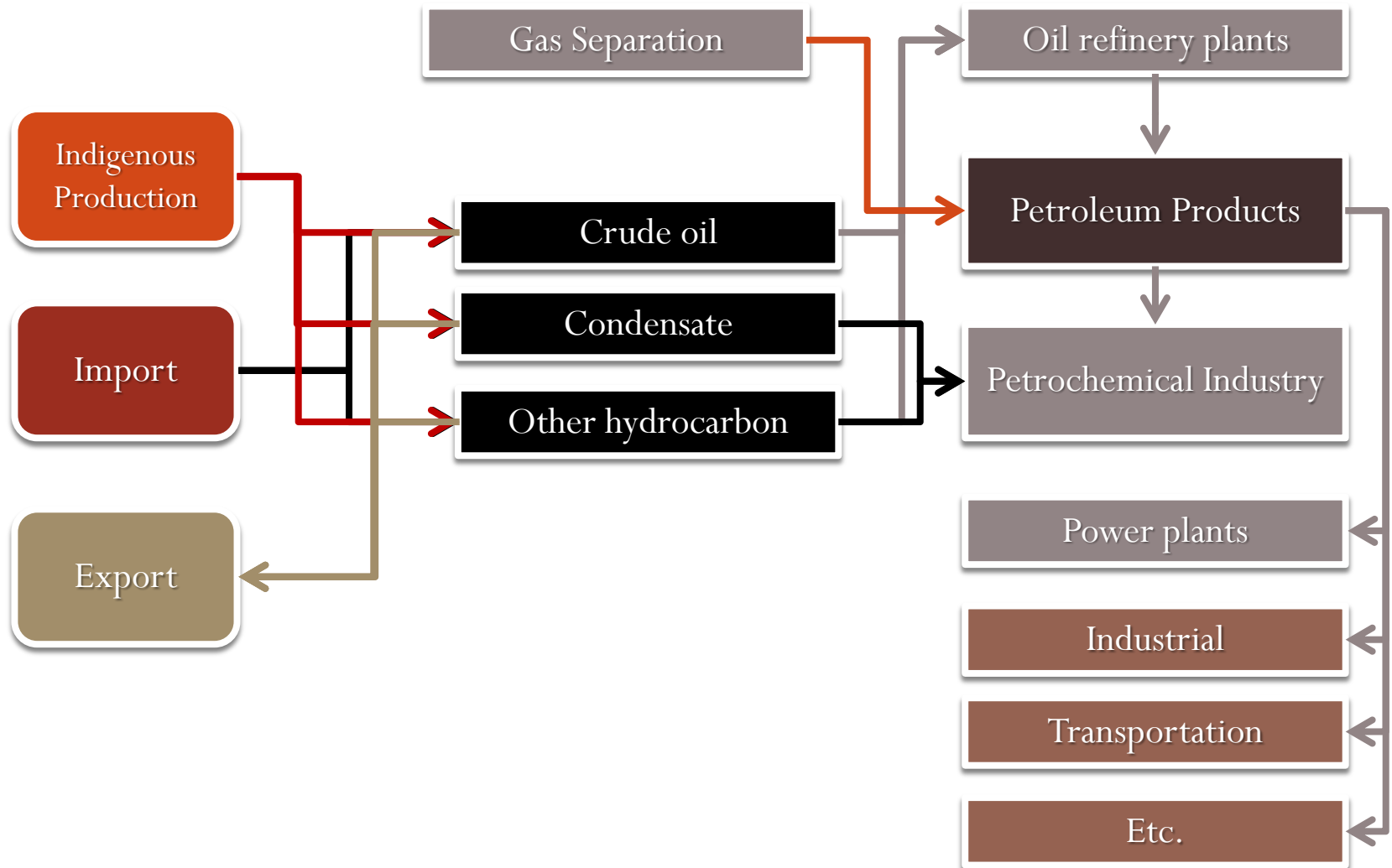
Total Primary Energy Supply 2008-2014



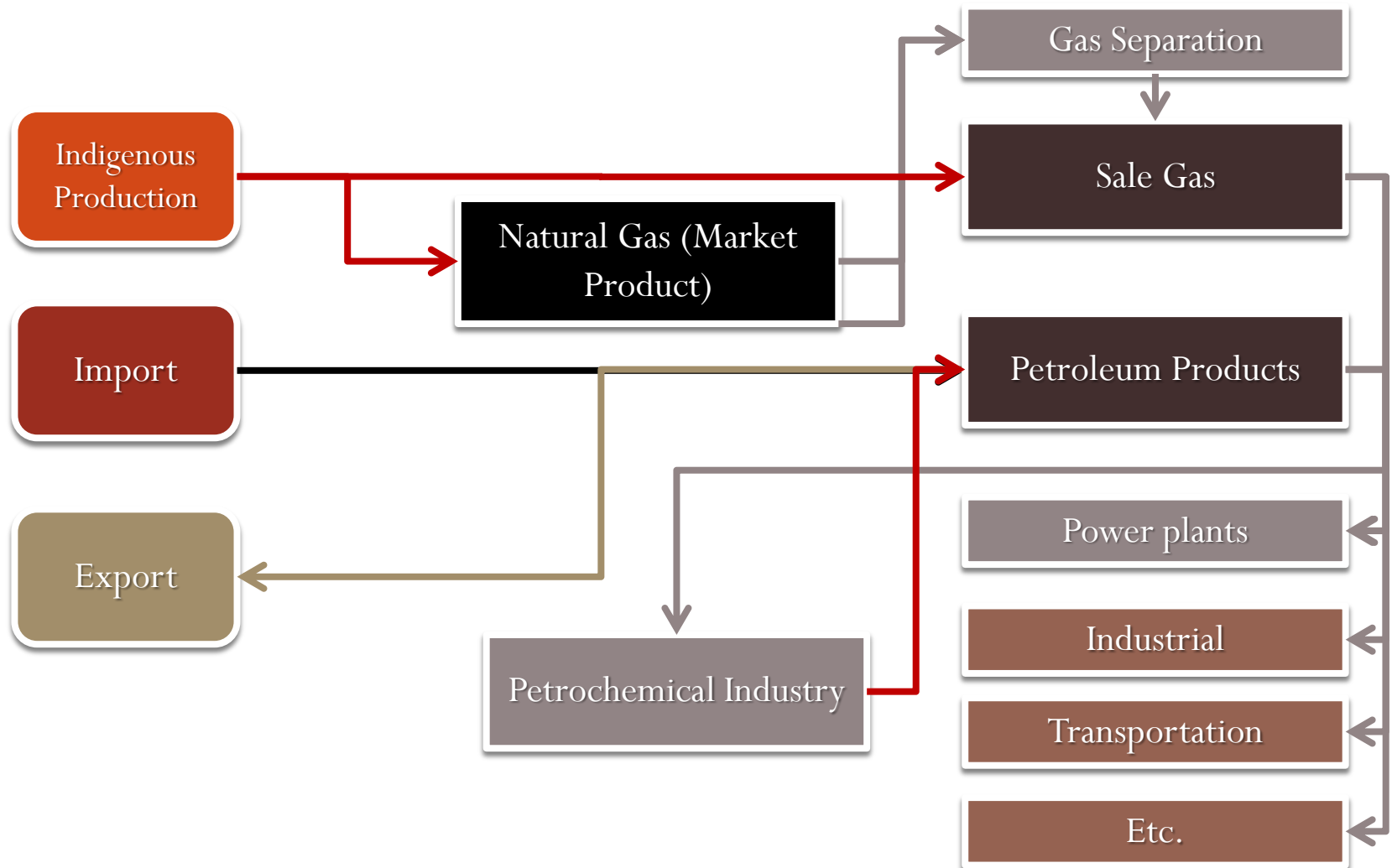
Coal: Commodity flow in Thailand



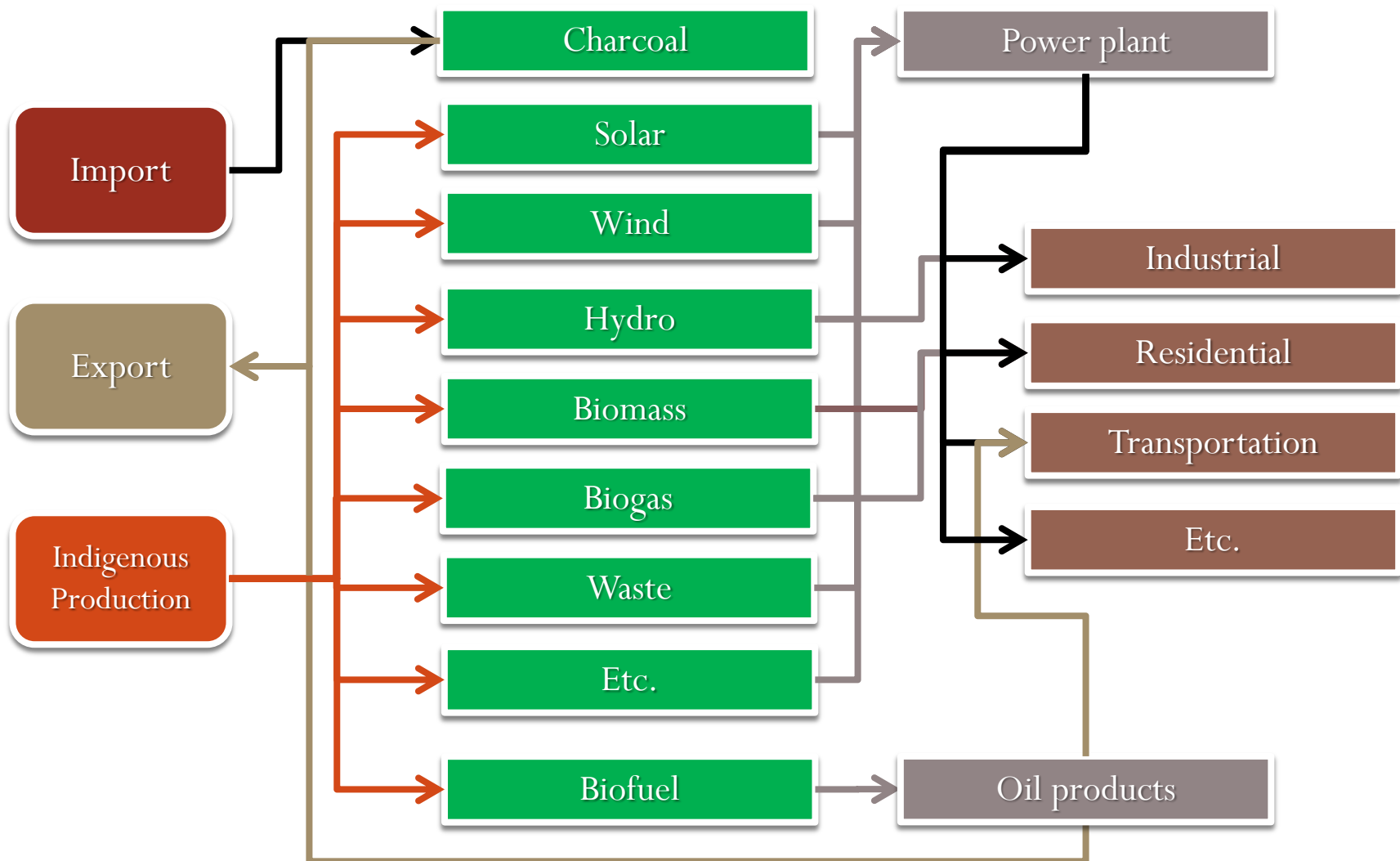
Petroleum: Commodity flow in Thailand



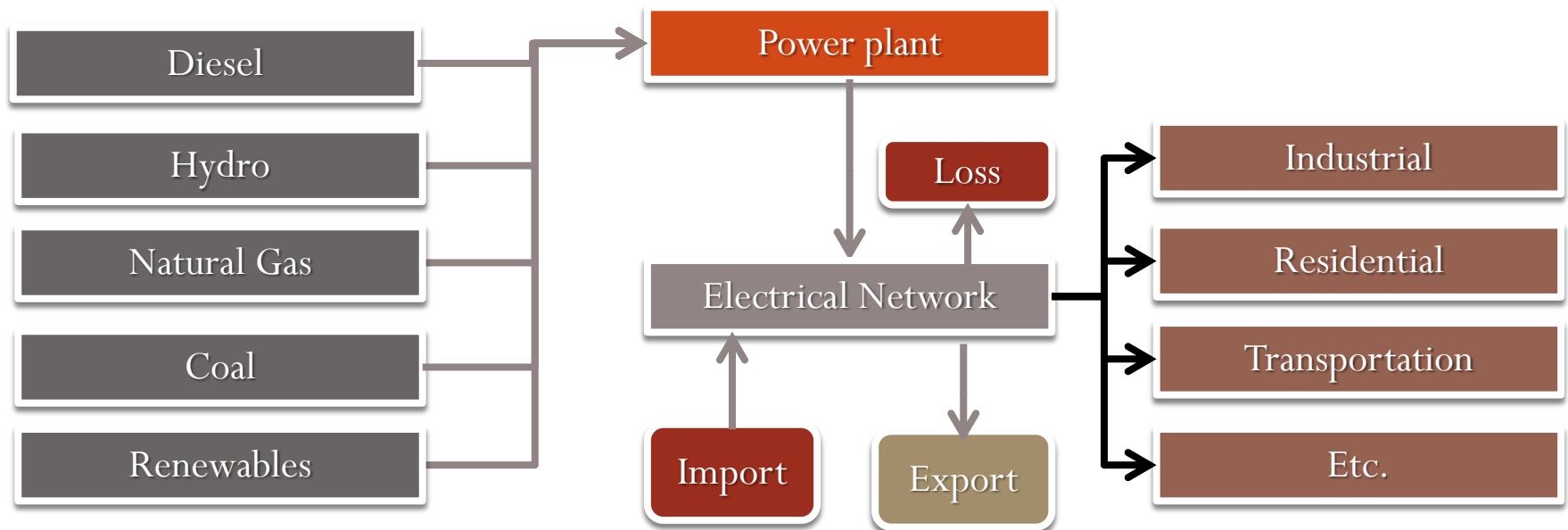
Natural Gas: Commodity flow in Thailand



Renewables: Commodity flow in Thailand



Electricity



Q&A

Thank you