COUNTRY REPORT ENERGY POLICY (A)

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I. General information

1. Country Profile

<u>Year: 2017</u>

Area: 181,035 Km²

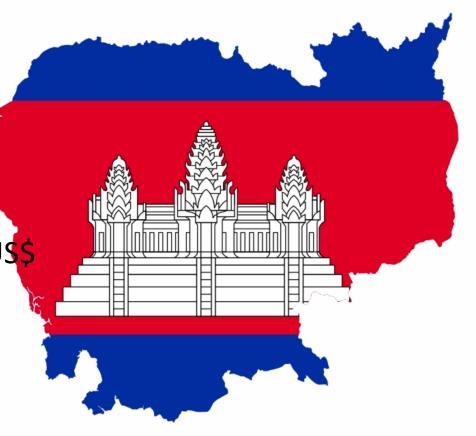
Population: 16,005,373

GDP: 22.15 Billion US\$

GDP per Capita: 1,384.42 US\$

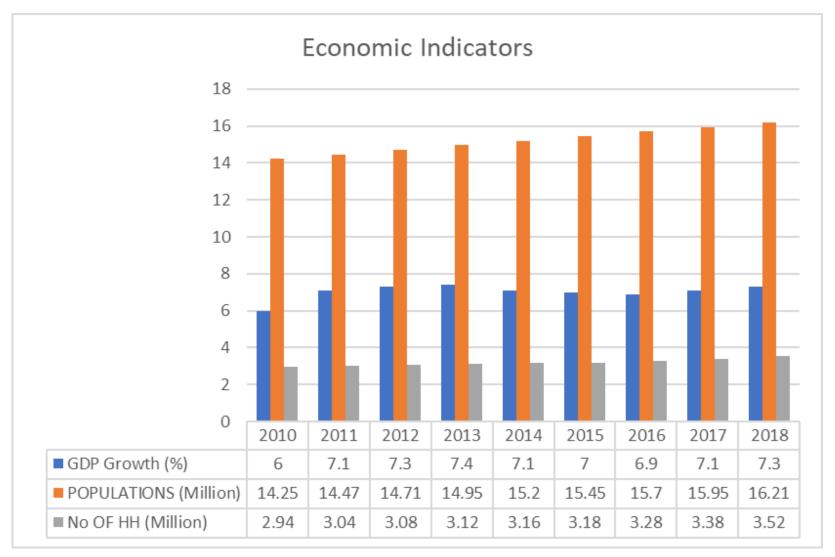
GDP Growth Rate: 7.1 %

Religion: Buddhism



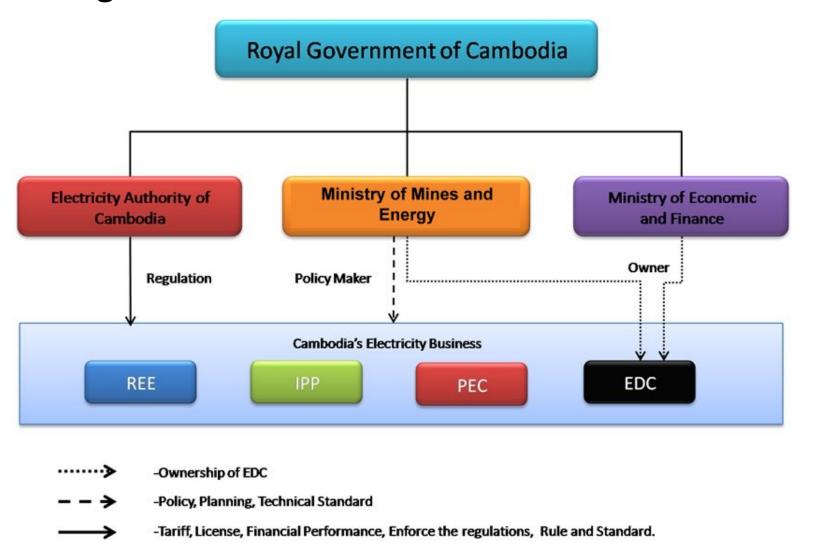
I. General information

2. Economic indicators



I. General information

3. Organizational structure



II. Current energy policy and measures



To provide an adequate supply of energy throughout Cambodia at reasonable and affordable price,



To ensure a reliable and secured electricity supply at reasonable price, which facilitates investment in Cambodia and development of national economy,

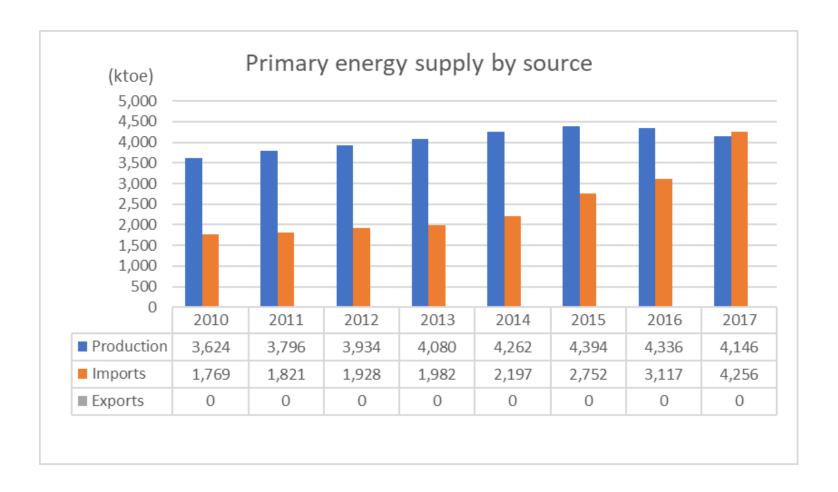


To encourage exploration and environmentally and socially acceptable development of energy resources needed for supply to all sectors of Cambodia economy,

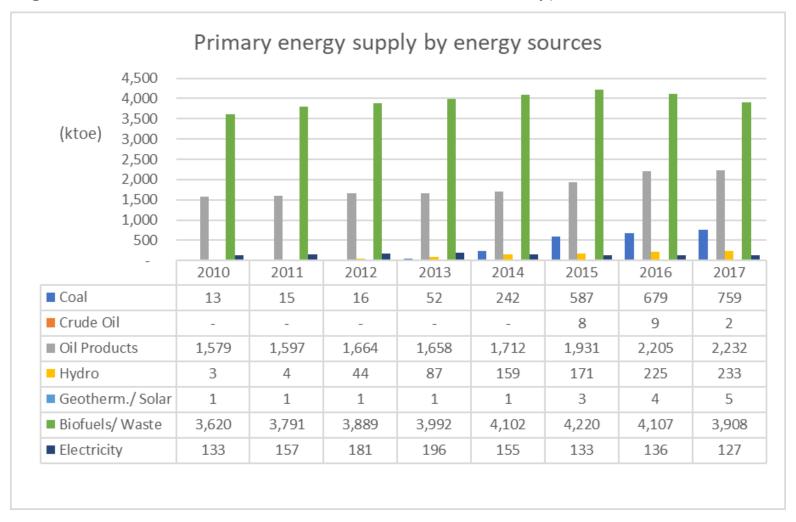


To encourage the efficient use of energy and to minimize the detrimental environmental affects resulted from energy supply and consumption.

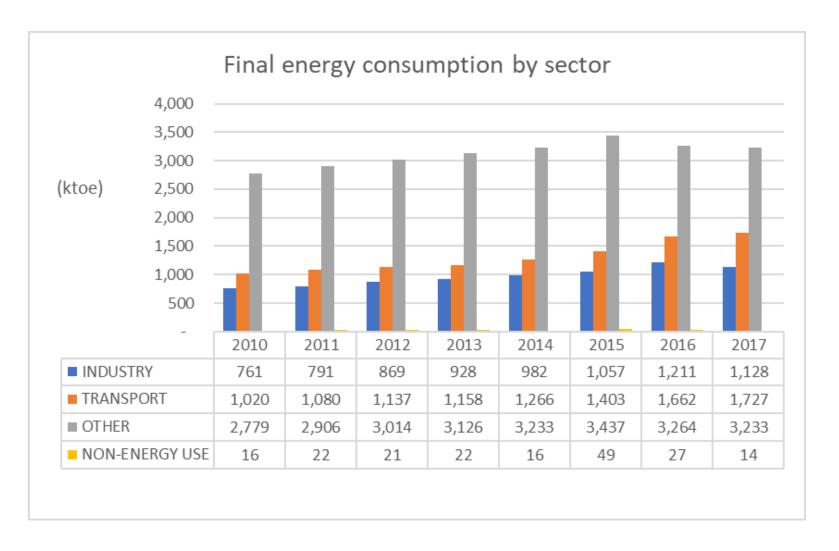
1. Primary energy supply by source(production, imports and exports)



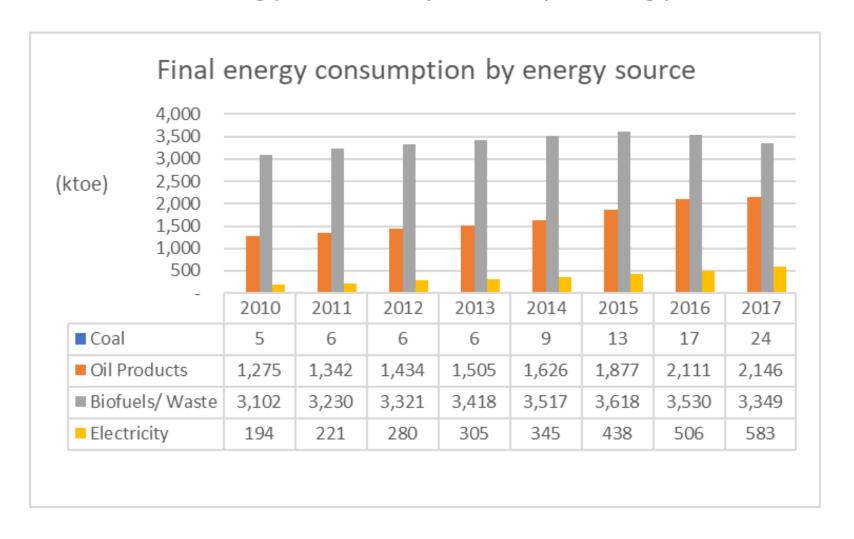
2. Primary energy supply by energy source (coal, oil, Oil Products, hydro, geothermal & solar, biofuels & waste, Electricity)



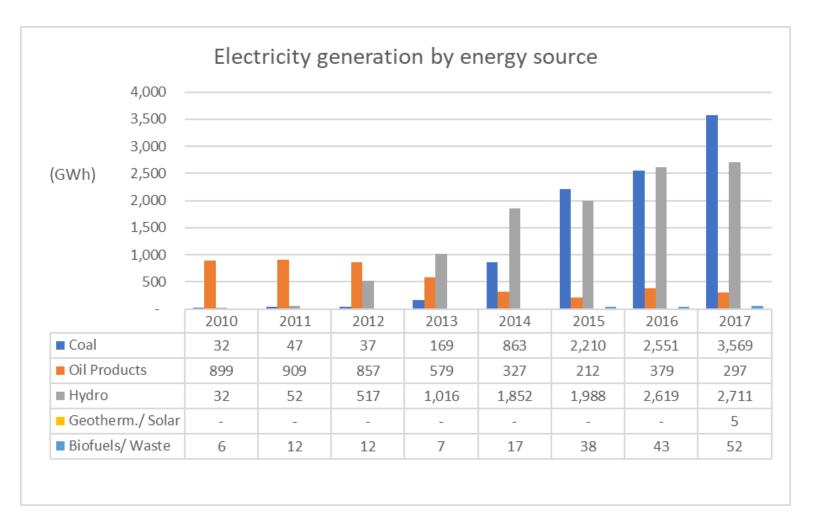
3. Final energy consumption by sector



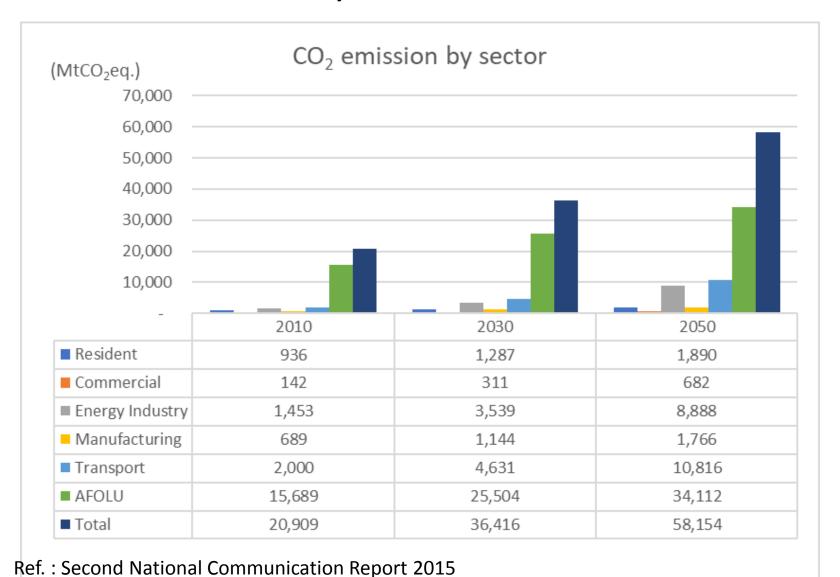
4. Final energy consumption by energy sources



5. Electricity generation by energy source



6. CO2 emission by sector



7. Energy Prices

Type of Purchase	Unit	Tariff to be applied for year							
Type of Fulchase	O I III	2015	2016	2017	2018	2019	2020		
1.Electricity supply from National Grid									
Purchase at High Voltage from Grid Substation	\$/kWh	0.1270	0.1240	0.1240	0.1240	0.1170	0.1170		
Purchase at Medium Voltage from Grid Substation	\$/kWh	0.1290	0.1260	0.1260	0.1260	0.1220	0.1220		
2. Electricity supplied by EDC in Phnom Penh and Krong Takhmao									
Purchase at Medium Voltage from Grid Substation	\$/kWh	0.1595	0.1545	0.1495	0.1475	0.1350	0.1330		
Industrial customer who is connected to MV on 22kV	\$/kWh	0.1770	0.1720	0.1670	0.1650	0.1470	0.1460		
Commercial customer and administration who are connected to MV on 22kV	\$/kWh	0.1770	0.1720	0.1670	0.1650	0.1590	0.1580		
Residents, governmental organizations, and embassy (>200kWh/month)	Riels/kWh	820	780	770	750	740	730		
Residents consume between 51 to 200kWh/month	Riels/kWh	720	720	720	720	610	610		
Residents consume between 11 to 50kWh/month	Riels/kWh	610	610	610	610	480	480		
Residents consume less than 10kWh/month	Riels/kWh	610	610	610	610	380	380		

7. Energy Prices

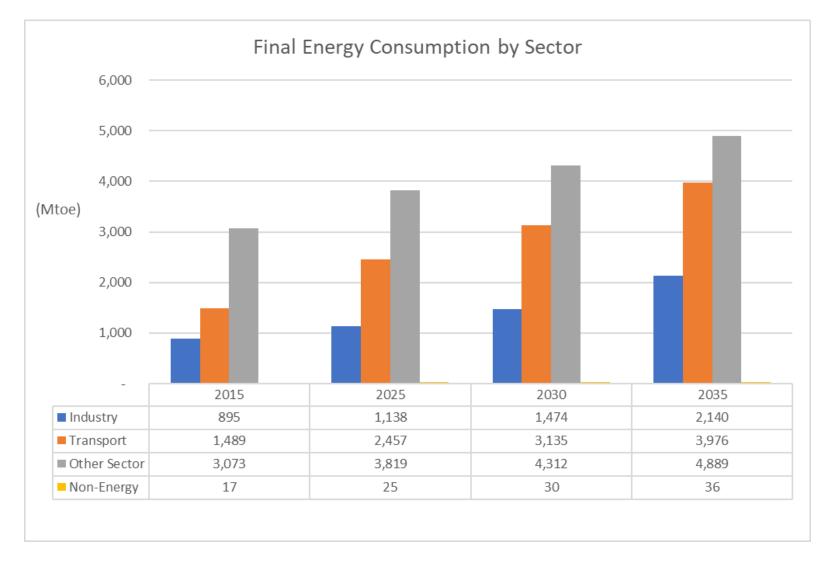
3. Electricity Supplied by EDC in Provincial Towns and Rural Areas								
Industrial customer who is connected to MV on 22kV	\$/kWh	0.1700	0.1675	0.1650	0.1640	0.1470	0.1460	
Commercial customer and administration who are connected to MV on 22kV	\$/kWh	0.1700	0.1675	0.1650	0.1640	0.1590	0.1580	
Bulk sale on 22kV from subtransmission line to distribution licensee	\$/kWh	0.1510	0.1470	0.1450	0.1440	0.1350	0.1330	
Residents and governmental organization (>200kWh/month) in provincial towns	Riels/kWh	820	780	770	750	740	730	
Residents and governmental organization (>200kWh/month) in rural areas	Rie l s/kWh	820	800	790	770	740	730	
Residents consume between 51 to 200kWh/month in provincial towns	Rie l s/kWh	820	780	770	750	610	610	
Residents consume between 51 to 200kWh/month in rural areas	Rie l s/kWh	820	800	790	770	610	610	
Residents consume between 11 to 50kWh/month in provincial towns and rural areas	Rie l s/kWh	820	800	610	610	480	480	
Residents consume less than 10kWh/month in provincial towns and rural areas	Rie l s/kWh	820	480	480	480	380	380	
Water pump for agriculture from 9:00 pm to 7:00 am	Riels/kWh	820	480	480	480	480	480	
Schools, Hospitals, and Referral Health Care Centers Connected Public LV (Rural Areas)	Rie l s/kWh	820	800	790	770	610	610	

7. Energy Prices

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4. Electricity supplied by Licensee and Subtransmission Licensee								
Industrial customer who is connected to MV on 22kV	\$/kWh	0.1725	0.1675	0.1650	0.1640	0.1470	0.1460	
Commercial customer and administration who are connected to MV on 22kV	\$/kWh	0.1725	0.1675	0.1650	0.1640	0.1590	0.1580	
Bulk sale on 22kV from subtransmission line to distribution licenseein rural areas	\$/kWh	0.1510	0.1470	0.1450	0.1440	0.1350	0.1330	
Residents (>200kWh/month), Government, and Embassy	Riels/kWh	1,000-3,000	800	790	770	740	730	
Residents consume between 51 to 200kWh/month	Riels/kWh	1,000-3,000	800	790	770	610	610	
Residents consume between 11 to 50kWh/month	Riels/kWh	1,000-3,000	800	610	610	480	480	
Residents consume less than 10kWh/month	Riels/kWh	1,000-3,000	480	480	480	380	380	
Water pump for agriculture from 9:00 pm to 7:00 am	Riels/kWh	1,000-3,000	480	480	480	480	480	
Schools, Hospitals, and Referral Health Care Centers Connected Public LV (Rural Areas)	Riels/kWh	1,000-3,000	800	790	770	610	610	

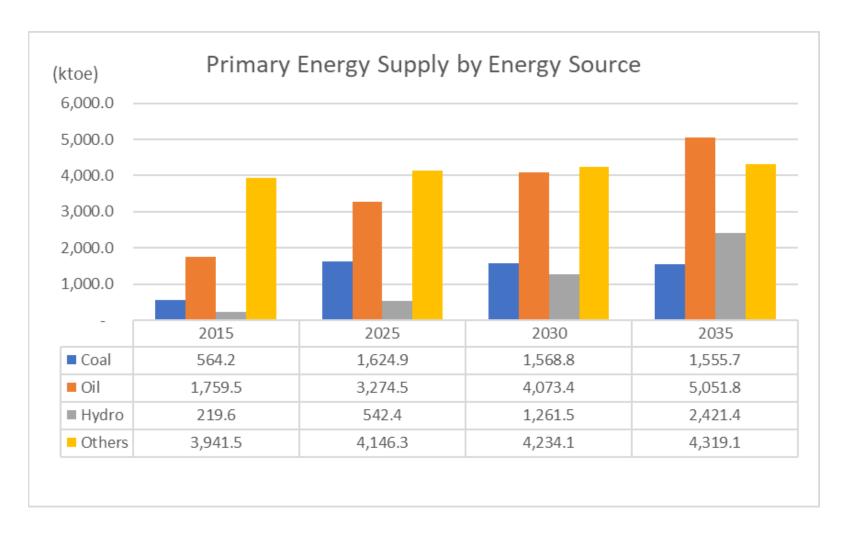
IV. Outlook of energy demand and supply

1. Final Energy Consumption by Sector



IV. Outlook of energy demand and supply

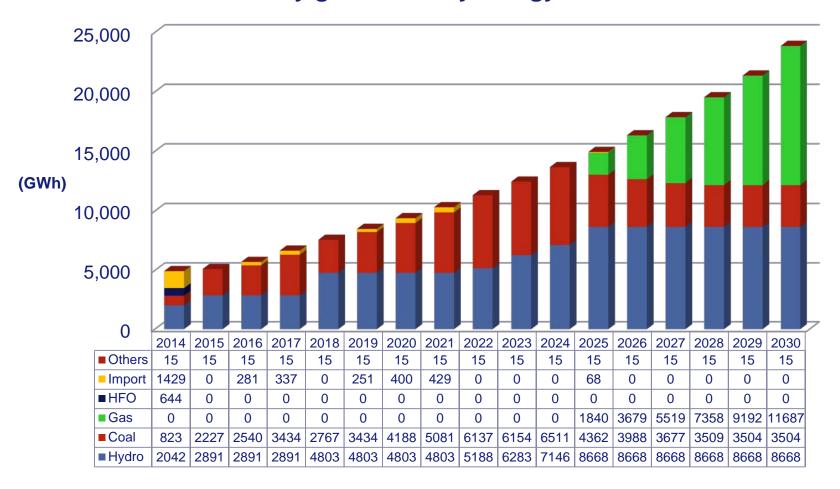
2. Primary Energy Supply by Energy Source



IV. Outlook of energy demand and supply

3. Electricity generation by energy source

Electricity generation by energy source



Ref.: EDC

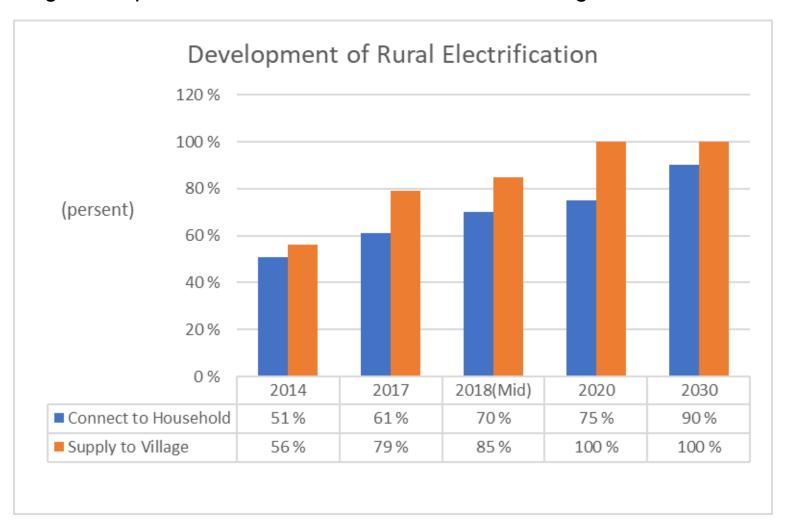
V. Estimated Rural Electrification Investment

Infrastructures Development	Unit		vestment 11-2020	Total Investment Year 2021-2030		
		Quantity	Cost, MUS\$	Quantity	Cost, MUS\$	
1. MV network	km	11,432	167.05	14,425	197.16	
2. Transformer	set	7,635	70.85	9,616	93.92	
3. LV network	km	38,174	285.46	48,082	415.48	
4. Meter and Accessory	h.h	945,263	68.45	1,346,298	74.32	
Total included Contingency	hh		591.81		780.87	

Ref.: EDC

VI. <u>Development of Rural Electrification</u>

Progress expected from the extension of the national grid:



Conclusion

- ♣ Hydro and Coal fired power plants are major shared of power generation mix, both account for 71%;
- ❖ To meet the target of the government 100% of the all villages access supplying of power required huge investment;
- Cambodia need to develop renewable energy and enhance energy efficiency regulation and activities to reduce energy intensity for long-term energy security;
- Capacity building, technology transfer are very important for developing country as Cambodia to improve living standard of residential as well as poverty reduction.

Thanks