

Contents

Introduction (บทนำ)

CHAPTER 1: THAILAND'S ENERGY SITUATION IN 2017 (สถานการณ์พลังงานไทยในปี 2560) 13

Table Yearly (ตารางรายปี)

1.1 Primary Energy (พลังงานขั้นต้น)

Table 1.1-1Y: Production, Consumption and Import (net) of Primary Commercial Energy (BBL/Day Crude Oil Equivalent)	32
Table 1.1-2Y: Primary Commercial Energy Production (Physical Unit)	33
Table 1.1-3Y: Primary Commercial Energy Production (ktoe)	33
Table 1.1-4Y: Primary Commercial Energy Import (Net) (Physical Unit)	34
Table 1.1-5Y: Primary Commercial Energy Import (Net) (ktoe)	34
Table 1.1-6Y: Primary Commercial Energy Consumption (Physical Unit)	35
Table 1.1-7Y: Primary Commercial Energy Consumption (ktoe)	35

1.2 Final Energy (พลังงานขั้นสุดท้าย)

Table 1.2-1Y: Final Modern Energy Consumption (Physical Unit)	36
Table 1.2-2Y: Final Modern Energy Consumption (ktoe)	36

1.3 Energy Reserves (ปริมาณสำรองพลังงาน)

Table 1.3-1: Energy Reserves	37
------------------------------	----

Table Monthly (ตารางรายเดือน)

1.1 Primary Energy (พลังงานขั้นต้น)

Table 1.1-1M: Primary Commercial Energy Production (Physical Unit)	38
Table 1.1-2M: Primary Commercial Energy Production (ktoe)	40
Table 1.1-3M: Primary Commercial Energy Import (Net) (Physical Unit)	42
Table 1.1-4M: Primary Commercial Energy Import (Net) (ktoe)	44
Table 1.1-5M: Primary Commercial Energy Consumption (Physical Unit)	46
Table 1.1-6M: Primary Commercial Energy Consumption (ktoe)	48

1.2 Final Energy (พลังงานขั้นสุดท้าย)

Table 1.2-1M: Final Modern Energy Consumption (Physical Unit)	50
Table 1.2-2M: Final Modern Energy Consumption (ktoe)	52

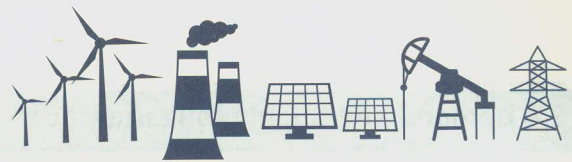


Table Yearly (ตารางรายปี)

2.1 Crude Oil/Condensate (น้ำมันดิบ/คอนเดนเสท)

2.1.1 Production (การผลิต)	
Table 2.1.1-1Y: Production of Crude Oil	64
Table 2.1.1-2Y: Production of Condensate	65
2.1.2 Import (การนำเข้า)	
Table 2.1.2-1Y: Import of Crude Oil Classified by Sources	66
Table 2.1.2-2Y: Quantity and Value of Petroleum Products Import	67
2.1.3 Export (การส่งออก)	
Table 2.1.3-1Y: Quantity and Value of Petroleum Products Export	68

2.2 Refinery (การกลั่น)

Table 2.2-1Y: Refining Capacity	69
Table 2.2-2Y: Material Intake by Refinery	70

2.3 Petroleum Products (น้ำมันสำเร็จรูป)

2.3.1 Production (การผลิต)	
Table 2.3.1-1Y: Production of Petroleum Products (Million Litres)	71
Table 2.3.1-2Y: Production of Petroleum Products (Barrels/Day)	71
2.3.2 Consumption/Sale (การใช้/การจำหน่าย)	
Table 2.3.2-1Y: Sale of Petroleum Products (Million Litres)	72
Table 2.3.2-2Y: Sale of Petroleum Products (Barrels/Day)	72
2.3.3 Import (การนำเข้า)	
Table 2.3.3-1Y: Import of Petroleum Products (Million Litres)	73
Table 2.3.3-2Y: Import of Petroleum Products (Barrels/Day)	73
2.3.4 Export (การส่งออก)	
Table 2.3.4-1Y: Export of Petroleum Products (Million Litres)	74
Table 2.3.4-2Y: Export of Petroleum Products (Barrels/Day)	74

2.4 Demand and Supply (อุปสงค์และอุปทาน)

Table 2.4-1Y:	Demand and Supply of Crude Oil and Oil Products	75
Table 2.4-2Y:	Demand and Supply of LPG, Propane and Butane	76

Table Monthly (ตารางรายเดือน)

2.1 Crude Oil/Condensate (น้ำมันดิบ/คอนเดนเสท)

2.1.1 Production (การผลิต)		
Table 2.1.1-1M:	Production of Crude Oil	77
Table 2.1.1-2M:	Production of Condensate	79
2.1.2 Imports (การนำเข้า)		
Table 2.1.2-1M:	Import of Crude Oil Classified by Sources	81

2.2 Refinery (การกลั่น)

Table 2.2-1M:	Material Intake by Refinery	82
---------------	-----------------------------	----

2.3 Petroleum Products (น้ำมันสำเร็จรูป)

2.3.1 Production (การผลิต)		
Table 2.3.1-1M:	Production of Petroleum Products (Million Litres)	84
Table 2.3.1-2M:	Production of Petroleum Products (Barrels/Day)	86
2.3.2 Consumption/Sale (การใช้/การจำหน่าย)		
Table 2.3.2-1M:	Sale of Petroleum Products (Million Litres)	88
Table 2.3.2-2M:	Sale of Petroleum Products (Barrels/Day)	90
2.3.3 Import (การนำเข้า)		
Table 2.3.3-1M:	Import of Petroleum Products (Million Litres)	92
Table 2.3.3-2M:	Import of Petroleum Products (Barrels/Day)	94
2.3.4 Export (การส่งออก)		
Table 2.3.4-1M:	Export of Petroleum Products (Million Litres)	96
Table 2.3.4-2M:	Export of Petroleum Products (Barrels/Day)	98

2.4 Demand and Supply (อุปสงค์และอุปทาน)

Table 2.4-1M:	Demand and Supply of Crude oil and Oil Products	100
Table 2.4-2M:	Demand and Supply of LPG, Propane and Butane	102

Table Yearly (ตารางรายปี)	
3.1 Production/Import (การผลิต/การนำเข้า)	
Table 3.1-1Y: Production and Import of Natural Gas	114
3.2 Consumption/Sales (การใช้/การจำหน่าย)	
Table 3.2-1Y: Distribution of NGL	115
Table 3.2-2Y: Consumption of Natural Gas by Sector	116
Table Monthly (ตารางรายเดือน)	
3.1 Production/Import (การผลิต/การนำเข้า)	
Table 3.1-1M: Production and Import of Natural Gas	117
3.2 Consumption/Sales (การใช้/การจำหน่าย)	
Table 3.2-1M: Distribution of NGL	119
Table 3.2-2M: Consumption of Natural Gas by sector	121
Table 3.2-3M: Consumption of Compressed Natural Gas (CNG)	123

Table Yearly (ตารางรายปี)	
4.1 Production/Consumption (การผลิต/การใช้)	
Table 4.1-1Y: Production and Consumption of Lignite	136
Table 4.1-2Y: Consumption of Lignite and Coal Classified by Sector (1,000 Tons)	137
Table 4.1-3Y: Consumption of Lignite and Coal Classified by Sector (Ktoe)	139
4.2 Import (การนำเข้า)	
Table 4.2-1Y: Coal Import	141
Table Monthly (ตารางรายเดือน)	
4.1 Production/Consumption (การผลิต/การใช้)	
Table 4.1-1M: Production and Consumption of Lignite	142
4.2 Import (การนำเข้า)	
Table 4.2-1M: Coal Import	144

Table Yearly (ตารางรายปี)

5.1 Generation (การผลิต)

Table 5.1-1Y: Power Generation Classified by Producer	162
Table 5.1-2Y: Power Generation Classified by Fuel Type	162
Table 5.1-3Y: Peak Generation Requirement,Energy Generation Requirement and Load Factor	163
Table 5.1-4Y: EGAT Purchased from SPP	163
Table 5.1-5Y: EGAT Purchased from IPP	164

5.2 Fuel Consumption (การใช้เชื้อเพลิง)

Table 5.2-1Y: EGAT Fuel Consumption in Power Generation	164
---	-----

5.3 Consumption/Sale (การใช้/การจำหน่าย)

Table 5.3-1Y: Electricity Consumption in MEA Service Areas (Classified by Tariff)	165
Table 5.3-2Y: Electricity Consumption in PEA Service Areas (Classified by Tariff)	165
Table 5.3-3Y: Electricity Consumption for the Whole Country (Classified by Tariff)	166
Table 5.3-4Y: Electricity Consumption in MEA Service Areas (Classified by Sector)	166
Table 5.3-5Y: Electricity Consumption in PEA Service Areas (Classified by Sector)	167
Table 5.3-6Y: Electricity Consumption for the Whole Country (Classified by Sector)	167

Table Monthly (ตารางรายเดือน)

5.1 Generation (การผลิต)

Table 5.1-1M: Power Generation Classified by Producer	168
Table 5.1-2M: Power Generation Classified by Fuel Type	170
Table 5.1-3M: Peak Generation Requirement,Energy Generation Requirement and Load Factor	172
Table 5.1-4M: EGAT Purchased from SPP	174
Table 5.1-5M: EGAT Purchased from IPP	176

5.2 Fuel Consumption (การใช้เชื้อเพลิง)

Table 5.2-1M: EGAT Fuel Consumption in Power Generation	178
---	-----

5.3 Consumption/Sale (การใช้/การจำหน่าย)

Table 5.3-1M: Electricity Consumption in MEA Service Areas (Classified by Tariff)	179
Table 5.3-2M: Electricity Consumption in PEA Service Areas (Classified by Tariff)	181
Table 5.3-3M: Electricity Consumption for the Whole Country (Classified by Tariff)	183

Table 5.3-4M: Electricity Consumption in MEA Service Areas (Classified by Sector)	185
Table 5.3-5M: Electricity Consumption in PEA Service Areas (Classified by Sector)	187
Table 5.3-6M: Electricity Consumption for the Whole Country (Classified by Sector)	189

5.4 Import and Export (การนำเข้าและการส่งออก)

Table 5.4-1M: Import of Electricity	191
Table 5.4-2M: Export of Electricity	191

CHAPTER 6: ENERGY VALUE (มูลค่าพลังงาน) 193

Table Yearly (ตารางรายปี)

Table 6.1-1Y: Expenditure on Final Energy Consumption	200
Table 6.1-2Y: Expenditure on Petroleum Products Consumption	201
Table 6.1-3Y: Value of Energy Import	202
Table 6.1-4Y: Value of Energy Export	203

Table Monthly (ตารางรายเดือน)

Table 6.1-1M: Expenditure on Final Energy Consumption	204
Table 6.1-2M: Expenditure on Petroleum Products Consumption	205
Table 6.1-3M: Value of Energy Import	207
Table 6.1-4M: Value of Energy Export	208

CHAPTER 7: ECONOMIC DATA AND ANALYSIS (ข้อมูลเศรษฐกิจและการวิเคราะห์) 209

7.1 Economics Data (ข้อมูลเศรษฐกิจ)

Table 7.1-1: GDP, chain volume measures [reference year = 2002]	222
Table 7.1-2: Population	223
Table 7.1-3: Industrial Index	224
Table 7.1-4: Industrial Capacity Utilization Ratios	224
Table 7.1-5: Sales of Vehicles	225
Table 7.1-6: GDP, Energy, Import and Export of Goods	226

7.2 Analysis (การวิเคราะห์)

Table 7.2-1: Final Energy Consumption per Capita	228
Table 7.2-2: Electricity Consumption per Capita	230

Table Yearly (ตารางรายปี)

Table 8.1-1Y: Rate of Exchange in Bangkok	248
Table 8.1-2Y: Ex-Refinery Price of Petroleum Products in Thailand	248
Table 8.1-3Y: Oil Fund Levied on Petroleum Products in Thailand	249
Table 8.1-4Y: Wholesale Price of Petroleum Products at Refinery in Thailand	250
Table 8.1-5Y: Retail Price of Petroleum Products in Bangkok	252
Table 8.1-6Y: Tax and Oil Fund Revenue in Thailand	253

Table Monthly (ตารางรายเดือน)

Table 8.1-1M: Rate of Exchange in Bangkok	254
Table 8.1-2M: Ex-Refinery Price of Petroleum Products in Thailand	256
Table 8.1-3M: Oil Fund Levied on Petroleum Products in Thailand	258
Table 8.1-4M: Wholesale Price of Petroleum Products at Refinery in Thailand	260
Table 8.1-5M: Retail Price of Petroleum Products in Bangkok	264
Table 8.1-6M: Tax and Oil Fund Revenue in Thailand	269
Table 8.1-7M: Retail Price of Premium Gasoline and Diesel	271

Table Yearly (ตารางรายปี)

Table 9.1-1Y: CO ₂ Emission by Energy Type	300
Table 9.1-2Y: CO ₂ Emission from Energy Consumption by Sector	301
Table 9.1-3Y: CO ₂ Emission in Power Generation by Energy Type	302
Table 9.1-4Y: CO ₂ Emission in Transport by Energy Type	303
Table 9.1-5Y: CO ₂ Emission in Industry by Energy Type	304
Table 9.1-6Y: CO ₂ Emission in Other Economic Sectors by Energy Type	305
Table 9.1-7Y: CO ₂ Emission by Sector and Energy Type	306

Table Monthly (ตารางรายเดือน)

Table 9.1-1M: CO ₂ Emission by Energy Type	310
Table 9.1-2M: CO ₂ Emission from Energy Consumption by Sector	312
Table 9.1-3M: CO ₂ Emission in Power Generation by Energy Type	314

Table 9.1-4M: CO ₂ Emission in Transport by Energy Type	316
Table 9.1-5M: CO ₂ Emission in Industry by Energy Type	318
Table 9.1-6M: CO ₂ Emission in Other Economic Sectors by Energy Type	320

CHAPTER 10: Energy Index (ดัชนีพลังงาน)

323

Table Yearly (ตารางรายปี)

10.1 Energy Security (ความมั่นคงด้านพลังงาน)

Table 10.1-1Y: Primary Energy Production	343
Table 10.1-2Y: Final Energy Consumption	344
Table 10.1-3Y: Reserves to Production (R/P Ratios)	345
Table 10.1-4Y: TPES Self Sufficiency Ratio	346
Table 10.1-5Y: Self Sufficiency Ratio by Fuel Type	347
Table 10.1-6Y: Import of Crude Oil by Regions	348
Table 10.1-7Y: Import of Natural Gas and LNG	349
Table 10.1-8Y: Fuel Mixed for Power Generation	350
Table 10.1-9Y: Production of B100	351
Table 10.1-10Y: Production of Ethanol	351
Table 10.1-11Y: Share of Energy Import Value to Total Import Value	352
Table 10.1-12Y: Share of Energy Export Value to Total Export Value	353

10.2 Energy Efficiency (ประสิทธิภาพด้านพลังงาน)

Table 10.2-1Y: Energy Intensity	354
Table 10.2-2Y: Electricity Consumption per GDP	355
Table 10.2-3Y: Final Energy Consumption per Capita	356
Table 10.2-4Y: Electricity Consumption per Capita	357

10.3 Energy Environment (สิ่งแวดล้อมด้านพลังงาน)

Table 10.3-1Y: CO ₂ Emission per Total Primary Energy Consumption	358
Table 10.3-2Y: CO ₂ Emission per Capita	359
Table 10.3-3Y: CO ₂ Emission per GDP	360
Table 10.3-4Y: CO ₂ Emission per kWh	361

Conversion Factors (ค่าการแปลงหน่วย)	362
Abbreviation (คำนิยาม)	363

*Note: M = Monthly (รายเดือน)
Y = Yearly (รายปี)

สำหรับเพื่อการศึกษาและการอ้างอิงเท่านั้น
For educational use and reference only

