

China Petroleum & Gas Maps, Databases and Reports  
**Appendix: Energy Industry Database**

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# 1 World Data

## 1.1 World Oil Data

### 1.1.1 Crude Oil Reserves and Production

#### 1.1.1.1 1980-2017 World Crude Oil Reserves by Nations

- 1, USD1 / year;
- 2, Each year's data include world's crude oil reserves figures by nations, approximately 235 columns;
- 3, Unit Available: Billion bbl;
- 4, Language Available: English

#### 1.1.1.2 1980-2016 World Crude Oil Reserves by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's crude oil reserves figures by major nations, approximately 70 columns;
- 3, Unit Available: Billion bbl;
- 4, Language Available: English

#### 1.1.1.3 1980-2015 World Crude Oil Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's crude oil production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.1.4 1965-2016 World Crude Oil Production by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's crude oil production figures by major nations, approximately 70 columns;
- 3, Unit Available: 1000 bbl/d, Million Tonnes;
- 4, Language Available: English

### 1.1.2 Refineries Capacity

#### 1.1.2.1 1980-2016 World Refinery Throughput by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's refinery throughput figures by major nations, approximately 85 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.2.2 1980-2016 World Refinery Capacity by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's refinery capacity figures by major nations, approximately 85 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

### 1.1.3 World Refined Oil Production

#### 1.1.3.1 1980-2014 World Refined Oil Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's refined oil production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.2 1980-2014 World Motor Gasoline Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's motor gasoline production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.3 1980-2014 World Jet Fuel Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's jet fuel production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.4 1980-2014 World Kerosene Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's kerosene production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.5 1980-2014 World Distillate Fuel Oil Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's distillate fuel oil production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.6 1980-2014 World Residual Fuel Oil Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's residual fuel oil production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.3.7 1980-2015 World LPG Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG production by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

### 1.1.4 World Refined Oil Consumption

#### 1.1.4.1 1980-2015 World Refined Oil Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's refined oil products consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.2 1965-2016 World Refined Oil Consumption by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's refined oil products consumption figures by major nations, approximately 90 columns;
- 3, Unit Available: 1,000 bbl/d, Million Tonnes;
- 4, Language Available: English

#### 1.1.4.3 1965-2016 World Refined Oil Consumption by Major Areas

- 1, USD1 / year;
- 2, Each year's data include world's refined oil products (light distillates, gasoline, middle distillates, diesel & gasoil, jet & kerosene, fuel oil and others) consumption figures by major areas (including North America, US, Central and South America, Europe & Eurasia, CIS, USSR, European Union, Middle East, Africa, Asia Pacific, China, Japan, World Total);
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.4 1980-2015 World Motor Gasoline Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's motor gasoline consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.5 1980-2015 World Jet Fuel Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's jet fuel consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.6 1980-2015 World Kerosene Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's kerosene consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.7 1980-2015 World Distillate Fuel Oil Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's distillate fuel oil consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.8 1980-2015 World Residual Fuel Oil Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's residual fuel oil consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.9 1980-2015 World LPG Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.4.10 1980-2015 World Bunker Oil Consumption by Nations

- 1, USD1 / year;
- 2, Each year's data include world's bunker oil consumption figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

### 1.1.5 World Oil Trade

#### 1.1.5.1 1972-2016 World Spot Crude Prices

- 1, USD10 / table;
- 2, Each year's data include 4 types of average price by Dubai, Brent, Nigerian Forcados and West Texas Intermediate;
- 3, Unit Available: USD / bbl;
- 4, Language Available: English

#### 1.1.5.2 1861-2016 World Crude Oil Prices

- 1, USD10 / table;
- 2, Each year's data include 2 types of average price (money of the day and NPV for the latest year);
- 3, Unit Available: USD / bbl;
- 4, Language Available: English

#### 1.1.5.3 1980-2016 Crude Oil Imports and Exports of World's Major Regions

- 1, USD1 / year;
- 2, Each year's data include world's imports figures (by US, Europe, China, Japan and Rest of World) and exports figures (by US, Canada, Mexico, South & Central America, Europe, Russia, Other CIS Countries, USSR & Central Europe, Middle East, North Africa, West Africa, Asia Pacific and Rest of World, approximately 20 columns);
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.1.5.4 2001-2016 World's Inter-Area Oil Trade Movements

- 1, USD10 / year;
- 2, Each year's data include an independent table with oil trade (crude oil and refined oil) movements figures among world's 17 major oil export regions and 15 major oil import regions;
- 3, Unit Available: 1000 bbl/d, Million Tonnes;

4, Language Available: English

#### **1.1.5.5 2001-2016 World's Inter-Area Crude Oil Trade Movements**

- 1, USD10 / year;
- 2, Each year's data include an independent table with crude oil trade movements figures among world's 17 major oil export regions and 15 major oil import regions;
- 3, Unit Available: Million Tonnes;
- 4, Language Available: English

#### **1.1.5.6 2001-2016 World's Inter-Area Refined Oil Trade Movements**

- 1, USD10 / year;
- 2, Each year's data include an independent table with refined oil trade movements figures among world's 17 major oil export regions and 15 major oil import regions;
- 3, Unit Available: Million Tonnes;
- 4, Language Available: English

#### **1.2.1.5 1980-2014 World Dry Gas Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's dry gas production figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

#### **1.2.1.6 1980-2014 World Vented and Flared Natural Gas by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's vented and flared natural gas figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

#### **1.2.1.7 1980-2014 World Reinjecting Natural Gas by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's reinjecting natural gas figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

## **1.2 World Natural Gas Data**

### **1.2.1 World Natural Gas Reserves and Production**

#### **1.2.1.1 1980-2015 World Natural Gas Reserves by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas reserves figures by nations, approximately 235 columns;
- 3, Unit Available: Tcf;
- 4, Language Available: English

#### **1.2.1.2 1980-2016 World Natural Gas Reserves by Major Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas reserves figures by major nations, approximately 70 columns;
- 3, Unit Available: Trillion cubic metres;
- 4, Language Available: English

#### **1.2.1.3 1980-2014 World Gross Natural Gas Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas production figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

#### **1.2.1.4 1970-2016 World Natural Gas Production by Major Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas production figures by major nations, approximately 70 columns;
- 3, Unit Available: Billion cubic metres, Bcf / day, Million tonnes oil equivalent;
- 4, Language Available: English

### **1.2.2 World Natural Gas Consumption**

#### **1.2.2.1 1980-2014 World Dry Natural Gas Consumption by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's dry gas consumption figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

#### **1.2.2.2 1965-2016 World Natural Gas Consumption by Major Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas consumption figures by major nations, approximately 70 columns;
- 3, Unit Available: Billion cubic metres, Bcf / day, Million tonnes oil equivalent;
- 4, Language Available: English

### **1.2.3 World Natural Gas Trade**

#### **1.2.3.1 1984-2016 World Natural Gas Prices**

- 1, USD10 / table;
- 2, Each year's data include Japan's LNG import price (CIF), Average German import price (CIF), UK Heren NBP Index price, US Henry Hub price and Canada Alberta price;
- 3, Unit Available: US dollars per million Btu;
- 4, Language Available: English

#### **1.2.3.2 1980-2014 World Natural Gas Export by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas export figures by nations, approximately 235 columns;

- 3, Unit Available: Bcf;
- 4, Language Available: English

### **1.2.3.3 1980-2014 World Natural Gas Import by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's natural gas import figures by nations, approximately 235 columns;
- 3, Unit Available: Bcf;
- 4, Language Available: English

### **1.2.3.4 2001-2016 World's Inter-Area Pipeline Natural Gas Trade Movements**

- 1, USD10 / year;
- 2, Each year's data include an independent table with pipeline natural gas trade movements figures among world's 22 major pipeline natural gas export regions and 45 major pipeline natural gas import regions;
- 3, Unit Available: Bcm;
- 4, Language Available: English

### **1.2.3.5 2001-2016 World's Inter-Area LNG Trade Movements**

- 1, USD10 / year;
- 2, Each year's data include an independent table with LNG trade movements figures among world's 21 major LNG export regions and 29 major LNG import regions;
- 3, Unit Available: Bcm;
- 4, Language Available: English

## **1.3 World Coal Data**

### **1.3.1 World Coal Reserves and Production**

#### **1.3.1.1 1980-2014 World Coal Reserves by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's coal reserves figures by nations, approximately 235 columns;
- 3, Unit Available: Million ST;
- 4, Language Available: English

#### **1.3.1.2 1981-2016 World Coal Production by Major Nations**

- 1, USD1 / year;
- 2, Each year's data include world's coal production figures by major nations, approximately 55 columns;
- 3, Unit Available: Million Tonnes, Million Tonnes Oil Equivalent;
- 4, Language Available: English

#### **1.3.1.3 1980-2014 World Anthracite Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's anthracite production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.4 1980-2014 World Metallurgical Coal Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coal production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.5 1980-2014 World Bituminous Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's bituminous production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.6 1980-2014 World Subbituminous Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's subbituminous production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.7 1980-2014 World Lignite Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's lignite production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.8 1980-2014 World Secondary Coal Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's secondary coal production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

#### **1.3.1.9 1980-2014 World Metallurgical Coke Production by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coke production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 ST;
- 4, Language Available: English

### **1.3.2 World Coal Consumption**

#### **1.3.2.1 1965-2016 World Coal Consumption by Major Nations**

- 1, USD1 / year;
- 2, Each year's data include world's coal consumption figures by major nations, approximately 85 columns;
- 3, Unit Available: Million Tonnes Oil Equivalent;
- 4, Language Available: English

### 1.3.3 World Coal Trade

#### 1.3.3.1 1987-2016 World Coal Prices

- 1, USD10 / table;
- 2, Each year's data include Northwest Europe Marker price, US Central Appalachian coal spot price index, Japan coking coal import price (CIF), Japan steam coal import price (CIF), Asian Marker price;
- 3, Unit Availalbe: US dollars per tonne;
- 4, Language Available: English

#### 1.3.3.2 2013-2014 World Anthracite Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's anthracite export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.3 2013-2014 World Metallurgical Coal Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coal export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.4 2013-2014 World Bituminous Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's bituminous export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.5 2013-2014 World Subbituminous Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's subbituminous export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.6 2013-2014 World Lignite Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's lignite export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.7 1980-2014 World Secondary Coal Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's secondary coal export figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.8 1980-2014 World Metallurgical Coke Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coke export figures by nations,

- approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
  - 4, Language Available: English

#### 1.3.3.9 2013-2014 World Anthracite Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's anthracite import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.10 2013-2014 World Metallurgical Coal Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coal import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.11 2013-2014 World Bituminous Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's bituminous import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.12 2013-2014 World Subbituminous Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's subbituminous import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.13 2013-2014 World Lignite Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's lignite import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.14 1980-2014 World Secondary Coal Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's secondary coal import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

#### 1.3.3.15 1980-2014 World Metallurgical Coke Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's metallurgical coke import figures by nations, approximately 235 columns;
- 3, Unit Availalbe: 1,000 ST;
- 4, Language Available: English

## 1.4 World Biofuel Data

### 1.4.1 World Biofuels Production

#### 1.4.1.1 1980-2014 World Fuel Ethanol Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's fuel ethanol production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.4.1.2 2000-2014 World Biodiesel Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's biodiesel production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

## 1.5 World Electricity Data

### 1.5.1 World Electricity Capacity

#### 1.5.1.1 1980-2014 World Electricity Capacity by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.2 1980-2014 World Electricity Capacity (Fossil Fuels) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (fossil fuels) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.3 1980-2014 World Electricity Capacity (Nuclear) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (nuclear) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.4 1980-2014 World Electricity Capacity (Hydroelectricity) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (hydroelectricity) figures by nations, approximately 235 columns;

- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.5 1980-2014 World Electricity Capacity (Hydroelectric Pumped Storage) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (hydroelectric pumped storage) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.6 1980-2014 World Electricity Capacity (Geothermal) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (geothermal) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.7 1990-2016 World Electricity Capacity (Geothermal) by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (geothermal) figures by major nations, approximately 25 columns;
- 3, Unit Available: Megawatts;
- 4, Language Available: English

#### 1.5.1.8 1980-2014 World Electricity Capacity (Solar) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (solar) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English

#### 1.5.1.9 1990-2016 World Electricity Capacity (Solar) by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (solar) figures by major nations, approximately 40 columns;
- 3, Unit Available: Megawatts;
- 4, Language Available: English

#### 1.5.1.10 1997-2016 World Electricity Capacity (Wind) by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (wind) figures by major nations, approximately 55 columns;
- 3, Unit Available: Megawatts;
- 4, Language Available: English

#### 1.5.1.11 1980-2014 World Electricity Capacity (Tide and Wave) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity capacity (tide and wave) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Kw;
- 4, Language Available: English



## 1.5.2 World Electricity Generation and Distribution

### 1.5.2.1 1980-2014 World Electricity Generation by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.2 1985-2016 World Electricity Generation by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation figures by major nations, approximately 85 columns;
- 3, Unit Available: Terawatt-hours;
- 4, Language Available: English

### 1.5.2.3 1980-2014 World Electricity Generation (Fossil Fuels) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (fossil fuels) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.4 1980-2014 World Electricity Generation (Nuclear) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (nuclear) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.5 1980-2014 World Electricity Generation (Hydroelectricity) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (hydroelectricity) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.6 1980-2014 World Electricity Generation (Hydroelectric Pumped Storage) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (hydroelectric pumped storage) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.7 1980-2014 World Electricity Generation (Geothermal) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (Geothermal) figures by

- nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.8 1980-2014 World Electricity Generation (Wind) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (wind) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.9 1980-2014 World Electricity Generation (Solar) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (solar) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.10 1980-2014 World Electricity Generation (Tide and Wave) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (tide and wave) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.11 1980-2014 World Electricity Generation (Biomass and Waste) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity generation (biomass and waste) figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.2.12 1980-2014 World Electricity Distribution Losses by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity distribution losses figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

## 1.5.3 World Electricity Trade

### 1.5.3.1 1980-2014 World Electricity Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's electricity export figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

### 1.5.3.2 1980-2014 World Electricity Net Import by Nations

- 1, USD1 / year;

- 2, Each year's data include world's electricity net import figures by nations, approximately 235 columns;
- 3, Unit Available: Billion Kwh;
- 4, Language Available: English

## 1.6 World Hydrocarbon Gas Liquids Data

### 1.6.1 World Hydrocarbon Gas Liquids Production

#### 1.6.1.1 1980-2014 World LPG and Ethane Production by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG and ethane production figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.6.1.2 1980-2014 World LPG and Ethane Production (Refinery) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG and ethane production (Refinery) figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.6.1.3 1980-2014 World LPG and Ethane Production (Non-Refinery) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG and ethane production (Non-Refinery) figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

### 1.6.2 World Hydrocarbon Gas Liquids Export

#### 1.6.2.1 1980-2014 World LPG Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG export figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.6.2.2 1980-2014 World Ethane Export by Nations

- 1, USD1 / year;
- 2, Each year's data include world's ethane export figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

### 1.6.3 World Hydrocarbon Gas Liquids Import

#### 1.6.3.1 1980-2014 World LPG Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's LPG import figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

#### 1.6.3.2 1980-2014 World Ethane Import by Nations

- 1, USD1 / year;
- 2, Each year's data include world's ethane import figures by nations, approximately 235 columns;
- 3, Unit Available: 1,000 bbl/d;
- 4, Language Available: English

## 1.7 World CO<sub>2</sub> Emissions

#### 1.7.1.1 1980-2015 World CO<sub>2</sub> Emissions by Nations

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### 1.7.1.2 1965-2016 World CO<sub>2</sub> Emissions by Major Nations

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission figures by major nations, approximately 85 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### 1.7.1.3 1980-2015 World CO<sub>2</sub> Emissions (Coal) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission (coal) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### 1.7.1.4 1980-2015 World CO<sub>2</sub> Emissions (Petroleum) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission (petroleum) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### 1.7.1.5 1980-2015 World CO<sub>2</sub> Emissions (Natural Gas) by Nations

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission (consumed natural gas and flared natural gas) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### **1.7.1.6 1980-2015 World CO<sub>2</sub> Emissions (Consumed Natural Gas) by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission (consumed natural gas) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

#### **1.7.1.7 1980-2015 World CO<sub>2</sub> Emissions (Flared Natural Gas) by Nations**

- 1, USD1 / year;
- 2, Each year's data include world's CO<sub>2</sub> emission (flared natural gas) figures by nations, approximately 235 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English

## **2 China Data**

### **2.1 General Data for China Energy Sector**

#### **2.1.1 China Energy Industry**

##### **2.1.1.1 1980-2015 Growth Rate of Energy Production and Consumption Compared with Growth Rate of GDP**

- 1, USD0.5 / year;
- 2, Each year's data include China's growth rates figures (GDP, energy production, electricity production, energy consumption, electricity consumption) and elasticity of energy production, electricity production, energy consumption, electricity consumption;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.2 1980-2015 China's Energy Intensity by GDP**

- 1, USD0.5 / year;
- 2, Each year's data include China's consumption, per 10,000 yuan GDP, of total energy, coal, coke, petroleum, crude oil, fuel oil and electricity;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.3 1980-2015 China's Efficiency of Energy Transformation**

- 1, USD0.5 / year;
- 2, Each year's data include China's energy transformation efficiency figures (total efficiency, power generation and heating by power station, coking, petroleum

- refinery);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.4 1980-2015 China's Per Capita Energy Production**

- 1, USD0.5 / year;
- 2, Each year's data include China's per capita energy production (total energy, raw coal, crude oil and electricity);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.5 1980-2015 China's Per Capita Energy Consumption**

- 1, USD0.5 / year;
- 2, Each year's data include China's per capita energy consumption (total energy, raw coal, crude oil and electricity);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.6 2000-2015 China's Number of Transportation Equipment**

- 1, USD1 / year;
- 2, Each year's data include China's number of transportation equipment at year end for total railway locomotives, steam locomotives, diesel locomotives, electric locomotives, railway passenger coaches, railway freight cars, total civil motor vehicles, passenger vehicles, trucks, other vehicles, motor vehicles owned by highway department, private vehicles, total civil aircraft, total civil transport vessels, motor vessels, barges, private transport vessels;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.7 2000-2015 China's Imports of Major Energy Products**

- 1, USD1 / year;
- 2, Each year's data include China's import figures of coal, coke, crude oil, gasoline, kerosene, diesel oil, fuel oil, LPG, other petroleum products, natural gas, electricity;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **2.1.1.8 2000-2015 China's Exports of Major Energy Products**

- 1, USD1 / year;
- 2, Each year's data include China's export figures of coal, coke and semi-coke, crude oil, gasoline, kerosene, diesel oil, fuel oil, LPG, other petroleum products, natural gas, electricity;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

#### **2.1.2 China Energy Production**

##### **2.1.2.1 1980-2015 China's Primary Energy Production and Composition (Calorific Value Calculation)**

- 1, USD0.5 / year;
- 2, Each year's data include China's total primary energy production figure and its composition percentage of raw coal, crude oil, natural gas, hydro power, nuclear power by calorific value calculation;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

### 2.1.2.2 1980-2015 China's Primary Energy Production and Composition (Coal Equivalent Calculation)

- 1, USD0.5 / year;
- 2, Each year's data include China's total primary energy production figure and its composition percentage of raw coal, crude oil, natural gas, hydro power, nuclear power by coal equivalent calculation;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

## 2.1.3 China Energy Consumption

### 2.1.3.1 1980-2015 China's Primary Energy Consumption and Composition (Calorific Value Calculation)

- 1, USD0.5 / year;
- 2, Each year's data include China's total primary energy consumption figure and its composition percentage of raw coal, crude oil, natural gas, hydro power, nuclear power by calorific value calculation;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

### 2.1.3.2 1980-2015 China's Primary Energy Consumption and Composition (Coal Equivalent Calculation)

- 1, USD0.5 / year;
- 2, Each year's data include China's total primary energy consumption figure and its composition percentage of raw coal, crude oil, natural gas, hydro power, nuclear power by coal equivalent calculation;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

### 2.1.3.3 1999-2015 China's Consumption of Total Energy and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include figures of China's total energy consumption and its approximately 51 industry sectors;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

## 2.1.4 China Energy Balance Tables

### 2.1.4.1 1999-2015 China's Overall Energy Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total energy available for consumption (primary energy output, recovery of energy, imports, exports, stock changes in the year); total energy consumption (by main industry sectors); consumption by usage (final consumption, losses in processing, other losses) and balance;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

### 2.1.4.2 1999-2015 China's Coal Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total coal available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final

- consumption, intermediate consumption for main sectors) and balance;
- 3, Unit Available: 10,000 tce;
  - 4, Language Available: English, Chinese

### 2.1.4.3 1999-2015 China's Coke Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 20 columns, include figures of China's total coke available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, intermediate consumption for main sectors, losses in coal washing and dressing) and balance;
- 3, Unit Available: 10,000 tce;
- 4, Language Available: English, Chinese

### 2.1.4.4 1999-2015 China's Petroleum Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total petroleum available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, intermediate consumption for main sectors, other losses) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

### 2.1.4.5 1999-2015 China's Crude Oil Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total crude oil available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, intermediate consumption for main sectors, losses in oil field for crude oil) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

### 2.1.4.6 1999-2015 China's Fuel Oil Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total fuel oil available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, intermediate consumption for main sectors, other losses) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

### 2.1.4.7 1999-2015 China's Gasoline Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 15 columns, include figures of China's total gasoline available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

### 2.1.4.8 1999-2015 China's Kerosene Balance Sheet

- 1, USD1 / year;
- 2, Each year's data, approximately 15 columns, include figures of China's total kerosene available for consumption (output, imports, exports, stock changes in

- the year); total consumption (by main industry sectors) and balance;
- 3, Unit Available: 10,000 ton;
  - 4, Language Available: English, Chinese

#### **2.1.4.9 1999-2015 China's Diesel Oil Balance Sheet**

- 1, USD1 / year;
- 2, Each year's data, approximately 21 columns, include figures of China's total diesel oil available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, intermediate consumption for main sectors, other losses) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

#### **2.1.4.10 1999-2015 China's LPG Balance Sheet**

- 1, USD1 / year;
- 2, Each year's data, approximately 15 columns, include figures of China's total LPG available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors) and balance;
- 3, Unit Available: 10,000 ton;
- 4, Language Available: English, Chinese

#### **2.1.4.11 1999-2015 China's Natural Gas Balance Sheet**

- 1, USD1 / year;
- 2, Each year's data, approximately 15 columns, include figures of China's total natural gas available for consumption (output, imports, exports, stock changes in the year); total consumption (by main industry sectors) and balance;
- 3, The table includes LNG data since 2010;
- 4, Unit Available: 100 Million Cubic Metres;
- 5, Language Available: English, Chinese

#### **2.1.4.12 1999-2015 China's Electricity Balance Sheet**

- 1, USD1 / year;
- 2, Each year's data, approximately 23 columns, include figures of China's total electricity available for consumption (hydropower output, thermal power output, nuclear power output, wind power output, imports, exports, stock changes in the year); total consumption (by main industry sectors); consumption by usage (final consumption, losses in transmission) and balance;
- 3, Unit Available: 100 million kwh;
- 4, Language Available: English, Chinese

### **2.1.5 China Energy Industry Investment**

#### **2.1.5.1 1999-2015 China's Investment in Energy Industry**

- 1, USD0.5 / year;
- 2, Each year's data include China's total energy industry investment and investment on main segment industries (coal mining and processing, petroleum and natural gas extraction, electricity, steam, hot water producing and supply, petroleum processing and coking, gas production and supply);
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.2 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Energy Industry**

- 1, USD0.5 / year;

- 2, Each year's data include China's total state-owned energy industry investment and investment on main segment industries (coal mining and processing, petroleum and natural gas extraction, electricity, steam, hot water producing and supply, petroleum processing and coking, gas production and supply);
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.3 1999-2015 China's Investment in Energy Industry by Proportions**

- 1, USD0.5 / year;
- 2, Each year's data include China's investment proportions for main energy sectors (coal mining and processing, petroleum and natural gas extraction, electricity, steam, hot water producing and supply, petroleum processing and coking, gas production and supply);
- 3, Unit Available: %;
- 4, Language Available: English, Chinese

#### **2.1.5.4 1999-2015 China's Proportions of Investment in Fixed Assets of State-Owned Units in Energy Industry**

- 1, USD0.5 / year;
- 2, Each year's data include China's investment proportions for main state-owned energy sectors (coal mining and processing, petroleum and natural gas extraction, electricity, steam, hot water producing and supply, petroleum processing and coking, gas production and supply);
- 3, Unit Available: %;
- 4, Language Available: English, Chinese

#### **2.1.5.5 1999-2015 China's Investment in Energy Industry by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in energy industry by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.6 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Energy Industry by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in energy industry by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.7 1999-2015 China's Investment in Coal Mining and Processing by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in coal mining and processing by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.8 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Coal Mining and Processing by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in coal mining and processing by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;

4, Language Available: English, Chinese

#### **2.1.5.9 1999-2015 China's Investment in Petroleum and Natural Gas Extraction by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in petroleum and natural gas extraction by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.10 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Petroleum and Natural Gas Extraction by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in petroleum and natural gas extraction by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.11 1999-2015 China's Investment in Electricity, Steam, Hot Water Production and Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in electricity, steam, hot water production and supply by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.12 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Electricity, Steam, Hot Water Production and Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in electricity, steam, hot water production and supply by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.13 1999-2015 China's Investment in Petroleum Processing and Coking by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in petroleum processing and coking by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.14 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Petroleum Processing and Coking by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in petroleum processing and coking by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

#### **2.1.5.15 1999-2015 China's Investment in Gas Production and Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's investment in gas production and supply by provinces, approximately 33 columns;

3, Unit Available: 100 Million Yuan;

4, Language Available: English, Chinese

#### **2.1.5.16 1999-2015 China's Investment in Fixed Assets of State-Owned Units in Gas Production and Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's state-owned investment in gas production and supply by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Yuan;
- 4, Language Available: English, Chinese

## **2.2 China Oil & Gas Data**

### **2.2.1 China Oil & Gas Production**

#### **2.2.1.1 1999-2015 China's Crude Oil Production by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's crude oil production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.2.1.2 1989-2016 China's Crude Oil Production by Major Oil Companies**

- 1, USD1 / year;
- 2, Each year's data include China's crude oil production figures by major oil companies;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.2.1.3 1999-2015 China's Gasoline Production by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's gasoline production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.2.1.4 1999-2015 China's Kerosene Production by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's kerosene production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.2.1.5 1999-2015 China's Diesel Oil Production by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's diesel oil production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.1.6 1999-2015 China's Fuel Oil Production by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's fuel oil production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.1.7 1999-2015 China's Natural Gas Production by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's natural gas production figures by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### 2.2.1.8 1989-2016 China's Natural Gas Production by Major Oil Companies

- 1, USD1 / year;
- 2, Each year's data include China's natural gas production figures by major oil companies;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

## 2.2.2 China Oil Consumption

### 2.2.2.1 1999-2015 China's Consumption of Crude Oil and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's crude oil consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.2 1999-2015 China's Consumption of Gasoline and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's gasoline consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.3 1999-2015 China's Consumption of Kerosene and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's kerosene consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.4 1999-2015 China's Consumption of Diesel Oil and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's diesel oil consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.5 1999-2015 China's Consumption of Fuel Oil and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's fuel oil consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.6 1999-2015 China's Crude Oil Consumption by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's crude oil consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.7 1999-2015 China's Gasoline Consumption by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's gasoline consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.8 1999-2015 China's Kerosene Consumption by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's kerosene consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.9 1999-2015 China's Diesel Oil Consumption by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's diesel oil consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

### 2.2.2.10 1999-2015 China's Fuel Oil Consumption by Provinces

- 1, USD1 / year;
- 2, Each year's data include China's fuel oil consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

## 2.2.3 China Gas Consumption & City Gas

### 2.2.3.1 1999-2015 China's Consumption of Natural Gas and Its Main Varieties by Sector

- 1, USD1 / year;
- 2, Each year's data include China's natural gas consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **2.2.3.2 1999-2015 China's Natural Gas Consumption by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's natural gas consumption figures (LNG statistics since 2010) by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **2.2.3.3 1999-2015 China's Natural Gas Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's natural gas supply figures in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Cubic Metres;
- 4, Language Available: English, Chinese

### **2.2.3.4 1999-2015 China's Population Gasified by Natural Gas Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's population gasified by natural gas in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 persons;
- 4, Language Available: English, Chinese

### **2.2.3.5 1999-2015 China's Coal Gas Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's coal gas supply figures in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Cubic Metres;
- 4, Language Available: English, Chinese

### **2.2.3.6 1999-2015 China's Population Gasified by Coal Gas Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's population gasified by coal gas in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 persons;
- 4, Language Available: English, Chinese

### **2.2.3.7 1999-2015 China's LPG Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's LPG supply figures in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Cubic Metres;
- 4, Language Available: English, Chinese

### **2.2.3.8 1999-2015 China's Population Gasified by LPG Supply in Cities by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's population gasified by LPG in cities by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 persons;
- 4, Language Available: English, Chinese

## **2.3 China Coal Data**

### **2.3.1 China Coal Production & Consumption**

#### **2.3.1.1 1999-2015 China's Coke Production by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's coke production figures by provinces, approximately 33 columns;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.3.1.2 1999-2015 China's Consumption of Coal and Its Main Varieties by Sector**

- 1, USD1 / year;
- 2, Each year's data include China's coal consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

#### **2.3.1.3 1999-2015 China's Consumption of Coke and Its Main Varieties by Sector**

- 1, USD1 / year;
- 2, Each year's data include China's coke consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 10,000 Tons;
- 4, Language Available: English, Chinese

## **2.4 China Electricity, Steam and Hot Water Data**

### **2.4.1 China Electricity, Steam and Hot Water Production**

#### **2.4.1.1 1999-2015 China's Power Generation by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's power generation figures by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Kwh;
- 4, Language Available: English, Chinese

#### **2.4.1.2 1999-2015 China's Thermal Power Generation by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's thermal power generation figures by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Kwh;
- 4, Language Available: English, Chinese

#### **2.4.1.3 1999-2015 China's Hydro Power Generation by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's hydro power generation figures by provinces,



approximately 33 columns;

- 3, Unit Available: 100 Million Kwh;
- 4, Language Available: English, Chinese

#### **2.4.1.4 1999-2015 China's Capacity of Steam Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's steam supply capacity figures by provinces, approximately 33 columns;
- 3, Unit Available: Ton/hr;
- 4, Language Available: English, Chinese

#### **2.4.1.5 1999-2015 China's Capacity of Hot Water Supply by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's hot water supply capacity figures by provinces, approximately 33 columns;
- 3, Unit Available: megawatt;
- 4, Language Available: English, Chinese

### **2.4.2 China Electricity Consumption**

#### **2.4.2.1 1999-2015 China's Consumption of Electricity and Its Main Varieties by Sector**

- 1, USD1 / year;
- 2, Each year's data include China's electricity consumption figures by approximately 51 industry sectors;
- 3, Unit Available: 100 Million Kwh;
- 4, Language Available: English, Chinese

#### **2.4.2.2 1999-2015 China's Electricity Consumption by Provinces**

- 1, USD1 / year;
- 2, Each year's data include China's electricity consumption figures by provinces, approximately 33 columns;
- 3, Unit Available: 100 Million Kwh;
- 4, Language Available: English, Chinese

## **3 Russia Data**

### **3.1 Russia's Hydrocarbon Production Zones and Reserves Classification**

#### **3.1.1 Russia's Hydrocarbon Provinces, Districts and Sub-districts**

##### **3.1.1.1 Russia's Hydrocarbon Provinces**

- 1, USD10 / table;
- 2, The table introduces Russia's hydrocarbon provinces by their names (Russian, English and Chinese), geology platform, square kilometres, number of subsidiary hydrocarbon districts and subdistricts, related countries);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.2 Timan-Pechora Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.3 Volga-Ural Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.4 Precaspian Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.5 Dnieper-Pripyat Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.6 Lena-Tunguska Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

##### **3.1.1.7 Yenisei-Anabar Hydrocarbon Province, Its Subsidiary Districts and Subdistricts**

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main

oil gas reservoirs, promising oil gas reservoirs and rock types);

- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.8 Lena-Vilyuy Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.9 West Siberian Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.10 Amu Darya Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.11 North Caucasus-Mangyshlak Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.12 South Caspian Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.1.13 Okhotsk Hydrocarbon Province, Its Subsidiary Districts and Subdistricts

- 1, USD10 / table;
- 2, The table introduces the hydrocarbon province's subsidiary districts and subdistricts (square kilometres, maximal thickness of sedimentary cover, main oil gas reservoirs, promising oil gas reservoirs and rock types);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

## 3.1.2 Russia's Reserves Classification

### 3.1.2.1 Russia's Oil & Gas Reserves Classification

- 1, USD10 / table;
- 2, The table introduces Russia's oil & gas reserves classification (related description, appraisal targets, E&P progress, reliability, similar classification degree of US PRMS and China);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.1.2.2 Russia and China's Classifications for Oil & Gas Field Sizes

- 1, USD10 / table;
- 2, The table introduces Russia and China's classifications for oil & gas field sizes (giant, very large, large, mid-size, small and very small);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

## 3.2 Gazprom Data

### 3.2.1.1 2005-2016 Gazprom's Share in World and Russian Energy Industry

- 1, USD1 / year;
- 2, Each year's data include Gazprom's total natural gas reserves and production share in world natural gas industry; Gazprom's share in Russian fuel and energy complex (Russian natural gas reserves, gas production, crude oil and gas condensate production, primary processing of oil and stable gas condensate, power generation);
- 3, Unit Available: %;
- 4, Language Available: English, Chinese

### 3.2.1.2 2005-2016 Gazprom's Natural Gas Reserves

- 1, USD1 / year;
- 2, Each year's data include Gazprom's natural gas reserves by categories A+B+C1 (share of ABC1 reserves covered by the assessment under PRMS standards), proved, probable, proved + probable;
- 3, Unit Available: Bcm;
- 4, Language Available: English, Chinese

### 3.2.1.3 2005-2016 Gazprom's Gas Condensate Reserves

- 1, USD1 / year;
- 2, Each year's data include Gazprom's gas condensate reserves by categories A+B+C1 (share of ABC1 reserves covered by the assessment under PRMS standards), proved, probable, proved + probable;
- 3, Unit Available: Million Tons;
- 4, Language Available: English, Chinese

### 3.2.1.4 2005-2016 Gazprom's Crude Oil Reserves

- 1, USD1 / year;
- 2, Each year's data include Gazprom's crude oil reserves by categories A+B+C1 (share of ABC1 reserves covered by the assessment under PRMS standards),

- proved, probable, proved + probable;  
3, Unit Available: Million Tons;  
4, Language Available: English, Chinese

### 3.2.1.5 2005-2016 Gazprom's Oil & Gas Production

- 1, USD0.5 / year;
- 2, Each year's data include Gazprom's production figures (natural gas and associated gas, gas condensate, crude oil);
- 3, Unit Available: Bcm, Million tons;
- 4, Language Available: English, Chinese

### 3.2.1.6 2005-2016 Russia's Pipeline Natural Gas Exports by Nations

- 1, USD1 / year;
- 2, Each year's data include Russia's pipeline natural gas exports figures by approximately 38 nations;
- 3, Unit Available: Bcm;
- 4, Language Available: English, Chinese

### 3.2.1.7 2008-2016 Russia's LNG Exports by Nations

- 1, USD1 / year;
- 2, Each year's data include Russia's LNG exports figures by approximately 12 nations;
- 3, Unit Available: Million Btu;
- 4, Language Available: English, Chinese

### 3.2.1.8 2005-2016 Gazprom's Natural Gas Sales Revenue

- 1, USD0.5 / year;
- 2, Each year's data include Gazprom's natural gas sales revenue in Russia, in far abroad countries and in FSU countries;
- 3, Unit Available: RUB mm, USD mm, EUR mm;
- 4, Language Available: English, Chinese

### 3.2.1.9 2005-2016 Gazprom's Average Natural Gas Sales Price

- 1, USD0.5 / year;
- 2, Each year's data include Gazprom's average natural gas sales price in Russia, in far abroad countries and in FSU countries;
- 3, Unit Available: RUB per mcm, USD per mcm, EUR per mcm;
- 4, Language Available: English, Chinese

### 3.2.1.10 2016 Gazprom Group Subsidiaries' Licenses for the Main Hydrocarbon Fields

- 1, USD10 / table;
- 2, The table include Gazprom group subsidiaries' licenses, as at 31 December of the year, for the main hydrocarbon fields (name of the field, year of production start, license holder subsidiary, the group share, type of the field, category of the license, license expiration year);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.11 2016 Gazprom's Associated Companies and Joint Ventures' Licenses for the Main Hydrocarbon Fields

- 1, USD10 / table;
- 2, The table include Gazprom's associated companies and joint ventures' licenses, as at 31 December of the year, for the main hydrocarbon fields (name of the field, year of production start, license holder subsidiary, the group share, type of

- the field, category of the license, license expiration year);  
3, Unit Available: -;  
4, Language Available: English, Chinese

### 3.2.1.12 2005-2016 Gazprom's Geological Exploration Activities in Russia

- 1, USD1 / year;
- 2, Each year's data include Gazprom's geological exploration activities (exploration drilling, completed exploration wells, productive wells, seismic exploration 2D, seismic exploration 3D, reserves growth due to geological exploration, drilling efficiency) in Russia;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.13 2005-2016 Gazprom's Production Capacity

- 1, USD1 / year;
- 2, Each year's data include Gazprom's production capacity by number of producing fields, number of gas producing wells, number of gas producing wells in operation, number of oil producing wells, number of oil producing wells in operation, number of comprehensive and preliminary gas treatment units, comprehensive gas treatment units' aggregate installed capacity, number of booster compressor stations, booster compressor stations' installed capacity;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.14 2005-2016 Gazprom's Production Drilling

- 1, USD1 / year;
- 2, Each year's data include Gazprom's production drilling figures (number of completed producing wells for natural gas, crude oil and at UGSF; production drilling depth for natural gas, crude oil and at UGSF);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.15 2016 Gazprom's Promising Fields in Russia

- 1, USD10 / table;
- 2, The table include Gazprom's promising fields (name, projected capacity, year of commissioning, year of attainment of projected capacity) as at 31 December of the year;
- 3, Unit Available: -;
- 4, Language Available: English

### 3.2.1.16 2005-2016 Major Technical Characteristics of Gazprom's Gas Transportation Assets in Russia

- 1, USD0.5 / year;
- 2, Each year's data include major technical characteristics of Gazprom's gas transportation assets (length of gas trunk pipelines and pipeline branches, number of linear compressor stations, number of gas pumping units, GPUs installed capacity) in Russia as at 31 December of the year;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.17 2005-2016 Gazprom's Upgrade and Overhaul of Gas Transportation System (GTS) in Russia

- 1, USD0.5 / year;
- 2, Each year's data include the gas trunk pipelines and pipeline branches putting into operation, capital repairs per km and the number of technical faults per 1 thousand km;

- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.18 2005-2016 Gas Received into and Distributed from Gazprom's Gas Transportation System (GTS) in Russia

- 1, USD1 / year;
- 2, Each year's data include the natural gas injections into GTS (total amount, amount of Central Asian gas, amount of Azerbaijanian gas, gas withdrawn from UGSFs in Russia, decrease of amount of gas stored in GTS) and the natural gas distribution from GTS (supplies inside Russia, Supplies outside Russia, Central Asian gas supply, Azerbaijanian gas supply, gas pumped into UGSFs in Russia, technical needs of GTS and UGSFs, increase of amount of gas stored in GTS);
- 3, Unit Available: Bcm;
- 4, Language Available: English, Chinese

### 3.2.1.19 2005-2016 Gazprom's Underground Gas Storage Facilities (UGSFs) in Russia

- 1, USD0.5 / year;
- 2, Each year's data include Gazprom's number of UGSFs, total active capacity, number of producing wells at UGSFs;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.20 2005-2016 Gazprom's Gas Injection and Withdrawal from Underground Gas Storage Facilities (UGSFs) in Russia

- 1, USD1 / year;
- 2, Each year's data include Gazprom's gas injection into UGSFs in Russia from Q1 to Q4 and gas withdrawal from UGSFs in Russia from Q3 to Q2 of the next year;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.21 2005-2016 Gazprom's Gas Injection and Withdrawal from Underground Gas Storage Facilities (UGSFs) Abroad

- 1, USD1 / year;
- 2, Each year's data include Gazprom's gas injection into UGSFs in FSU countries (Armenia, Belarus, Latvia) and in far abroad countries (Austria, Great Britain, Hungary, Germany, The Netherlands, Serbia, France); gas withdrawal from UGSFs in FSU countries (Armenia, Belarus, Latvia) and in far abroad countries (Austria, Great Britain, Hungary, Germany, The Netherlands, Serbia, France) during withdrawal season (Q3 to Q2 of the next year);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.2.1.22 Management of Russia's Unified Gas Supply System (UGSS) by Regions

- 1, USD10 / table;
- 2, The table introduces the current operators and their territory of responsibility for former Soviet Union's UGSS in Russia, Eastern Europe, Near East and Central Asia;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

## 3.3 Russia's Eastern Gas Program

### 3.3.1 The Resources Basis

#### 3.3.1.1 Eastern Gas Program's Anticipation of Eastern Russia's Natural Gas Resources

- 1, USD10 / table;
- 2, The table introduces the Eastern Gas Program's anticipation of the natural gas resources (resource prospects, remaining A+B+C1 and C2 reserves, C3+D resources) for Russia (by total, land and continental shelf), Siberia (by total, Tomskaya oblast, Novosibirskaya oblast, Evenkysky avtonomny okrug, Krasnoyarsky krai, Irkutskaya oblast, Ust-Ordynsky Buryatsky avtonomny okrug, Omskaya oblast), Far East regions (by total, Respublika Sakha (Yakutiya), Magadanskaya oblast, Chukotsky avtonomny okrug, Kamchatskaya oblast, Koryaksky okrug, Sakhalinskaya oblast, Amurskaya oblast, Khabarovskiy kray, Primorsky krai, Evreyskaya avtonomnaya oblast, Taymyrskiy avtonomny okrug) and Russia's continental shelves (by total, Sea of Okhotsk, Sea of Japan, Laptev Sea, East Siberian Sea, Chukchi Sea, Bering Sea and Pacific Ocean);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

#### 3.3.1.2 Russia's Coal Reserves in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces Russia's coal reserves figures (A+B+C1, C2), at the year of East Gas Program, for the whole nation, East Siberia and Far East regions' individual federal subjects, approximately 17 columns;
- 3, Unit Available: Million Tons;
- 4, Language Available: English, Chinese

#### 3.3.1.3 Eastern Gas Program's Anticipation of Russia's Coal Production in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of Russia's coal production, at intervals of 5 years, for the whole nation, East Siberia and Far East regions' individual federal subjects;
- 3, Unit Available: Million Tons;
- 4, Language Available: English, Chinese

#### 3.3.1.4 Eastern Gas Program's Anticipation of Russia's Petroleum Production in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of Russia's petroleum production, till 2020, by core oil fields and small & mid-sized oil fields in East Siberia and Far East regions;
- 3, Unit Available: Million Tons;
- 4, Language Available: English, Chinese

#### 3.3.1.5 Eastern Gas Program's Anticipation of Russia's Fuel Consumption in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of Russia's fuel consumption (natural gas, coal, fuel oil and other types of fuel) at intervals of 5 years till 2030. 3 groups of figures are listed based on different regional GDP growth rate (basic, target and intensive);
- 3, Unit Available: Mtce;

4, Language Available: English, Chinese

### 3.3.1.6 Eastern Gas Program's Anticipation of Russia's Natural Gas Prices in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of Russia's natural gas prices, at intervals of 5 years till 2030, in East Siberia and Far East regions' individual federal subjects;
- 3, Unit Available: Ruble / thousand cubic metres;
- 4, Language Available: English, Chinese

### 3.3.1.7 Sakhalin 1 to 8 Projects in Russia's Far East

- 1, USD10 / table;
- 2, The table introduces Sakhalin 1 to 8 projects' oil/gas fields, blocks, natural gas reserves, oil reserves and operators;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

## 3.3.2 The Target Markets

### 3.3.2.1 Eastern Gas Program's Anticipation of Russia's Natural Gas Consumption in East Siberia and Far East

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of the natural gas consumption, at intervals of 5 years till 2030, in Russia's East Siberia and Far East regions. 4 groups of figures are listed based on different regional GDP growth rate (basic, target and intensive) and the development of local gas chemical industry;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### 3.3.2.2 Eastern Gas Program's Anticipation of Natural Gas Share in East Siberia and Far East's Energy Complex

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of the natural gas consumption, at intervals of 5 years till 2030, in Russia's East Siberia (by Krasnoyarsky krai, Irkutskaya oblast, Republic of Buryatia, Zabaykalsky Krai) and Far East (by Respublika Sakha (Yakutiya), Kamchatskaya oblast, Sakhalinskaya oblast, Amurskaya oblast, Khabarovskiy kray, Primorsky krai, Evreyskaya avtonomnaya oblast). 3 groups of figures are listed based on different regional GDP growth rate (basic, target and intensive);
- 3, Unit Available: %;
- 4, Language Available: English, Chinese

### 3.3.2.3 Eastern Gas Program's Anticipation of Natural Gas Production and Sales in Russia's East Siberia and Far East Regions

- 1, USD5 / table;
- 2, The table introduces East Gas Program's anticipation of Russia's natural gas production, domestic consumption, export, pipeline gas export, LNG export in East Siberia and Far East regions at intervals of 5 years;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

## 3.3.3 Eastern Gas Program's 15 Options

### 3.3.3.1 Roles and Duties of Russia's Ministries and Companies in Planning Eastern Gas Program

- 1, USD10 / table;
- 2, The table introduces the ministries and companies (by policy content, plan target and related data, time schedule) involved in planning the East Gas Program;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.3.3.2 Eastern Gas Program's Options for Developing Natural Gas in Russia's East Siberia and Far East Regions

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options for developing natural gas in Russia's East Siberia and Far East regions. Each option lists its planned pipeline routes, domestic demand growth, the gas to be injected into UGSS, exports to China and South Korea;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.3.3.3 Eastern Gas Program's Natural Gas Balance Sheet in 2030 by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation on natural gas production in East Siberia (by Irkutsk production center, Krasnoyarsk production center, Norilskgazprom OAO), natural gas production in Far East (by Yakutiya production center, Sakhalin production center, Kamchatka), natural gas consumption in East Siberia (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses), natural gas consumption in Far East (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses) and exports to Asia Pacific;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### 3.3.3.4 Eastern Gas Program's Anticipation of 2006-2030 Natural Gas Production and Transportation Costs by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation on the total costs of natural gas production and transportation;
- 3, Unit Available: 100 Million USD, 100 Million RUB;
- 4, Language Available: English, Chinese

### 3.3.3.5 Eastern Gas Program's Internal Rate of Return by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation on the cash flow, accumulative net cash flow and internal rate of return;
- 3, Unit Available: Million USD;
- 4, Language Available: English, Chinese

### 3.3.3.6 Eastern Gas Program's Anticipation of State Budgetary Revenue by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation on the indirect tax, business tax, income tax, property tax etc;
- 3, Unit Available: 100 Million USD;

4, Language Available: English, Chinese

### 3.3.3.7 Eastern Gas Program's Anticipation of Central and Local Governments' Revenue by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation on the revenue received by central government and local governments;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

### 3.3.3.8 Eastern Gas Program's Price Sensitivity Analysis by Different Options

- 1, USD5 / table;
- 2, The table introduces East Gas Program's 4 export-oriented options' price sensitivity analysis (the impacts on accumulative net cash flow and state budgetary revenue);
- 3, Unit Available: Million USD;
- 4, Language Available: English, Chinese

### 3.3.3.9 The Impacts of Eastern Gas Program's Options (Not Connected to UGSS) on Macro Economy

- 1, USD5 / table;
- 2, The table introduces the direct, indirect and overall impacts of East Gas Program's options (not connected to UGSS) on macro economy;
- 3, Unit Available: 100 Million RUB;
- 4, Language Available: English, Chinese

## 3.3.4 Investment for Different Options

### 3.3.4.1 Eastern Gas Program's Anticipation of 2006-2030 Total Investment by Different Options

- 1, USD5 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation of the total investment during 2006-2030;
- 3, Unit Available: 100 Million USD, 100 Million RUB;
- 4, Language Available: English, Chinese

### 3.3.4.2 Eastern Gas Program's Anticipation of 2006-2030 Total Investment by Target Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target options' anticipation of the investment during 2006-2030 on exploration, recovery, transportation, processing, UGSFs etc. 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: 100 Million USD, 100 Million RUB;
- 4, Language Available: English, Chinese

### 3.3.4.3 Eastern Gas Program's Anticipation of 2006-2030 Total Investment by Intensive Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive options' anticipation of the investment during 2006-2030 on exploration, recovery, transportation, processing, UGSFs etc. 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: 100 Million USD, 100 Million RUB;
- 4, Language Available: English, Chinese

### 3.3.4.4 Eastern Gas Program's Anticipation of 2006-2030 Total Investment by 500 Options (Not Connected to UGSS)

- 1, USD5 / table;
- 2, The table introduces East Gas Program's 500 (not connected to UGSS) options' anticipation of the investment during 2006-2030 on exploration, recovery, transportation, processing, UGSFs etc;
- 3, Unit Available: 100 Million USD, 100 Million RUB;
- 4, Language Available: English, Chinese

## 3.3.5 Field and Pipeline Facilities for Different Options

### 3.3.5.1 Eastern Gas Program's Anticipation of Field Facilities Required by Target Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target options' anticipation of the required field facilities (number of natural gas wells, number of processing plants, booster compressor stations' installed capacity, number of offshore central platforms, number of ice-resistant drilling platforms, number of subsea wellhead facilities). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.3.5.2 Eastern Gas Program's Anticipation of Field Facilities Required by Intensive Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive options' anticipation of the required field facilities (number of natural gas wells, number of processing plants, booster compressor stations' installed capacity, number of offshore central platforms, number of ice-resistant drilling platforms, number of subsea wellhead facilities). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.3.5.3 Eastern Gas Program's Anticipation of Field Facilities Required by 500 Options (Not Connected to UGSS)

- 1, USD5 / table;
- 2, The table introduces East Gas Program's 500 (not connected to UGSS) options' anticipation of the required field facilities (number of natural gas wells, number of processing plants, booster compressor stations' installed capacity, number of offshore central platforms, number of ice-resistant drilling platforms, number of subsea wellhead facilities). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### 3.3.5.4 Eastern Gas Program's Anticipation of Gas Pipelines Required by Target Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target options' anticipation of the required gas pipelines (length, diameter, designed pressure, number of compressor stations, installed power capacity for gas transport). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected

- to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### **3.3.5.5 Eastern Gas Program's Anticipation of Gas Pipelines Required by Intensive Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive options' anticipation of the required gas pipelines (length, diameter, designed pressure, number of compressor stations, installed power capacity for gas transport). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### **3.3.5.6 Eastern Gas Program's Anticipation of Gas Pipelines Required by 500 Options (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 500 (not connected to UGSS) options' anticipation of the required gas pipelines (length, diameter, designed pressure, number of compressor stations, installed power capacity for gas transport). 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

## **3.3.6 Gas Production Forecast for Different Options**

### **3.3.6.1 Eastern Gas Program's Anticipation of Natural Gas Production by Target Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target options' anticipation of the natural gas production at intervals of 5 years from 2006 to 2030. 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.2 Eastern Gas Program's Anticipation of Natural Gas Production by Intensive Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive options' anticipation of the natural gas production at intervals of 5 years from 2006 to 2030. 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.3 Eastern Gas Program's Anticipation of Natural Gas Production by 500 Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 500 (not connected to UGSS) options' anticipation of the natural gas production at intervals of 5 years from 2006 to 2030. 2 groups of figures are listed based on 2 situations (connected to UGSS and not connected to UGSS);

- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.4 Eastern Gas Program's Anticipation of Natural Gas Production by Western Target Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.5 Eastern Gas Program's Anticipation of Natural Gas Production by Western Target Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.6 Eastern Gas Program's Anticipation of Natural Gas Production by Central Target Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.7 Eastern Gas Program's Anticipation of Natural Gas Production by Central Target Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.8 Eastern Gas Program's Anticipation of Natural Gas Production by Eastern Target Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.9 Eastern Gas Program's Anticipation of Natural Gas Production by Eastern Target Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.10 Eastern Gas Program's Anticipation of Natural Gas**

### **Production by Western Intensive Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.11 Eastern Gas Program's Anticipation of Natural Gas Production by Western Intensive Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.12 Eastern Gas Program's Anticipation of Natural Gas Production by Central Intensive Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.13 Eastern Gas Program's Anticipation of Natural Gas Production by Central Intensive Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.14 Eastern Gas Program's Anticipation of Natural Gas Production by Eastern Intensive Option (Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.15 Eastern Gas Program's Anticipation of Natural Gas Production by Eastern Intensive Option (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.16 Eastern Gas Program's Anticipation of Natural Gas Production by Western 500 Option**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;

- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.17 Eastern Gas Program's Anticipation of Natural Gas Production by Central 500 Option**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.6.18 Eastern Gas Program's Anticipation of Natural Gas Production by Eastern 500 Option**

- 1, USD10 / table;
- 2, The table introduces this option's natural gas production anticipation, till 2030, by approximately 20 gas producing areas in Russia's East Siberia and Far East;
- 3, Unit Availalbe: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

## **3.3.7 Gas Processing and Main Products Forecast for Different Options**

### **3.3.7.1 Eastern Gas Program's Options for Deploying Natural Gas Processing and Gas Chemical Industry Centers in Russia's East Siberia and Far East Regions**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's options for deploying natural gas processing and gas chemical industry centers in Russia's East Siberia and Far East regions;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### **3.3.7.2 Eastern Gas Program's Anticipation of Petroleum and Natural Gas Chemical Products Production by Eastern Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's anticipation of petrochemical and gas chemical products production (by ethylene, propylene, polyethylene, vinyl chloride, polyvinyl chloride, polystyrene, styrene copolymer, ethylene glycol) by eastern types of options. 2 groups of figures are listed for target and intensive options based on 2 situations (connected to UGSS and not connected to UGSS);
- 3, Unit Availalbe: million tons;
- 4, Language Available: English, Chinese

### **3.3.7.3 Eastern Gas Program's Anticipation of Main Products from Natural Gas Processing by Target Options (Not Connected to UGSS)**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target (not connected to UGSS) options' anticipation of the main products production (dry gas, ethylene, glycol terephthalate, condensate oil, helium concentrate) from natural gas processing at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese



### 3.3.7.4 Eastern Gas Program's Anticipation of Main Products from Natural Gas Processing by Intensive Options (Not Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive (not connected to UGSS) options' anticipation of the main products production (dry gas, ethylene, glycol terephthalate, condensate oil, helium concentrate) from natural gas processing at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.5 Eastern Gas Program's Anticipation of Main Products from Natural Gas Processing by Target Options (Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target (connected to UGSS) options' anticipation of the main products production (dry gas, ethylene, glycol terephthalate, condensate oil, helium concentrate) from natural gas processing at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.6 Eastern Gas Program's Anticipation of Main Products from Natural Gas Processing by Intensive Options (Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive (connected to UGSS) options' anticipation of the main products production (dry gas, ethylene, glycol terephthalate, condensate oil, helium concentrate) from natural gas processing at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.7 Eastern Gas Program's Anticipation of Main Products from Natural Gas Processing by 500 Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 500 options' anticipation of the main products production (dry gas, ethylene, glycol terephthalate, condensate oil, helium concentrate) from natural gas processing at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.8 Eastern Gas Program's Anticipation of Natural Gas Processing Derivatives and Chemical Products by Target Options (Not Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target (not connected to UGSS) options' anticipation of natural gas processing derivatives and chemical products (polybutylene terephthalate, oil gas mixture, polyolefin, petrochemical products, gas chemical products, helium concentrate) at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.9 Eastern Gas Program's Anticipation of Natural Gas Processing Derivatives and Chemical Products by Intensive Options (Not Connected to UGSS)

- 1, USD10 / table;

- 2, The table introduces East Gas Program's intensive (not connected to UGSS) options' anticipation of natural gas processing derivatives and chemical products (polybutylene terephthalate, oil gas mixture, polyolefin, petrochemical products, gas chemical products, helium concentrate) at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.10 Eastern Gas Program's Anticipation of Natural Gas Processing Derivatives and Chemical Products by Target Options (Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's target (connected to UGSS) options' anticipation of natural gas processing derivatives and chemical products (polybutylene terephthalate, oil gas mixture, polyolefin, petrochemical products, gas chemical products, helium concentrate) at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.11 Eastern Gas Program's Anticipation of Natural Gas Processing Derivatives and Chemical Products by Intensive Options (Connected to UGSS)

- 1, USD10 / table;
- 2, The table introduces East Gas Program's intensive (connected to UGSS) options' anticipation of natural gas processing derivatives and chemical products (polybutylene terephthalate, oil gas mixture, polyolefin, petrochemical products, gas chemical products, helium concentrate) at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

### 3.3.7.12 Eastern Gas Program's Anticipation of Natural Gas Processing Derivatives and Chemical Products by 500 Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 500 options' anticipation of natural gas processing derivatives and chemical products (polybutylene terephthalate, oil gas mixture, polyolefin, petrochemical products, gas chemical products, helium concentrate) at intervals of 5 years till 2030;
- 3, Unit Availalbe: -;
- 4, Language Available: English, Chinese

## 3.3.8 Return on Investment Forecast

### 3.3.8.1 Eastern Gas Program's Internal Rate of Return for Natural Gas Recovery by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation, for this sector, on the cash flow, accumulative net cash flow and internal rate of return;
- 3, Unit Availalbe: USD mm;
- 4, Language Available: English, Chinese

### 3.3.8.2 Eastern Gas Program's Internal Rate of Return for Natural Gas Transportation by Different Options

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation, for this sector,

on the cash flow, accumulative net cash flow and internal rate of return;

- 3, Unit Available: USD mm;
- 4, Language Available: English, Chinese

### **3.3.8.3 Eastern Gas Program's Internal Rate of Return for Natural Gas Processing by Different Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation, for this sector, on the cash flow, accumulative net cash flow and internal rate of return;
- 3, Unit Available: USD mm;
- 4, Language Available: English, Chinese

### **3.3.8.4 Eastern Gas Program's Internal Rate of Return for Natural Gas Sales by Different Options**

- 1, USD10 / table;
- 2, The table introduces East Gas Program's 15 options' anticipation, for this sector, on the cash flow, accumulative net cash flow and internal rate of return;
- 3, Unit Available: USD mm;
- 4, Language Available: English, Chinese

## **3.3.9 Eastern Gas Program's Recommended Option**

### **3.3.9.1 Eastern-500 Option's Oil and Gas Fields Development Plan**

- 1, USD5 / table;
- 2, The table includes Eastern-500 option's related oil and gas fields, anticipated commissioning year and the exact commissioning year;
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### **3.3.9.2 Eastern-500 Option's Required Field Facilities**

- 1, USD5 / table;
- 2, The table introduces Eastern-500 option anticipation of its required field facilities (number of natural gas wells, number of processing plants, booster compressor stations' installed capacity, number of offshore central platforms, number of ice-resistant drilling platforms, number of subsea wellhead facilities);
- 3, Unit Available: -;
- 4, Language Available: English, Chinese

### **3.3.9.3 Eastern-500 Option's Natural Gas Balance Sheet**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation, from 2006 to 2030, on natural gas production in East Siberia (by Irkutsk production center, Krasnoyarsk production center, Norilskgazprom OAO), natural gas production in Far East (by Yakutiya production center, Sakhalin production center, Kamchatka), natural gas consumption in East Siberia (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses), natural gas consumption in Far East (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses) and exports to Asia Pacific;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.9.4 Eastern-500 Option's Natural Gas Balance Sheet When**

### **Connected to UGSS**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation, from 2006 to 2030 when connected to UGSS, on natural gas production in East Siberia (by Irkutsk production center, Krasnoyarsk production center, Norilskgazprom OAO), natural gas production in Far East (by Yakutiya production center, Sakhalin production center, Kamchatka), natural gas consumption in East Siberia (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses), natural gas consumption in Far East (by domestic gas consumption, gas chemical industry consumption, gas injected into UGSS and other industry uses) and exports to Asia Pacific;
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.9.5 Eastern-500 Option's Upstream Investment from 2006 to 2030**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation of the investment on exploration, recovery, transportation, processing, UGSFs etc at intervals of 5 years during 2006-2030;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.6 Eastern-500 Option's Upstream Investment from 2006 to 2030 When Connected to UGSS**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation, when connected to UGSS, of the investment on exploration, recovery, transportation, processing, UGSFs etc at intervals of 5 years during 2006-2030;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.7 Eastern-500 Option's Return of Investment**

- 1, USD5 / table;
- 2, The table introduces Eastern-500 option's anticipation on return of investment (accumulated net cash flow and internal rate of return) by gas recovery, gas transportation, gas processing, gas sales etc;
- 3, Unit Available: Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.8 Eastern-500 Option's Return of Investment When Connected to UGSS**

- 1, USD5 / table;
- 2, The table introduces Eastern-500 option's anticipation, when connected to UGSS, of the return of investment (accumulated net cash flow and internal rate of return) by gas recovery, gas transportation, gas processing, gas sales etc;
- 3, Unit Available: Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.9 Eastern-500 Option's State Budgetary Revenue**

- 1, USD5 / table;
- 2, The table introduces Eastern-500 option's anticipation on the indirect tax, business tax, income tax, property tax etc;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.10 Eastern-500 Option's Local Natural Gas Supply in 2030**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation on natural gas supplied to local federal subjects in 2030 and the usage structure percentage (by thermal power generation, boiler, direct consumption and civil users consumption);
- 3, Unit Available: 100 Million Cubic Metres;
- 4, Language Available: English, Chinese

### **3.3.9.11 Eastern-500 Option's Total Local Investment from 2006 to 2030**

- 1, USD10 / table;
- 2, The table introduces Eastern-500 option's anticipation, from 2006 to 2030, on the total local investment (exploration, recovery, transportation, processing, UGSFs) by Krasnoyarsky krai, Irkutskaya oblast, Respublika Sakha (Yakutiya), Sakhalinskaya oblast, Amurskaya oblast, Khabarovskiy kray, Primorsky krai, Evreyskaya avtonomnaya oblast and other regions;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

### **3.3.9.12 Eastern-500 Option's Total Local Natural Gas Sales Revenue and Tax from 2006 to 2030**

- 1, USD5 / table;
- 2, The table introduces Eastern-500 option's anticipation, from 2006 to 2030, on the natural gas sales and tax for local federal subjects by Krasnoyarsky krai, Irkutskaya oblast, Respublika Sakha (Yakutiya), Sakhalinskaya oblast, Amurskaya oblast, Khabarovskiy kray, Primorsky krai, Evreyskaya avtonomnaya oblast and other regions;
- 3, Unit Available: 100 Million USD;
- 4, Language Available: English, Chinese

## **4 Other Data**

### **4.1 Approximate Conversion Factors**

#### **4.1.1.1 Approximate Energy Conversion Factors**

- 1, USD10 / table;
- 2, The table introduces approximate conversion factors between metric tonnes, kilolitres, barrels, US gallons for crude oil; between metric tonnes, kilolitres, barrels for oil products (LPG, gasoline, kerosene, gas oil/diesel, residual fuel oil, product basket); between billion cubic metres, billion cubic feet, million tonnes oil equivalent, million tonnes LNG, trillion British thermal units, million barrels oil equivalent for natural; between other factors;
- 3, Language Available: English, Chinese

[www.chinagasmag.com](http://www.chinagasmag.com)

[www.chinaoilmap.com](http://www.chinaoilmap.com)