



Lawrence Berkeley  
National Laboratory

# KEY CHINA ENERGY STATISTICS 2014



**China Energy Group**





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## The Lawrence Berkeley National Laboratory China Energy Group

The China Energy Group at Lawrence Berkeley National Laboratory (LBNL) was established in 1988. Over the years, the Group has gained recognition as an authoritative source of China energy statistics through the publication of its China Energy Databook (CED). To date, the Group has published eight editions of the CED (<http://china.lbl.gov/research-projects/china-energy-databook>). This handbook summarizes key statistics from the CED and is expressly modeled on the International Energy Agency's Key World Energy Statistics series of publications. The handbook contains timely, clearly presented data on the supply, transformation, and consumption of all major energy sources in China.

Gathering and analyzing data is one important function of LBNL's China Energy Group. The mission of the Group, located within the Environmental Energy Technologies Division of LBNL, is to:

Working collaboratively with groups in China and elsewhere to understand the dynamics of energy use, improve energy efficiency, and reduce emissions in China;

Strengthen Chinese capabilities in energy efficiency;

Enhance relationships on energy efficiency among Chinese, U.S., and international institutions.

Major achievements of the China Energy Group include:

- Introduced appliance energy efficiency standards to China
- Initiated pilot policy programs that led to the Top 1,000 (now Top 10,000) Enterprises Program
- Analyzed long-term energy demand in China to 2020, 2030, and 2050
- Played a key role in creating the Beijing Energy Efficiency Center and the Energy Foundation China Program
- Leads the US-China Clean Energy Research Center — Building Energy Efficiency
- Hosted more than 100 visiting researchers from China

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# Supply



## Maps of China

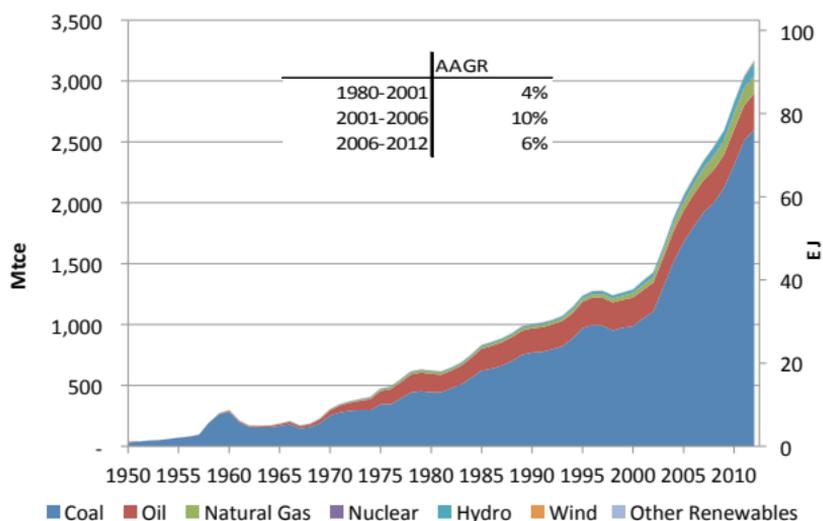


## 2012 Highlights \*

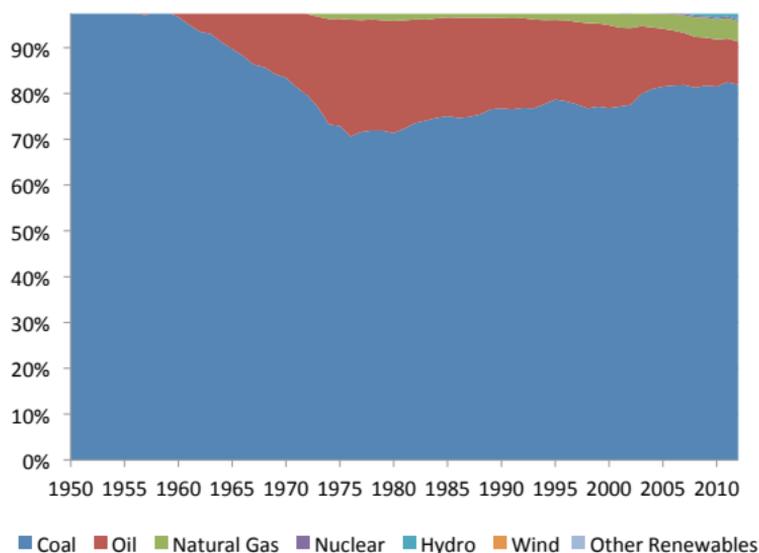
- China accounted for 20% of global energy consumption.
- Energy grew 51% percent as fast as GDP.
- China accounted for more than 20% of global energy-related CO<sub>2</sub> emissions.
- China's per capita CO<sub>2</sub> emissions were 6 tonnes/person, 32% percent above the world average but 65% below that of the United States.
- China accounted for a staggering 47 percent of total world coal consumption.
- In contrast, oil consumption was 11 percent of world demand and natural gas, 4 percent.
- Since 2000, natural gas consumption grew at a rate of 15 percent per year.
- China's Western region continues to be the dominant source of increased production of oil and natural gas.
- China built 88 GW of power plants, of which about 60 percent were coal-based. To date, about 35% of all global coal-fired power generation capacity has been built in China.
- China built 14.6 GW of wind power, accounting for about 32% percent of world capacity additions.
- China installed 1.1 GW of solar power, 4% percent of world capacity additions.
- Imports of natural gas jumped 40% to 63 billion cubic meters (including a 50% increase in pipeline gas from Central Asia), crude oil imports rose 7% to 5.4 million barrels/day, and coal imports rose 29% to 234 million tonnes.

\* All data are for 2012 unless otherwise noted.

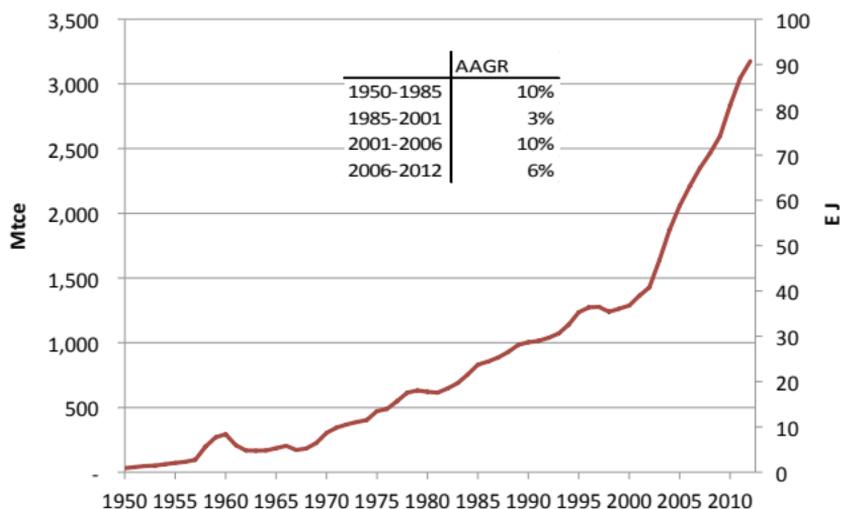
## China's Total Primary Energy Production by Source (1950-2012)



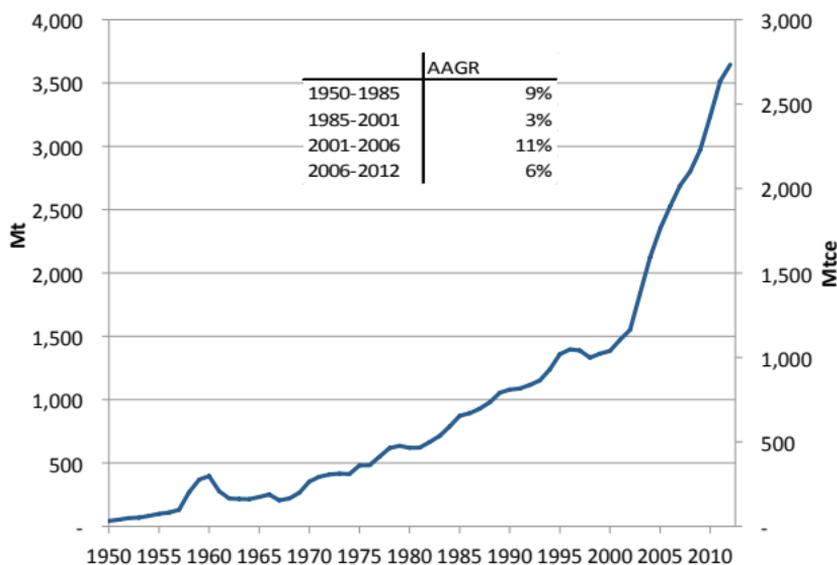
## China's Total Primary Energy Production by Source Shares (1950-2012)



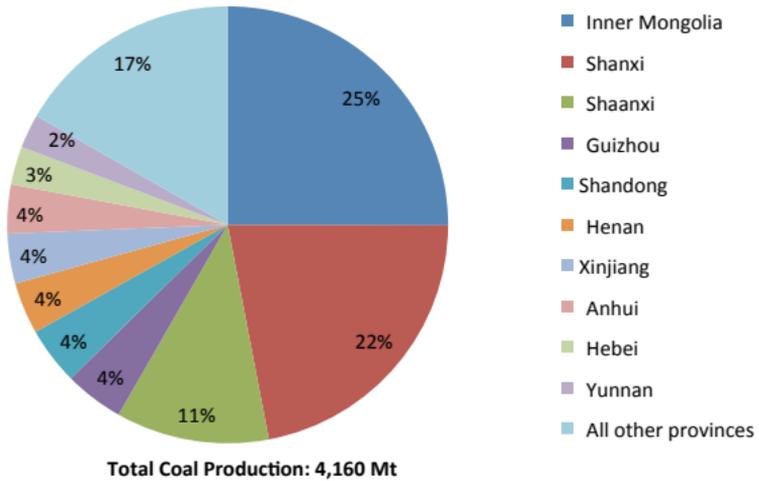
## China's Total Primary Energy Production (1985-2012)



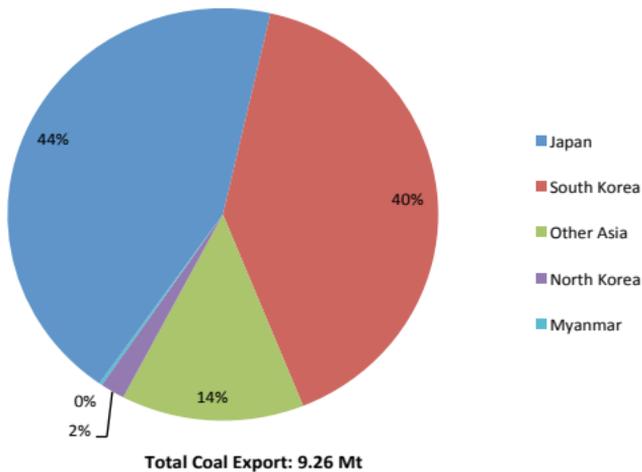
## China's Total Coal Production (1985-2012)



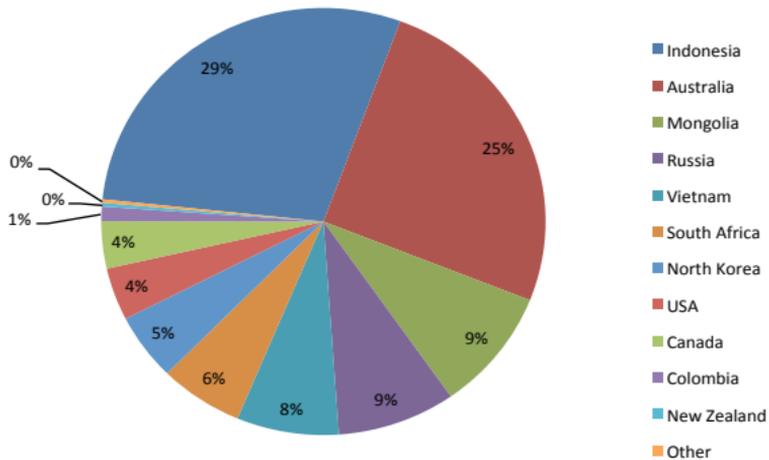
## Coal Producing Provinces in China (2012)



## China's Coal Export (2012)

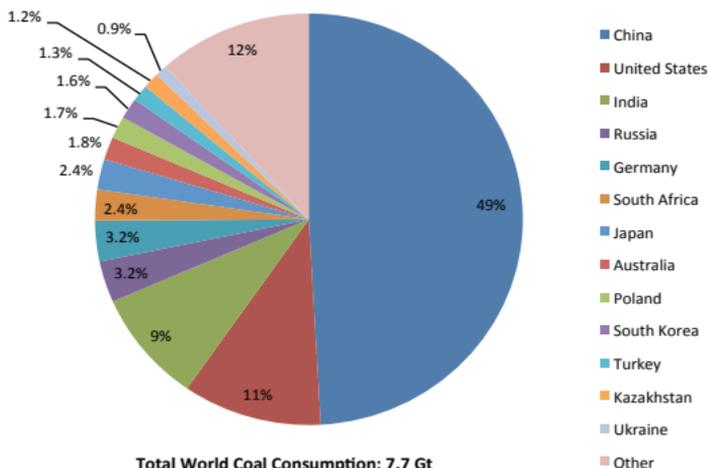


## China's Coal Import (2012)



Total Coal Import: 234.28 Mt

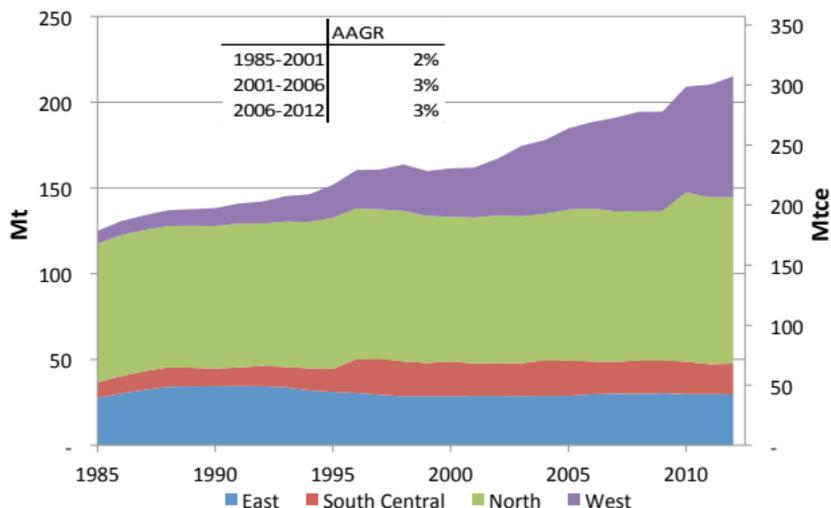
## World Coal Consumption (2012)



Total World Coal Consumption: 7.7 Gt

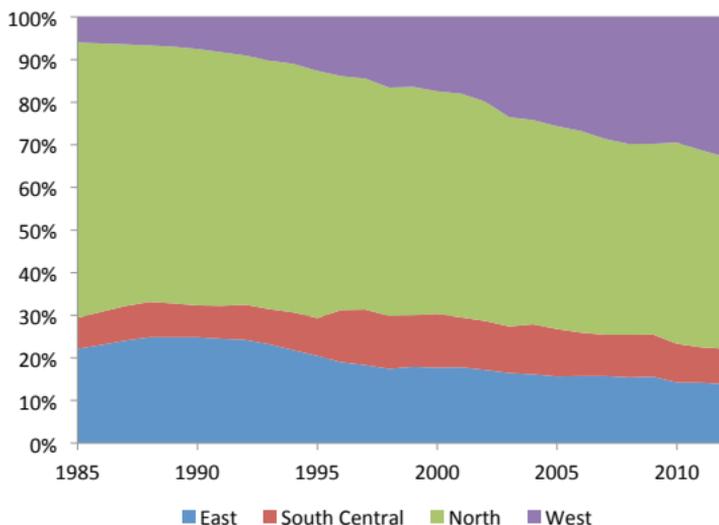
Total China Coal Consumption: 3.8 Gt

## China's Crude Oil Production by Region (1985-2012)



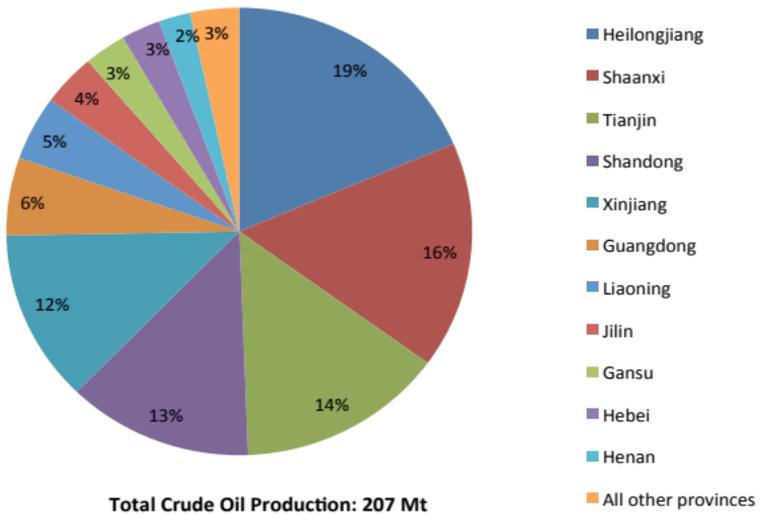
Note: The sum of reported provincial production exceeds the official national total.

## China's Crude Oil Production by Regional Shares (1985-2012)

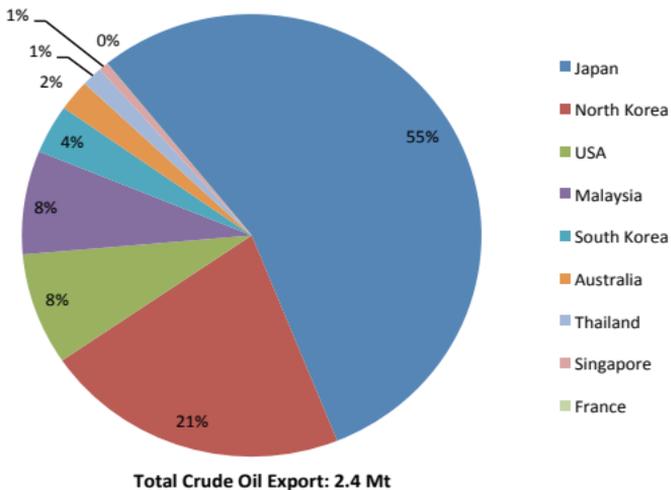


Note: The sum of reported provincial production exceeds the official national total.

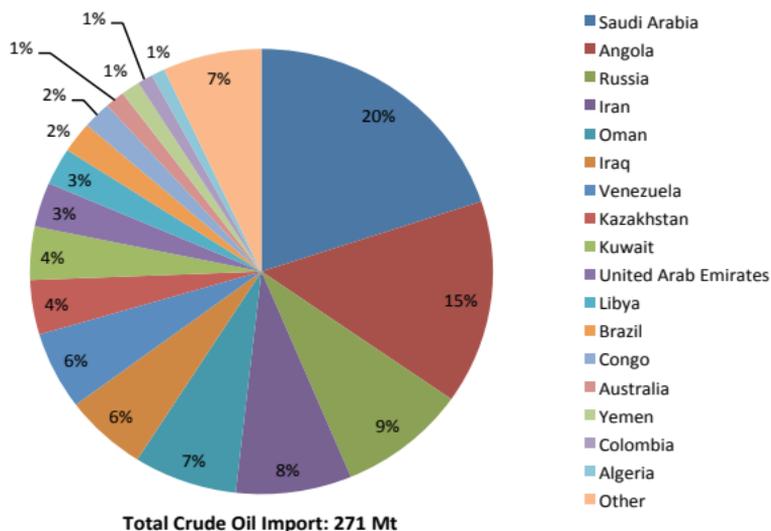
## Crude Oil Producing Provinces in China (2012)



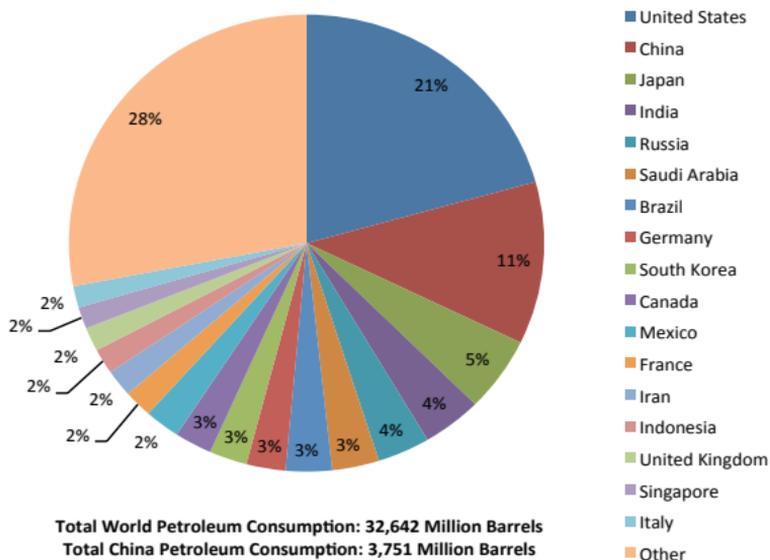
## China's Crude Oil Export (2012)



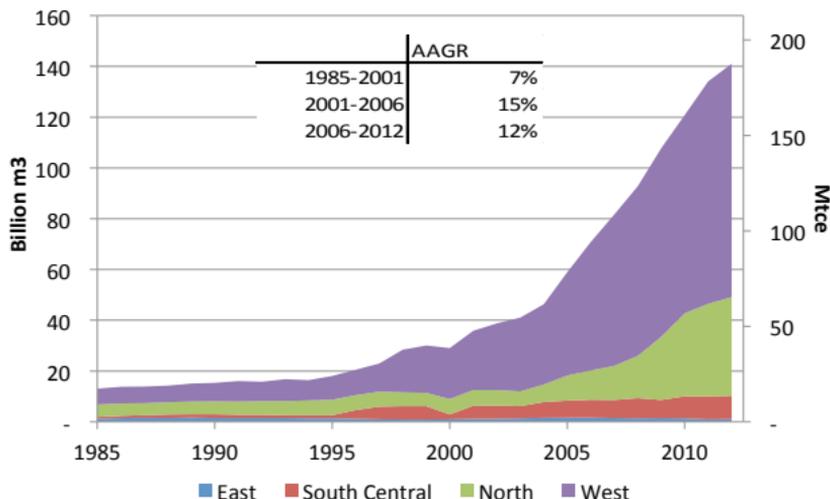
## China's Crude Oil Import (2012)



## World Oil Consumption (2012)

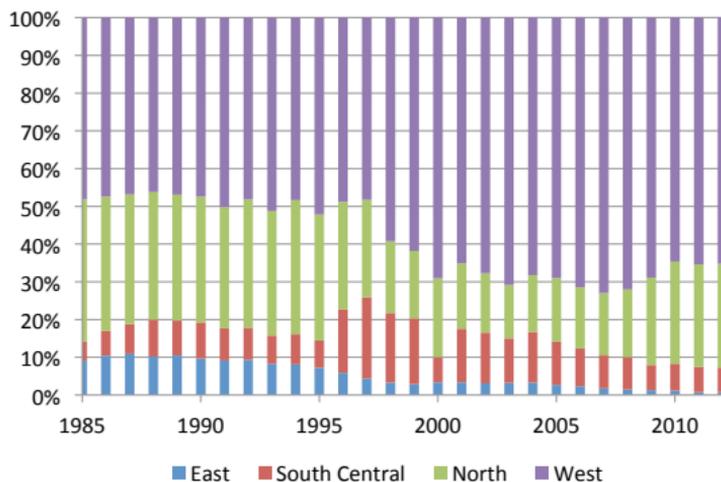


## China's Natural Gas Production by Region (1985-2012)



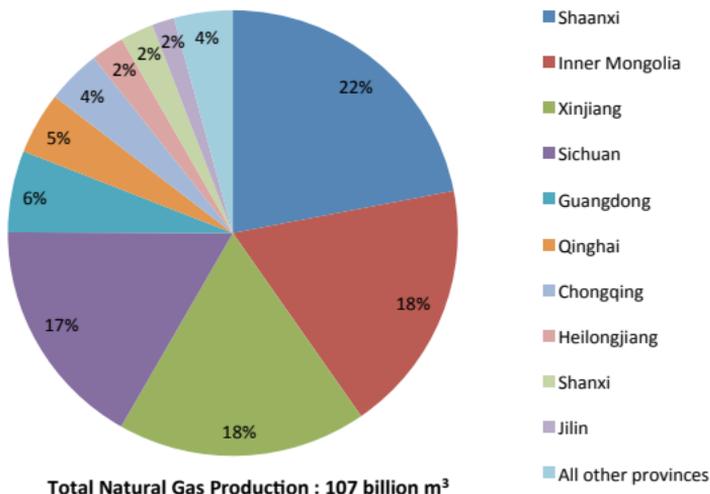
- Notes: 1. Includes natural gas and coal-bed methane.  
2. The sum of reported provincial production exceeds the official national total.

## China's Natural Gas Production by Regional Shares (1985-2012)

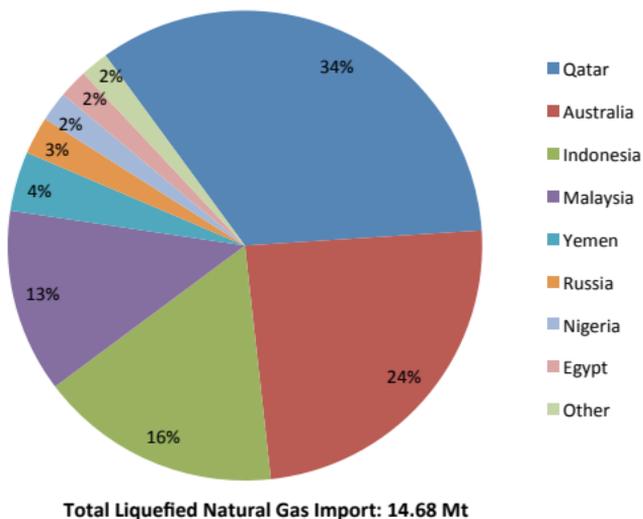


- Notes: 1. Includes natural gas and coal-bed methane.  
2. The sum of reported provincial production exceeds the official national total.

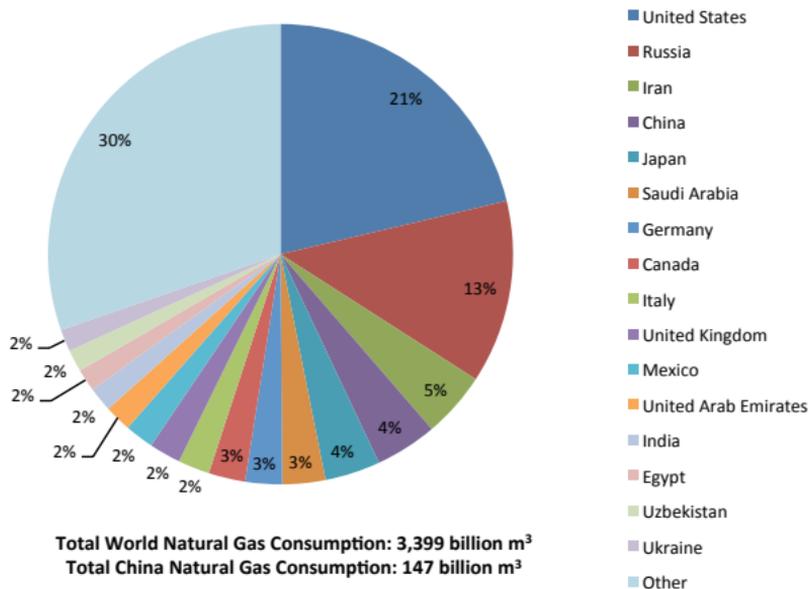
## Natural Gas Producing Provinces in China (2012)



## China's Liquefied Natural Gas Import (2012)



## World Natural Gas Consumption (2012)





# Transformation



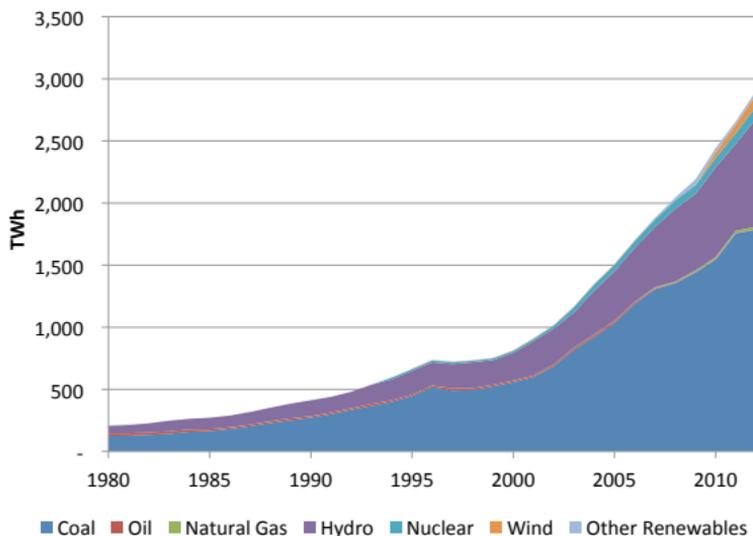
The image is a composite. The top half features a large, black steel lattice pylon for high-voltage power lines against a clear sky. The bottom half shows an industrial site with extensive piping, scaffolding, and storage tanks. A blue directional sign is prominent, with Chinese characters and English text. In the foreground, a few people are visible: one on a motorcycle and another on a rickshaw.

骆霞线  
LUOXIAOXIAN  
9号岗  
JUNAOGA NG



12号岗  
SHIHAOGANG

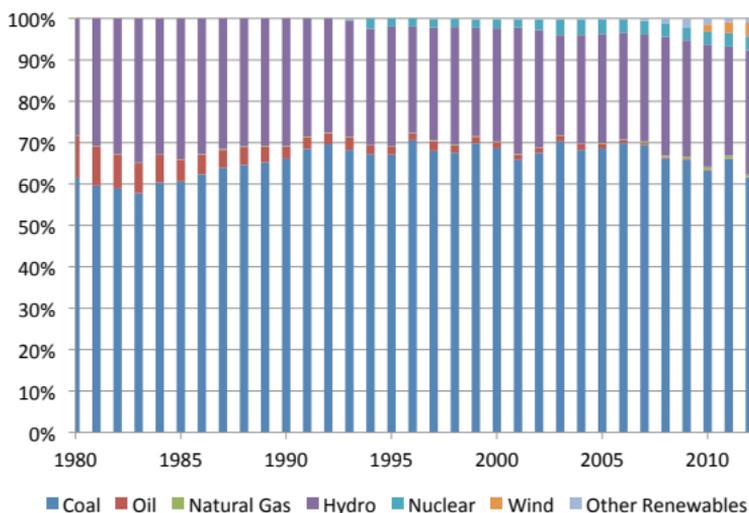
## China's Electricity Production by Fuel Source (1980-2012)



Notes: 1. Natural gas includes LNG.

2. Other renewables include solar, biomass, geothermal, and tidal.

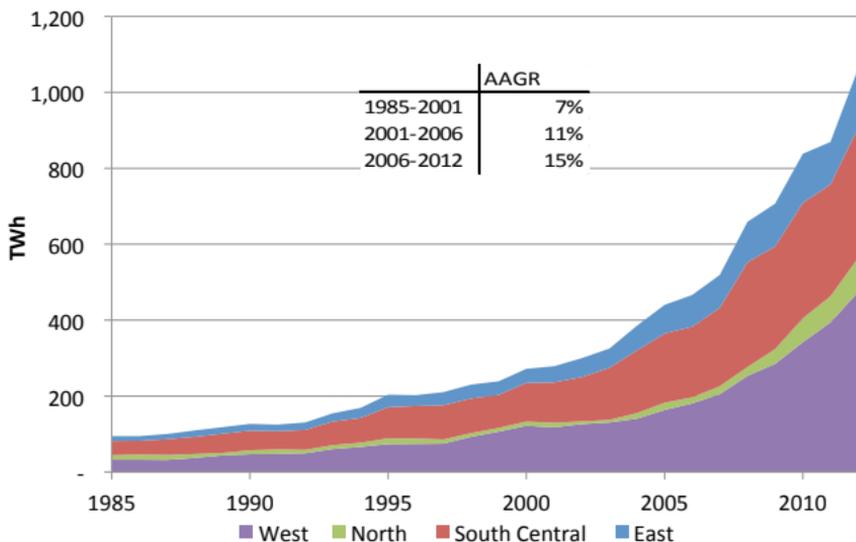
## China's Electricity Production by Source Shares (1980-2012)



Notes: 1. Natural gas includes LNG.

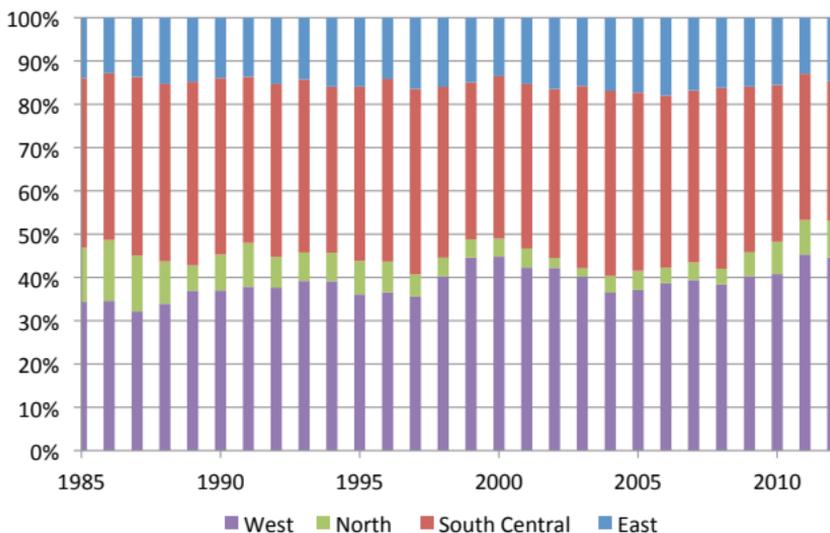
2. Other renewables include solar, biomass, geothermal, and tidal.

## China's Primary Electricity Generation by Region (1985-2012)



Note: Primary electricity includes nuclear, hydro, wind, solar, and other renewables.

## China's Primary Electricity Production by Regional Shares (1985-2012)

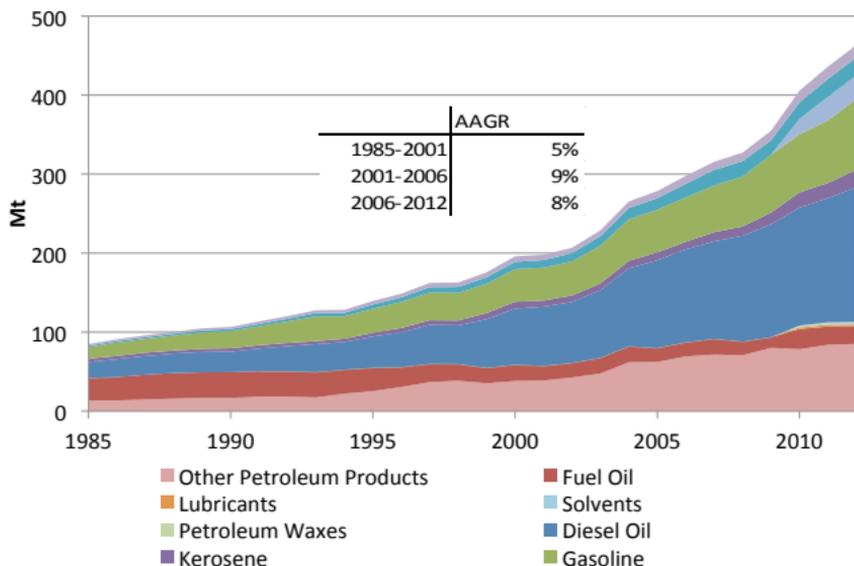


Note: Primary electricity includes nuclear, hydro, wind, solar, and other renewables.

## Top 10 Primary Electricity Producing Provinces (2012)

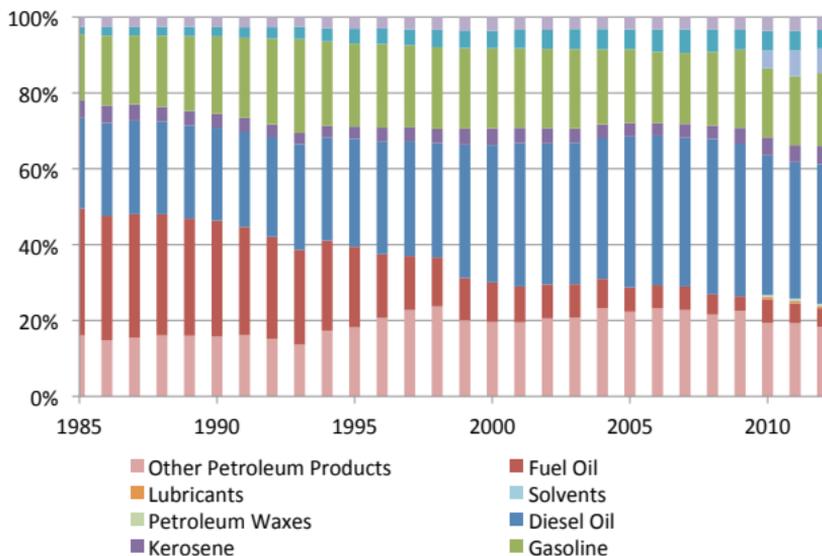
Region	Province	TWh	% of Total
West	Sichuan	155	15%
South Central	Hubei	138	13%
West	Yunnan	127	12%
South Central	Guangdong	70	7%
East	Zhejiang	57	5%
South Central	Hunan	57	5%
West	Guizhou	54	5%
South Central	Guangxi	53	5%
East	Fujian	50	5%
West	Qinghai	47	4%
	<b>Top 10 Total</b>	<b>808</b>	<b>76%</b>
	<b>Other</b>	<b>254</b>	<b>24%</b>
	<b>Total</b>	<b>1,062</b>	<b>100%</b>

## China's Oil Refining by Product (1985-2012)



Note: Began in 2010, "Other Petroleum Products" are further disaggregated.

## China's Refinery Production by Product Shares (1985-2012)



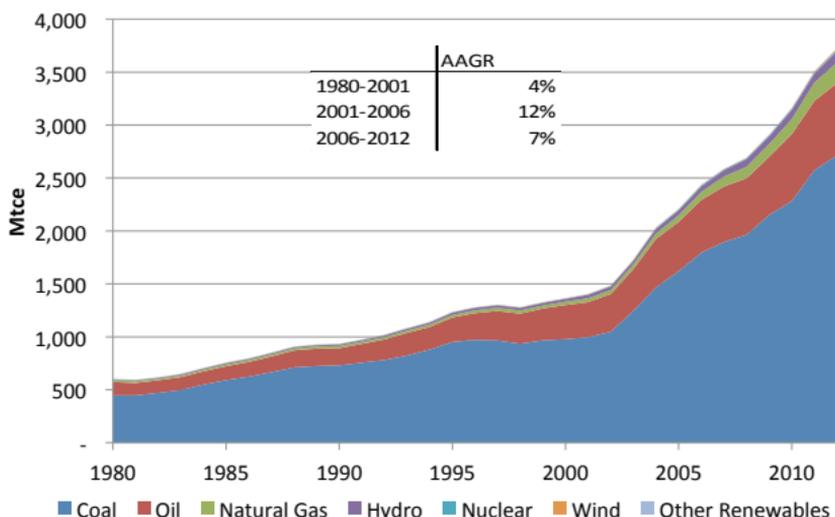
Note: Beginning in 2010, "Other Petroleum Products" are further disaggregated.



# Consumption

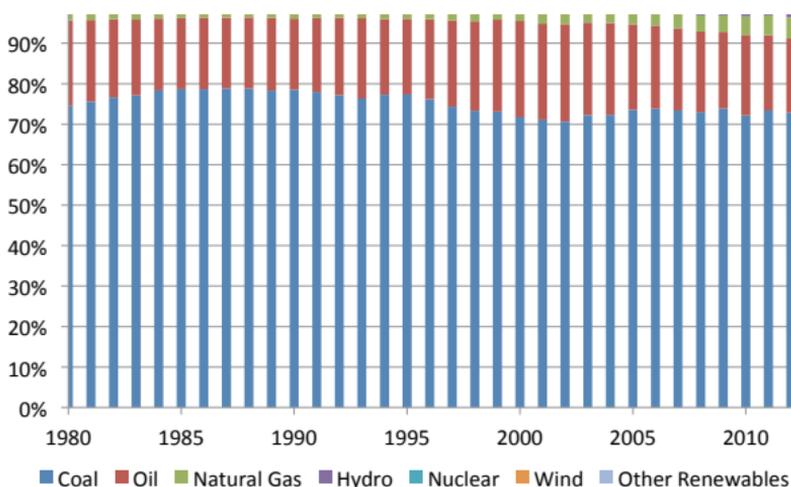


## China's Total Primary Energy Consumption by Source (1980-2012)



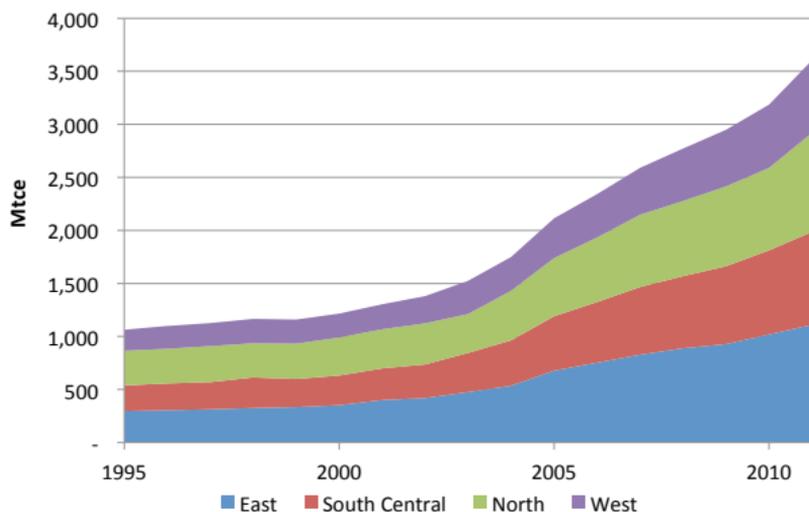
Note: Natural gas includes LNG. Primary electricity is converted at its calorific value (1 kWh = 0.1229 kgce).

## China's Total Primary Energy Consumption by Source Shares (1985-2012)

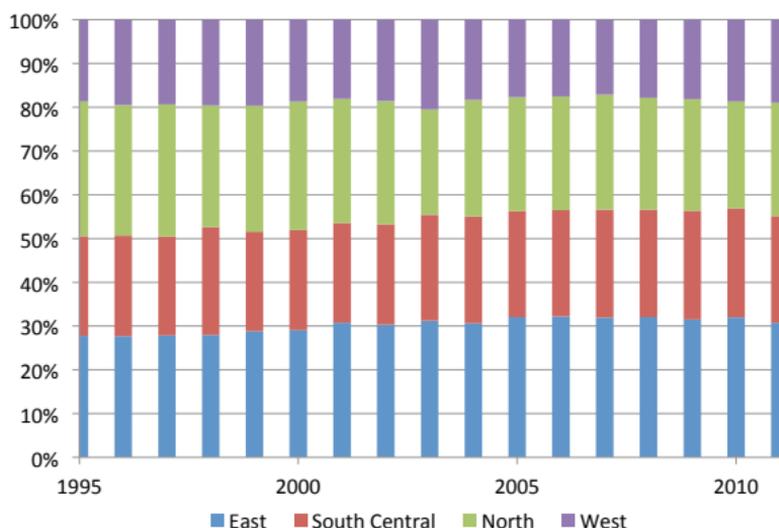


Note: Natural gas includes LNG. Primary electricity is converted at its calorific value (1 kWh = 0.1229 kgce).

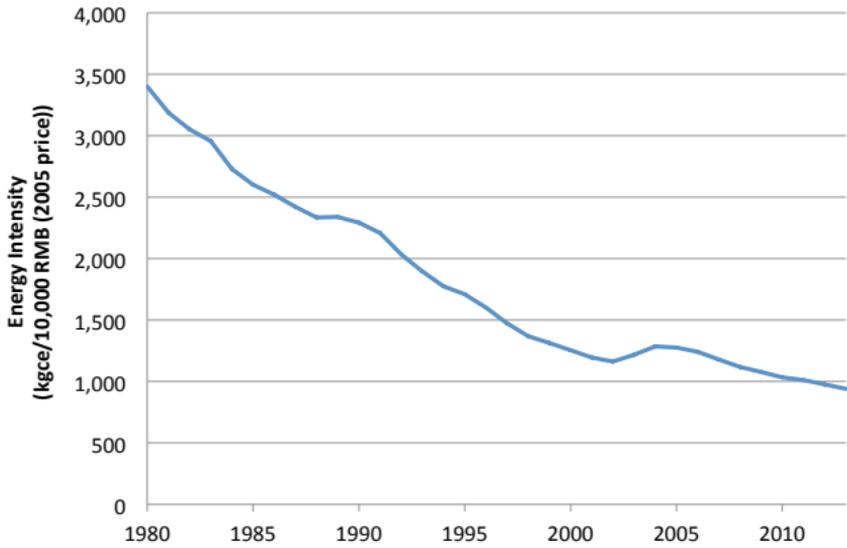
## China's Total Energy Consumption by Region (1995-2012)



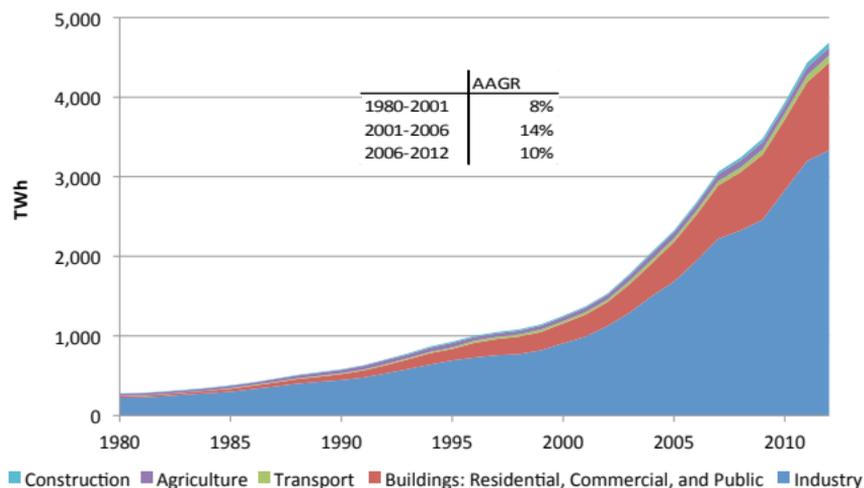
## China's Total Energy Consumption by Regional Shares (1995-2012)



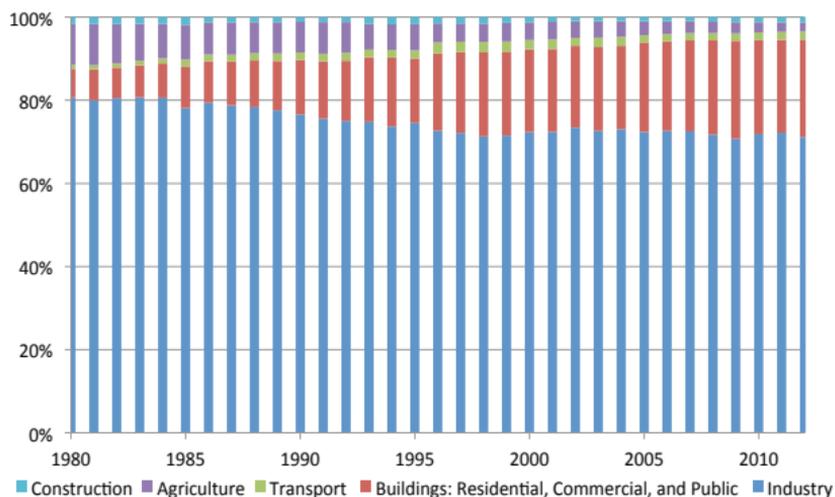
## China's Energy Consumption per Unit of GDP (1980-2013)



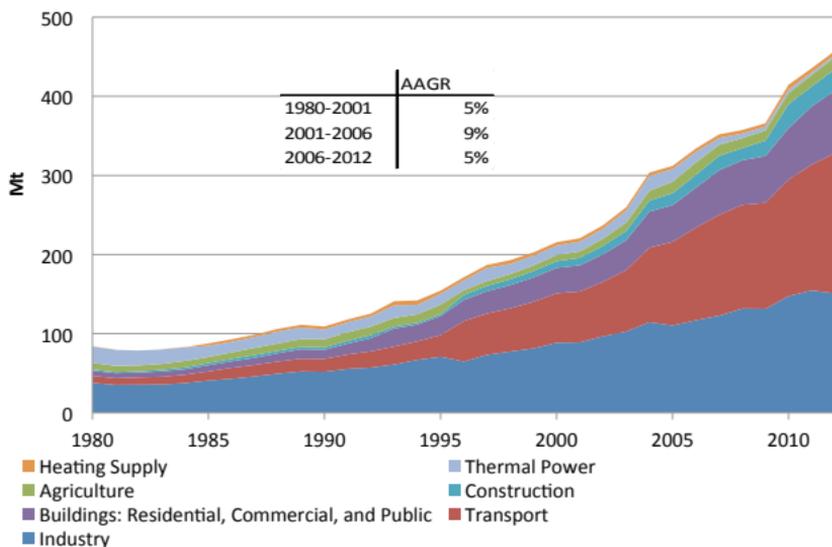
## China's Electricity Consumption by End-Use Sector (1980-2012)



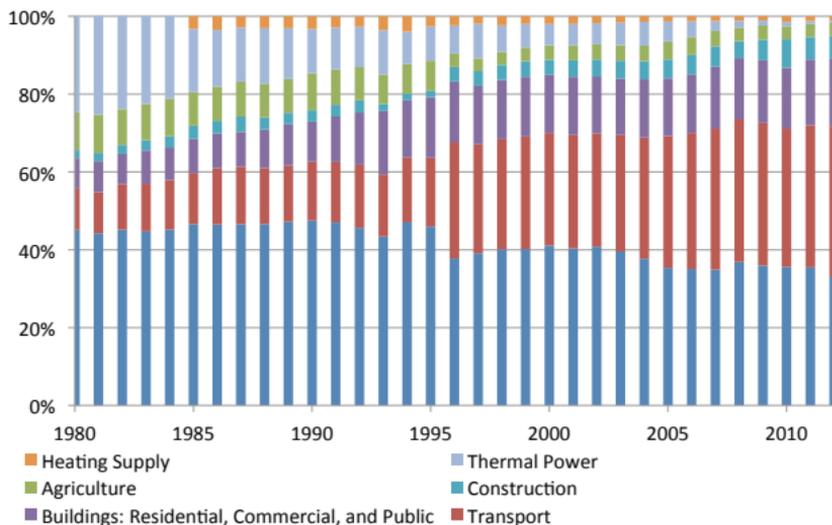
## China's Electricity Consumption by Sectoral Shares (1980-2012)



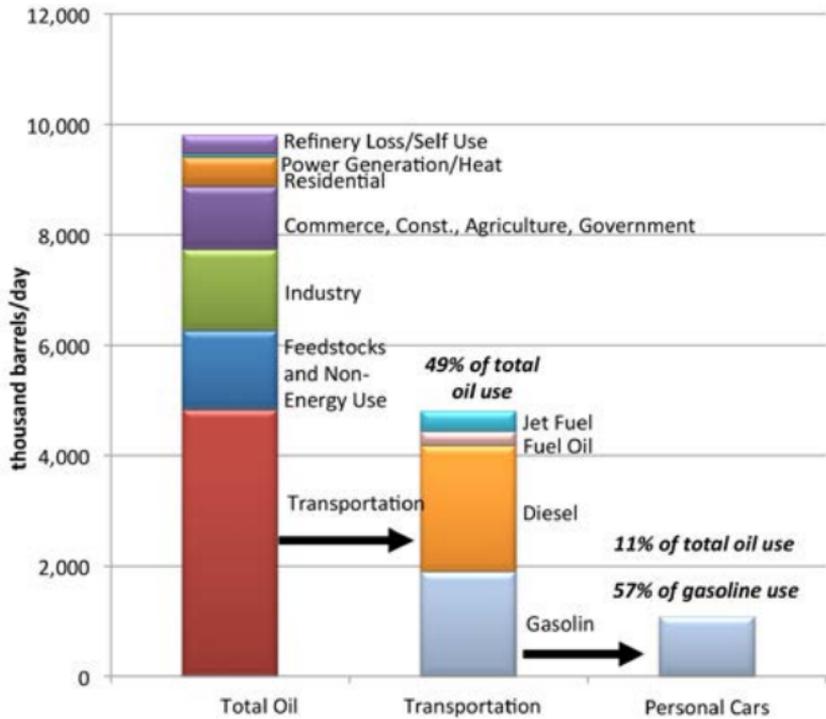
## China's Oil Consumption by Sector (1980-2012)



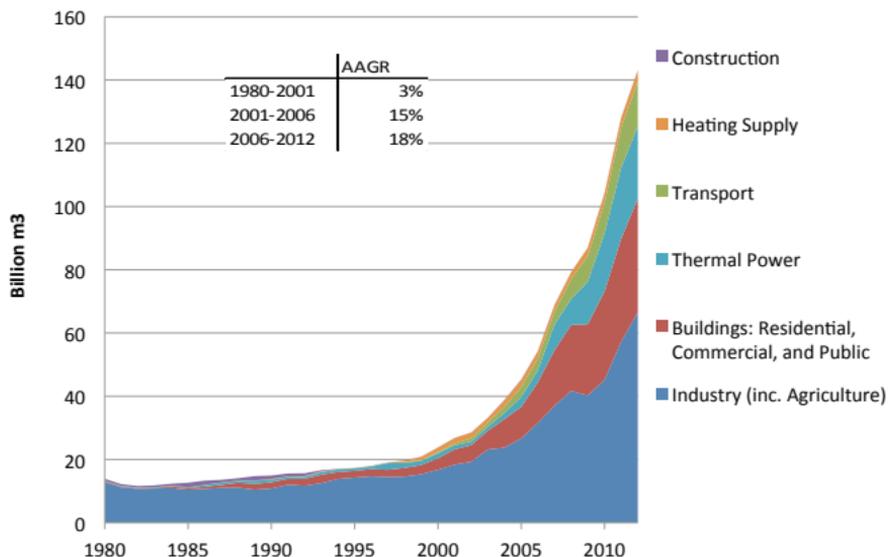
## China's Oil Consumption by Sectoral Shares (1980-2012)



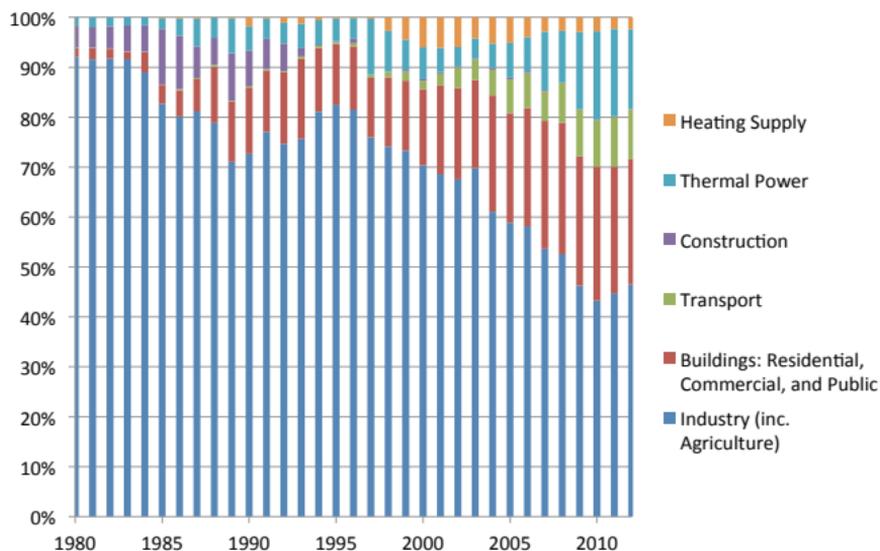
## Composition of China Oil Use (2012)



## China's Natural Gas Consumption by Sector (1980-2012)



## China's Natural Gas Consumption by Sectoral Shares (1980-2012)



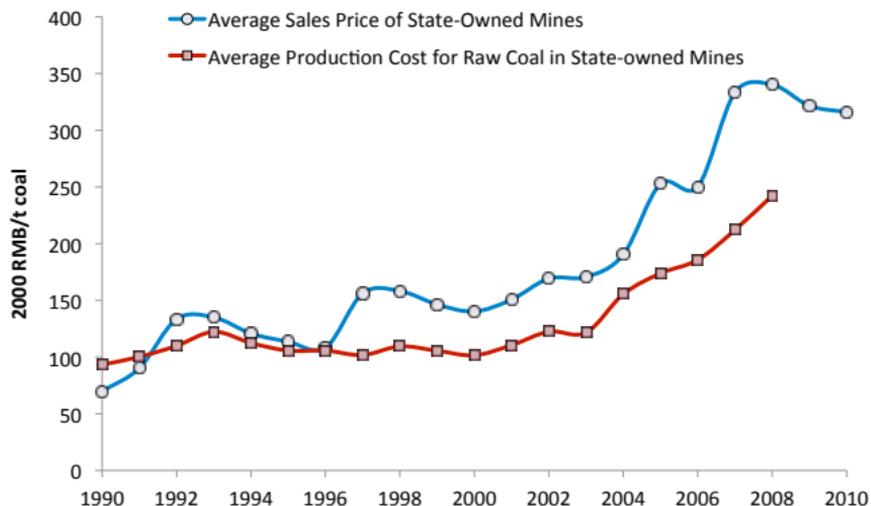


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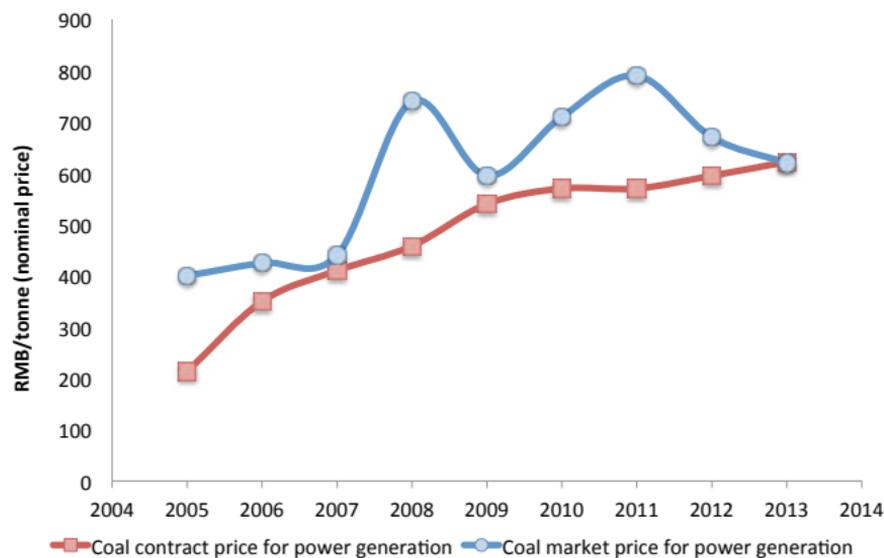
# Prices



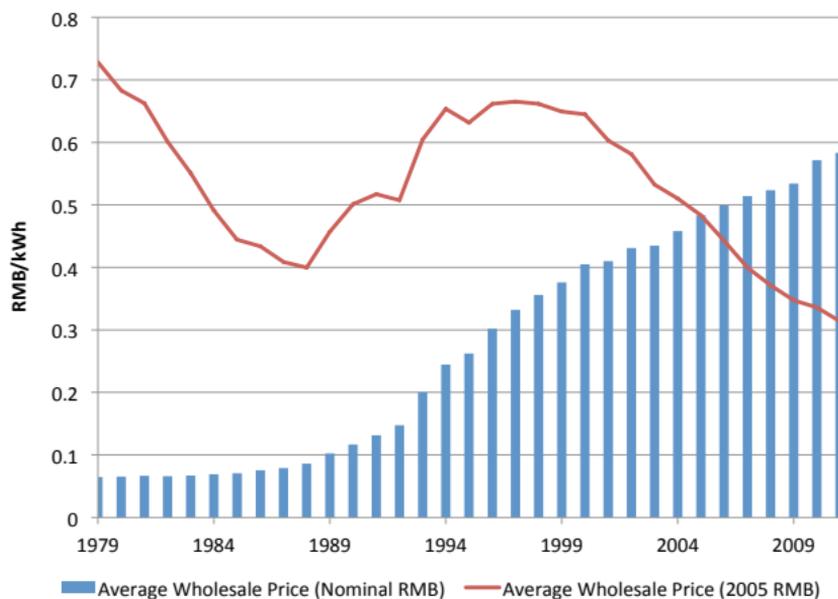
## China's Production Cost and Average Sales Price of State-Owned Coal Mines



## China's Average Coal Contract Price and Coal Market Price for Power Generation



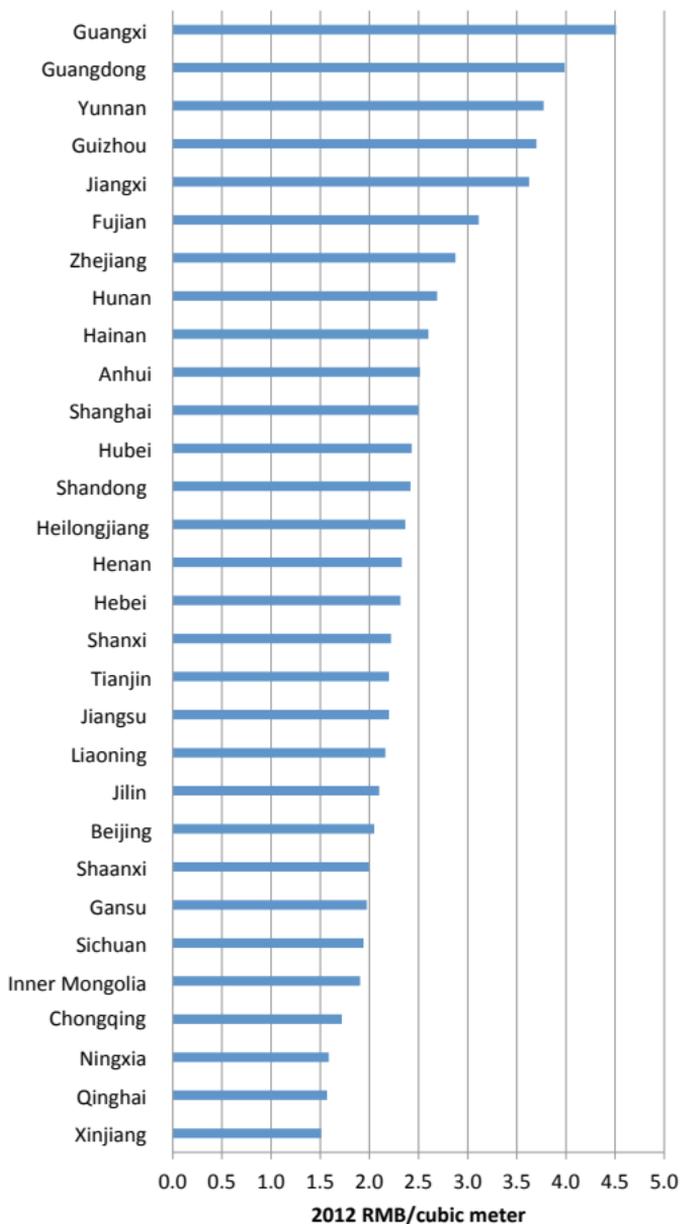
## China's Average Wholesale Price of Electricity (1979-2011)



## China's Average Residential Power Price by Province (2008-2011)

Province	2008	2009	2010	2011
	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)
Guangdong	0.63	0.63	0.63	0.63
Hainan	0.59	0.60	0.60	0.60
Jiangxi	0.60	0.60	0.60	0.60
Hubei	0.56	0.56	0.56	0.56
Henan	0.54	0.54	0.55	0.55
Anhui	0.55	0.55	0.54	0.55
Shanghai	0.54	0.54	0.54	0.54
Hunan	0.53	0.53	0.53	0.53
Zhejiang	0.53	0.53	0.53	0.53
Jilin	0.52	0.52	0.52	0.52
Shandong	0.50	0.52	0.52	0.53
Guangxi	0.49	0.51	0.52	0.54
Chongqing	0.52	0.52	0.52	0.52
Sichuan	0.51	0.51	0.51	0.51
Jiangsu	0.50	0.50	0.50	0.50
Xinjiang	0.49	0.50	0.50	0.50
Shaanxi	0.47	0.50	0.50	0.50
Tibet	0.56	0.53	0.50	0.49
Liaoning	0.50	0.50	0.50	0.50
Tianjin	0.49	0.49	0.49	0.49
Gansu	0.48	0.49	0.49	0.48
Hebei (South Grid)	0.49	0.48	0.49	0.49
Hebei (North Grid)	0.48	0.48	0.48	0.49
Fujian	0.47	0.47	0.47	0.48
Beijing	0.48	0.47	0.47	0.47
Shanxi	0.47	0.46	0.46	0.46
Heilongjiang	0.46	0.46	0.46	0.46
Yunnan	0.45	0.45	0.45	0.45
Ningxia	0.45	0.46	0.45	0.45
Inner Mongolia (East)	0.45	0.43	0.45	0.48
Guizhou	0.43	0.44	0.44	0.44
Inner Mongolia (West)	0.39	0.39	0.37	0.36
Qinghai	0.34	0.34	0.36	0.36

## China's Residential Natural Gas Price by Province (2012)



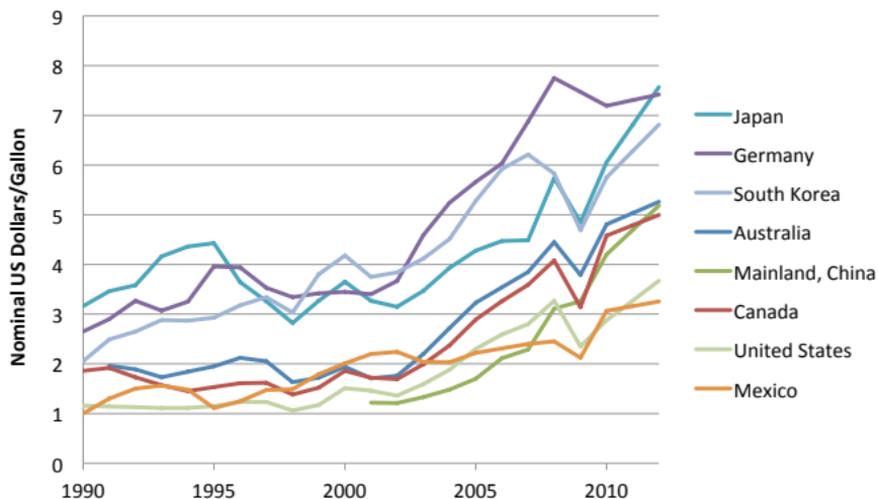
## China's Non-Residential Natural Gas City-Gate Ceiling Prices by Province (2013)

Province	Quota Price	Above-quota Price
Beijing	2.26	3.14
Tianjin	2.26	3.14
Hebei	2.24	3.12
Shanxi	2.17	3.05
Inner Mongolia	1.60	2.48
Liaoning	2.24	3.12
Jilin	2.02	2.90
Heilongjiang	2.02	2.90
Shanghai	2.44	3.32
Jiangsu	2.42	3.30
Zhejiang	2.43	3.31
Anhui	2.35	3.23
Jiangxi	2.22	3.10
Shandong	2.24	3.12
Henan	2.27	3.15
Hubei	2.22	3.10
Hunan	2.22	3.10
Guangdong	2.74	3.32
Guangxi	2.57	3.15
Hainan	1.92	2.78
Chongqing	1.92	2.78
Sichuan	1.93	2.79
Guizhou	1.97	2.85
Shaanxi	1.60	2.48
Guansu	1.69	2.57
Ningxia	1.77	2.65
Qinghai	1.53	2.41
Xinjiang	1.41	2.29

Unit: RMB/1000 cubic meter (include value-added tax)

- Notes: 1. Effective since July 10, 2013.  
 2. Applies to domestically produced onshore natural gas and imported pipeline natural gas.  
 3. Does not apply for shale gas, coal-bed methane, and coal-to-gas.

## Retail Gasoline Price (Including Tax) in Selected Countries and Regions (1990-2012)



Note: Prices are those actually paid (i.e., net of rebates), and include transport costs and non-refundable taxes. Prices in national currencies are converted to U.S. dollars using exchange rates published by the International Monetary Fund.

## China's Price Cap on the Highest Gasoline and Diesel Prices by Province and Major City (February 26, 2014)

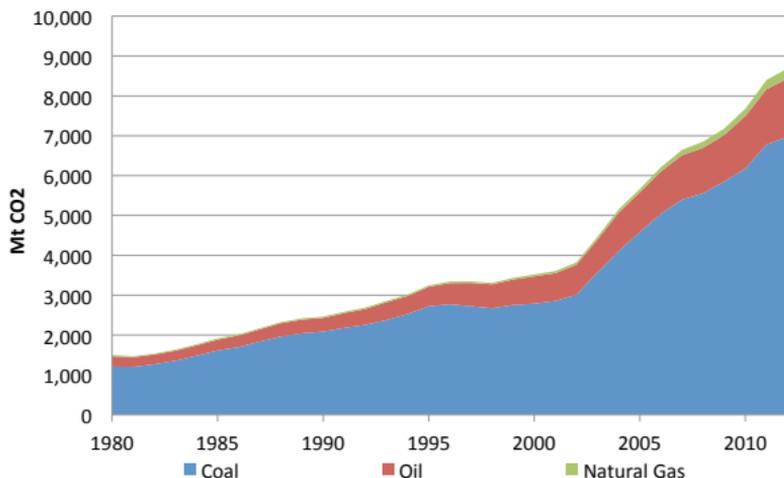
Province	Gasoline	Diesel
	(RMB/t)	(RMB/t)
Beijing	9,735	8,980
Tianjin	9,530	8,415
Hebei	9,530	8,415
Shanxi	9,600	8,470
Liaoning	9,530	8,415
Jilin	9,530	8,415
Heilongjiang	9,530	8,415
Shanghai	9,715	8,950
Jiangsu	9,585	8,455
Zhejiang	9,585	8,470
Anhui	9,580	8,465
Fujian	9,605	8,480
Jiangxi	9,585	8,475
Shandong	9,540	8,425
Hubei	9,555	8,440
Hunan	9,595	8,500
Henan	9,550	8,435
Hainan	9,675	8,920
Chongqing	9,745	8,625
Guangdong	9,610	8,855
Guangxi	9,675	8,550
Ningxia	9,535	8,415
Gansu	9,515	8,435
Xinjiang	9,310	8,310
City	Gasoline	Diesel
	(RMB/t)	(RMB/t)
Hohhot	9,545	8,430
Chengdu	9,750	8,650
Guiyang	9,710	8,575
Kunming	9,740	8,605
Xi'an	9,515	8,425
Xining	9,495	8,460



# Emissions

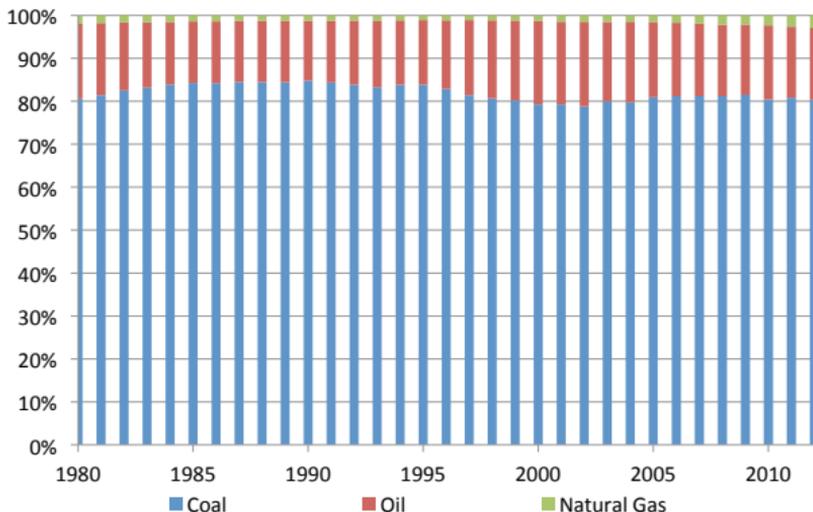


## China's Fuel Combustion CO<sub>2</sub> Emissions by Fuel (1980-2012)



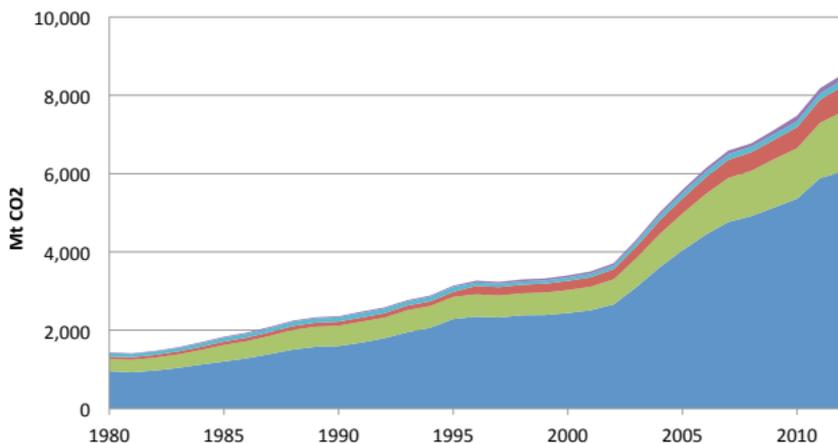
Note: Data based on total final consumption and energy used for energy transformation. CO<sub>2</sub> emissions are calculated using 2006 IPCC carbon emission factors. Emissions data include the sequestered carbon in non-energy use petroleum products such as asphalt and plastics.

## China's CO<sub>2</sub> Emissions by Fuel Shares (1980-2012)



Note: Data based on total final consumption and energy used for energy transformation. CO<sub>2</sub> emissions are calculated using 2006 IPCC carbon emission factors. Emissions data include the sequestered carbon in non-energy use petroleum products such as asphalt and plastics.

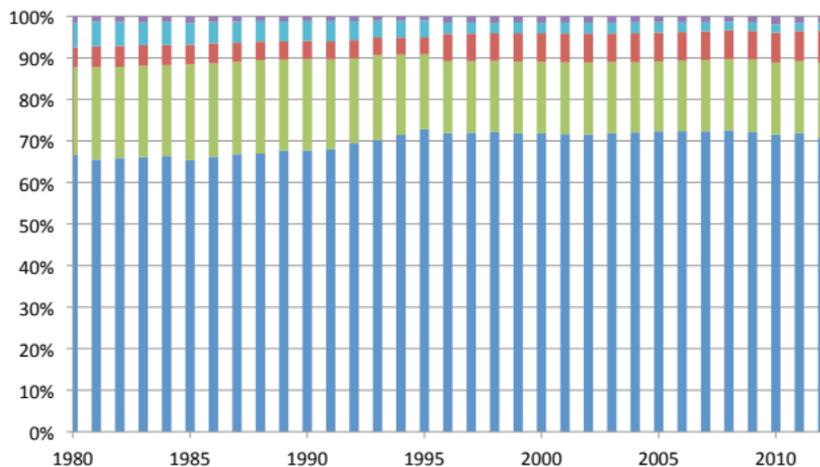
## China's Energy-Related CO<sub>2</sub> Emissions by Sector (1980-2012)



■ Construction ■ Agriculture ■ Transport ■ Buildings: Residential, Commercial, and Public ■ Industry

Note: Power sector emissions are allocated to end-use sectors in proportion to their electricity use.

## China's Energy-Related CO<sub>2</sub> Emissions by Sectoral Shares (1980-2012)



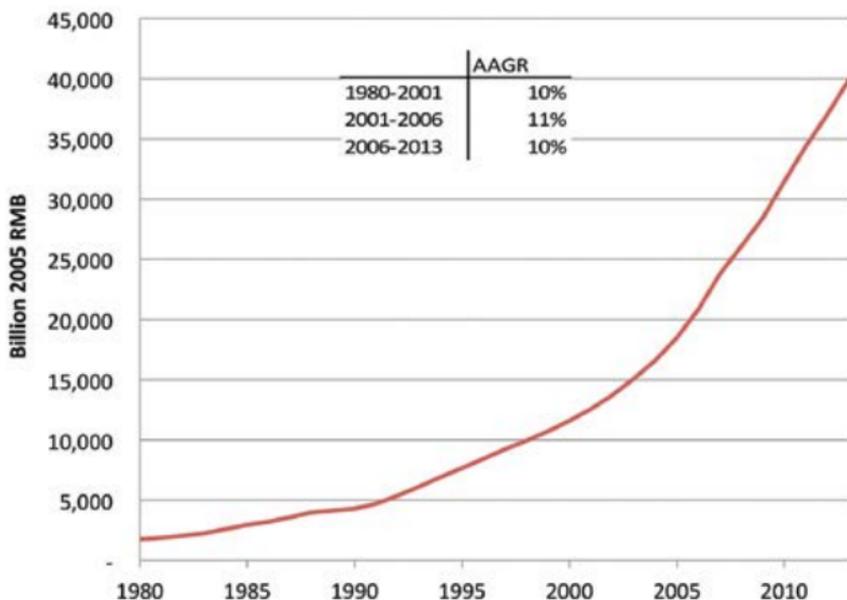
■ Construction ■ Agriculture ■ Transport ■ Buildings: Residential, Commercial, and Public ■ Industry

Note: Power sector emissions are allocated to end-use sectors in proportion to their electricity use.

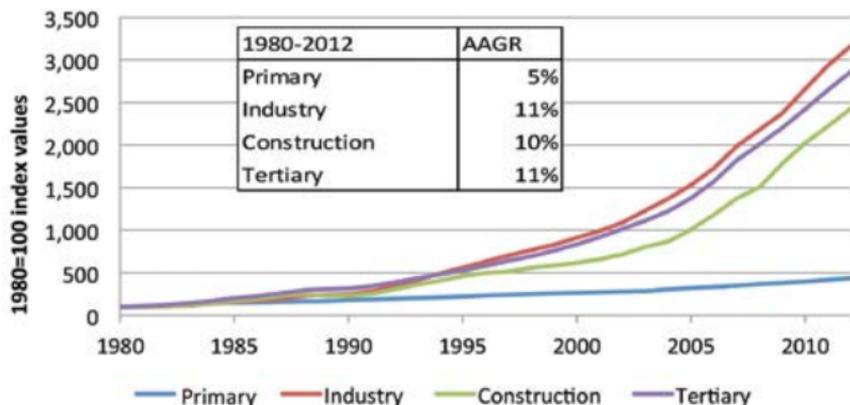


# Economic and Demographic Indicators

## China's Gross Domestic Product (GDP) (1980-2013)



## China's GDP by Sector (1980-2012)



**Primary:** agriculture (farming, forestry, animal husbandry, sideline production and fishery)

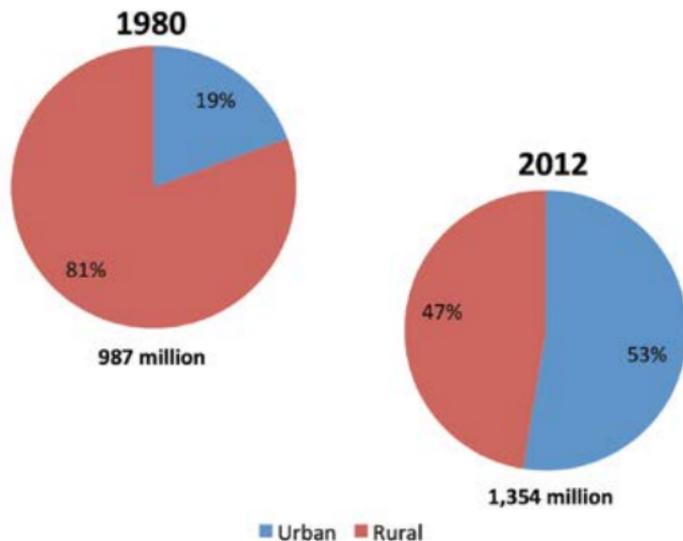
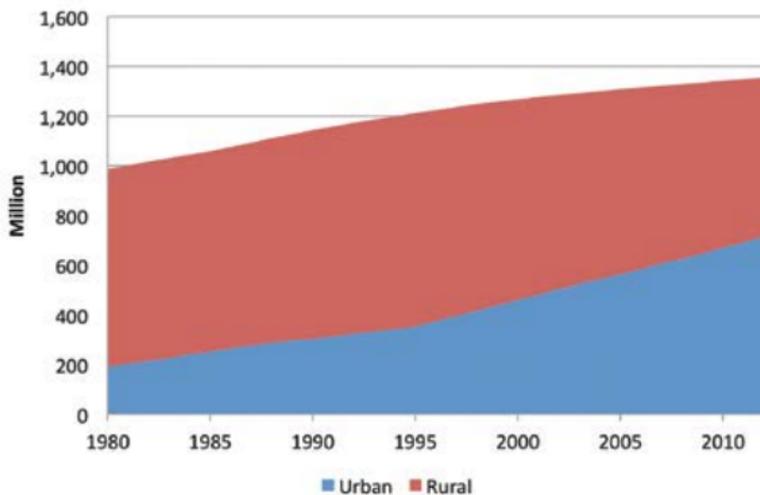
**Industry:** including mining and quarrying, manufacturing, water supply, electricity generation and supply, steam, hot water and gas.

**Construction:** including preparation of land and construction, alteration, and repair of buildings, structures, and other real property.

**Tertiary:** all the other industries not included in primary, industry, and construction.

## Growth of China's Population (1980-2012)

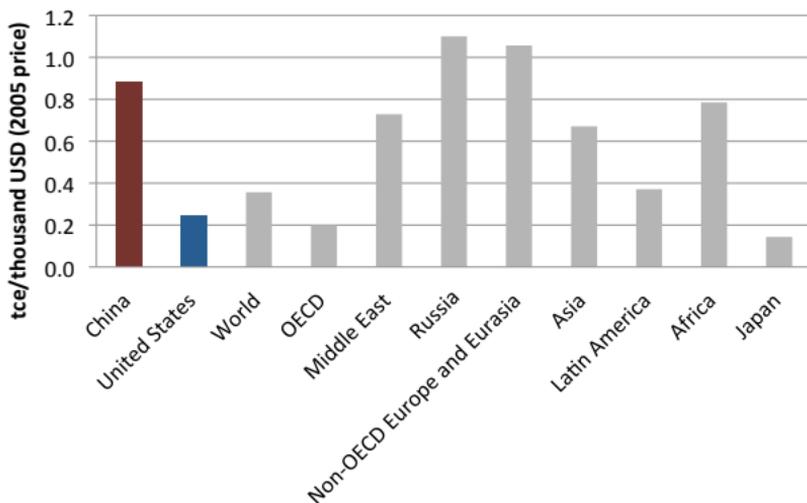
Growth of Chinese Population (1980-2012)



A photograph of the International Space Station (ISS) in orbit above Earth. The station's complex structure, including multiple solar panel arrays and modules, is clearly visible against the blackness of space. Below the station, the blue and white clouds of the Earth's atmosphere are seen from a high-angle perspective. A semi-transparent white horizontal band is overlaid across the middle of the image, containing the title text.

# International Comparisons

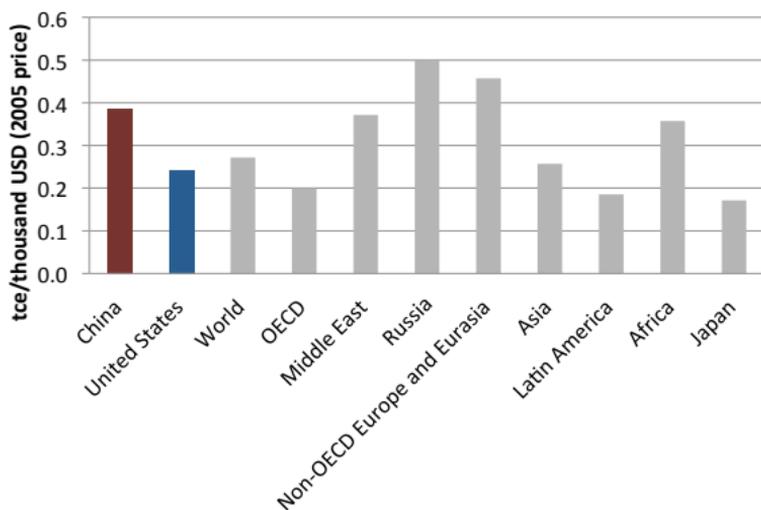
## Total Primary Energy Production per GDP (MER\*) (2011)



\*Market Exchange Rates

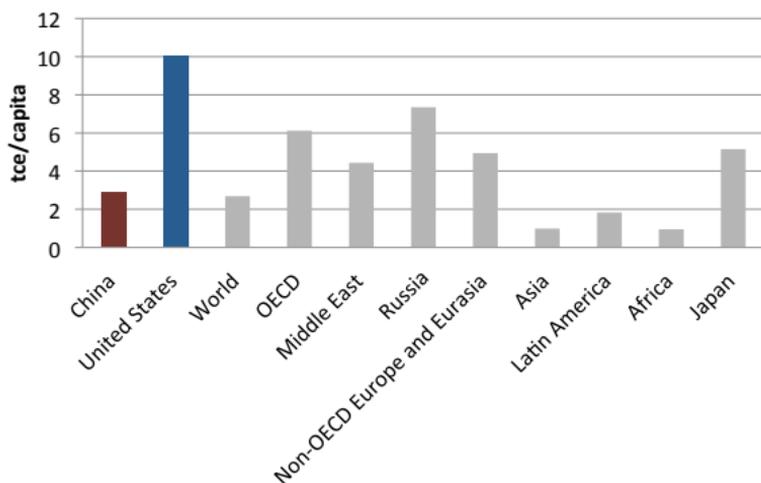
OECD: members of the Organization for Economic Co-operation and Development

## Total Primary Energy Production per GDP (PPP\*\*) (2011)

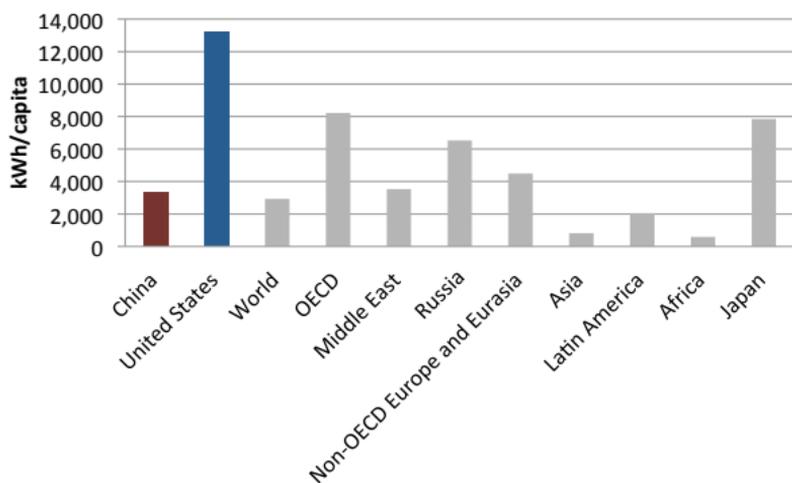


\*\* Purchasing Power Parity

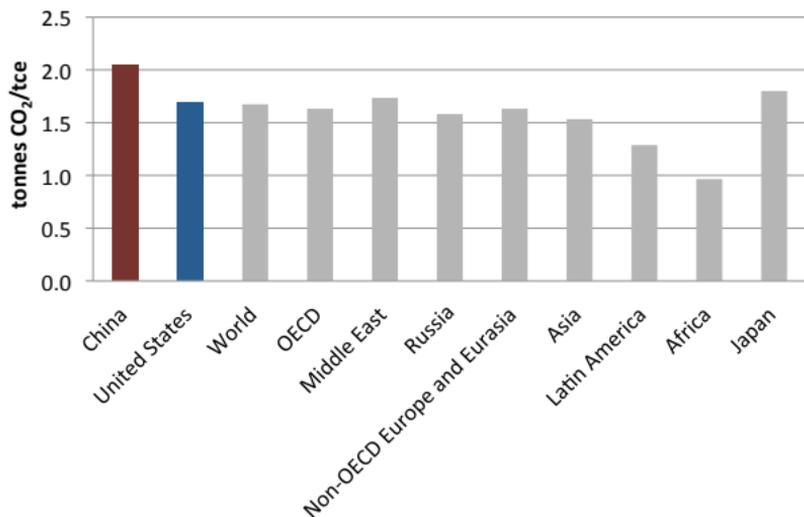
## Total Primary Energy Production per Capita (2011)



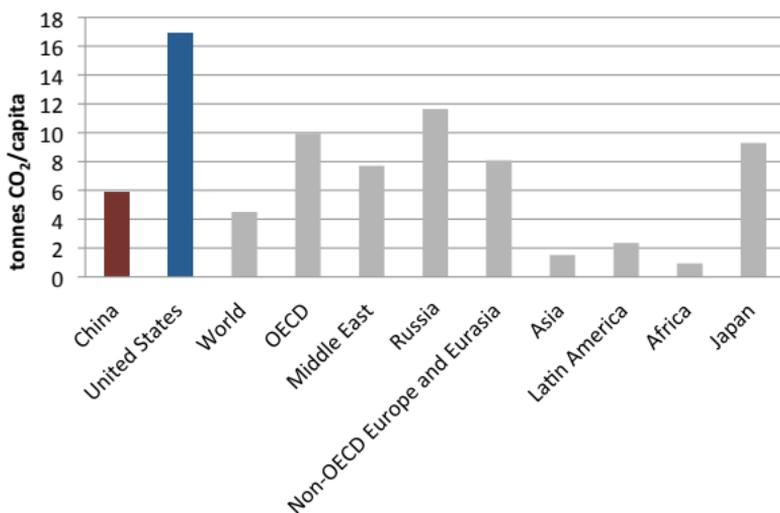
## Electricity Consumption per Capita (2011)



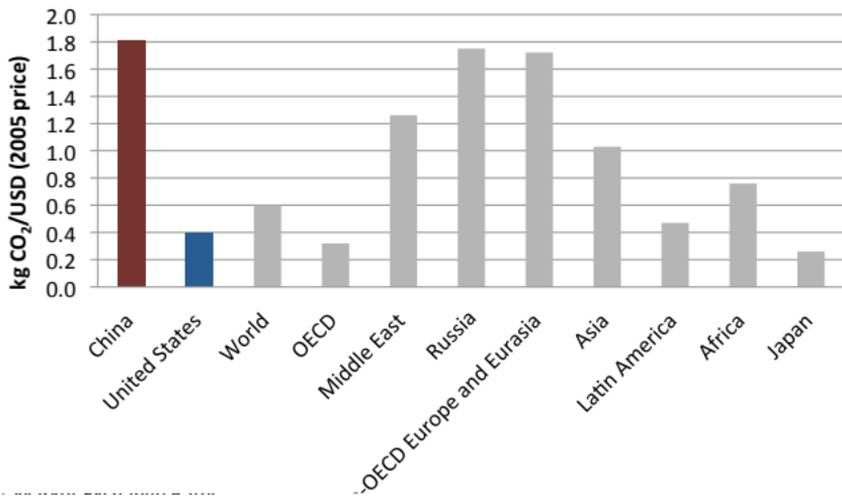
## Energy-Related CO<sub>2</sub> Emissions per Total Primary Energy Supply (2011)



## Energy-Related CO<sub>2</sub> Emissions per Capita (2011)

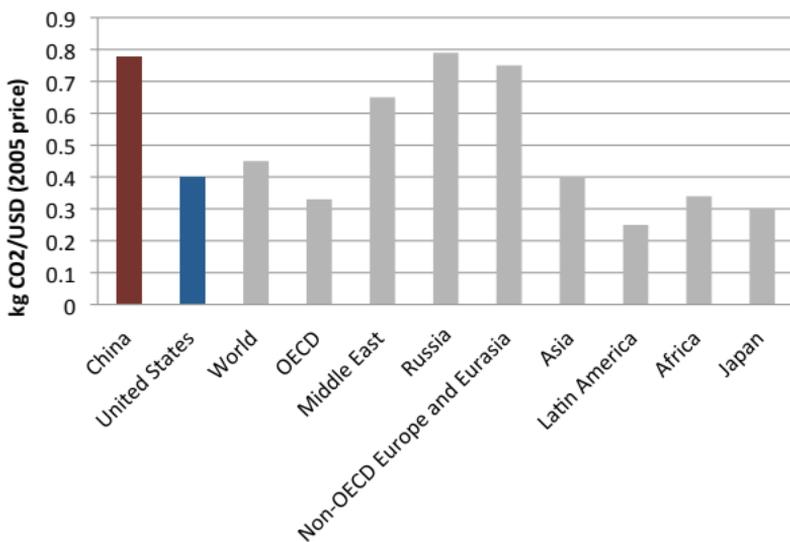


## Energy-Related CO<sub>2</sub> Emissions per GDP (MER\*) (2011)



\*Market Exchange Rates

## Energy-Related CO<sub>2</sub> Emissions per GDP (PPP\*\*) (2011)



\*\* Purchasing Power Parity

## Appendix 1: Table of Abbreviations

Abbreviations	
AAGR	average annual growth rate
bm <sup>3</sup>	billion cubic meters
bm <sup>3</sup> /yr	billion cubic meters/year
CO <sub>2</sub>	carbon dioxide
EJ	exajoule (10 <sup>18</sup> joules)
GDP	gross domestic product
Gt	giga (billion) tonnes
IPCC	Intergovernmental Panel on Climate Change
kgce	kilogram of coal equivalent
kgce/cap	kilogram of coal equivalent/capita
kWh	kilowatt-hours
kWh/cap	kilowatt-hour/capita
LPG	liquefied petroleum gas
m <sup>3</sup>	cubic meter
Mt	million tonnes
Mt/yr	million tonnes/year
Mtce	million tonnes of coal equivalent
Mtce/yr	million tonnes of coal equivalent/year
MWh	megawatt-hours
MWh/t	megawatt-hour/tonne
MWh/yr	megawatt-hour/year
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
RMB	renminbi (Chinese currency)
RMB/kWh	renminbi/kilowatt-hour
RMB/m <sup>3</sup>	renminbi/cubic meter
RMB/tce	renminbi/tonnes of coal equivalent
tce	tonnes of coal equivalent
TWh	terawatt-hours

## Appendix 1: Glossary

<b>Coal</b>	Coal includes both primary (raw coal, cleaned coal, washed coal, briquettes) and derived fuels (coke, coke oven gas, and other coking products).
<b>Crude Oil</b>	Crude oil includes crude oil, natural gas liquids, refinery feedstock, additives, and other hydrocarbon.
<b>Petroleum Products</b>	Petroleum products include gasoline, kerosene, diesel oil, fuel oil, LPG, refinery gas, and other petroleum products.
<b>Gas</b>	Gas includes natural gas.
<b>Nuclear</b>	Nuclear is the energy content of the electricity produced by a nuclear power plant.
<b>Hydro</b>	Hydro is the energy content of the electricity produced by a hydro electric power plant.
<b>Indigenous Production</b>	Indigenous production is the production of primary energy in China.
<b>International Marine Bunkers</b>	International marine bunker cover those quantities delivered to sea-going ships of all countries, including warships.
<b>Region - East</b>	The east region of China is defined to include provinces of Anhui, Fujian, Jiangsu, Jiangxi, Shandong, and Zhejiang.
<b>Region - West</b>	The west region of China is defined to include cities and provinces of Gansu, Ningxia, Qinghai, Shaanxi, Xinjiang, Chongqing, Guizhou, Sichuan, Tibet, and Yunnan.
<b>Region - North</b>	The north region of China is defined to include cities and provinces of Beijing, Hebei, Inner Mongolia, Shanxi, Heilongjiang, Jilin, and Liaoning.
<b>Region - South</b>	The south region of China is defined to include provinces of Guangdong, Guangxi, Hainan, Henan, Hubei, and Hunan.

## Appendix 1: Glossary *(continued)*

<b>Stock Changes</b>	Stock changes reflect the difference between opening stock levels on the first day of the year and closing stock levels of the last day of the year of stocks on national territory held by producers, importers, energy transformation industries, and large consumers.
<b>Total Primary Energy Supply</b>	Total primary energy supply equals to the total of indigenous production and imports, and minus exports and international marine bunkers and plus stock changes.
<b>Transformation</b>	Transformation includes the conversion of primary energy into secondary energy carriers such as electricity and oil products.
<b>Statistical Differences</b>	Statistical differences is a category that includes the sum of unexplained statistical differences for individual fuels.
<b>Distribution and Transmission Losses</b>	Distribution and transmission losses are losses in gas distribution, electricity transmission, and coal transport.
<b>Total Final Consumption</b>	Total final consumption is the sum of consumption by end-use sectors.

## Appendix 2: Conversion Factors from Physical Unit to Coal Equivalent

For this energy form...	1 unit of	equals in Mtce
Coal Total	Mt	0.714
Raw Coal	Mt	0.714
Cleaned Coal	Mt	0.9
Other Washed Coal	Mt	0.525
Briquettes	Mt	0.6
Coke	Mt	0.971
Coke Oven Gas	Billion m <sup>3</sup>	0.593
Other Gas	Billion m <sup>3</sup>	0.288
Other Coking Products	Mt	1.107
Petroleum Products	Mt	1.43
Crude Oil	Mt	1.429
Gasoline	Mt	1.471
Kerosene	Mt	1.471
Diesel Oil	Mt	1.457
Fuel Oil	Mt	1.429
LPG	Mt	1.714
Refinery Gas	Mt	1.571
Other Petroleum Products	Mt	1.31
Natural Gas	Billion m <sup>3</sup>	1.33
Heat	TJ	3.4 X 10 <sup>-5</sup>
Heat	PJ	0.034
Electricity	TWh	0.123
Electricity	GWh	1.23 X 10 <sup>-4</sup>
Thermal Power	TWh	0.404
Thermal Power	GWh	4.04 X 10 <sup>-4</sup>
Total Power	TWh	0.404
Total Power	GWh	4.04 X 10 <sup>-4</sup>
Other Energy	Mt	1
Fuelwood	Mt	0.571
Crop Residues	Mt	0.43
Dried Dung	Mt	0.471

## Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce)

Standard Quantity (Mtce)					
	Total Coal	Coal Raw	Coal Cleaned	Coal Washed	Coal Briquettes
<b>Total Primary Energy Supply</b>	<b>2,713.44</b>	<b>2,719.12</b>	<b>(7.83)</b>	<b>0.42</b>	<b>(0.03)</b>
Indigenous Production	2,602.53	2,602.53			
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import	205.93	205.88			0.04
Chinese Vessels Refueling Abroad					
Export	6.62	6.52			0.08
Foreign Vessels Refueling in China					
Stock Change	(88.40)	(82.76)	(7.83)	0.42	0.01
<b>Total Transformation</b>	<b>(1,896.32)</b>	<b>(1,997.14)</b>	<b>40.29</b>	<b>45.08</b>	<b>6.34</b>
Thermal Power	(1,274.71)	(1,255.55)	(0.53)	(13.78)	
Heating Supply	(144.62)	(139.09)	(0.38)	(3.82)	
Coal Washing	(80.35)	(542.66)	464.13	69.19	
Coking	(386.05)	(53.06)	(419.26)	(0.28)	
Petroleum Refineries	(2.70)	(1.39)	(1.56)	(0.05)	
Petroleum Refineries - Petroleum Products Input					
Gas Works	(5.70)	(4.04)	(2.10)		
Gas Works - Coke input					
Natural Gas Liquefaction					
Briquettes	(2.21)	(1.35)		(6.18)	6.34
Recovery of Energy					
<b>Losses in Transformation</b>					
<b>Total Consumption</b>	<b>621.58</b>	<b>539.17</b>	<b>24.38</b>	<b>40.89</b>	<b>6.27</b>
Agriculture	12.61	12.35		0.19	
Industry	500.68	431.16	24.20	34.95	2.34
Industry - NonEnergy Use	31.33	28.30	1.24	1.50	
Construction	5.38	5.30	0.05	0.03	
Transportation, Telecommunications, Postal	4.39	4.19	0.12	0.07	
Wholesale, Retail Trade, and Catering Service	16.86	16.52		0.09	0.19
Other	16.30	15.32		0.66	0.07
Residential consumption	65.36	54.33		4.90	3.67
Residential consumption - Urban	10.94	7.75		1.37	1.11
Residential consumption - Rural	54.42	46.57		3.52	2.56
<b>Statistical Difference</b>	<b>195.54</b>	<b>182.82</b>	<b>8.08</b>	<b>4.60</b>	<b>0.04</b>

### Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)					
	Gangue	Coke	Coke Oven Gas	Blast Furnace Gas	Converter Gas
<b>Total Primary Energy Supply</b>		<b>1.19</b>			
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import		0.07			
Chinese Vessels Refueling Abroad					
Export		0.99			
Foreign Vessels Refueling in China					
Stock Change		2.11			
<b>Total Transformation</b>	<b>0.02</b>	<b>397.89</b>	<b>36.05</b>	<b>12.75</b>	<b>7.13</b>
Thermal Power	(5.39)		(7.88)	(12.36)	(2.60)
Heating Supply	(1.38)		(4.34)	(6.11)	(1.43)
Coal Washing	6.78				
Coking		396.59	47.21		
Petroleum Refineries					
Petroleum Refineries - Petroleum Products Input					
Gas Works		1.82	1.05		
Gas Works - Coke input		(0.53)			
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy				31.21	11.16
<b>Losses in Transformation</b>					
<b>Total Consumption</b>		<b>381.78</b>	<b>35.13</b>	<b>12.80</b>	<b>6.93</b>
Agriculture		0.56			
Industry		380.71	32.79	12.80	6.93
Industry - NonEnergy Use		15.23	0.33		
Construction		0.06			
Transportation, Telecommunications, Postal		0.00			
Wholesale, Retail Trade, and Catering Service		0.06	0.04		
Other		0.02	0.16		
Residential consumption		0.37	2.14		
Residential consumption - Urban		0.17	2.14		
Residential consumption - Rural		0.20			
<b>Statistical Difference</b>	<b>0.02</b>	<b>17.30</b>	<b>0.92</b>	<b>(0.05)</b>	<b>0.20</b>

## Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)					
	Coal Gas not Coke Source	Coke Other Products	Total Petroleum	Crude Oil	Gasoline
<b>Total Primary Energy Supply</b>			<b>684.46</b>	<b>667.12</b>	<b>(11.94)</b>
Indigenous Production			296.69	296.49	
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import			463.38	387.30	0.01
Chinese Vessels Refueling Abroad			9.79		
Export			44.09	3.48	4.29
Foreign Vessels Refueling in China			11.45		
Stock Change			(29.85)	(13.18)	(7.65)
<b>Total Transformation</b>	<b>4.02</b>	<b>9.03</b>	<b>(35.96)</b>	<b>(656.56)</b>	<b>132.04</b>
Thermal Power			(4.18)	(0.16)	(0.00)
Heating Supply			(7.06)	(0.02)	(0.00)
Coal Washing					
Coking		9.28			
Petroleum Refineries		(0.54)	53.94	(656.39)	132.04
Petroleum Refineries - Petroleum Products Input			(78.66)		(0.00)
Gas Works	4.02	0.45			
Gas Works - Coke input		(0.16)			
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>			<b>2.60</b>	<b>2.54</b>	
<b>Total Consumption</b>	<b>4.09</b>	<b>8.71</b>	<b>642.84</b>	<b>7.94</b>	<b>119.75</b>
Agriculture			21.99		2.84
Industry	0.95	8.71	215.93	7.94	8.55
Industry - NonEnergy Use			102.19	1.06	0.27
Construction			38.60		4.22
Transportation, Telecommunications, Postal			253.32		55.21
Wholesale, Retail Trade, and Catering Service	0.22		7.76		2.94
Other			43.87		21.48
Residential consumption	2.92		61.37		24.51
Residential consumption - Urban	2.91		43.81		16.78
Residential consumption - Rural	0.01		17.56		7.73
<b>Statistical Difference</b>	<b>(0.07)</b>	<b>0.32</b>	<b>3.06</b>	<b>0.08</b>	<b>0.35</b>

### Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)					
	Kerosene	Diesel Oil	Fuel Oil	Naphtha	Lubricants
<b>Total Primary Energy Supply</b>	<b>(3.01)</b>	<b>(1.41)</b>	<b>20.55</b>	<b>3.41</b>	<b>0.28</b>
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import	9.13	1.32	38.34	4.63	0.43
Chinese Vessels Refueling Abroad	3.77	0.13	5.99		
Export	10.96	2.70	16.60	0.32	0.15
Foreign Vessels Refueling in China	5.01	0.30	6.29		
Stock Change	0.05	0.13	(0.90)	(0.90)	
<b>Total Transformation</b>	<b>32.13</b>	<b>247.67</b>	<b>9.19</b>	<b>41.19</b>	<b>3.15</b>
Thermal Power		(0.52)	(0.62)		
Heating Supply		(0.03)	(2.68)		
Coal Washing					
Coking					
Petroleum Refineries	32.13	248.62	32.20	44.49	3.15
Petroleum Refineries - Petroleum Products Input		(0.40)	(19.72)	(3.30)	
Gas Works					
Gas Works - Coke input					
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>					
<b>Total Consumption</b>	<b>28.78</b>	<b>246.24</b>	<b>29.62</b>	<b>44.53</b>	<b>3.27</b>
Agriculture	0.02	19.46	0.03		
Industry	0.47	24.51	9.02	44.53	3.27
Industry - NonEnergy Use				42.53	3.03
Construction	0.12	7.55	0.39		
Transportation, Telecommunications, Postal	26.29	156.29	19.78		
Wholesale, Retail Trade, and Catering Service	0.42	3.34	0.12		
Other	1.09	21.05	0.28		
Residential consumption	0.38	14.05			
Residential consumption - Urban	0.05	9.89			
Residential consumption - Rural	0.33	4.16			
<b>Statistical Difference</b>	<b>0.33</b>	<b>0.01</b>	<b>0.11</b>	<b>0.06</b>	<b>0.15</b>

### Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)					
	Petroleum Waxes	Solvents	Bitumen Asphalt	Petroleum Coke	Liquid Petroleum Gas
<b>Total Primary Energy Supply</b>	<b>(0.57)</b>	<b>0.03</b>	<b>3.45</b>	<b>4.66</b>	<b>3.90</b>
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import	0.07	0.03	3.58	7.39	6.14
Chinese Vessels Refueling Abroad					
Export	0.64	0.01	0.13	2.41	2.20
Foreign Vessels Refueling in China					
Stock Change		0.00		(0.32)	(0.05)
<b>Total Transformation</b>	<b>2.00</b>	<b>2.37</b>	<b>21.20</b>	<b>15.68</b>	<b>36.18</b>
Thermal Power				(1.37)	
Heating Supply				(1.50)	(0.00)
Coal Washing					
Coking					
Petroleum Refineries	2.00	2.37	21.20	18.56	38.89
Petroleum Refineries - Petroleum Products Input					(2.70)
Gas Works					
Gas Works - Coke input					
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>					<b>0.07</b>
<b>Total Consumption</b>	<b>1.38</b>	<b>2.32</b>	<b>24.05</b>	<b>20.01</b>	<b>39.77</b>
Agriculture					0.11
Industry	1.38	2.32	0.59	20.01	7.94
Industry - NonEnergy Use	1.35	2.23		15.23	0.87
Construction			23.46		0.12
Transportation, Telecommunications, Postal					1.09
Wholesale, Retail Trade, and Catering Service					1.30
Other					1.17
Residential consumption					28.03
Residential consumption - Urban					21.26
Residential consumption - Rural					6.77
<b>Statistical Difference</b>	<b>0.05</b>	<b>0.08</b>	<b>0.61</b>	<b>0.34</b>	<b>0.24</b>

## Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)				
	Refinery Gas	Petroleum Other Products	Natural Gas	LNG
<b>Total Primary Energy Supply</b>		(3.75)	167.67	25.79
Indigenous Production			142.51	
Indigenous Production - Hydro Power				
Indigenous Production - Nuclear Power				
Indigenous Production - Wind Power				
Import		2.94	29.00	25.79
Chinese Vessels Refueling Abroad				
Export		0.12	3.84	
Foreign Vessels Refueling in China				
Stock Change		(6.57)		
<b>Total Transformation</b>	<b>20.35</b>	<b>63.34</b>	<b>(34.76)</b>	<b>(1.21)</b>
Thermal Power	(1.06)	(0.06)	(27.19)	(3.14)
Heating Supply	(2.19)	(0.26)	(4.40)	(0.15)
Coal Washing				
Coking				
Petroleum Refineries	24.62	111.48	(0.29)	
Petroleum Refineries - Petroleum Products Input	(1.03)	(47.82)		
Gas Works			(0.37)	
Gas Works - Coke input				
Natural Gas Liquefaction			(2.51)	2.09
Briquettes				
Recovery of Energy				
<b>Losses in Transformation</b>			<b>2.24</b>	<b>0.49</b>
<b>Total Consumption</b>	<b>20.19</b>	<b>59.25</b>	<b>130.70</b>	<b>24.04</b>
Agriculture			0.09	
Industry	20.19	58.44	66.69	21.12
Industry - NonEnergy Use	0.26	29.28	16.67	5.28
Construction		0.81	0.17	
Transportation, Telecommunications, Postal			15.90	2.92
Wholesale, Retail Trade, and Catering Service			5.15	
Other			4.37	
Residential consumption			38.34	
Residential consumption - Urban			38.24	
Residential consumption - Rural			0.10	
<b>Statistical Difference</b>	<b>0.16</b>	<b>0.35</b>	<b>(0.02)</b>	<b>0.05</b>

## Appendix 3: Energy Balance/China 2012 Standard Quantity (Mtce) *(continued)*

Standard Quantity (Mtce)				
	Heat	Electricity	Other Energy	Total Energy
<b>Total Primary Energy Supply</b>		<b>133.22</b>		<b>4,004.69</b>
Indigenous Production		134.54		3,484.01
Indigenous Production - Hydro Power		107.18		352.33
Indigenous Production - Nuclear Power		119.70		39.35
Indigenous Production - Wind Power		117.96		38.78
Import		0.84		701.16
Chinese Vessels Refueling Abroad				9.79
Export		2.17		62.68
Foreign Vessels Refueling in China				11.45
Stock Change				(116.14)
<b>Total Transformation</b>	<b>116.06</b>	<b>478.43</b>	<b>(0.00)</b>	<b>168.68</b>
Thermal Power	(12.71)	478.43	(5.23)	240.80
Heating Supply	113.79		(2.48)	(49.10)
Coal Washing				(80.35)
Coking				67.03
Petroleum Refineries			(0.02)	50.40
Petroleum Refineries - Petroleum Products Input				(78.66)
Gas Works				1.27
Gas Works - Coke input				(0.68)
Natural Gas Liquefaction				(2.51)
Briquettes				(2.21)
Recovery of Energy	14.98		7.72	22.70
<b>Losses in Transformation</b>	<b>1.24</b>	<b>35.59</b>		<b>123.08</b>
<b>Total Consumption</b>	<b>114.81</b>	<b>575.99</b>		<b>3,833.04</b>
Agriculture	0.04	12.44		76.19
Industry	82.75	409.70		2,635.99
Industry - NonEnergy Use				165.76
Construction	0.23	7.48		69.02
Transportation, Telecommunications, Postal	0.77	11.25		311.36
Wholesale, Retail Trade, and Catering Service	1.62	20.79		100.05
Other	3.01	37.90		192.32
Residential consumption	26.39	76.43		448.12
Residential consumption - Urban	26.39	43.74		268.39
Residential consumption - Rural		32.69		179.74
<b>Statistical Difference</b>	<b>0.00</b>	<b>0.06</b>	<b>(0.00)</b>	<b>217.24</b>

## Appendix 3: Energy Balance/China 2012 Physical Quantity

Physical Quantity						
Row Labels	Total Coal	Coal Raw	Coal Cleaned	Coal Washed	Coal Briquettes	Gangue
	Mt	Mt	Mt	Mt	Mt	Mt
<b>Total Primary Energy Supply</b>	<b>3,800.33</b>	<b>3,808.29</b>	<b>(8.71)</b>	<b>0.79</b>	<b>(0.05)</b>	
Indigenous Production	3,645.00	3,645.00				
Indigenous Production - Hydro Power						
Indigenous Production - Nuclear Power						
Indigenous Production - Wind Power						
Import	288.41	288.34			0.07	
Chinese Vessels Refueling Abroad						
Export	9.27	9.14			0.14	
Foreign Vessels Refueling in China						
Stock Change	(123.80)	(115.91)	(8.71)	0.79	0.02	
<b>Total Transformation</b>	<b>(2,655.91)</b>	<b>(2,797.11)</b>	<b>44.77</b>	<b>85.86</b>	<b>10.57</b>	<b>0.08</b>
Thermal Power	(1,785.31)	(1,758.48)	(0.58)	(26.25)		(26.94)
Heating Supply	(202.54)	(194.80)	(0.43)	(7.29)		(6.88)
Coal Washing	(112.54)	(760.02)	515.69	131.79		33.90
Coking	(540.68)	(74.31)	(465.85)	(0.53)		
Petroleum Refineries	(3.78)	(1.95)	(1.74)	(0.09)		
Petroleum Refineries - Petroleum Products Input						
Gas Works	(7.99)	(5.66)	(2.33)			
Gas Works - Coke input						
Natural Gas Liquefaction						
Briquettes	(3.10)	(1.89)		(11.78)	10.57	
Recovery of Energy						
<b>Losses in Transformation</b>						
<b>Total Consumption</b>	<b>870.56</b>	<b>755.13</b>	<b>27.08</b>	<b>77.88</b>	<b>10.46</b>	
Agriculture	17.66	17.30		0.36		
Industry	701.23	603.87	26.89	66.58	3.90	
Industry - NonEnergy Use	43.88	39.64	1.38	2.86		
Construction	7.53	7.42	0.06	0.06		
Transportation, Telecommunications, Postal	6.14	5.87	0.13	0.14		
Wholesale, Retail Trade, and Catering Service	23.62	23.14		0.16	0.32	
Other	22.83	21.46		1.26	0.12	
Residential consumption	91.53	76.09		9.33	6.12	
Residential consumption - Urban	15.32	10.86		2.61	1.85	
Residential consumption - Rural	76.21	65.23		6.71	4.27	
<b>Statistical Difference</b>	<b>273.86</b>	<b>256.05</b>	<b>8.98</b>	<b>8.77</b>	<b>0.07</b>	<b>0.08</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity					
Row Labels	Gangue	Coke	Coke Oven Gas	Blast Furnace Gas	Converter Gas
	Mt	Mt	bm <sup>3</sup>	bm <sup>3</sup>	bm <sup>3</sup>
<b>Total Primary Energy Supply</b>		<b>1.23</b>			
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import		0.08			
Chinese Vessels Refueling Abroad					
Export		1.02			
Foreign Vessels Refueling in China					
Stock Change		2.17			
<b>Total Transformation</b>	<b>0.08</b>	<b>409.77</b>	<b>60.79</b>	<b>99.11</b>	<b>26.28</b>
Thermal Power	(26.94)		(13.28)	(96.12)	(9.60)
Heating Supply	(6.88)		(7.32)	(47.49)	(5.25)
Coal Washing	33.90				
Coking		408.44	79.61		
Petroleum Refineries					
Petroleum Refineries - Petroleum Products Input					
Gas Works		1.87	1.77		
Gas Works - Coke input		(0.55)			
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy				242.73	41.12
<b>Losses in Transformation</b>					
<b>Total Consumption</b>		<b>393.19</b>	<b>59.23</b>	<b>99.50</b>	<b>25.52</b>
Agriculture		0.57			
Industry		392.08	55.29	99.50	25.52
Industry - NonEnergy Use		15.69	0.55		
Construction		0.06			
Transportation, Telecommunications, Postal		0.00			
Wholesale, Retail Trade, and Catering Service		0.07	0.06		
Other		0.02	0.28		
Residential consumption		0.38	3.61		
Residential consumption - Urban		0.18	3.61		
Residential consumption - Rural		0.20			
<b>Statistical Difference</b>	<b>0.08</b>	<b>17.81</b>	<b>1.55</b>	<b>(0.39)</b>	<b>0.75</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity					
Row Labels	Coal Gas not Coke Source	Coke Other Products	Total Petroleum	Crude Oil	Gasoline
	bm <sup>3</sup>	Mt	Mt	Mt	Mt
<b>Total Primary Energy Supply</b>			<b>478.65</b>	<b>466.85</b>	<b>(8.12)</b>
Indigenous Production			207.48	207.48	
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import			324.04	271.03	0.00
Chinese Vessels Refueling Abroad			6.85		
Export			30.83	2.43	2.92
Foreign Vessels Refueling in China			8.01		
Stock Change			(20.88)	(9.23)	(5.20)
<b>Total Transformation</b>	<b>13.95</b>	<b>8.15</b>	<b>(25.15)</b>	<b>(459.46)</b>	<b>89.76</b>
Thermal Power			(2.92)	(0.11)	(0.00)
Heating Supply			(4.94)	(0.01)	(0.00)
Coal Washing					
Coking		8.38			
Petroleum Refineries		(0.49)	37.72	(459.34)	89.76
Petroleum Refineries - Petroleum Products Input			(55.01)		(0.00)
Gas Works	13.95	0.41			
Gas Works - Coke input		(0.14)			
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>			<b>1.82</b>	<b>1.78</b>	
<b>Total Consumption</b>	<b>14.21</b>	<b>7.87</b>	<b>449.54</b>	<b>5.55</b>	<b>81.41</b>
Agriculture			15.38		1.93
Industry	3.30	7.87	151.00	5.55	5.81
Industry - NonEnergy Use			71.46	0.74	0.19
Construction			26.99		2.87
Transportation, Telecommunications, Postal			177.15		37.53
Wholesale, Retail Trade, and Catering Service	0.78		5.42		2.00
Other			30.68		14.61
Residential consumption	10.13		42.92		16.67
Residential consumption - Urban	10.11		30.63		11.41
Residential consumption - Rural	0.03		12.28		5.26
<b>Statistical Difference</b>	<b>(0.26)</b>	<b>0.29</b>	<b>2.14</b>	<b>0.06</b>	<b>0.24</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity					
Row Labels	Kerosene	Diesel Oil	Fuel Oil	Naphtha	Lubricants
	Mt	Mt	Mt	Mt	Mt
<b>Total Primary Energy Supply</b>	<b>(2.05)</b>	<b>(0.97)</b>	<b>14.38</b>	<b>2.27</b>	<b>0.20</b>
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import	6.21	0.91	26.83	3.09	0.30
Chinese Vessels Refueling Abroad	2.56	0.09	4.19		
Export	7.45	1.85	11.62	0.22	0.11
Foreign Vessels Refueling in China	3.41	0.20	4.40		
Stock Change	0.04	0.09	(0.63)	(0.60)	
<b>Total Transformation</b>	<b>21.84</b>	<b>169.98</b>	<b>6.43</b>	<b>27.46</b>	<b>2.22</b>
Thermal Power		(0.36)	(0.43)		
Heating Supply		(0.02)	(1.87)		
Coal Washing					
Coking					
Petroleum Refineries	21.84	170.64	22.53	29.66	2.22
Petroleum Refineries - Petroleum Products Input		(0.27)	(13.80)	(2.20)	
Gas Works					
Gas Works - Coke input					
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>					
<b>Total Consumption</b>	<b>19.57</b>	<b>169.01</b>	<b>20.73</b>	<b>29.69</b>	<b>2.31</b>
Agriculture	0.01	13.35	0.02		
Industry	0.32	16.82	6.31	29.69	2.31
Industry - NonEnergy Use				28.35	2.15
Construction	0.08	5.18	0.27		
Transportation, Telecommunications, Postal	17.87	107.27	13.84		
Wholesale, Retail Trade, and Catering Service	0.29	2.29	0.09		
Other	0.74	14.45	0.20		
Residential consumption	0.26	9.64			
Residential consumption - Urban	0.03	6.79			
Residential consumption - Rural	0.22	2.85			
<b>Statistical Difference</b>	<b>0.22</b>	<b>0.01</b>	<b>0.08</b>	<b>0.04</b>	<b>0.11</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity					
Row Labels	Petroleum Waxes	Solvents	Bitumen Asphalt	Petroleum Coke	Liquid Petroleum Gas
	Mt	Mt	Mt	Mt	Mt
<b>Total Primary Energy Supply</b>	<b>(0.42)</b>	<b>0.02</b>	<b>2.64</b>	<b>4.44</b>	<b>2.27</b>
Indigenous Production					
Indigenous Production - Hydro Power					
Indigenous Production - Nuclear Power					
Indigenous Production - Wind Power					
Import	0.05	0.02	2.73	7.03	3.59
Chinese Vessels Refueling Abroad					
Export	0.47	0.01	0.10	2.29	1.28
Foreign Vessels Refueling in China					
Stock Change		0.00		(0.30)	(0.03)
<b>Total Transformation</b>	<b>1.47</b>	<b>1.61</b>	<b>16.19</b>	<b>14.94</b>	<b>21.11</b>
Thermal Power				(1.31)	
Heating Supply				(1.43)	(0.00)
Coal Washing					
Coking					
Petroleum Refineries	1.47	1.61	16.19	17.67	22.69
Petroleum Refineries - Petroleum Products Input					(1.58)
Gas Works					
Gas Works - Coke input					
Natural Gas Liquefaction					
Briquettes					
Recovery of Energy					
<b>Losses in Transformation</b>					<b>0.04</b>
<b>Total Consumption</b>	<b>1.01</b>	<b>1.58</b>	<b>18.36</b>	<b>19.05</b>	<b>23.20</b>
Agriculture					0.06
Industry	1.01	1.58	0.45	19.05	4.63
Industry - NonEnergy Use	0.99	1.52		14.51	0.51
Construction			17.91		0.07
Transportation, Telecommunications, Postal					0.64
Wholesale, Retail Trade, and Catering Service					0.76
Other					0.68
Residential consumption					16.35
Residential consumption - Urban					12.40
Residential consumption - Rural					3.95
<b>Statistical Difference</b>	<b>0.04</b>	<b>0.05</b>	<b>0.47</b>	<b>0.32</b>	<b>0.14</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity				
Row Labels	Refinery Gas	Petroleum Other Products	Natural Gas	LNG
	Mt	Mt	bm <sup>3</sup>	Mt
<b>Total Primary Energy Supply</b>		<b>(2.86)</b>	<b>126.07</b>	<b>14.68</b>
Indigenous Production			107.15	
Indigenous Production - Hydro Power				
Indigenous Production - Nuclear Power				
Indigenous Production - Wind Power				
Import		2.25	21.81	14.68
Chinese Vessels Refueling Abroad				
Export		0.10	2.89	
Foreign Vessels Refueling in China				
Stock Change		(5.01)		
<b>Total Transformation</b>	<b>12.95</b>	<b>48.35</b>	<b>(26.14)</b>	<b>(0.69)</b>
Thermal Power	(0.67)	(0.05)	(20.44)	(1.79)
Heating Supply	(1.39)	(0.20)	(3.31)	(0.09)
Coal Washing				
Coking				
Petroleum Refineries	15.67	85.10	(0.22)	
Petroleum Refineries - Petroleum Products Input	(0.66)	(36.50)		
Gas Works			(0.28)	
Gas Works - Coke input				
Natural Gas Liquefaction			(1.89)	1.19
Briquettes				
Recovery of Energy				
<b>Losses in Transformation</b>			<b>1.68</b>	<b>0.28</b>
<b>Total Consumption</b>	<b>12.85</b>	<b>45.23</b>	<b>98.27</b>	<b>13.68</b>
Agriculture			0.06	
Industry	12.85	44.61	50.14	12.02
Industry - NonEnergy Use	0.17	22.35	12.54	3.01
Construction		0.62	0.13	
Transportation, Telecommunications, Postal			11.95	1.66
Wholesale, Retail Trade, and Catering Service			3.87	
Other			3.29	
Residential consumption			28.83	
Residential consumption - Urban			28.75	
Residential consumption - Rural			0.08	
<b>Statistical Difference</b>	<b>0.10</b>	<b>0.26</b>	<b>(0.02)</b>	<b>0.03</b>

## Appendix 3: Energy Balance/China 2012

### Physical Quantity *(continued)*

Physical Quantity				
Row Labels	Heat	Electricity	Other Energy	Total Energy
	PJ	TWh	Mtce	Mtce
<b>Total Primary Energy Supply</b>		<b>1,083.96</b>		<b>4,004.69</b>
Indigenous Production		1,094.74		3,484.01
Indigenous Production - Hydro Power		872.11		352.33
Indigenous Production - Nuclear Power		97.39		39.35
Indigenous Production - Wind Power		94.98		38.78
Import		6.87		701.16
Chinese Vessels Refueling Abroad				9.79
Export		17.65		62.68
Foreign Vessels Refueling in China				11.45
Stock Change				(116.14)
<b>Total Transformation</b>	<b>3,413.39</b>	<b>3,892.81</b>	<b>(0.00)</b>	<b>168.68</b>
Thermal Power	(373.93)	3,892.81	(5.23)	240.80
Heating Supply	3,346.85		(2.48)	(49.10)
Coal Washing				(80.35)
Coking				67.03
Petroleum Refineries			(0.02)	50.40
Petroleum Refineries - Petroleum Products Input				(78.66)
Gas Works				1.27
Gas Works - Coke input				(0.68)
Natural Gas Liquefaction				(2.51)
Briquettes				(2.21)
Recovery of Energy	440.46		7.72	22.70
<b>Losses in Transformation</b>	<b>36.42</b>	<b>289.62</b>		<b>123.08</b>
<b>Total Consumption</b>	<b>3,376.87</b>	<b>4,686.65</b>		<b>3,833.04</b>
Agriculture	1.13	101.26		76.19
Industry	2,433.91	3,333.61		2,635.99
Industry - NonEnergy Use				165.76
Construction	6.88	60.84		69.02
Transportation, Telecommunications, Postal	22.65	91.54		311.36
Wholesale, Retail Trade, and Catering Service	47.59	169.15		100.05
Other	88.63	308.36		192.32
Residential consumption	776.08	621.90		448.12
Residential consumption - Urban	776.08	355.93		268.39
Residential consumption - Rural		265.96		179.74
<b>Statistical Difference</b>	<b>0.09</b>	<b>0.51</b>	<b>(0.00)</b>	<b>217.24</b>

## Appendix 4: Data Sources

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## Acknowledgments

The LBNL China Energy Group team responsible for this compilation of energy statistics of China includes David Fridley, Mark Levine, Hongyou Lu, and Cecilia Fino-Chen. The team wishes to acknowledge the following institutions for their support of this effort:

- Energy Foundation China whose grants have enabled the China Energy Group to collect many data sources in China and to augment the expertise needed to understand the data.
- Shenzhen Institute of Building Research
- Oak Foundation

We also acknowledge most of these same parties for the support of the much more extensive China Energy Databook. Instructions for obtaining the databook can be found on our website <http://china.lbl.gov>.

We plan to publish updates to this compilation annually or biannually. We are thus eager to learn about any errors you may find, suggestions for improvement, and the most important data additions you would like to see.

This work was supported by the U.S. Department of Energy under Contract No. DE-AC02-05CH11231.



## Notes

## Notes



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## China Energy Group

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