



ENERGY STATISTICS IN CHINA

中国能源统计介绍

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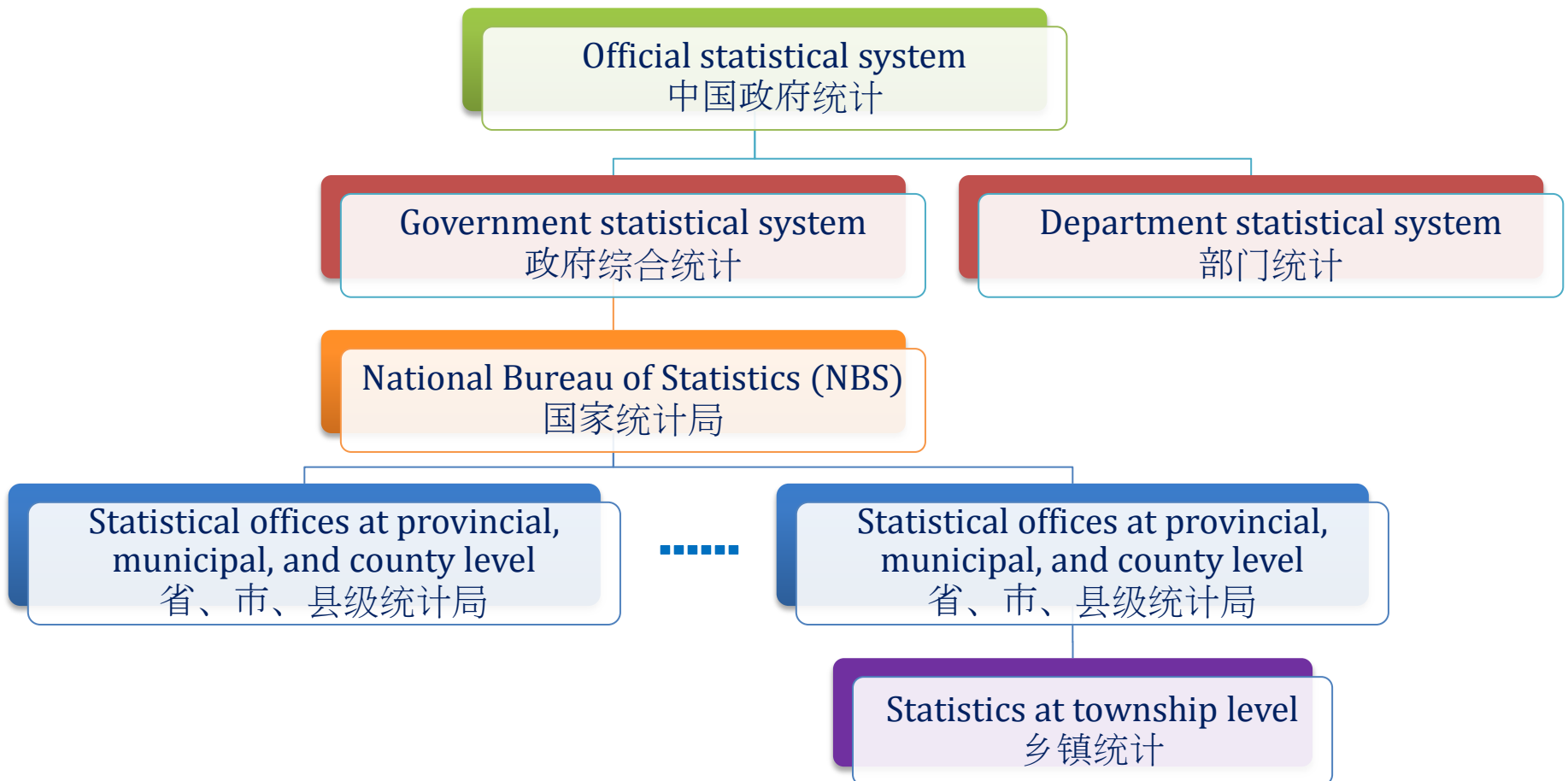
Energy Statistics Publication
能源统计信息出版物

Review and Prospects for China's Energy Statistics
中国能源统计工作回顾和展望



ORGANIZATIONAL STRUCTURE OF ENERGY STATISTICS IN CHINA 中国能源统计的组织机构

I Introduction to Statistics in China 中国统计体系简介

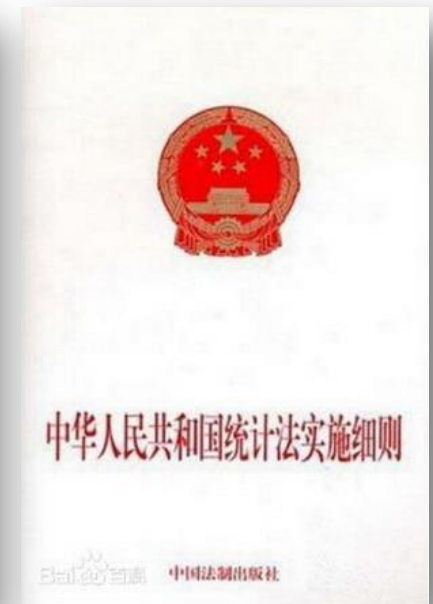




ORGANIZATIONAL STRUCTURE OF ENERGY STATISTICS IN CHINA 中国能源统计的组织机构

- In China, statistical surveys should be carried out in accordance with a unified system of indicators and statistical approaches developed by NBS.
统计调查需按照国家统计局统一制定的统计指标体系、统计制度方法进行

- Legislation: the Statistics Law of the People's Republic of China, and its Detailed Rules for the Implementation.
中华人民共和国统计法及其实施细则





ORGANIZATIONAL STRUCTURE OF ENERGY STATISTICS IN CHINA 中国能源统计的组织机构

II Administrative Mode of Energy Statistics 能源统计行政管理模式

- In government statistical system, China's energy statistical agencies are under the hierarchical administrative management. But for statistical work itself, it's under the unified leadership of NBS.
在政府统计系统，能源统计在行政上采用分级管理，但在统计业务上由国家统计局统一领导
- Inside all levels of government statistics, energy statistical works are scattered into different specialized departments.
在各级政府统计部门内部，能源数据由不同的专业和部门负责统计



ORGANIZATIONAL STRUCTURE OF ENERGY STATISTICS IN CHINA 中国能源统计的组织机构

III

Energy Statistical Agency in Government Statistical System and Its Function 政府统计部门的能源统计机构及其职能

- **Department of Energy Statistics (DES)** of NBS is mainly responsible for:
Energy production, circulation and consumption survey, energy efficiency, energy balance sheet, energy demand and supply analysis, monitoring energy saving progress, international cooperation, exchange of information and data on energy statistics, etc.
国家统计局能源统计司主要负责：
能源生产、流通、消费统计，能源利用效率统计，编制能源平衡表，能源供需分析，节能降耗统计监测，国际合作，信息交流等



ORGANIZATIONAL STRUCTURE OF ENERGY STATISTICS IN CHINA 中国能源统计的组织机构

- Energy statistics conducted by other departments of NBS.
由国家统计局其他部门负责的能源统计业务
- Energy statistics belonging to the department statistical system are conducted by other governmental departments or organizations. Such as energy international trade data is collected by the Customs.
属于其他政府部门业务统计范围内的能源统计业务由其他政府部门负责，比如能源的国际贸易统计由海关总署负责
- Energy statistics in provincial, municipal and county statistical offices.
省、市、县级统计局的能源统计工作



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

I Energy Production Statistics 能源生产统计

- **Two Industrial Production Output Surveys by DES**
两个工业企业产品产量调查 - 由能源统计司负责
 - a. Monthly online survey on industrial enterprises which are above designated size (with annual sales revenue of above 20M RMB, 13K enterprises).
规模以上工业企业能源产量为月度在线调查（1.3万家）
 - b. Annual survey on industrial enterprises below designated size.
上述统计范围之外的其他能源生产企业的能源产量数据为年度调查



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

➤ Industrial Production Output Survey investigates following types of energy production:

工业企业产品产量调查包含以下能源品种的产量：

Raw Coal	原煤	LPG	液化石油气
Crude Oil	原油	Petroleum Coke	石油焦
Natural Gas	天然气	Bitumen	石油沥青
Coalbed Methane	煤层气	Coke	焦炭
LNG	液化天然气	Electricity	发电量
Processed Crude Oil	原油加工量	Thermal Power	火力发电量
Gasoline	汽油	Hydro Power	水力发电量
Kerosene	煤油	Nuclear Power	核能发电量
Diesel Oil	柴油	Wind Power	风力发电量
Fuel Oil	燃料油	Gas	煤气
Naphtha	石脑油		



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

II Energy Import and Export Statistics 能源进出口统计

- Conducted by China Customs.
由中国海关负责统计
- Investigating import volume, import amount of money, export volume, export amount of money.
其指标主要包括各种能源的进口量、出口量以及金额
- Monthly survey.
月度调查



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

III Statistics on Domestic Energy Circulation 能源流通统计

- **Key Energy Trade Survey by DES**
重点能源商品经销情况调查 - 由能源统计司负责
- Monthly online survey on wholesale trade and retail trade enterprises above designated size (17K enterprises).
月度在线调查限额以上批发、零售贸易企业（1.7万家）
- Providing the basis for energy interprovincial inflow and out flow statistics.
为省际间能源流入流出统计提供依据



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

IV Energy Consumption Statistics 能源消费统计

➤ Two Energy Consumption Surveys by DES

两个能源消费调查 - 由能源统计司负责

a. Monthly online survey on industrial enterprises which are above designated size (380K enterprises, accounts for 90% of total industrial energy consumption).

规模以上工业企业能源消费为月度在线调查（38万家，占全部工业能源消费的90%）

b. Quarterly online survey on non-industrial enterprises including enterprises in construction, hotel and catering services, wholesale trade and retail trade sectors (1.2K enterprises).

非工业重点耗能单位能源消费季度在线调查（1200家），包括有资质建筑业、限额以上批发零售业、住宿餐饮业等

Questionnaire for monthly online energy consumption survey on industrial enterprises

规模以上工业能源消费调查表表式

表 号：205-1 表
制表机关：国家统计局
文 号：国统字(2015)95号
有效期至：2017年 1 月

组织机构代码□□□□□□□□-□
统一社会信用代码 □□□□□□□□□□
单位详细名称：

能源名称	计量单位	代码	年初库存量	1-本月购进量		1-本月消费量					期末库存量	采用折标系数
					其中： 购自省外	合计	1. 工业生产 消费	用于原材料	2. 非工业生 产消费	合计中：运 输工具消费		
甲	乙	丙	1	2	3	4	5	6	7	8	9	10
原煤	吨	1										
洗精煤（用于炼焦）	吨	6										
其他洗煤	吨	7										
煤制品	吨	8										
焦炭	吨	9								-		
其他焦化产品	吨	10								-		
焦炉煤气	万立方米	11	-							-	-	
高炉煤气	万立方米	12	-							-	-	
转炉煤气	万立方米	13	-							-	-	
发生炉煤气	万立方米	14	-							-	-	
天然气	万立方米	15			-							
液化天然气	吨	16										
煤层气	万立方米	17								-		
原油	吨	18								-		
汽油	吨	19										
煤油	吨	20										
柴油	吨	21										
燃料油	吨	22										
液化石油气	吨	23										
炼厂干气	吨	24								-		
石脑油	吨	25								-		
润滑油	吨	26								-		
石蜡	吨	27								-		
溶剂油	吨	28								-		
石油焦	吨	29								-		
石油沥青	吨	30								-		
其他石油制品	吨	31								-		
热力	百万千焦	32	-					-		-	-	
电力	万千瓦时	33	-		-			-		-	-	
煤矸石（用于燃料）	吨	34						-		-		
城市生活垃圾（用于燃料）	吨	35						-		-		
生物燃料	吨标准煤	36						-		-		
余热余压	百万千焦	37	-		-			-		-	-	
工业废料（用于燃料）	吨	38						-		-		
其他燃料	吨标准煤	39										
能源合计	吨标准煤	40	-	-	-			-		-	-	-



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

- **Energy Consumption Surveys** by other departments and organizations, mainly including:
由其他专业或部门调查的能源消费数据，主要包括：
 - a. Annual sample survey on residential energy use.
年度居民生活用能抽样调查
 - b. Monthly survey on electricity consumption by China Electricity Council.
中国电力企业联合会负责的月度全社会电力消费调查



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

V Energy Efficiency Statistics 能源利用效率统计

➤ Energy Efficiency Surveys by DES including:

由能源统计司负责的能源利用效率调查包括：

- a. Monthly online survey on energy transformation and recovery data in more than 7K industrial enterprises.
月度在线调查有能源加工转换或回收利用活动的规模以上工业企业（7000余家）
- b. Quarterly online survey on energy consumption per unit production in main energy-consuming industrial enterprises (7K enterprises).
季度在线调查主要耗能工业企业单位产品能源消耗情况（7000余家）



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

VI Energy Prices Statistics 能源价格统计

- **Energy Prices Survey** investigates energy purchase price and producer price.
能源的价格统计包括能源的出厂价格和购进价格
- This survey is a monthly sample survey, conducted by the Department of Urban Surveys of NBS.
这项调查由国家统计局城市司负责，以抽样调查的方法取得信息，每月调查一次



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

- The aforementioned fundamental energy data is strictly verified by DES, especially for online collected data. Taking advantages of statistical data online collection system, the data management is strengthened. The automatic and manual verification methods are both utilized to enhance the fundamental energy data quality.

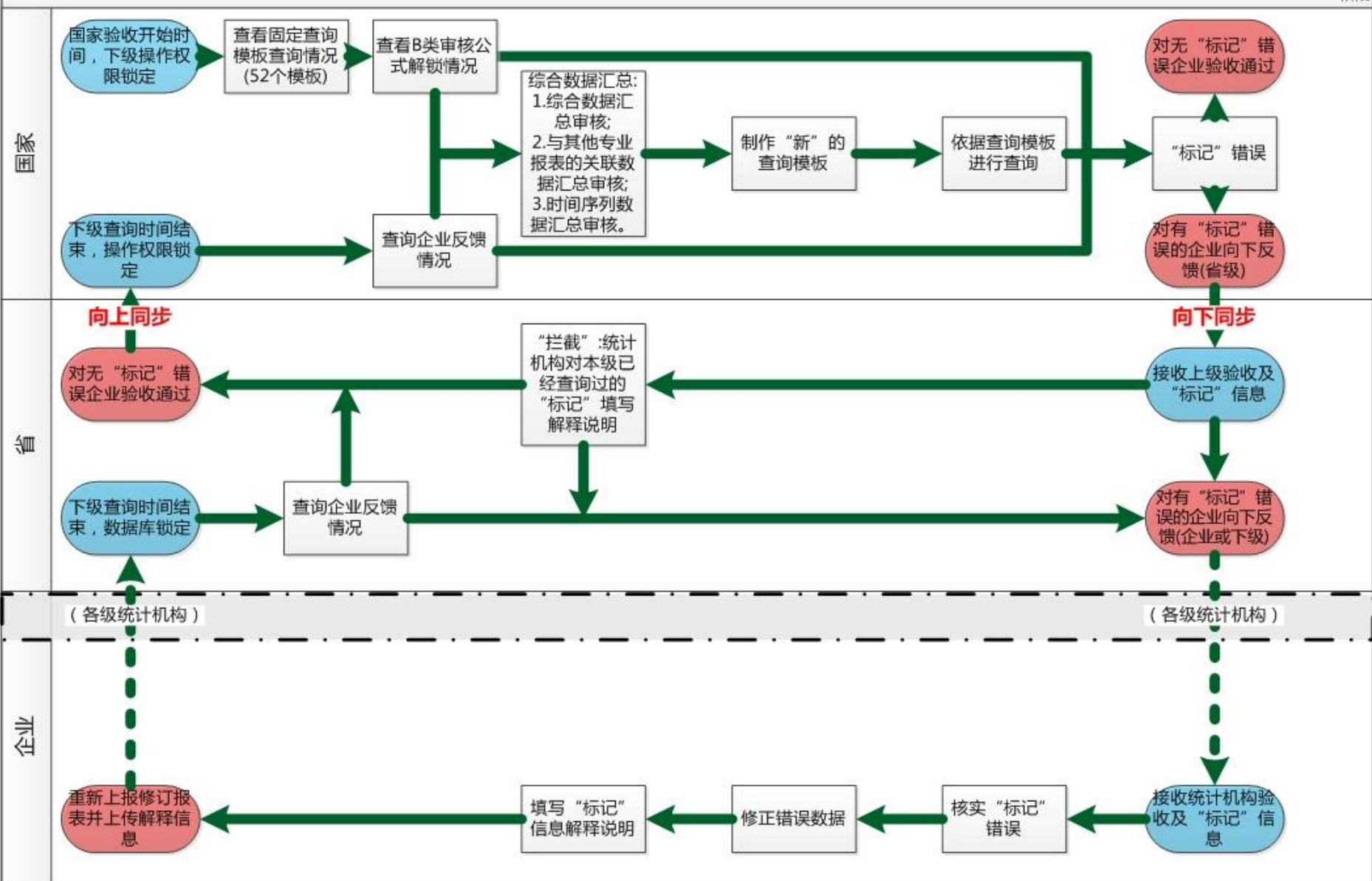
企业数据审核：对于以上基础能源数据，尤其是联网直报的各基层报表数据，能源统计司对其进行严格的审核。发挥网络直报的优势，加强源头数据管理，严格基础数据审核，形成了分企业在线逻辑审核、分层级人工平行审核、分指标综合比对审核和分专业关联趋势审核的一套方法。这一方法加强了数据生产过程的规范化，提高了数据审核的效率和调查结果的可靠性

Flowchart of online energy data processing

能源统计数据在线审核流程图

能源统计专业联网直报数据处理

阶段





CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

VII Energy Balance Sheet 能源平衡表

- DES compiles **Energy Balance Sheet** according to various data sources such as aforementioned energy surveys, administrative records, and other energy-related information. All energy statistical information such as energy supply, transformation, consumption is processed in the Energy Balance Sheet.

能源平衡表是能源统计司以前述能源统计调查及部门业务统计、行政记录等各类基础资料为基础，按照能源平衡表编制方法，对能源资源供给、加工转换、消费等各方面的能源统计信息进行加工、整理，进行能源平衡表的编制



CHINA'S ENERGY STATISTICS AND DATA COLLECTION

中国的能源统计信息和数据采集

- China's energy balance system was established in the early 1980s, while Energy Balance Sheet is compiled annually since 1980.
中国的能源平衡表体系是在上世纪80年代初建立起来的，从1980年起，能源平衡表每年编制一次
- At provincial level, Energy Balance Sheet is compiled in accordance with DES recommended methodology and tabular form. DES has responsibility to verify provincial Energy Balance Sheet to ensure the data accuracy.
各省按照国家推荐的方法和表式编制本省的能源平衡表，并报送能源统计司进行审核，保证其数据的准确性

5-2 中国能源平衡表(标准量) -2014
Energy Balance of China (Standard Quantity) -2014

Energy Balance Sheet of China

中国能源平衡表

单位: 万吨标准煤

项 目 Item	能源合计 (发电煤耗 计算法) (coal equivalent calculation)	Energy Total (电热当量 计算法) (calorific value calculation)	煤合计 Coal Total	原煤 Raw Coal	洗精煤 Cleaned Coal	其他洗煤 Other Washed Coal	型煤 Briquettes	煤矸石 Gangue	焦炭 Coke	焦炉煤气 Coke Oven Gas	高炉煤气 Blast Furnace Gas
	一. 可供本地区消费的能源量 Total Primary Energy Supply	426094.60	400590.74	280908.72	281462.82	-326.79	-220.94	-6.37		-1055.48	
1. 一次能源生产量 Indigenous Production	361865.69	336149.38	266315.72	266315.72							
水电 Hydro Power	32901.21	13080.70									
核电 Nuclear Power	4097.07	1628.89									
风电 Wind Power	4824.75	1918.20									
2. 进口量 Import	76345.56	76219.86	17829.40	17827.13			2.28		0.17		
3. 境内轮船和飞机在境外的加油 Domestic Airplanes&Ships Refueling in	979.47	979.47									
4. 出口量(-) Export (-)	7203.89	6865.74	483.98	475.64			8.34		826.41		
5. 境外轮船和飞机在境内的加油 Oversea Airplanes&Ships Refueling in	1066.89	1066.89									
6. 库存增(-)、减(+)量 Stock Change	-4825.33	-4825.33	-2752.41	-2204.39	-326.79	-220.94	-0.30		-229.25		
二. 加工转换投入(-)产出(+)量 Input(-) & Output(+) of Transformat	-2442.76	-81935.26	-200461.46	-213610.60	5832.98	6147.55	1168.61	76.40	46321.25	3598.05	
1. 火力发电 Thermal Power		-79492.50	-121918.29	-120539.31	-28.95	-1350.03		-636.59	-48.51	-949.72	
2. 供热 Heating Supply	-5036.10	-5036.10	-14342.83	-13943.93	-35.16	-363.74		-164.82	-206.95	-352.44	
3. 洗选煤 Coal Washing	-6527.41	-6527.41	-7405.23	-72361.32	55778.76	9177.34		877.81			
4. 炼焦 Coking	-2730.85	-2730.85	-55381.23	-5757.02	-49581.17	-43.05			46475.96	4854.50	
5. 炼油及煤制油 Petroleum Refineries	8467.89	8467.89	-471.28	-303.26	-161.91	-6.11					
#油品再投入量(-) Petroleum Products Input (-)	-10582.46	-10582.46									
6. 制气 Gas Works	-230.56	-230.56	-662.24	-520.30	-138.59	-3.3443			132.65	45.71	
#焦炭再投入量(-) Coke Input (-)	-48.54	-48.54							-31.90		
7. 天然气液化 Natural Gas Liquefaction	-51.95	-51.95									
8. 煤制品加工 Briquettes	-280.37	-280.37	-280.37	-185.46			-1263.52	1168.61			
9. 回收能 Recovery of Energy	14577.61	14577.61									
三. 损失量 Loss	10200.97	4428.25									
四. 终端消费量 Total Final Consumption	413162.29	313935.03	80311.59	67721.93	5499.97	5931.71	1157.98		45256.68	3595.98	
1. 农、林、牧、渔业 Agriculture, Forestry, Animal Husband	8094.27	6207.09	1928.39	1904.71			23.68		33.85		



ENERGY STATISTICS PUBLICATION 能源统计信息出版物

Statistical Communique of the People's Republic of China on
National Economic and Social Development
中国国民经济和社会发展统计公报



China Statistical Abstract
中国统计摘要



China Statistical Yearbook
中国统计年鉴



China Energy Statistical Yearbook
中国能源统计年鉴



China Monthly Economic Indicators
中国经济景气月报





REVIEW AND PROSPECTS FOR CHINA'S ENERGY STATISTICS

中国能源统计工作回顾和展望

I Review for Energy Statistics 中国能源统计回顾

- Based on an improving energy statistical system, comprehensive energy data survey system and energy-saving statistical indicators have been gradually established.
在能源统计能力不断提高的基础上，我们建立起了一套比较完善的能源统计调查体系和能源节约统计指标体系
- Strengthened the regional capacity-building and carried out large-scope energy statistics training at enterprises level.
加强了基层能力建设，进行了较大范围企业能源统计培训
- Improved China's energy balance system.
完善了中国的能源平衡表体系



REVIEW AND PROSPECTS FOR CHINA'S ENERGY STATISTICS

中国能源统计工作回顾和展望

II Prospects for Energy Statistics 中国能源统计展望

- China is a huge energy producer and consumer, strongly influences the world's energy supply and demand situation.
中国是能源生产和消费大国，对世界能源供需形势产生着越来越重要的影响
- New challenges raised for energy statistics, such as statistics on neo energy, renewables, efficiency, and carbon emissions.
新的能源统计需求不断增加，如新能源、可再生能源、能源效率、碳排放等
- We hope to learn more knowledge and experiences on international energy statistics through this workshop.
希望通过此次培训学习到更多能源统计知识和国际经验



THANK YOU!

