



CDM Country Fact Sheet : China

IGES Market Mechanism Project / Climate Change Area : Keisuke Iyadomi

November 2008

Current Status of CDM in China

Basic Information (as of 3 November 2008)

Project Status	Number of Projects
CDM projects registered at CDM executive board	286
CDM projects approved by Chinese DNA	1,598
CDM projects at or after the validation stage	1,707

Source: UNFCCC website <<http://www.unfccc.int/index.html>> and CDM in CHINA. 2008. <<http://cdm.ccchina.gov.cn/english/>>

Basic Data on Registered CDM Projects (as of 3 November 2008)

	N. of projects	Annual Emission Reduction (tCO ₂ /y)	Total ERs by 2012 (tCO ₂)	Amount of Issued CERs
Hydro power	111	9,295,180	47,735,261	1,087,861
Wind power	72	8,852,023	50,019,575	2,827,688
Waste heat/gas utilisation	30	8,522,727	43,801,946	768,085
Methane recovery & utilisation	22	8,801,856	48,486,470	857,212
N ₂ O decomposition	18	18,427,309	93,279,700	2,739,394
Biomass	11	1,587,540	8,656,464	24,161
HFC reduction	10	59,431,122	345,166,475	67,124,633
Fuel Switch	9	7,826,826	37,162,963	-
Afforestation & reforestation	1	20,076	340,223	-
Biogas	1	110,461	570,715	-
Methane avoidance	1	41,880	204,795	-
Total	286	122,917,000	675,424,587	75,309,464

Source: IGES CDM Project Database <<http://www.iges.or.jp/jp/cdm/report.html#db>> and UNFCCC <<http://cdm.unfccc.int/index.html>>

Number of Approved CDM Projects by DNA (as of 3 November 2008)

Type of project / Year	2005	2006	2007	2008	Total
Hydro power	2	105	426	281	814
Wind power	8	55	94	99	256
Waste heat/gas utilisation	1	24	118	92	235
Methane recovery & utilisation	3	23	40	36	102
Energy efficiency		3	29	26	58
Biomass		9	27	19	55
Fuel Switch		10	13	7	30
N ₂ O decomposition		3	17	6	26
HFC reduction	4	4	3		11
Biogas			3	2	5
Other renewable energies			3		3
Afforestation & reforestation		1		2	3
Total	18	237	773	570	1,598

Source: CDM in CHINA. 2008. <<http://cdm.ccchina.gov.cn/english/>> Note: Latest approved project list was published in 8 October 2008.



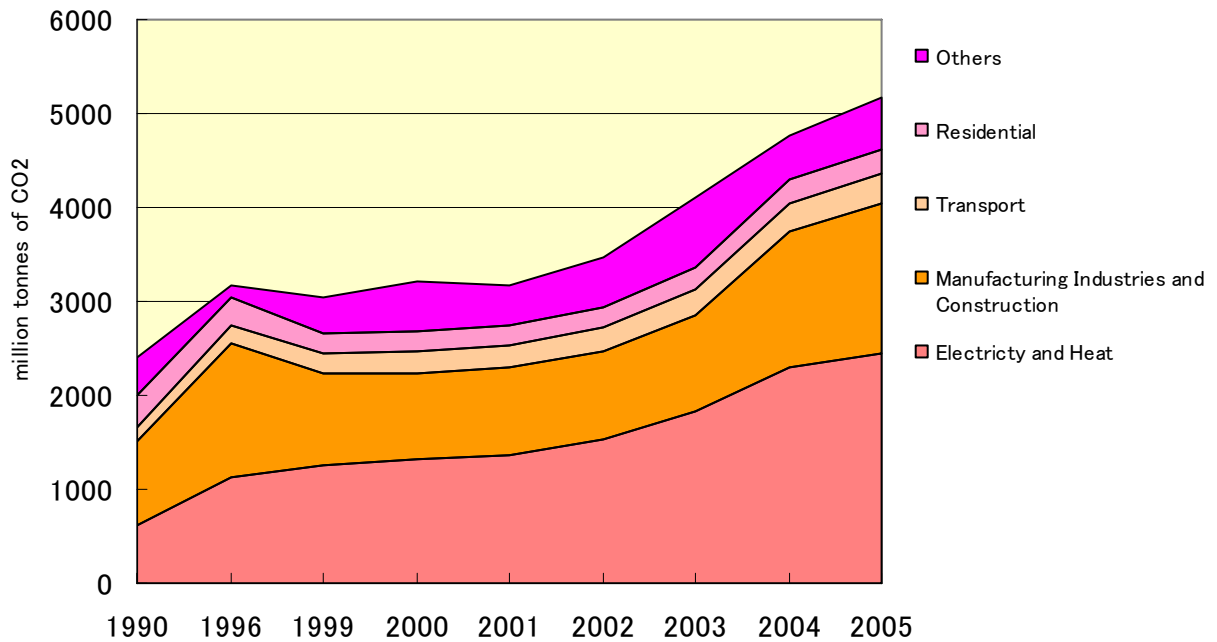
1 Basic Data

Land Area	9,327.4 ('000 square kilometers) (2005, ADB)
Population	1,321.052 million (2007, IMF)
GDP, current prices	3,280.224 billion USD (2007, IMF)
GDP per capita, current prices	2,483.038 USD (2007, IMF)

Source: World Economic Outlook Database (IMF 2008) <<http://www.imf.org/external/pubs/ft/weo/2008/02/weodata/index.aspx>>
 ADB, Key Indicators of Developing Asian and Pacific Countries <http://www.adb.org/documents/books/key_indicators/>

2 Domestic GHG Emission Data

CO₂ Emissions by sector in China (Unit: million ton)



Source: International Energy Agency (IEA), CO₂ Emissions from Fuel Combustion (1998-2007 edition)

Note: Emission data in Hong Kong is included.

"Others" includes "Unallocated Auto-producers," "Other Energy Industries," "Difference due to Losses and/or Transformation," and "Industrial waste and non-renewable municipal waste."

3 Ratification Status

UNFCCC	11 June 1992 (Signed)	5 January 1993 (Ratified)
The Kyoto Protocol	29 May 1998 (Signed)	30 August 2002 (Ratified)
Electric Power Law	28 December 1995 (Approved)	1 April 1996 (Enforced)
	Source: (http://www.ccchina.gov.cn/en/NewsInfo.asp?NewsId=5376)	
Law on Energy Conservation	1 November 1997 (Approved)	1 January 1998 (Enforced)
	Source: (http://www.ccchina.gov.cn/en/NewsInfo.asp?NewsId=5372)	
Measures for Operation and Management of Clean Development Mechanism Projects in China	30 June 2004 (Approved)	12 October 2005 (Revised)
	Downloadable: (http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=905)	
Renewable Energy Law	28 February 2005 (Approved)	1 January 2006 (Enforced)
	(http://www.ccchina.gov.cn/en/NewsInfo.asp?NewsId=5371)	
National Climate Change Programme	June 2007 (Announced)	
	Downloadable: (http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File188.pdf)	
China's Policies and Actions for Addressing Climate Change (White Paper)	29 October 2008 (Issued)	
	Downloadable : (http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=3097)	

Source: UNFCCC <<http://maindb.unfccc.int/public/country.pl?country=CN>>

China Climate Change Info-Net <<http://www.ccchina.gov.cn/en/>>

4 DNA Structure

Organisation	Member	Function
National Coordination Committee on Climate Change (NCCC)	Representative of NDRC is the chair. Vice-chair is selected from MFA, MOST, Ministry of Environmental Protection (MEP), China Meteorological Administration (CMA), and other ministries.	Policy making and coordination of CDM related issues
Office of the NCCCC	Managed by the NDRC	Functioned as the secretariat of NCCCC and NCB; manage the review of CDM application documents
National CDM Board (NCB)	Representatives of NDRC and MOST are the co-chair. Representative of the MFA is vice chair. Board is composed of MOF, Ministry of Agriculture (MOA), MEP, and CMA.	Conduct the review and evaluation of CDM projects
National Development and Reform Commission (NDRC)	Act as the Chinese DNA and manage the office of NCCCC	Receive the CDM application documents. Issue an approval letter
Ministry of Science and Technology (MOST)	Act as the co-chair of the NCB	Open the documents for approved projects to the public
Ministry of Foreign Affairs (MFA)	Act as the vice-chair of the NCB	Open the documents for approved projects to the public



5 DNA Approval Procedure

Each process under the DNA approval procedure is as follows.

1. The project proponent submits the application documents summarised below to the NDRC.

- ❑ CDM Project Application Form (for reference) (2 copies)
- ❑ Application Form for CDM Project Activity (15 copies in Chinese)
- ❑ Project Design Document (PDD) (15 copies in Chinese and 5 copies in English)
- ❑ General Information on the Construction Project and Financing (15 copies in Chinese)

Downloadable for application documents from the web-site of Chinese Government <<http://cdm.ccchina.gov.cn/english/>>

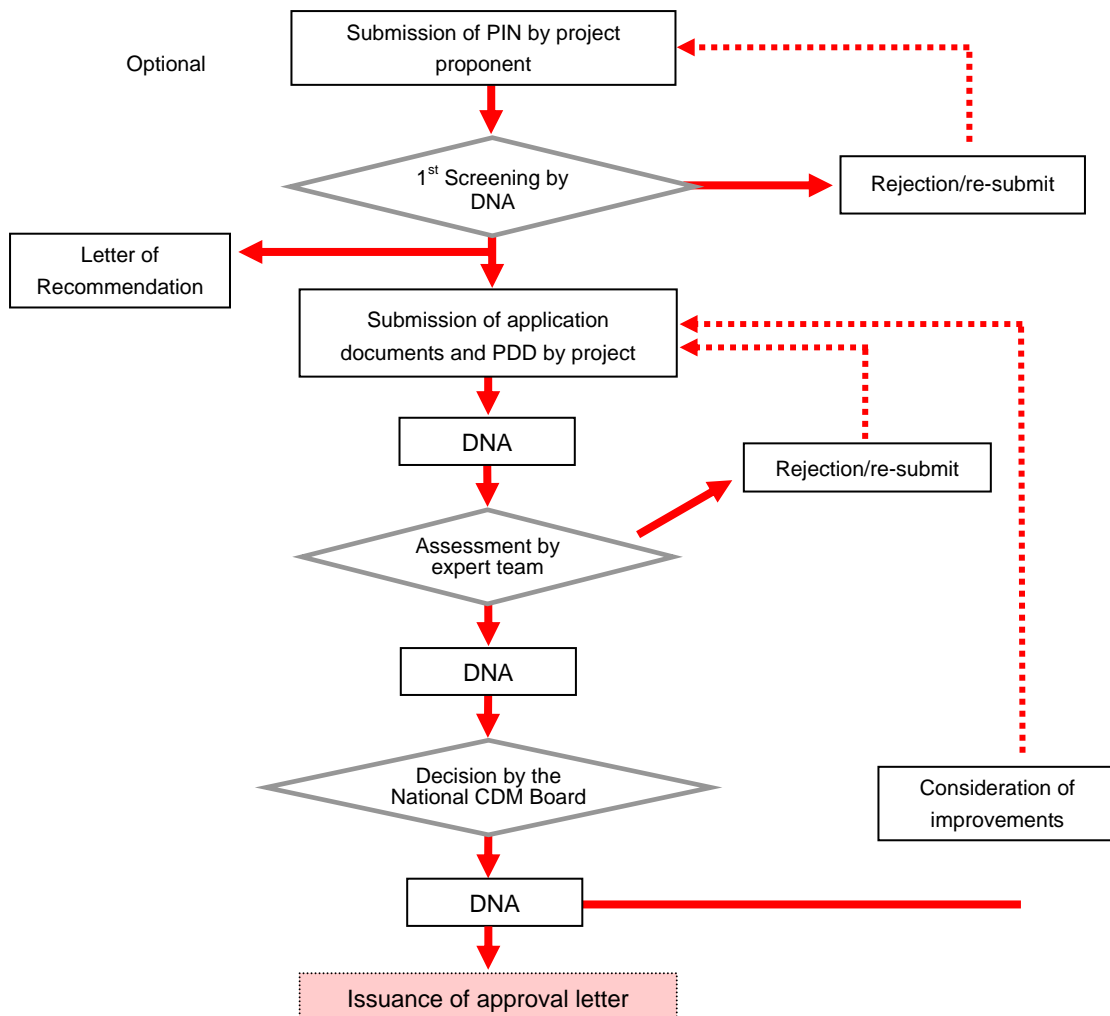
2. If DNA requires additional documents to be submitted, the project proponent has to submit those accordingly.

3. The DNA starts the assessment of expert review team toward the applied document. It should be done within 30 days.

4. If the applied project passes the expert review, it is submitted to the National CDM Board.

5. Based on the recommendation by the Board, and in cooperation with MOST and MFA, the DNA, makes a final decision and issues an approval letter to the project proponent.

Chinese DNA Approval Procedure



Source: CDM Country Guide for China (IGES, 2005)

6 DNA Approval Criteria

Requirements for approval are summarised below.

- Qualification to participate CDM in China (More than 51% of stock should be owned by Chinese funded or Chinese-holding enterprises)
- Qualification of PDD
- Baseline Methodology and emission reduction
- Price of CER (RMB/tCO₂e)

Note: CER price decided under the purchase agreement should be converted to RMB on the exchange rate on the date when application form is filled.

- Funding and technology transfer (need to confirm that project funding is not diverted from ODA)
- Crediting period
- Monitoring Plan
- Contribution of sustainable development (need to confirm that project is categorised within the area recommended by Chinese government)

Priority area and the transfer of CERs to the Chinese government specified in the Measures for Operation and Management of CDM Projects in China are summarised below.

Summary of the Measures for Operation and Management of CDM Project in China (Came into force in 12 October 2005)

Priority Area (Article 4)

- Energy efficiency improvement
- Development and utilisation of new and renewable energy
- Methane recovery and utilisation

Amount of transfer of CER (Article 24)

- emission reduction resource is owned by the Government of China
- emission reductions generated by specific CDM project belong to the project owner
- revenue from the transfer of CERs shall be owned jointly by the Government of China and the project owner

Allocation of ratio is defined below.

- HFC and PFC project: 65%
- N₂O project: 30%
- A priority area stated in Article 4 and forestation project: 2%

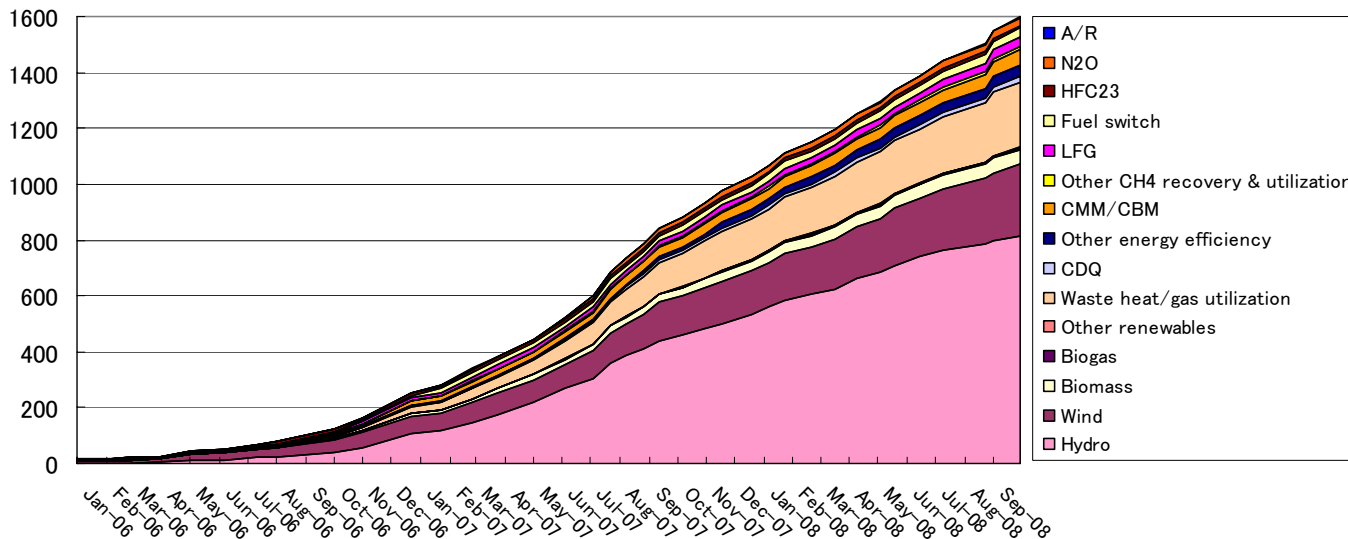
Source: Measures for Operation and Management of Clean Development Mechanism Project in China (CCCHINA, 2005)
<<http://cdm.ccchina.gov.cn/NewsInfo.asp?NewsId=458>>



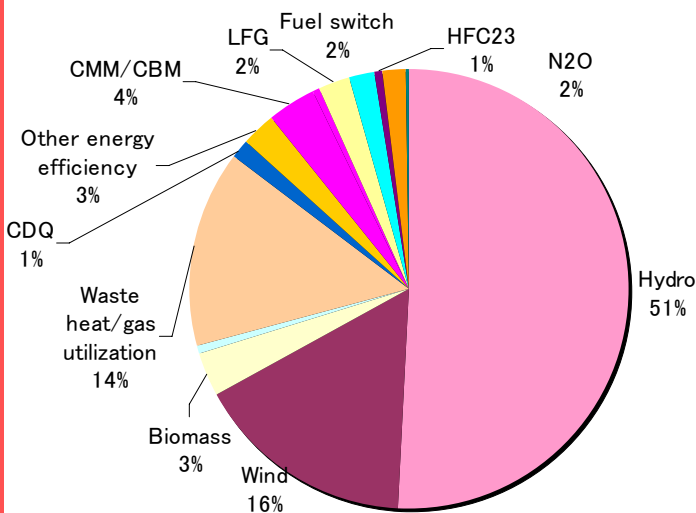
7 CDM Project Information

1. Approved project as of 3 November 2008: **1,598** projects
2. Registered project under the CDM EB as of 3 November 2008: **286** projects
3. Emission reductions by 2012 from registered projects: **675,424,587** t-CO₂ equivalent
4. Type of Approved Projects (Below graph)
5. Countries of intended CER Buyers at the time of national approval (Below graph)

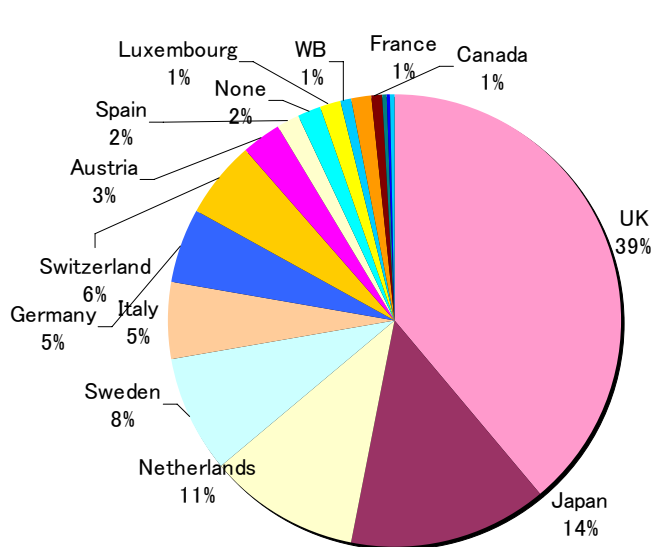
Approved Projects as of 3 November 2008



Project Types (as of 3 Nov. 2008)



Intended Buyers (as of 3 Nov. 2008)



Source: CDM in CHINA. 2008. <<http://cdm.ccchina.gov.cn/english/>>

Note: Latest approved project list was published in 8 October 2008.

8 Relevant Information

China's Regional Grid Emissions Factors 2008

Regional Grid	Covered Region	OM* (t-CO ₂ /MWh)	BM* (t-CO ₂ /MWh)
North China Grid	Beijing, Tianjin, Hebei, Shanxi, Shandong, Inner-Mongolia	1.169	0.8687
Northeast China Power Grid	Liaoning, Jilin, Heilongjiang	1.2561	0.7946
East China Grid	Shanghai, Jiangsu, Zhejiang, Anhui, Fujian	0.9556	0.8154
Central China Power Grid	Henan, Hubei, Hunan, Jiangxi, Sichuan, Chongqing	1.2783	0.7156
Northwest China Power Grid	Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang Uyghur	1.1225	0.6315
Southern China Power Grid	Guangdong, Jiangxi, Yunnan, Guizhou	1.0634	0.6968
Hainan Provincial Power Grid	Hainan	0.8944	0.7628

*OM: Operating Margin from 2004-2006 data, BM: Build Margin from 2006 data

Source: CDM in CHINA. 2008. <<http://cdm.ccchina.gov.cn/english/>>

Reference:

- Clean Development Mechanism in China, National Development and Reform Commission
<http://cdm.ccchina.gov.cn/english/>
- Market Mechanism Project / Climate Change Area, Institute for Global Environmental Strategies
<http://www.iges.or.jp/jp/cdm/index.html>



Current Status of CDM in China

Currently, 1,598 projects have been approved by the Chinese DNA as of 3 November 2008. Even though the increase of number of projects becomes little moderate compared with 2007, almost 600 projects are newly added within this year. The number of registered projects at the UN has been also increased up to 286 projects (150 projects were registered as of 31 December 2007). However, 7 Chinese projects were rejected at the last two CDM EB meetings.

The number of hydro power projects has dramatically increased up to 814 projects, which is almost more than a half of total approved projects in China. Even the increase rate of the number of approved projects is decelerating, the wind power projects are still the 2nd project in China (256 projects). Waste heat or gas utilisation type is the 3rd project and has rapidly increased up to 231 projects (almost 100 projects are newly added in 2008).

In addition, the share of average annual emission reductions from HFC23 and N₂O decomposition projects has decreased from 56.6% to 27% between 31 December 2006 and 8 October 2008. In comparison, the share of hydro power projects and waste heat or gas utilisation projects are gradually increased; 11% to 24% for hydro power projects and 3.7% to 10% for waste heat or gas utilisation projects in the same period.

The DNA approval process has been smoothly operated, even though almost 50 projects every month are submitted and requested for DNA approval. The national CDM policy has remarkable features toward CDM such as requirements for participation, allocation ratio of CERs with the Chinese government, and proposal of price of CER, according to the Measures for Operation and Management of CDM Projects. (See also Section 6; Approval criteria).

Office of National Climate Change Coordination Committee under NDRC was disestablished and new department for climate change has been established since August 2008. New department takes over the role of previous office and is expected to deal with expanding climate change related services. Chinese Government recently announced a white paper addressing climate change in the end of October 2008. The paper addresses an importance and effectiveness of the CDM for sustainable development as well as reduction of greenhouse gas emissions and enhances continuation of this mechanism after 2012.

CDM Country Fact Sheets

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