

Nationally Appropriate Mitigation Actions in China: Summary of Measurement and Compliance of Policies

NAMA	Scope	Metric	Reporting Mechanism	Verification Mechanism	Time Frame
Five Year Plan					
Five Year Plan	National Comprehensive Planning Document	Qualitative Evaluation of Policy Implementation	Annual Work Report by Premier and by each Ministry	Monitored and verified by Standing committee of National People's Congress	New targets set every five years
Quantitative National Policies					
GDP Restructuring	National	Share of Service Sector in GDP	NBS publishes a yearly statistics bulletin	Internal data quality assurance system within NBS	5 year goal. Annual progress reported
Technology Development	National	Share of R&D spending in GDP	NBS, MOST and MOF jointly publish a yearly statistics bulletin	NBS and MOST collect enterprise level data separately	5 year goal, annual progress reported
Energy Intensity	National, with targets given to each province, locality and State-owned enterprise	Energy used MTCE/Unit GDP	Calculated by NBS and published in a half-year statistics bulletin	Collected from multiple sources to ensure cross-checking	Five year goal. Much data is tabulated monthly. Provinces are required to report twice annually
Renewable Energy	National, with targets given to provinces and power generation companies	Renewable energy portfolio standard (percentage renewable in total output)	Energy Bureau will aggregate data from NBS, various ministries and industrial associations	Internal data quality assurance system within various ministries and cross checking	Goals to year 2010 and 2020, calculated annually
Waste recycling	National, industrial sector	Percentage of industrial solid waste recycled	Calculated by State Environment Protection Agency and published in a yearly bulletin	Internal data quality assurance system within SEPA	Five Year goal from 2006 to 2010
Forest Cover	National	Percentage of total landmass planted in trees	State Forestry Administration conducts national forest resource inventory	Remote sensing and ground-truthing	Five year and longer term goals
Regulations and Standards					
Efficiency Standards	Multiple sectors for both industrial sectors and products	Energy use per physical unit output	New investment project should report its energy efficiency standard when asking for approval and registration	Chapter for energy saving will be verified by Energy Conservation Technology Service Center at national and local level.	
Efficiency Labeling	Multiple Products	Energy use in operating equipment	1. All products listed in category should label products 2. Test energy efficiency and report to National Institute of Standardization (NIS)	Test result will be verified by Energy Labeling Management Center under NIS	The category for energy labeling will be renewed accordingly

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Incentives					
Tax policy	National	Cost increase on fossil fuel use (examples: fuel tax and VAT rebate change)	National Tax Bureau	Tax bureau has tax receipts	Change becomes permanent
Tax incentives	National	Tax breaks for renewable investments	National Tax bureau for amount of tax, NDRC for actual investments	NDRC reports on new renewable power	Annual reports
Agriculture and Forestry					
Low till and no till agriculture	Potentially national in agricultural sector, currently at pilot stage	Additional land put into low and no till -- hectares	Through agricultural bureaus to central ministry	Verified at local level through local bureau of NBS	
Biogas development	National in rural areas, but specific program area focuses	Number of digesters added, should add information on what fuel is replaced	Through agricultural bureaus to central ministry	Aggregated data at national level, local bureau of NBS verify local data.	Annual reports
Reforestation	National	% of total land forested	State Forestry Administration	Compilation of local reports, verified with satellite data	Reported annually
Industry					
Top 1000 Enterprises	National, targeted at 1000 largest enterprises	Energy Intensity per unit output	Enterprise to local DRC to NDRC	NDRC verification teams	5 year program with annual targets, twice yearly reporting
Individual Industrial Sector Targets	Set by Sector	Energy Intensity per unit physical output or value added	Industrial association to NBS/NDRC	Aggregated data from individual companies	Annual and 5 year reporting
Closure of small plants	National, specified closures in electricity and other sectors	GW capacity for power, tons of production capacity in industry	Provincial government and related enterprises reporting to national NDRC	Energy Bureau of NDRC make on-site verification	5 year targets, annual progress reports
Energy Conservation Power Generation Dispatch	Planned to be national within the electric power system, but piloted in 5 provinces	Currently a compliance metric, but no energy metric	Power plant performance determined by NDRC at local levels, which then sets the dispatch priority	Local technical bureaus verify efficiency and performance	
Coal-fired industrial boiler (kiln) retrofit projects	Coal-fired industrial boilers nation-wide	Average efficiency and energy saving of industrial coal-fired boilers	Energy saving reported by enterprises to government	Energy saving projects verified by third parties	2010 Goal

District Cogeneration Projects	District heating, especially in northern China	Share of cogeneration in district heating and capacity of cogeneration	Energy saving reported by enterprises to government	Energy saving projects verified by third parties	2010 Goal
Residual Heat and Pressure Utilization Projects	Iron and steel, construction material and other industries with saving potential	Energy saving from residual heat and pressure utilization	Energy saving reported by enterprises to government	Energy saving projects verified by the third parties	2010 Goal
Petroleum Saving and Substituting Projects	Metal, construction material and other industries with saving potential	Quantity of petroleum saved and substituted	Energy saving reported by enterprises to government	Energy saving projects verified by third parties	2010 Goal
Motor System Energy Saving Projects	Major electricity consuming sectors	Motor efficiency improvement and electricity saving	Energy saving reported by enterprises to government	Energy saving projects verified by the third parties	2010 Goal
Energy System Optimization Projects	Refinery, chemical, iron, and steel industries	Energy improvement per unit product and quantity of energy saving	Energy saving reported by enterprises to government	Energy saving projects verified by the third parties	2010 Goal
Buildings					
Energy Efficiency in Buildings	National	Adherence to standards	Building contractors report to local government and building owner in project acceptance report.	Local quality supervision institution verifies	
Transportation					
Vehicle Efficiency Standards	National, auto sector	Km/liter	Manufacturers to NDRC	Both pre and post manufacture	Based on introduction of new models
Fuel tax	National, vehicle sector	Absolute price increase to fuel	Set by central tax authorities who also report revenues	Tax authority audits of local collection	Annual revenue reporting
Mass Transit development	Local authorities	Share of public transit system, km for BRT, metro and other public transit systems	Local municipal government	Annual report to People' Congress at city level	Annual reporting
Intercity rail	National, rail sector	Km of new track and investment	Ministry of Railway	National ministry collects data from localities	Annual reporting