

ChinaFAQs

The Network for Climate and Energy Information

Key Points

- China has a long term target to reduce the carbon intensity of the economy by 40-45% from 2005 levels by 2020
- China also has binding targets to reduce energy intensity by 16% from 2010 levels by 2015 and carbon intensity by 17% from 2010 levels by 2015
- China has a target to reduce coal consumption as a percentage of primary energy to below 65% by 2017
- China has ambitious targets for renewable energy in 2015, 2017, and 2020

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TABLE: WHAT ARE CHINA'S NATIONAL CLIMATE AND ENERGY TARGETS?

Category	Target / Limit	Unit	2010	2015	Target Annual Growth or Reduction (2010-2015)	2015 Target Type ¹	Medium Term Target (Expected)	Main Source
Overall Energy Consumption and Efficiency	Total consumption of primary energy	billion tons of coal equivalent	3.25	4	4.30%	Expected		12FYP for Energy Development ²
	Non-fossil energy as percentage of total primary energy	%	8.6	11.4	5.80%	Binding	15 by 2020 ³	12FYP for Energy Development
	Coal as percentage of total primary energy	%	70% in 2011 ⁴	below 65% by 2017	1.8% (2014-2017)	Expected		Air Pollution Prevention Action Plan ⁵
	Total electricity consumption	One trillion kwh (1 billion GWh)	4.2	6.15	8.00%	Expected		12FYP for Energy Development
	Energy Intensity of economy	Metric Tons of standard coal equivalent / 10,000 RMB	0.81	0.68	16% reduction from 2010 levels by 2015	Binding		12FYP for Energy Development
	Coal consumption efficiency for thermal electric power	Grams coal / kWh	333	323	-0.60%	Expected		12FYP for Energy Development
	Energy Capacity Targets	Total Power capacity	GW	970	1490	9.00%	Expected	
Coal ⁶		GW	660	960	7.80%	Expected		12FYP For Energy Development
Hydro		GW	220	290	5.70%	Expected	330 by 2017 ⁷ 420 by 2020 ⁸	12FYP For Energy Development
Nuclear power		GW	10.82	40	29.90%	Expected	50 by 2017 ⁷ 58 by 2020 ⁹	12FYP For Energy Development
Natural gas		GW	26.42	56	16.20%	Expected		12FYP For Energy Development
Wind Power		GW	31	100	26.40%	Expected	150 by 2017 ⁷ 200 by 2020 ¹⁰	12FYP For Energy Development
Solar Power		GW	0.86	over 35	10GW/year (2013-2015)	Expected	70 by 2017 ⁷	Target updated by State Council ¹¹

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Category	Target / Limit	Unit	2010	2015	Target Annual Growth or Reduction (2010-2015)	2015 Target Type	Medium Term Target (Expected)	Main Source
Ecological and Environmental Protection	Carbon Intensity of economy	Metric Tons Carbon Dioxide / Ten-Thousand Year 2005 RMB	170.69 ¹²	141.76 ¹²	17% reduction from 2010 levels by 2015	Binding	40-45% reduction from 2005 levels by 2020 ¹³	12FYP For Energy Development
	Rate for Sulfur dioxide emissions from coal-fired power	Grams Sulfur / kWh	2.9	1.5	-12.40%	Binding		12FYP For Energy Development
	Coal nitrogen oxide emission rate	Grams Nitrogen / kWh	3.4	1.5	-15.10%	Binding		12FYP For Energy Development
Livelihood Improvement	Residents per capita consumption	KWh	380	620	10.30%	Expected		12FYP For Energy Development
	Green energy demonstration counties	# of counties	108	200	13.10%	Expected		12FYP For Energy Development
	Population using natural gas	million people	180	250	6.80%	Expected		12FYP For Energy Development

Notes

¹ For more information on the difference between an 'expected' and 'binding' target see: "China's New Energy Consumption Control Target" <http://www.chinafaqs.org/blog-posts/chinas-new-energy-consumption-control-target>

² See: "12th Five Year Plan for Energy Development" http://www.gov.cn/zwjk/2013-01/23/content_2318554.htm (in Chinese)

³ "China announces targets on carbon emissions cuts" http://english.gov.cn/2009-11/26/content_1474008.htm

⁴ BP. 2013. BP Statistical Review of World Energy June 2013. (London: BP p.l.c.) Retrieved at: <http://www.bp.com/statisticalreview>

⁵ See: "Air Pollution Prevention Action Plan" http://www.gov.cn/zwjk/2013-09/12/content_2486773.htm (in Chinese)

⁶ China's coal use is projected to peak in 2020, see: <http://eaei.lbl.gov/publications/china-energy-and-emissions-paths-2030>

⁷ See: "Plan for Strengthening Energy Industry Air Pollution Prevention Work" http://www.ndrc.gov.cn/gzdt/201405/t20140516_611843.html (in Chinese)

⁸ See: "12th Five-Year Plan for Hydropower Development" <http://wenku.baidu.com/view/aa06291da8114431b90dd817.html> (in Chinese)

⁹ See: "China targets 20-percent growth in nuclear power installation" Xinhua. http://news.xinhuanet.com/english/china/2013-03/12/c_132227231.htm

¹⁰ See: "12th Five-Year Plan for Wind Power Development" <http://wenku.baidu.com/view/a1431281bceb19e8b8f6ba99.html> (in Chinese)

¹¹ See: "China to build more photovoltaic power stations" Xinhua. http://news.xinhuanet.com/english/china/2013-11/05/c_132861728.htm

¹² These numbers were calculated using the IEA's data on China's 2010 carbon intensity, the target in the 12FYP for Energy Development and the World Bank's data on 2005 exchange rates. For the IEA data see: <http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=91&pid=46&aid=31> For the World Bank data see: <http://databank.worldbank.org/data/home.aspx>

¹³ "China announces targets on carbon emissions cuts" http://english.gov.cn/2009-11/26/content_1474008.htm