

IEA's Medium Term Coal Market Report 2016

国际能源署《煤炭市场中期报告2016》

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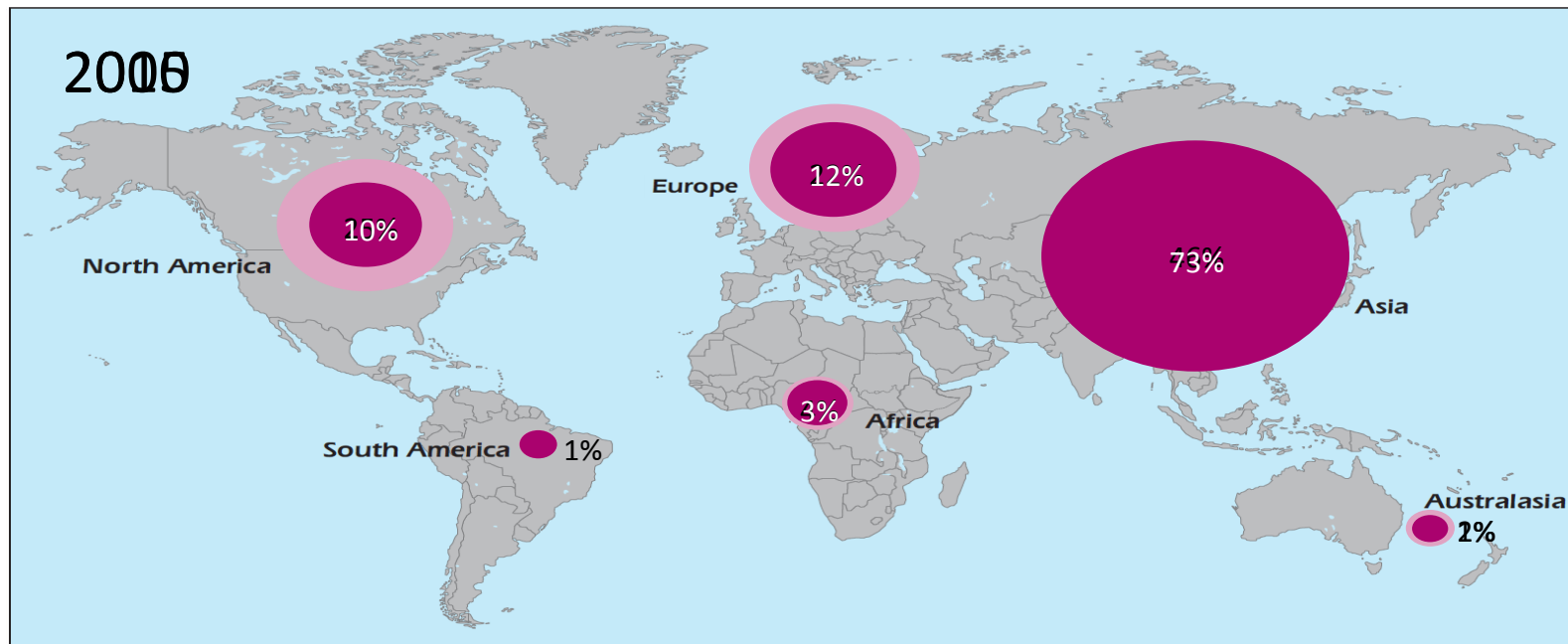
北京，2016年12月12日

Coal markets: recent developments 煤炭市场：最新趋势

- **Global coal demand declined in 2015 for the first time in this century**
2015年，全球煤炭需求在本世纪首次下降
 - *Coal demand drop in China and US in 2015 was unprecedented*
2015年，美国与中国的煤炭需求经历了前所未有的下降
- **China's coal demand declined in 2015 for the second year in a row**
中国的煤炭需求在2015年连续第二年下滑
 - *Last time this happened was 1981. Economic restructuring and energy diversification underpinned such decline* 上次这一情形发生还是1981年。而且，经济结构的调整与能源结构的多元化助推了这一下降趋势
- **International coal trade shrank in 2015 for the first time in 20 years**
2015年，国际煤炭贸易20年来首次萎缩
 - *There is none to offset declines in Europe, India and especially China*
没有任何国家能够抵消欧洲、印度、尤其是中国煤炭贸易的大幅下降
- **India, Australia and Russia increased production significantly in 2015**
印度，澳大利亚和俄罗斯在2015年大幅增产
 - *Despite low prices, cost reduction in Australia and Russia, and increasing demand in India were drivers for production ramp up* 虽然煤价走低，但是产量增加的主要推动力来自于澳大利亚与俄罗斯的成本削减，以及印度不断增长的需求
- **Coal prices ramped up in 2016 to unexpected levels one year ago**
煤炭价格在2016年上涨到一年前意想不到的水平
 - *Chinese supply side policy changes was the main driver, exacerbated by disruption in Australia and other places*
中国供应侧政策变化是主要驱动因素，澳大利亚及其他区域的供应中断也加剧了这一上涨

The shift of coal to Asia is accelerating

煤炭正在加速向亚洲转移

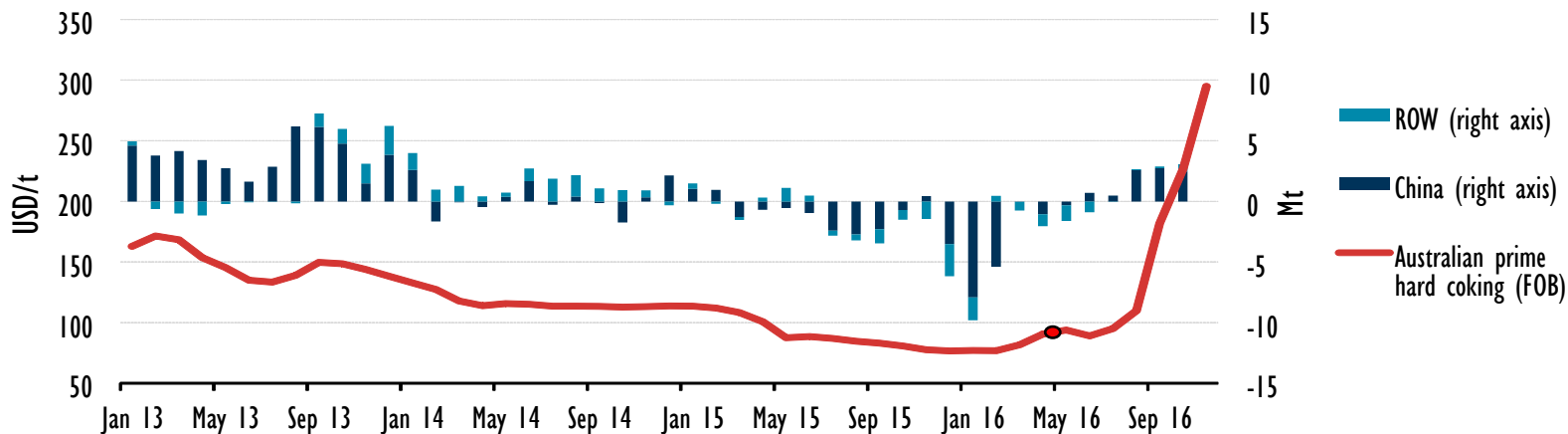


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- **Coal consumption has decreased in North America and Europe while increasing strongly in Asia**
北美和欧洲的煤炭消费量下降，而亚洲的煤炭消费量则强劲增长
- **The coal world is becoming completely asymmetrical**
世界煤炭版图正变得完全不对称

Coking coal prices: déjà vu? 炼焦煤价格：似曾相识？

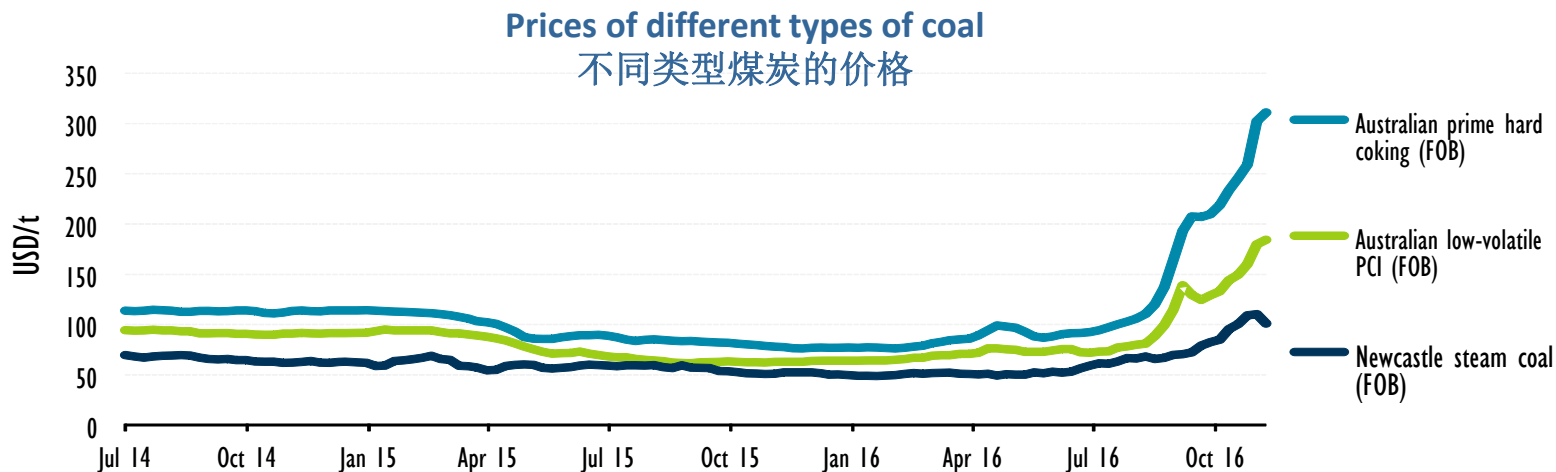
Coking coal prices and monthly year-on-year change in BFI production
炼焦煤价格及高炉生铁产量的月度同比变化



- **The 2010 spike was caused by floods in Queensland**
2010年的价格峰值是由于昆士兰的洪水影响供应
- **The 2016 rally comes with policy changes in China, exacerbated by some disruptions**
2016年的反弹则是由于中国政策的变化，而某些供应中断加剧了这一上涨

Prices increased for all types of coal

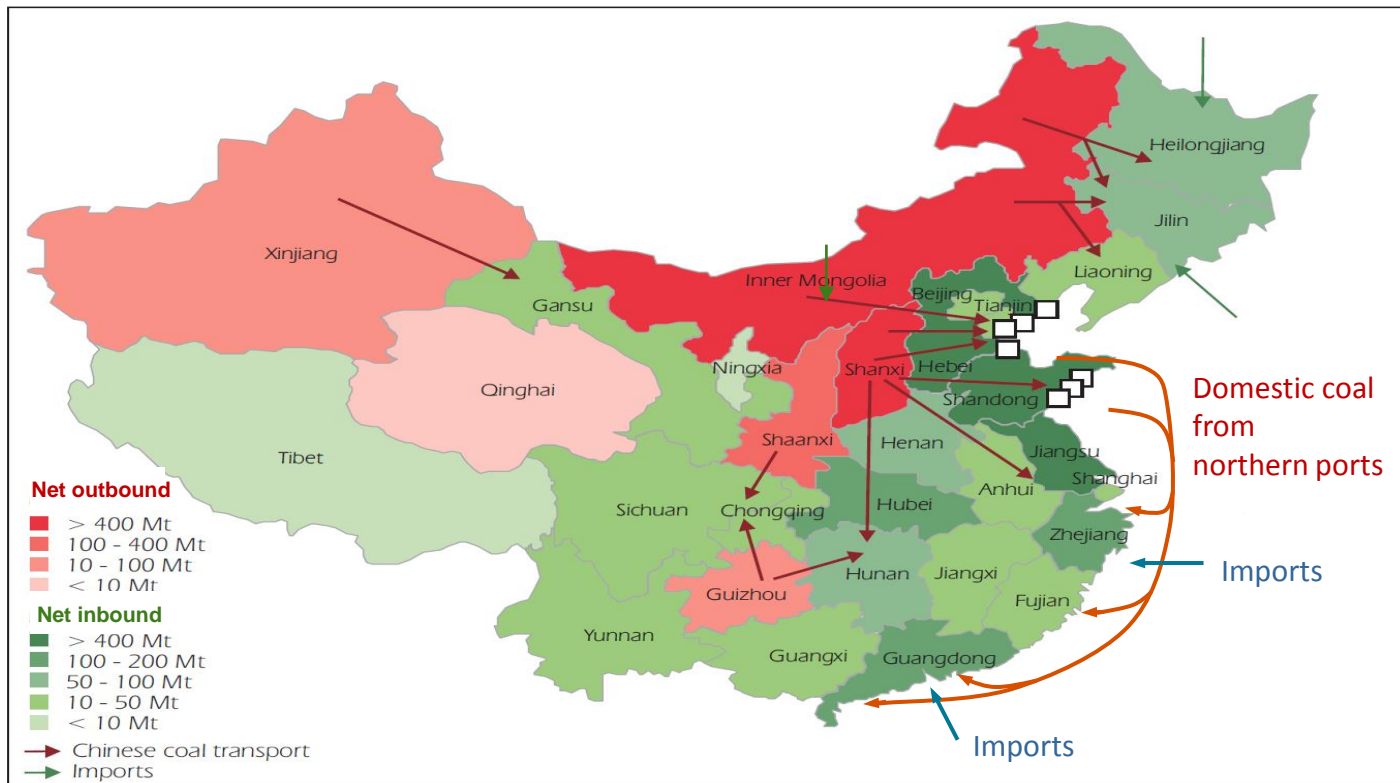
各种煤炭的价格都有所上涨



- **Thermal coal prices doubled mostly pushed by Chinese supply cut, but some disruptions also contributed**

动力煤价格翻了一番，主要由于中国供给减少，但也受到了其他供应中断的影响

Does China set the global prices? 中国决定全球价格？



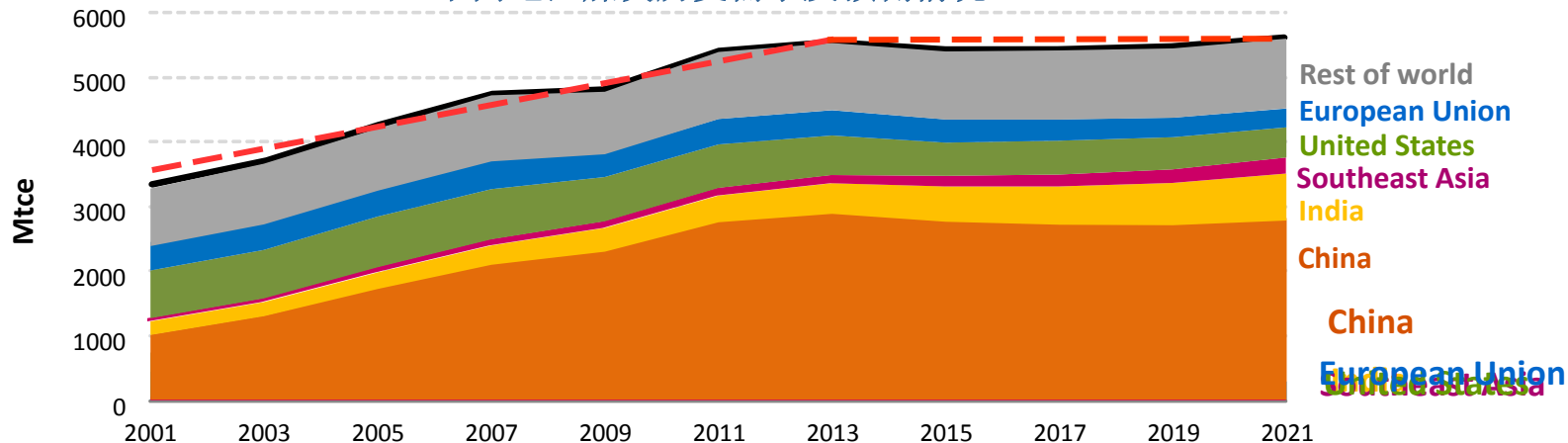
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- **The large arbitrage in the southern import ports between domestic and imported coal is key to determines prices – in China and elsewhere**
南方进口港在国产煤和进口煤之间的大规模套利行为是决定中国和其他地区煤炭价格的关键

Global coal demand: from growth to plateau

全球煤炭需求：从增长进入平台期

Historical and forecast coal demand by region
不同地区煤炭历史需求及预测情况

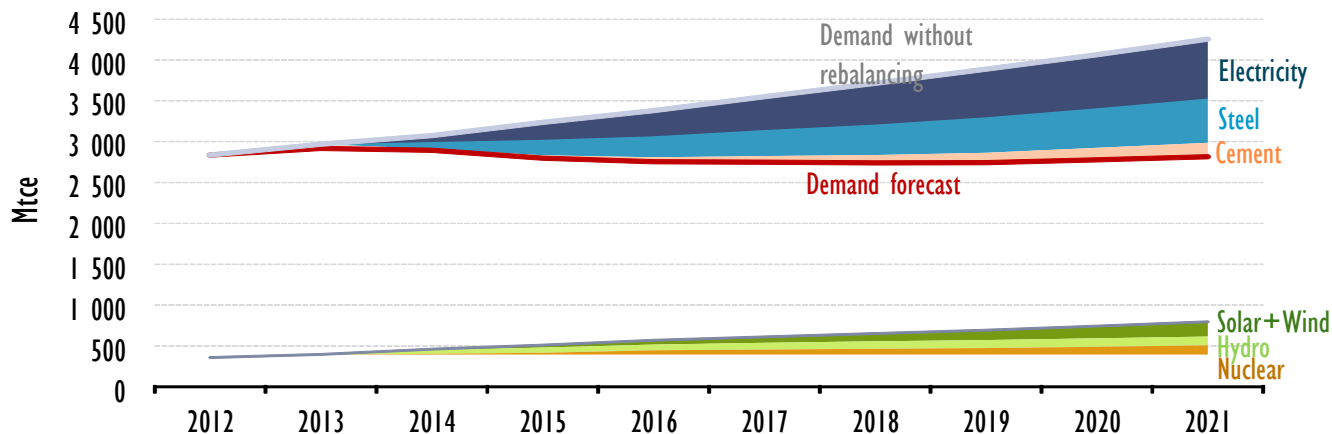


- **Largest growth will be in India and ASEAN region**
需求增长最大的将是印度和东盟地区
- **Largest decline will be in US and Europe**
需求减少最大的将是美国和欧洲
- **Largest uncertainty is China**
最大的不确定因素是中国

Coal consumption in China in the future: a flat trajectory

中国未来煤炭消费：趋于平缓

Impact of diversification and economic rebalancing on Chinese coal demand
能源结构多样化和经济转型对中国煤炭需求的影响



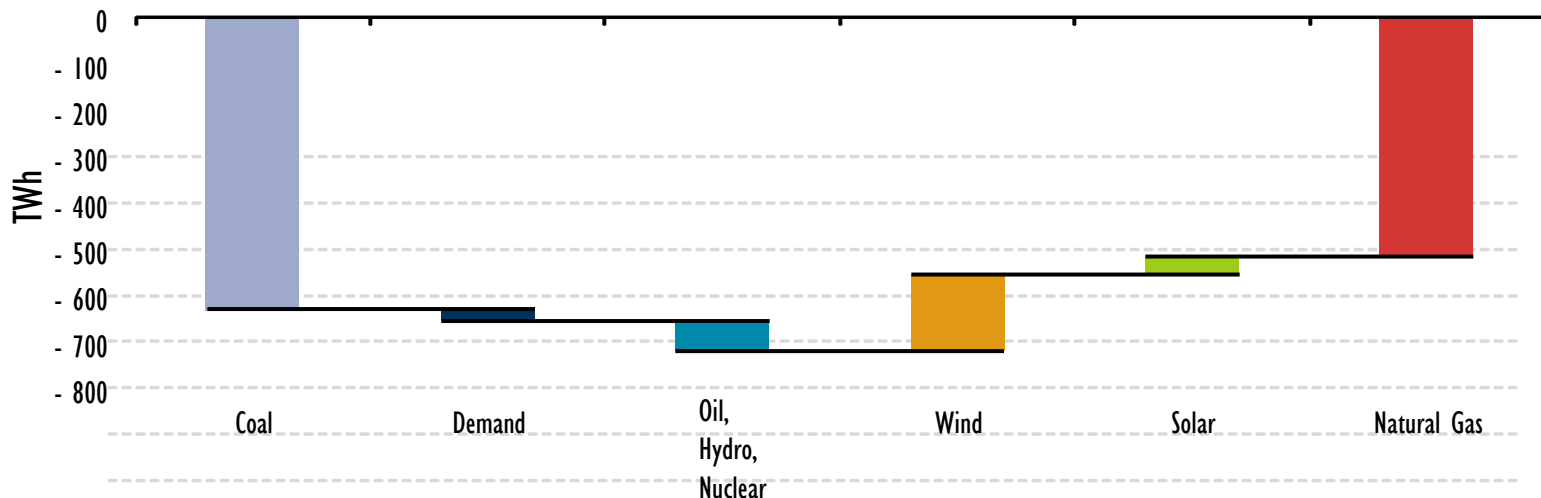
- **Rebalancing of the economy and the increasing share of generation from hydro, nuclear and other renewables flatten the projection**

鉴于经济转型和水电、核电及其它可再生能源发电比重的增长，对煤炭消费的预测趋平

Who is hitting US coal? 谁在打击美国煤炭行业?

2006–2015 change in power generation in the US

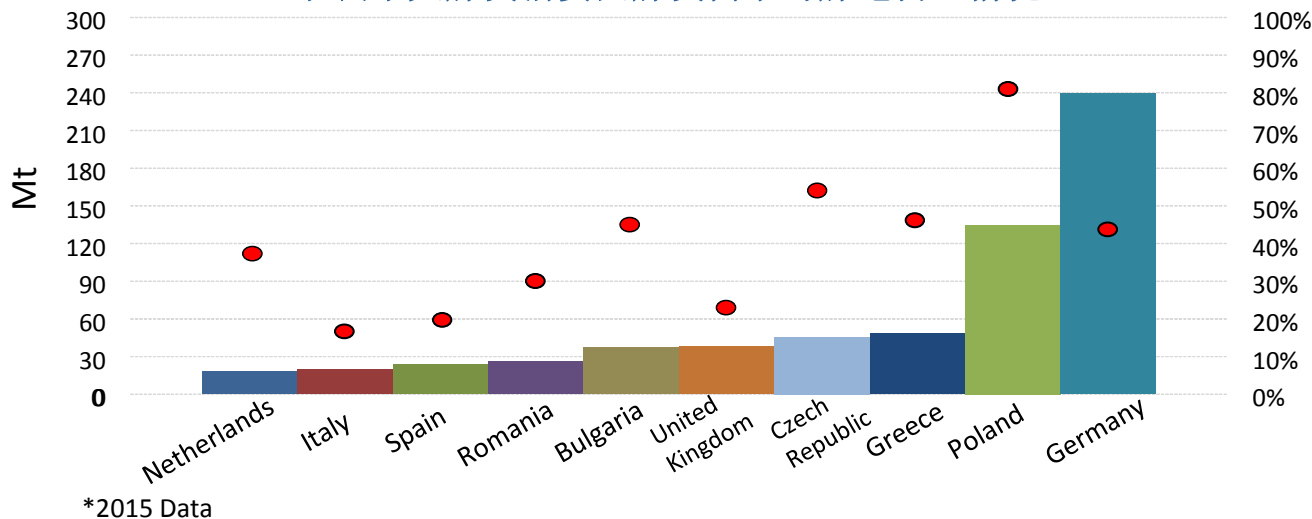
2006-2015年美国发电量变化情况



- **Coal power generation has largely been replaced by gas generation**
煤电大量被气电替代
- **But energy efficiency and wind were also significant**
能效的提高和风电的发展也有很大影响

A farewell to coal in Europe? 欧洲，向煤炭说再见？

Coal demand and share in power in the 10-largest consumers in the EU
欧洲十大煤炭消费国煤炭需求与煤电占比情况



- **Belgium was the last European country ending coal generation**
比利时是欧洲最新告别煤电的国家
- **But for others, things are far more complex**
但是对于其他国家，情况远为复杂

China: giving access to electricity 中国：提供电力可及性

Countries where coal plants have been announced or built by Chinese companies
中国企业已建或拟建煤电厂的国家



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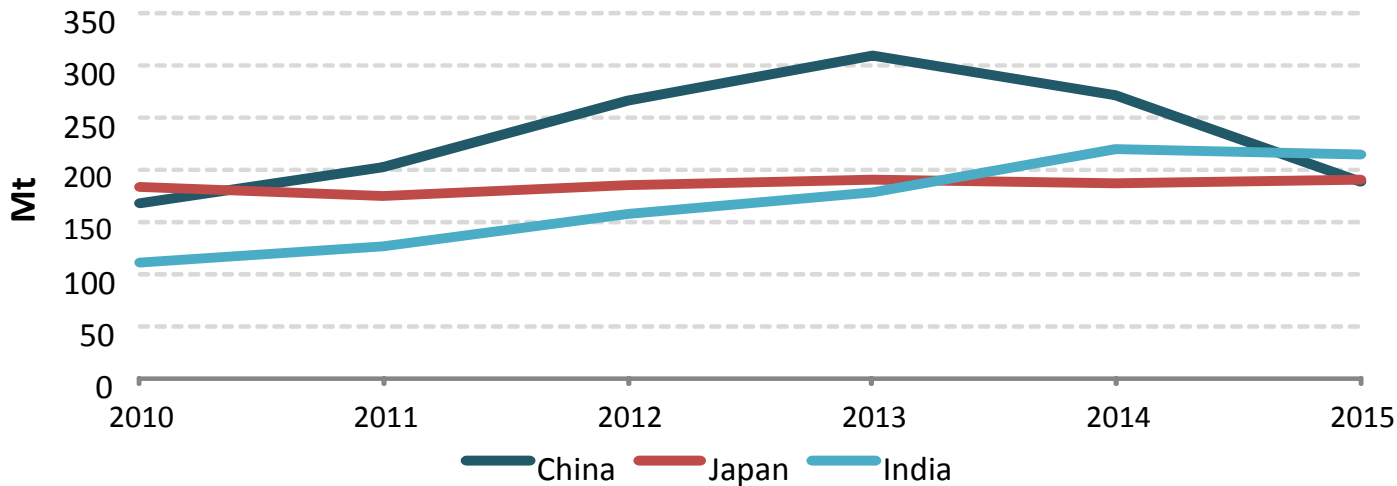
- **After successful electrification at home, Chinese companies are building new coal-fired power plants in numerous countries**

在国内成功普及电力后，中国企业正在许多国家建造新的煤电厂

Coal trade forecast: all eyes on China and India

煤炭贸易预测：焦点在中国与印度

Coal imports to China, Japan and India
中国、日本和印度的煤炭进口

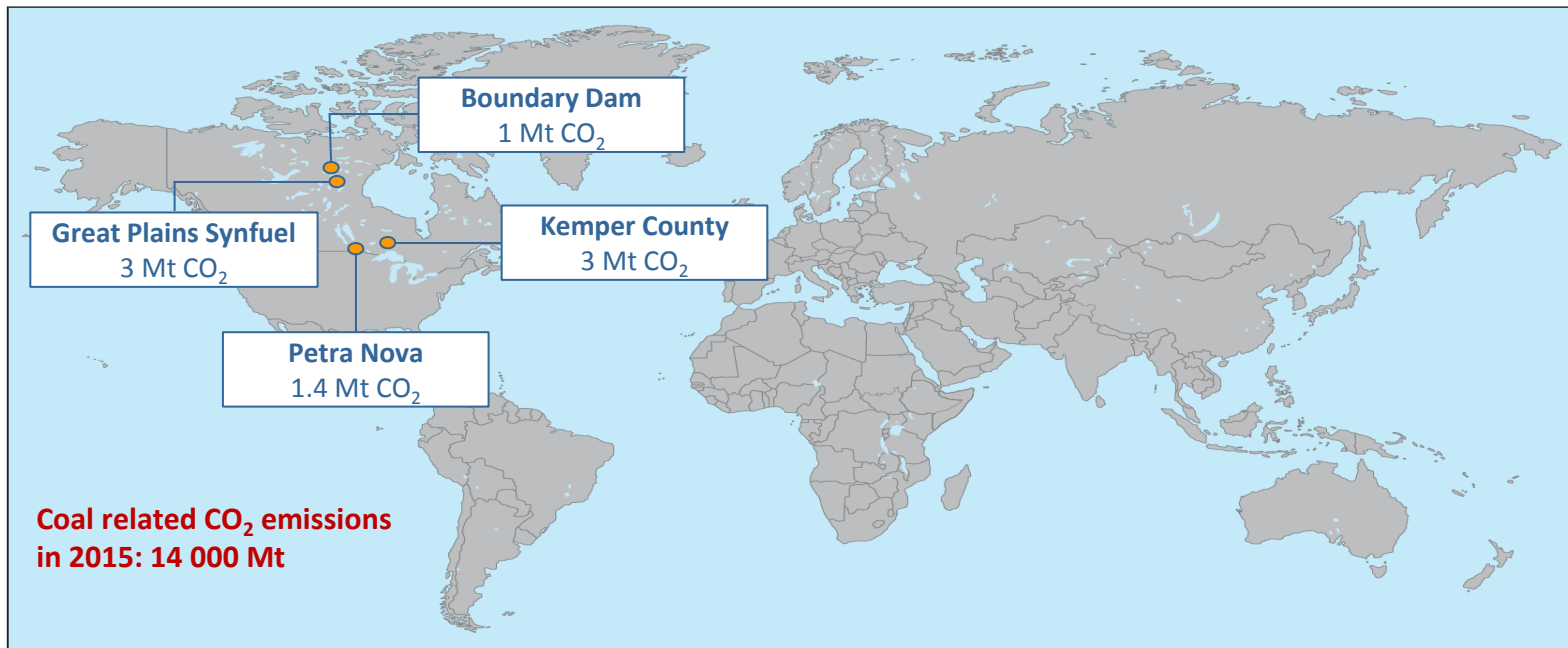


- Coal trade is forecast to recover by the end of the outlook period
煤炭贸易预计在展望期末恢复
- Imports to China and India will remain volatile and hard to predict
中国和印度的进口仍然波动较大且难以预测

CCS: few steps, no strides.

碳捕集与封存：进展甚微，踏步不前

Large-scale coal-based CCUS projects in the world
全球煤炭相关的大规模碳捕集、利用与封存项目



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- **Despite concrete progress on CCS, only 0.06% of coal-based CO₂ emissions are captured**
尽管CCS有具体进展，但只有0.06%与煤炭相关的CO₂排放被捕集
- **Strong action from governments is urgently needed** 亟需政府强有力的行动

Coal markets: the outlook 煤炭市场展望

- **Global demand growth to stall in the next coming years 未来几年全球需求增长停滞**
 - *With decline in Europe and US almost offsetting increase in India and ASEAN region, China will determine the global trends 欧美的下降抵消了印度和东盟的增长，中国将决定全球趋势*
- **In China, coal demand is in structural and slow decline driven by a new economic growth model and diversification from coal**

中国经济增长新模式与能源结构多样化推动中国煤炭需求结构性转变和缓速下降

 - *However, dependence on coal of China will remain and demand in 2021 is forecast higher than in 2015 然而，中国将继续依赖煤，2021的需求预计高于2015年*
- **Coal trade contracts, but recovers at the end of the outlook period**

煤炭贸易萎缩，但预计在展望期末恢复

 - *Viet Nam, Malaysia, Pakistan, Philippines, Morocco and other importers add up to increase coal trade 越南、马来西亚、巴基斯坦、菲律宾、摩洛哥和其他进口国将增加煤炭贸易*
- **Coal prices have strongly rebounded up in 2016. As a result, the coal industry has found some relief 煤价在2016年强力反弹，煤炭行业压力相应缓解。**
 - *Looking ahead, low costs, slugging demand and structural oversupply in China do not support high prices 长远来看，成本低廉、需求疲软及中国的结构性供应过剩不支持当前的高煤价。*
- **Despite concrete progress, CCS development requires stronger support and commitment by governments 尽管CCS有具体进展，其发展需要政府更强有力的支持和承诺**
 - *Without CCS deployment, coal's future is seriously challenged, but also our climate targets 没有CCS的部署，煤炭的未来和我们的气候目标都将备受挑战*

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