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Making Choices over China

Delivering EU Strategic Priorities with China on Climate,
Energy and Growth

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May 2011

- Broader Strategic Context
- EU-China interdependencies on Climate and Energy
- China's 12th 5 Year Plan
- China's Green Industrial Strategy?
- Strategic Choices for the EU and China

A Harder World to Manage



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- “Flattening” of global power structures – accelerated by global financial crisis; has made governance harder.
- US-EU-China (+Japan) are the global economic core but they cannot drive governance change without broader coalitions
- EU relates to China on global issues; US on global and regional issues. EU and US disagree on China as a security threat.
- US/EU plans for China 2030/2050; China sees itself as China 1990?

Climate Change and Energy exemplify these trends

Climate, Energy and Resource Diplomacy



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- Emerging economies' impact on global resources predicted since 1970's "Limits to Growth" report; "that's what poverty reduction looks like"
- There is no "business as usual" growth path or China would use 70% of global oil supply by 2030
- Links between energy, food, water and climate leading to "perfect storms" of volatility and instability: 2008, 2011, ?
- Chinese leadership highly aware of instability consequences of its resource import vulnerability
- All major powers claim adherence to rules-based access while investing in power-based hedging strategies

First casualty of poorly managed scarcity will be global rules

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More Common Interests than Conflicts?



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- EU (90%) and China (75%) will be major oil importers in 2030; high dependency on the Middle East, Russia and Central Asian suppliers.
- EU and China are vulnerable to climate change **but** China is more at risk domestically and Europe regionally
- Europe is the major investor and technology supplier to China; particularly in energy, transport and infrastructure
- European demographics require a growing China to fund pensions; Chinese demographics require it to move up the value chain to maintain GDP growth
- EU needs to maintain a rules based trading and security system

Europe requires a successful China that sees global-rules based system as essential for its security

Climate Vulnerability



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Climate Tensions/Climate Realities



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- To keep climate change below 2C - China must peak its emissions between 2020-2030 at the latest
- This is “unfair” based on historic emissions and per capita GDP but necessary to manage risks
- To avoid international monitoring China has rejected use of international climate funds under UNFCCC; still receives bilateral funding e.g. EIB, KfW
- Moving to low carbon economy would require China to pioneer new models in urbanisation and heavy industry
- Chinese leadership has yet to decide 2C is in their interest – especially given US unwillingness to take real cuts

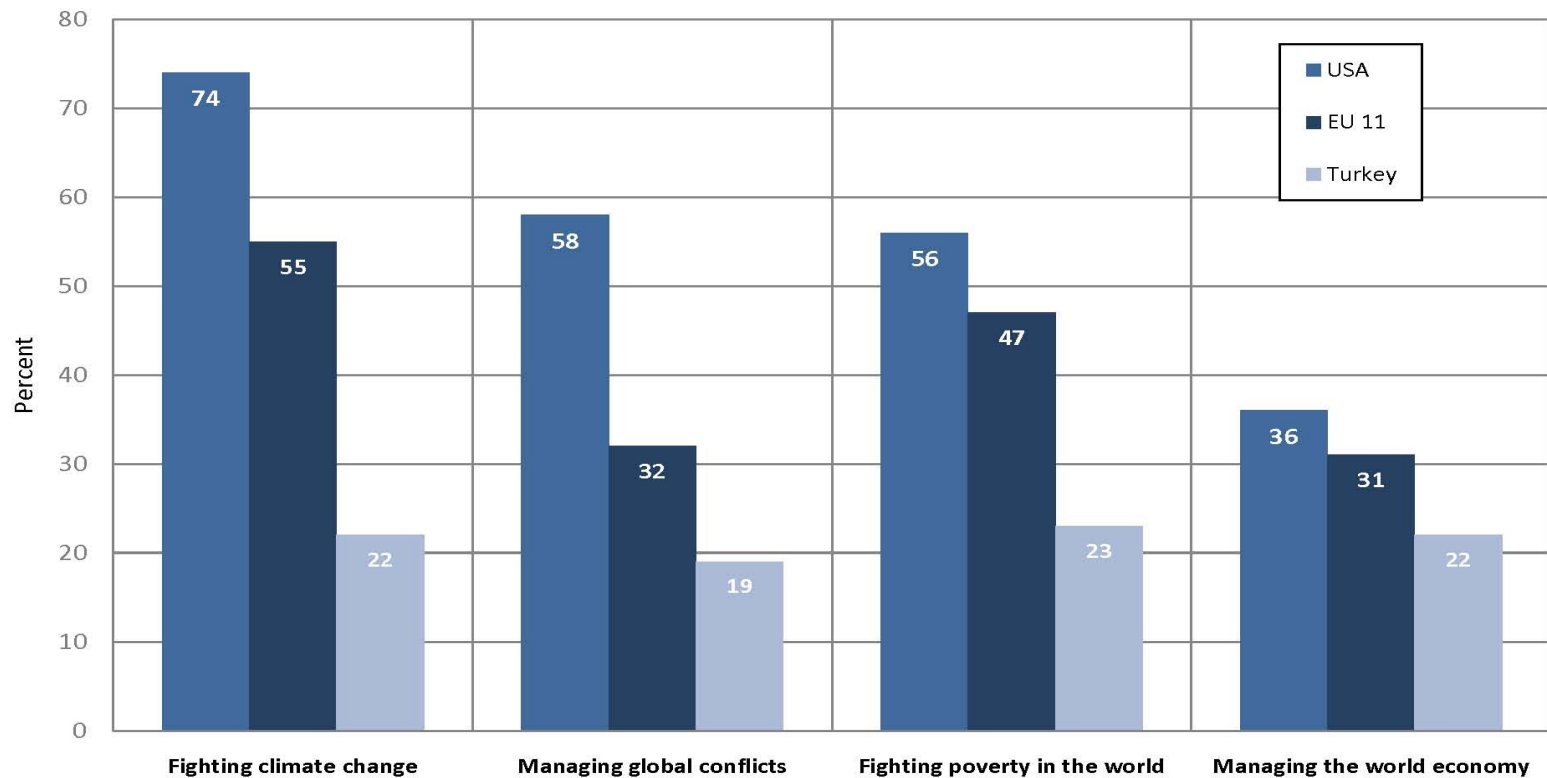
Heart of EU-China disputes at Copenhagen were differences over the fairness and economic feasibility of meeting a 2C trajectory

Perceptions of China as a Threat



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China Plays a Negative Role in the World



Q21.1: In your opinion, would you say that China tends to play a positive role, a negative role or neither a positive nor a negative role in the following.....

Trust and Confidence



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- Copenhagen was a diplomatic disaster for both China and the EU
- Resulted in a large increase in EU leaders' distrust of China's intentions and good faith
- European public sees China as a problem more than a threat; Europeans do not have an affinity to China
- Europe lacks confidence in its own climate diplomacy

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China's 12th Five-Year Plan (2011-2015)



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- Approved by the National People's Congress and the Chinese Political Party Consultative Conference on 14th March 2011
- More than mere political intent - delivering the Five-Year Plan (FYP) targets is a crucial source of political legitimacy for the Chinese leadership
- The Chinese economy is expected to grow by around 40% to \$8.47 trillion (€6.09 trillion) but its working population will peak in 2017
- The 12th FYP responds to this context by shifting from a focus on the quantity of growth to the quality of development

The greenest Five-Year Plan?



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There are seven binding environmental targets:

- 30% reduction in industrial added-value water consumption intensity
- 11.4% of non-fossil fuel in primary energy consumption
- 16% reduction in energy intensity
- 17% reduction in carbon intensity
- 10% reduction in sulphur dioxide and chemical oxygen demand; 8% reduction in ammonia nitrogen and nitrogen oxide
- 6% increase in forest stock volume compared to 11th FYP

Energy intensity target takes centre stage



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- Estimated that a 16% reduction in energy intensity will result in an 18% reduction in carbon intensity. CO2 emissions still grow.
- Emphasis on structural change: compared to 11th FYP, role of technology will be reduced from 70% to 60% while role of structural shifts increases from 17% to 30%
- Expansion of successful Top 1,000 Enterprises programme to 10,000 Top Enterprises programme
- Chinese emission reductions will be between 0.5-2.5GT CO2 in 2020; EU reductions are 0.5-1.1GT in 2020 depending on 20 or 30% target

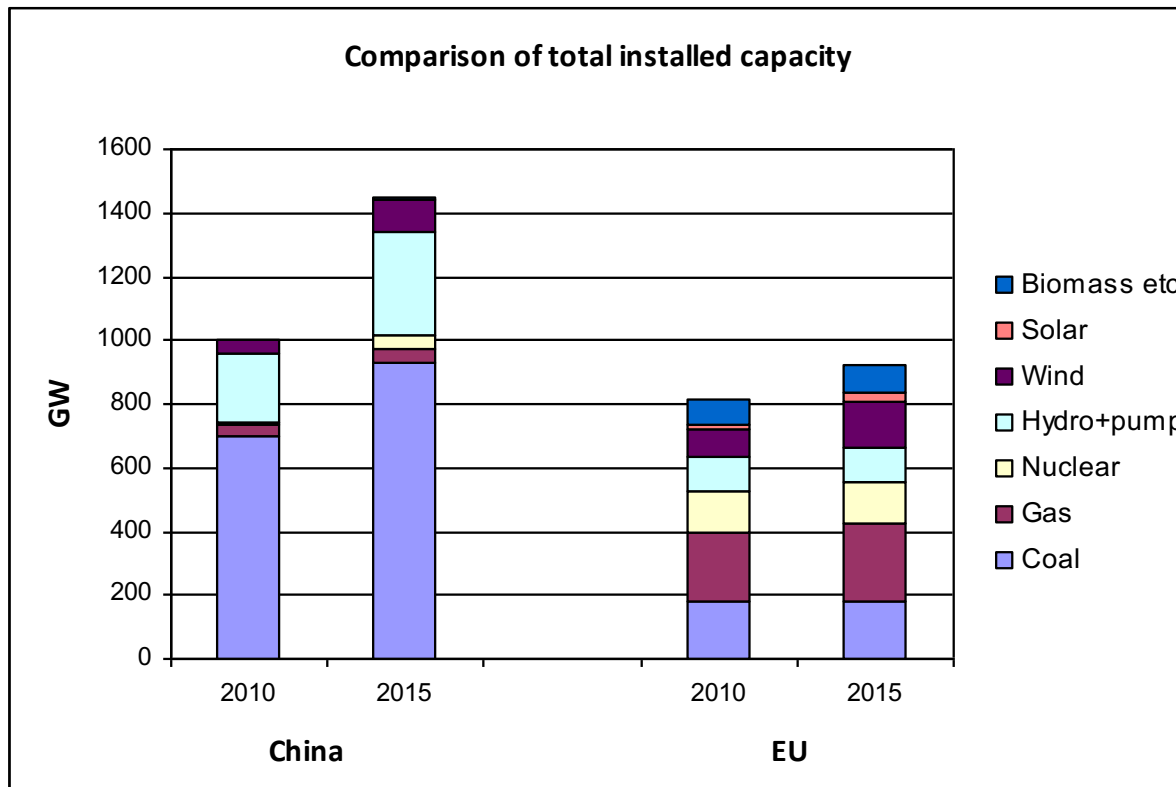
China will be a comparable or larger market than the EU for low carbon goods and services by 2020

Coal will remain the dominant fuel source



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Although coal consumption is will increase over the next 5 years, the government will put a cap on total coal production – 3.8 billion tonnes



Nuclear, hydro and wind power will dominate non-fossil fuel



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- Installed capacity of non-fossil fuel to grow to 474 GW, 33% of the total capacity (322GW RES in EU)
- Investment of 2-3 trillion yuan (€230- €340 billion) in renewables over the next 10 years
- Investment in grids (often using EU technology) will intensify to 'normalise' energy supply and demand and promote renewables uptake:
 - €57 billion in UHV Transmission (€23-26 bn needed in EU by 2015)
 - €460 billion on smart grids (€100 bn needed in EU by 2020)

China will match EU low carbon supply and surpass in strategic grid investment. Chinese goals are fully funded; EU goals are unfunded.

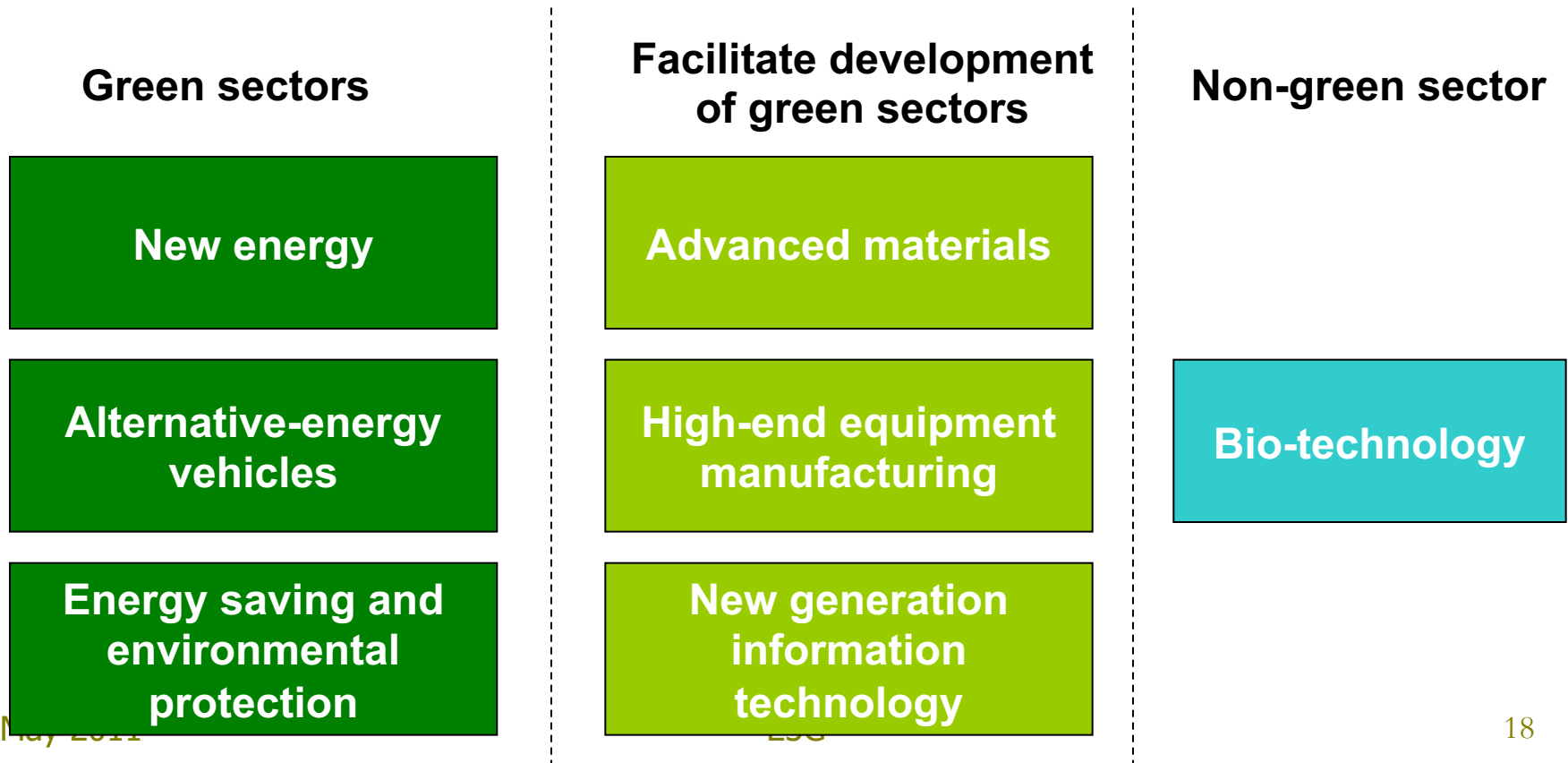
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China's new 7 'pillar' industries



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Low carbon is at heart of China's move towards higher value-added sectors – new industrial strategy aims to increase capacity and competitiveness of Chinese companies and turn them into global players



Massive public investment in new industries and clear innovation strategy.



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- Total value-added output of the new industries is expected to account for 8% of GDP by 2015 and 15% by 2020
- **State development banks** will use public investment to leverage hundreds of billions of euros of extra investments from both the private sector and local governments. €570bn govt funding for new energy sector.
- Other supporting measures include **research and development** (China aims to spend 2.2% of GDP on R&D by 2015) and
- **Large scale demonstration projects** to accelerate technology deployment and diffusion – **low carbon pilot zones** covering 8 cities and 5 provinces (over 350m people) provide testing hotbeds for new technologies and policy. Purchasing preferences for Chinese firms.
- Government support for **mergers and acquisitions of overseas companies** in strategic technology sectors.

Clean(er) coal, wind power and electric vehicles are winners



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- China already has home grown clean coal technologies – ultra supercritical coal power plants and integrated gasification combined cycle (IGCC); currently has 3 small scale carbon capture and storage (CCS) demonstration plants
- China will build 8 major GW wind power bases – wind installed capacity to reach 100 GW by 2015. Compulsory purchase of renewables by grid companies and differentiated pricing (FIT) for wind power. Stricter wind turbine performance standards to promote industrial consolidation
- China already has the world's largest electric vehicle charging network. €11.5 bn of government investment in alternative energy vehicles by 2020; annual sales of 1 million alternative energy vehicles by 2015 (500K electric vehicles by 2015?).

China vs the EU Policy Environment



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- China is converging on the EU in terms of market scale and has aspires to compete in high tech areas by increasing market driven approaches
- China is integrating its growth, energy security and climate change policies at the same time as EU is fragmenting its approach
- China is backing its plans with large scale public investment in RD&D and infrastructure while EU plans remain unfunded (SET Plan and priority supergrid investments).
- China is growing domestic low carbon markets in order to support new industries while EU is lowering market incentives by not shifting to 30%

China faces huge challenges in reaching its goals but the EU is failing to build on its current lead in the low carbon race

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Successes of EU Climate Diplomacy?



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- Annually EU countries spend €60m on bilateral co-operation and €1.5 billion through Clean Development Mechanism in China
- China has committed to moving to a low(er) carbon economy; growing opportunities for European technological leaders
- Industrial modernisation in Chinese 12th 5 Year Plan is based on the assumption of global growth in clean energy markets
- By 2015 China will have larger markets and innovation support than the EU in renewable energy, electric cars and modern grids
- China is becoming a major investor in EU clean technology companies

Chinese focus on clean energy will accelerate global decarbonisation by lowering prices but presents real competition to EU companies

Challenges of China's low carbon race



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- Europe will face growing competition in green sectors, but there are limits to China's innovation and high-tech capacity in short term
- China may become a market leader in low carbon economy by dominating bulk clean technology market for developing countries, and setting technology standards
- China's domestic innovation and clean technology support policies may increase barriers to entry into low carbon markets
- Aggressive expansion of M&A by Chinese companies could further erode the shares of European companies in the global clean technology market, and is raising protectionist responses

Carbon Leakage is a Distraction



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- In 2008 high energy merchandise made up 8% of Chinese exports to the EU and 20% of EU exports to China.
- China represents 18% of EU steel imports; China produces 50% of global cement and exports 1% of this.
- Increased shipping costs in 2008 alone added implicit €50-150 per tonne carbon tariff to Chinese steel and cement exports
- China's growth strategy is not based on high energy commodity exports to Europe; real competition is from Russia, Gulf States and Turkey

EU priority should be managing growth of low carbon trade and investment with China not discussing border taxes

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- Barriers and (mis)perceptions
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- EU and China have some aligned long term interests on climate, energy and resources but these don't automatically lead to cooperation
- EU's key influence on China has been through its domestic climate policy and through shaping UN climate agenda
- EU cooperation in China has had low political impact and low delivery in key areas e.g. CCS demo in planning since 2005
- Europe needs China to see that raising its domestic ambition onto a 2C trajectory is in its national interest by 2015

European engagement needs to be more consistent, high-level, targeted and backed with strategic cooperation (and delivery!)

EU Strategic Goals with China?



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1. A China that believes that the global rules based system will maintain its resource, energy and economic security
2. China deciding by 2015 that shifting to a 2C consistent emissions pathway is in its national interest
3. EU-China agreement to a strategic agenda to maximise the mutual benefits of EU-China trade and investment in low carbon goods and services

Agenda for EU-China Engagement



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Demonstrating decarbonisation

- Negotiate successor to CDM mechanisms
- Aligned EU support for Chinese Low Carbon Zones (350m people!)
- Deliver EU-China CCS demo plant
- Real technology co-development in FP7 and SET Plan

Managing costs and benefits of action

- High level agreement on maximising benefits of low carbon growth: cooperation on standards; “peace clause” on WTO actions over low carbon subsidies; low carbon free trade and investment agreement?

Building a broader agenda

- Open talks on energy security around Russia, ME and Africa



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Thank You!

More information at www.E3G.org