



A SURVEY BY WWF'S TRADE AND INVESTMENT PROGRAMME 彭磊 - PENG LEI, 龙柏金 - BAIJIN LONG AND DENNIS PAMLIN APRIL 2005



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This report is the first of a series of studies by WWF's Trade and Investment Programme. The project of which it is a part aims to identify and work with actors in key emerging economies (China, Brazil, India, Russia and South Africa) to champion international sustainable trade and investment. The project examines the scope for these countries to become leading exporters of, and investors in, sustainable goods and services, whilst emerging as key actors in promoting a proactive international sustainable development agenda.

For more information see: www.panda.org/investment or email: trade@wwfint.org

EXECUTIVE SUMMARY

This report is based on a survey of 182 of the largest and most important Chinese companies. WWF would like to highlight the following summarized results and outline possible steps forward.

RESULTS

- 1. A significant minority (22%) of Chinese companies say they are going beyond current regulation and some (13%) are even suggesting tougher rules. Many of these companies also have concrete suggestions that could help China become a leader in the provision of sustainable goods and services, not only in China but also for the rest of the world, and thereby move beyond the existing CSR discussion.
- 2. While one group of companies takes environmental issues seriously and is proactive, a large group could be described as almost hostile to environmental issues and do not even want to engage in discussions. 39% of respondents said "many" or "very many" Chinese companies were breaking the law, and 57% said companies were trying to lower standards.
- 3. There is a need to develop domestic solutions that support export of products and services that help the environment, according to 78% of the companies surveyed.
- 4. 85% think traditional Chinese philosophical concepts like "union of nature and man" could help both Chinese and foreign companies become more environmentally friendly. 96% thought that the "circular economy", a modern concept used widely in China today, also could be of help.
- 5. 85% of the companies said there is a need for stronger rules for environmental reporting, transparency and monitoring for large companies. Only 2% said there wasn't and 13% said they didn't know.
- 6. 53% said they would be willing to engage with NGOs like WWF in discussion about how sustainable development can be promoted, even though NGOs are not yet key actors in China and for many Chinese companies the idea of policy work with NGOs is new.

POSSIBLE STEPS FORWARD

Chinese companies:

- 1. Companies that want to contribute to sustainability could work with government and NGOs to ensure that an overarching investment and export framework is developed that supports sustainable development.
- 2. Companies with sustainable goods and services for export could collaborate with the government and NGOs to develop export strategies, starting with a limited number of sectors.
- 3. Progressive companies could choose a limited number of concrete projects for potential use in China and abroad, implement these and communicate the results to key stakeholders. Any such projects should be linked to the core business of the company and not be philanthropic.
- 4. Companies that want to contribute to sustainable development could use important forums to highlight key areas and ways of moving forward within them. In China, forums like the BOAO forum for Asia, the China Beijing International High-Tech Expo/China Economic Summit, the China International Fair for Investment & Trade, China–ASEAN EXPO and the Chinese Export Commodities Fair (Canton Fair) provide opportunities to communicate new ideas and concrete actions for sustainable development.

The Chinese government and authorities:

- A process could be initiated to support proactive companies and ensure
 the rest don't lower environmental standards and give Chinese products a
 bad name on the international market. This process could include:

 A. Incentives, including financial ones, for sustainable initiatives. Companies that go beyond existing regulation should be rewarded accordingly.
 B. Disclosure of basic environmental information, preferably in line with
 international standards such as Global Reporting. Existing laws must also
 be complied with. Progressive companies must be given the opportunity
 to clarify where reporting needs are most acute. Companies that don't follow the rules could be exposed on a national website.
- 2. The Chinese government could encourage partnerships between Chinese companies and NGOs to support export of sustainable goods and services. A work programme with clear targets could be explored and implemented during 2006. This would explore the role of procurement in the importing countries of the EU, the US and Japan.

- 3. The Chinese government could explore how relevant Chinese concepts can be incorporated into the regulation framework. As China grows and Chinese companies invest abroad and increase exports, there is a need to involve indigenous thinking on sustainability.
- 4. Government, business and NGOs should ensure that polarisation over the environmental issue does not get worse. Companies dragging their feet in China cannot be allowed to disrupt sustainable development.
- 5. Definition and promotion of sustainable investments must be explored. This could be linked to work with green GDP. Green investments are a prerequisite for green GDP and a circular economy.

Foreign governments and companies:

- 1. For each of these recommendations, foreign governments and companies could support Chinese companies taking the lead on sustainable development.
- 2. Foreign governments could change their domestic rules and regulations in order to support the import from China of sustainable goods and services. Governments should also use public procurement to support sustainable development in China.
- 3. Foreign companies could investigate their supply chains and their Chinese customers to ensure that they are supporting progressive actors in China.

IMTRODUCTION

China is one of the most rapidly changing countries in today's global economy. Some estimates suggest that it could be the world largest economy within 40 years. The country is now in the process of radically reforming its economic regulations. The shape that these regulations finally take will be crucial for the future not just of the economic development in China, but also globally. There are several economic factors that are of particular importance to those concerned to see China emerge as a global leader for sustainable development:

Economy: In 2004, national GDP stood at 1,645 billion US dollars and GDP per capita at 1,265 US dollars.² In 2003, China's GDP was the seventh largest in the world.³ It is easily forgotten that China was the world's largest economy throughout much of recorded history, and as recently as the mid-19th century. The indications are that this will again be the case within a few decades.⁴

Trade: China is now the world's third-largest trading nation, behind only the United States and Germany. The total value of imports and exports in 2004 reached 1,154.7 billion US dollars, up 35.7% over the previous year. The value of export was 593.4 billion US dollars, up 35.4%, and the value of imports was 561.4 billion US dollars, up 36%. As a result, China had a trade surplus of 32 billion US dollars, or 6.5 billion US dollars more than in 2003. During 2004, Shanghai was reported to have overtaken Rotterdam as the world's leading port in cargo throughput, handling 382 million metric tons.

Since 1995 the Chinese Yuan Renminbi (CNY) has been pegged at 8.3 to the US dollar. Investment: Inward flows of foreign direct investment (FDI) to China reached 53.5 billion US dollars in 2003, displacing the United States as the world's largest recipient. This growth continued during 2004 totalling 60.6 billion US dollars, a 13.3% increase over the previous year.

Standards: China is setting the standard in a number of areas, both alone and together with other actors. 9

New actors: A rapidly developing economy is also giving birth to a host of new actors with innovative ideas for the future. The business sector is one area where a host of new actors are emerging. Fourteen mainland Chinese companies were among the 2004 Global 500 companies listed by Fortune. ¹⁰ This had increased from just three companies a decade earlier – a trend likely to continue. ¹¹ The fact that during 2004 China had three of the 10 biggest tech IPOs, and the two IPO companies with the largest year-end gains, is telling. ¹²

Innovative sustainability: Ideas on sustainability are emerging in China – drawing both on traditional concepts and new thinking. As different actors in China become more important on the global scale, so will the concepts that influence them.

Regulatory environment: The regulatory environment which will determine the trajectory of the Chinese economy – the frameworks governing trade and investment flows, for example – is developing rapidly; presenting the opportunity to shape such frameworks to address long-term sustainability concerns. ¹⁴ Key figures in the Chinese government have stated that "mergers and acquisitions will become one of the focal points of China's state-owned economy." ¹⁵

We should not underestimate either the challenges or the opportunities of rapid development in China. If China develops by reasonable conservative estimates, by 2040 it will have around two and a half times the GDP of the US today. The consequences, assuming traditional means of industrialisation, are challenging.

The International Energy Agency (IEA) estimates that the carbon emissions in China will exceed those of the United States by 2020 since, if it follows a traditional path, China's energy consumption will more than double in 20 years. This is mainly the result of coal burning and rapid motorization.

About 77% of Chinese energy is provided by coal. Even if that fell to 67% in 2020, China would still burn twice as much coal as it does today. To Coal-use worldwide is projected to increase by 2.3 billion short tons between 2001 and 2025... In the developing world... larger increases in coal use are projected for China and India, where coal supplies are plentiful. Together, China and India account for 85% of the projected rise in coal use in the developing world and 70% of the total world increment in coal demand over the forecast period. Together, China and India account for 85% of the projected rise in coal use in the developing world and 100% of the total world increment in coal demand over the forecast period.

Turning to the transport sector we can see that "China expects to have 140 million automobiles plying its roads by 2020, seven times more than now, fuelling demand for transportation infrastructure and services....Li Xinghua, deputy director of the Communication Ministry's Comprehensive Planning Department, predicted that China's auto population would eventually reach around 250 million, or about 150 cars per 1,000 people." Such growth by 2020 would make China's auto fleet larger than the US today. If automobile ownership in China were to reach the US level of 0.77 cars per person (three cars for every four people), China would have a fleet of 1.1 billion cars in 2031. This is more than all the 795 million cars on the planet now. 11

China's growing need for energy will have all sorts of consequences, not least for security policy around the world. The CIA, for example, has said that: "Beijing's growing energy requirements are likely to prompt China to increase its activist role in the world – in the Middle East, Africa, Latin America, and Eurasia. In trying to maximize and diversify its energy supplies, China worries about being vulnerable to pressure from the United States which Chinese officials see as having an aggressive energy policy that can be used against Beijing."²²

Below are some snapshots of what different experts foresee when it comes to China's demand for other natural resources beside fossil fuel. Together they give us an idea of what we have to address in the years to come:

"By 2020, China will not be able to supply itself with oil, iron, steel, aluminium, sulphur, and other minerals."²³ In 2003 China accounted for two-thirds of global increases in nickel demand.²⁴

"In 2003 China acquired an estimated 17% of global metals output, in addition to its own stocks, and increased its consumption of metals by a quarter during that period." ²⁵

"The natural resources of China are not especially abundant, at least in per capita terms. Water resources amount to 2,400 cubic meters (m3) per caput per year. This modest supply (less than a third of the world average) is expected to drop to 1,800 m3 in 2025 (based on the UN medium population projection). It must also be considered that the supply is heavily concentrated in the sparsely populated south-west of China. With increasing water use by agriculture, industries and cities, inland resources are overextended. More than 200 major cities lack adequate water, and some 50 of them face acute shortages."26

"China has already become the world's importer of chemicals, predicted to account for 40% of the rise in global chemical demand between 2003 and 2006."²⁷

"Within the coming year, China looks likely to overtake the US as the world's single biggest consumer of aluminium. The country has more aluminium smelters than the rest of the world put together, but many of these are antique and small." ²⁸

"According to BHP Billiton the recent jump in demand for iron ore from China is 'the greatest in living memory'."²⁹ "Globally it is also the biggest consumer, as imports doubled between 1999 and 2002."³⁰ "The company is confident that the world's most populous state will account for 37% of global demand for sea-borne iron ore by 2007 – as much as Europe and Japan combined, representing 'a profound change in market structure'."³¹

"Current forecasts suggest that by 2010, China will consume 45% of the world's iron ore production and 35% of the world's zinc." 32

China's import demand for forest and wood products is now the largest in the world (from seventh to first in the last five years) with over 110 million m3 in 2004 (45 million m3—roundwood equivalent). "China will produce 114 million cubic meters of industial roundwood in 2010. This would mean that China would have to import 125 million cubic meters (RWE) in 2010 to satisfy our estimate of demand for wood for domestic consumption and re-export." "34

The problem with most scenarios is that they take for granted that China will pursue a model of economic growth analogous to that of today's industrialised countries, with corresponding intensification of environmental impacts. ³⁵ If we are to reach sustainable development it is however obvious that we need to find another path.

SUSTAINABLE DEVELOPMENT AND THE ENVIRONMENT IN CHIMA

THE EVOLUTION
OF CHINESE
COMPANIES

Modern Chinese companies are a late creation in comparison with their western counterparts. Before China adopted open policies in 1978, most Chinese companies were either state-owned or, to a lesser extent, collectively owned.³⁶ Today these companies are described in China as neither independent nor innovative. "They received production quotas from the government, which would purchase and sell the products on their behalf and the profits would also be allocated and distributed by the government in a unified way. Enterprises are highly reliant on the government. The operation mechanism of such enterprises was immobile and stiff with extremely low efficiency."37

In the past 25 years, consistent with China's overall economic reform, Chinese enterprises have undergone fundamental change. This includes the delegation of more autonomy to enterprises, increasing separation of government and enterprise, separation of the "two rights" (ownership and management) and the introduction of contract responsibility. Since 1994, the Chinese government has pursued "clearly established ownership, well-defined power and responsibility, separation of enterprise from administration and scientific management." Enterprises are responsible for their own profit and loss, and are regulated by the market.

China has established a mixture of corporate systems, including state-owned companies, share-holding companies, private companies and companies partly owned by foreigners. The total number of registered companies in 2002 was 181,557.40

THE MAJOR COMPANIES IN CHINA

China's top 500 companies are playing an increasingly important role in the economy. In 2003, total turnover accounted for just over 77% of GDP, up 9% from 2002. Increasingly, private companies are entering the top 500, accounting for nearly 15% in the 2004 ranking, compared to nearly 4% in 2002.

Large companies are also growing rapidly. In 2002 the turnover of the bottom company on the top 500 list was RMB 2 billion (0.24 billion US dollars); in 2003 it was RMB 2.5 billion (0.30 billion US dollars); and in 2004 it reached RMB 3 billion (0.36 billion US dollars). In 2004, the largest 15 companies recorded a turnover of more than RMB 100 billion 43 (12.05 billion US dollars).

There were 14 Chinese companies in the Global 500 ranking in 2004, up from 11 in 2003 (excluding Hong Kong and Taiwan).⁴⁴ In 2004 these companies enjoyed 15.74% higher sales growth than the average for the Global Fortune 500.

There is a marked disparity in terms of globalisation and brand between leading world companies and Chinese ones. ⁴⁵ Chinese companies have started to purchase foreign companies to market products under well-known names. ⁴⁶

The Chinese top 500 list is very dynamic. In 2003, 112 new companies entered the list; in 2004, there were 101 new companies. 47 This points to both a rapid change in the business environment and corporate operation, and reflects high growth rates.

China's top 500 are dominated by the secondary sector; manufacturing industries, including utilities and construction, accounted for 367 companies. The tertiary sector, consisting mainly of service industries, comprised 110 companies. Only four companies from the primary sector (agriculture, fisheries and forestry) are listed.

Geographically, there is a marked disparity between the coastal regions and the less developed western regions. 386 companies of the 500 listed are based in the coastal areas, with merely 64 from central China. 50 companies are based in the western region, and these – 10% of the 500 listed – have lower than average turnover and profit. 48 These figures emphasize the challenge of achieving economic development nationwide.

While the top 500 covers around 33 sectors, there is a concentration in such sectors as energy (oil, gas and power generation), iron and steel, electronics and telecommunication, banking, automobiles, engineering and construction, and transportation. The top three companies are all from the energy sector: State Grid Corp, CNPC and Sinopec. The banks lead in terms of asset value, while the oil and gas companies and telecommunications operators enjoy the highest profit margin.

Of the 500 companies listed for 2004, 18 are loss-makers.

So while the top 500 list gives us a snapshot of today's situation, many new companies have yet to appear on the list. Some may soon emerge as amongst the most influential – especially in the service sector. ⁴⁹ It is no coincidence that Chinese companies dominate 2004's new IPOs. ⁵⁰

AN OVERVIEW
OF CSR
ACTIVITIES
IN CHINA

While corporate responsibility for national and global environmental problems is a recent issue to emerge in China, there are a number of initiatives that should be noted.

The China Enterprise Confederation (CEC) and the China Business Council for Sustainable Development (CBCSD) have launched initiatives to promote CSR in China, including several important events. ⁵¹ The Chinese Institute of Certificated Public Accountants cooperated with the Administrative Centre for China's Agenda 21 (ACCA 21) and held a seminar on corporate governance and CSR in March 2004, promoting the integration of financial reporting and CSR. ⁵²

A number of universities have also engaged with CSR issues. With funding from the Ford Foundation, Renmin University is arranging a series of research projects and seminars. Hohai University is cooperating with the World Bank and the ADB to promote socially responsible assessment of Chinese engineering projects. In 2000 a collaboration between the World Resources Institute and the China's Center for Environmental Education and Communications (CEEC) of the State Environmental Protection Administration (SEPA) brought the BELL (Business, Environment, Learning, and Leadership) programme to China. The BELL programme aims to promote the commercialisation of environmental technologies and policy tools around the world. In China the programme is active at Guanghua School of Management at Peking University, the School of Economics and Management at Tsinghua University and the School of Business at Renmin University.

There are also informal student initiatives on CSR. For example, a group of graduate students at Tsinghua University maintain a blog on CSR. ⁵⁵

CSR is also of ever greater interest to the Chinese media. Southern Weekend, an influential Guangzhou-based newspaper, is promoting the China Annual Magnate Ranking, which includes a CSR criterion. ⁵⁶ Several environmental journalists are closely engaged with CSR issues via avenues like the China Forum of Environmental Journalists. ⁵⁷

The programme of Leadership for Environment and Development International (LEAD) has conducted a series of CSR research projects in China, with assistance from the UK Department for International Development (DFID). ⁵⁸ Most recently, this has led to current efforts on the part of LEAD China to establish a CSR database in China. ⁵⁹ LEAD's CSR work has focused mainly on the social rather than the environmental dimension of CSR, and thus complements the environmental work of WWF.

FROM MARGINAL IMPROVEMENTS TO NEW SOLUTIONS

Intensifying environmental problems in China have encouraged Chinese companies to take part in environmental actions, as well as policy initiatives like demonstration projects illustrating the "circular economy".⁶⁰

The opportunity now exists to move beyond the western approach of mitigating environmental impacts towards developing new systemic solutions which could themselves provide export opportunities.⁶¹

This window of opportunity exists mainly due to two converging factors. Firstly, much investment in China involves green-field programmes, including the building of new infrastructure. This creates an opportunity to think beyond the simple industrial pattern western countries are now are trying to get away from – involving high consumption of natural resources and dependence on fossil fuels. Companies could be challenged to build houses and cities that are net producers of energy; they could plan for investments in ICT to enable telework and video-conferencing and reduce transport needs. The second factor is that Chinese investments happen just as new sustainable solutions are commercially competitive.

In the West much of the infrastructure is old and there are strong vested interests in refurbishing rather than replacing systems. The same agencies also try to export old solutions to China and are influential in multilateral institutions such as the World Bank, the IMF, the WTO and the ADB.

Infrastructure development in China is rapid and infrastructure built today will fix many aspects of China's environmental response for decades to come. China's energy problems might also soon be solved, but the solution would probably determine the country's energy profile for the foreseeable future. ⁶² The time for action is now.

The structure of Chinese companies is also evolving rapidly, with many companies beginning to find export markets. ⁶³ Various kinds of state support for exports have emerged, such as Made-in-China.com and their Exim Bank. ⁶⁴ ⁶⁵ But many Chinese companies are unknown abroad, even if some of them are now shaping reputations and emerging as recognised brands in their own right. ⁶⁶ Companies like Haier, Lenovo and Huawei, for example, are beginning to penetrate new markets. ⁶⁷ These companies can move beyond a business model centred on response to consumer demands and accept responsibility for providing sustainable goods and services. ⁶⁸

THE MIMITSTUDY: CHIMESE COMPANIES AND SUSTAINABLE DEUELOPMENT

THE PROCESS

This section presents the results of a survey of 182 Chinese companies conducted by WWF over the period August-December 2004. Appendix 1 list the companies. An English translation of the text of the questionnaire, the letter which accompanied it and the results are in Appendix 2.

The listing of Chinese companies was compiled as follows:

- » Fifty companies selected at random from the top 100 companies in China, as ranked by the China Enterprise Confederation in 2002.⁶⁹
- » Twenty to thirty companies randomly selected from five key sectors: information technology, energy, finance, life-sciences and consumer products.⁷⁰

Each company was telephoned and the name of the person responsible for strategic environmental decisions requested. The questionnaire was then mailed to this individual, with a covering letter guaranteeing anonymity (see Appendix 1). Individuals who did not respond were contacted four weeks later. Interviews in person or by telephone were then held with selected individuals to expand their response to the questionnaire. All communication – verbal and written – was in Chinese.

Sixty-one responses were received (a 34% response rate). Comparable response rates have been achieved by WWF in the course of conducting similar surveys in Europe or North America. However, as concern about negative publicity from NGOs is low in China, WWF expected the response rate to be lower than it was. Almost all the companies who responded answered all the questions. Only eight questionnaires were partially completed.

THE RESULTS The results follow the order of questions in the questionnaire. 72

The importance of environmental care⁷³

Every one of the respondents said that environmental care is important.⁷⁴ While this is perhaps to be expected given that these respondents were self-selecting for a willingness to engage in the questionnaire process, it raises serious questions about non-respondents as they might have a very different perspective on sustainable development, CSR and environmental work.

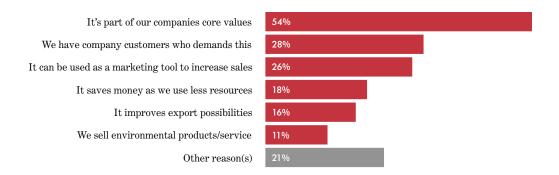
Thirty companies who did not reply were later contacted by telephone to find out why. Many said they simply hadn't had time. In some cases there were particular challenges – for example, finance companies were experiencing particular problems at the time of the survey.⁷⁵

However, six companies said they had no interest in the issue. One said: "Don't disturb us with questions like this. We don't care about these issues and we don't want to answer the questionnaire". Two such companies, both from the finance sector, made clear their indifference to whether or not WWF made their response public. One commented: "We don't like these questions, we don't want to talk to you and we don't care if you publish our name." 54% of respondents indicated that environmental care was a core value. Customer demand was ranked second, and the use of environmental care as a marketing tool – something that could be seen as an improvement compared to the situation in the West – third.

The core-value response might have been just strategic public relations or it could reflect genuine commitment, in which case a significant proportion of Chinese companies take environmental concerns more seriously than many western companies, especially CSR. 78 But very few Chinese companies have public relations departments as such, or it was not they who responded to the questionnaire.

In western companies it is often communications departments who produce CSR reports and answer questions from the public or NGOs. 79 WWF experience indicates that this often results in PR departments producing glossy material that has little, if anything, to do with core business or long-term strategy. 80

Returning to the Chinese companies, it is notable that only 18% refer to good environmental practice saving money. This may be a reluctance to admit financial reasons for environmental concern, or reflect the generally low price of (often subsidized) natural resources in China. ⁸¹ Clearly, if the market is to send the right signals, companies would see that they can gain economically by improving environmental performance.



Products/services that can help the environment and their export⁸²

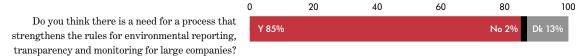
Forty-three per cent identified products or services they believed can help the environment. However, only about 27% actually export such products. Importantly, 78% request support in exporting products or services that can help the environment.



Fifty-one per cent of respondents already promote some of their products and services as environmentally friendly through advertising. Real and verified environmental performance might also be used as a selling point to boost exports.

Disclosure of environmental impact⁸³

Thirty-one per cent of respondents said their company reported its environmental impact. Another 56% planned to. 85% of respondents favoured stronger rules for environmental reporting, transparency and monitoring for large companies. Only 2% disagreed.



This marks a clear distinction with most western companies who lobby against binding rules, either directly or through industry associations. In the EU, when CSR is discussed, industry associations heavily lobby against any binding rules, while the NGOs say only new law can assure responsible corporate behaviour. 84

Sustainable products, services and concepts⁸⁵

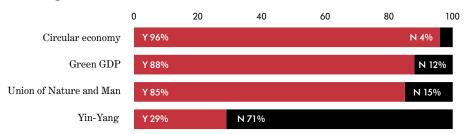
A large number of companies are using energy-efficient appliances. 89% of respondents say their company buys them; 66% use teleconferencing for meetings; 28% use telework; 74% say they would be interested in buying green electricity.



There is widespread awareness (84% of respondents) of the Chinese label for energy efficiency. A concept like CSR, however, is not very well known (60%) and Forest Stewardship Council (FSC), the timber certification scheme, was known to only 31%. Here a low level of awareness of some western schemes (such as FSC) does not preclude greater awareness of Chinese schemes (such as the Chinese label for energy efficient products).

Chinese concepts for Chinese and foreign companies⁸⁶

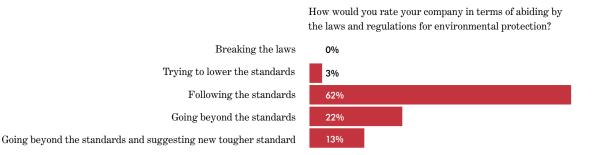
Ninety-six per cent of respondents thought the Chinese concept of the circular economy could help both Chinese and foreign companies be more environmentally friendly. 85% of respondents felt the concept of the union of nature and man could be of help. 87 Follow-up interviews established that companies believed such concepts could guide the development of business models, legislation and international agreements.



Companies also listed other concepts that they felt might be of help. These included Feng Shui, Clean Production, Sustainable Development, Energy Saving, "Green GDP", Circular Economy, Sustainable Developer Zone, Scientific Development, etc.

Abiding by laws and regulations: respondents' assessment of their own companies⁸⁸

No respondents indicated that their companies were breaking the law, although a small minority (3%) are attempting to have the standards relaxed. Whilst the majority (62%) claim to follow the standards, a significant minority (22%) indicate that their companies are going beyond the required levels of environmental protection and 13% indicated they are advocating tougher standards.

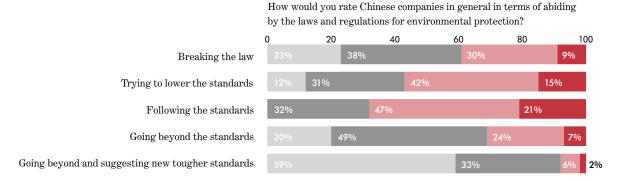


That a small number of respondents indicate their companies are attempting to lower standards seems surprising, at least from a western perspective. Clearly, the balance between profit and environmental protection is likely to be struck differently in national contexts. And in a country still struggling with poverty, environmental care might not be a high priority. There are several cases where Chinese companies have expressed frustration at how the balance between development and environmental protection is struck. ⁸⁹ This underlines the importance of economic development, poverty reduction and environmental protection going hand-in-hand; where environmental protection has associated costs, it is important these do not fall on the poor. ⁹⁰

Of greater surprise was the proportion of respondents who indicated that their companies were either going beyond the standards or suggesting tougher regulations. This goes to the core of the Chinese approach to environmental constraints: the regulatory framework within which companies operate.

Abiding by laws and regulations: assessment of Chinese companies in general⁹¹

Respondents' assessment of how their fellow companies perform differs from companies' assessment of their own performance, particularly in the case of estimates of the numbers of companies breaking the law or attempting to lower the standards. No companies admitted to breaking the law themselves, whereas a large minority of respondents (39%) indicated that "many" or "very many" companies were doing so. Similarly, only 3% of respondents indicated that their own companies were trying to lower the standards but 57% felt that many or very many other companies were attempting this.



The questionnaire clearly self-selects for companies with greater environmental concerns. To this extent, it could accurately reflect the fact that, whilst only a minority of respondents work for companies which are breaking the law or attempting to lower the standards, there is a far higher prevalence of this approach amongst companies at large. Respondents might also be more honest, or harsh, in their assessment of *other* companies.

The situation with companies which are breaking the law, or working to lower the standards, contrasts with companies which are going beyond the current standards or which are both doing this and suggesting new tougher standards. 35% of respondents indicated their companies fell into this category. This is also reflected by respondents' assessment of other Chinese companies. 49% of respondents felt that few companies were going beyond the standards; 59% felt very few companies were both going beyond the standards, and suggesting new tougher standards.

If the assessment that a high proportion of companies are seeking a lowering of standards is accurate, and proactive companies want action taken against this, there are important implications for how CSR could evolve in China. ⁹² Rather than looking at the broad business community, as in the West, China might focus on the smaller group that really wants to move ahead on sustainability, and introduce new legal and economic incentives for this group.

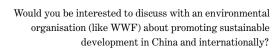
The emergence of a significant group of proactive companies means China might differ from the western countries where environmental concerns have been seen almost exclusively as a problem by industry associations. ⁹³ It would be interesting if there were to be a growing concern among leading Chinese companies about such environmental "short-termism".

A common response was to call for better law enforcement. One steel company argued that "all the companies in our sector follow the existing national environmental laws and are punished if they break the law, so that no one gets away with it if they break the law."

Respondents felt companies that broke the law and lowered standards made it harder for others to make profit, and undermined the credibility of Chinese companies as a whole. Some companies said Chinese business had a bad reputation abroad. Three companies linked image to export success, and one that makes household appliances said sustainable goods needed encouragement, adding that "we must also ensure that Chinese companies are not allowed to systemically break the law and...give all Chinese companies a bad reputation."

Interest in discussion with an environmental organisation like WWF on promoting sustainable development.⁹⁴

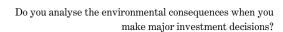
Fifty-three per cent of respondents indicated they would be interested in having discussions with an environmental organisation, perhaps reflecting the large proportion who indicated they would like support for exporting products or services that could help the environment (see responses to Q3 above). 38% indicated they "didn't know" whether they had such interest, possibly reflecting a lack of familiarity with environmental NGOs.





Environmental consequences of major investment decisions, including outward investment 95

84% of respondents indicated that their companies analyse environmental consequences when they make major investment decisions. 72% said environmental concerns were taken into account in making outward investment decisions. The recently strengthened environmental impact assessment (EIA) legislation might be a factor here. 96





There is a clear need to follow up on both these questions and establish the actual standards of assessment companies are using, as well as the range of environmental concerns addressed. Outward investment is growing fast and there are indications Chinese companies have played a controversial role in many cases. 97

WWF'S RESPONSE

The increasingly central role of Chinese companies raises the question of how we can move from simply focusing on mitigating the worst environmental impacts of Chinese business to the fostering systemic solutions. In the case of energy, for example, how can we move beyond mere improved efficiency and reduced emissions in the power sector to embracing innovative and sustainable approaches to energy – like ICT alternatives to business travel?⁹⁸

Sustainable development challenges are likely to emerge in environments dominated by new actors. That's why WWF looks to emerging economies such as China to take the lead in addressing environmental problems. WWF views the practice of many Chinese companies and their answers to our survey as providing grounds for hope for the emergence of such leadership.

WWF acknowledges the huge challenges presented by Chinese growth, but rather than focusing on the threats presented by such growth, prefers to focus on the opportunities for the emergence of China – alongside other emerging economies – as key to the global response to natural resource constraints and environmental problems.

Working through its Trade and Investment Programme (TIP), WWF prefers to engage proactively, asking how China can become a leading exporter of and investor in sustainable goods and services, whilst emerging as a key actor in a proactive international environmental agenda. Clearly, the key to addressing this challenge will be an understanding of which government and business actors in China can engage with the trade and investment framework – both domestically and internationally.

This report presents an initial scoping of such actors. It is the first of several studies underway in China and will be mirrored by work in other key emerging economies: Brazil, India, Russia and South Africa.

Business and industry play an important role in our efforts to achieve sustainable development. During the past decade we have seen the growth and increased influence of transnational corporations in sustainable development. The world's top corporations – today based almost exclusively in developed countries – are the principal drivers of production and international trade. ⁹⁹ The influence of these corporations will, however, be augmented by Chinese companies (see below). The response of these Chinese corporations to sustainability concerns will therefore become of increasing importance, both in China and globally. ¹⁰⁰

Based on the results of this study WWF believe that the following steps should be considered for these following actors:

CHINESE COMPANIES:

- 1. Companies that want to contribute to sustainability could work with government and NGOs to ensure that an overarching investment and export framework is developed that supports sustainable development.
- 2. Companies with sustainable goods and services for export could collaborate with the government and NGOs to develop export strategies, starting with a limited number of sectors.
- 3. Progressive companies could choose a limited number of concrete projects for potential use in China and abroad, implement these and communicate the results to key stakeholders. These projects should be linked to the core business of the company and not be philanthropic.
- 4. Companies that want to contribute to sustainable development could use important forums to highlight key areas and ways of moving forward within them. In China, forums like the BOAO forum for Asia, the China Beijing International High-Tech Expo/China Economic Summit, the China International Fair for Investment & Trade, China–ASEAN EXPO and the Chinese Export Commodities Fair (Canton Fair) all provide opportunities to communicate new ideas and concrete actions for sustainable development.

THE CHINESE GOVERNMENT AND AUTHORITIES:

- A process could be initiated that can support proactive companies and ensure the rest don't lower environmental standards and give Chinese products a bad name on the international market.¹⁰¹ This could include:

 A. Incentives, including financial ones. Companies that go beyond existing regulation should be rewarded accordingly.
 B. Basic environmental information would be disclosed, preferably in line with international agreed standards such as Global Reporting. Existing laws must also be complied with. Progressive companies must be given the opportunity to clarify where reporting needs are most acute. Companies that don't follow the rules could be exposed on a national website.
- 2. The Chinese government could encourage partnerships between Chinese companies and NGOs to support export of sustainable goods and services. A work programme with clear targets could be explored and implemented during 2006. This would explore the role of procurement in the importing countries of the EU, the US and Japan.
- 3. The Chinese government could explore how Chinese concepts can be incorporated into the regulation framework. As China grows and Chinese companies invest abroad and increase exports, there is a need to involve indigenous thinking on sustainability.
- 4. Government, business and NGOs should ensure that polarisation over the environmental issue does not get worse. Companies dragging their feet in China cannot be allowed to disrupt sustainable development.
- 5. Definition and promotion of sustainable investments must be explored. This could be linked to the work with green GDP. Green investments are a prerequisite for green GDP.

FOREIGN GOVERNMENTS AND COMPANIES:

- 1. For each of these recommendations, foreign governments and companies could explore how to support Chinese companies taking the lead on sustainable development.
- Foreign governments could explore ways of changing their domestic rules and regulations in order to support the import from China of sustainable goods and services. Governments should also use public procurement to support sustainable development in China.
- 3. Foreign companies could investigate their supply chains and their Chinese customers to ensure that they are supporting progressive actors in China.

APPEMOIX AMD FOOTMOTES

APPENDIX 1

Companies approached

ABN AMRO Xiang Cai Fund Management

Agricultural Bank of China Alcatel Shanghai Bell

Aluminium Corporation of China

Amoi Electronics Aucma Group Bank of China

Bank of Communications Bank of Shanghai Baoshan Iron and Steel Beijing Airport High-Tech Park

Beijing Bashi

Beijing Biotechnology and New Medicine Promotion Centre

Beijing Capital

Beijing Double Crane Pharmaceutical Beijing Electric Power Corporation Beijing Pharmaceutical Group Beijing Sanyuan Food

Beijing Urban Construction Group

Beijing Wandong Medical Equipment

Beijing Zhong Ke San Huan

Beiqi Forton Motor

Changhong electric

Beijing Biopharmaceutical Centre Bo Shi Fund Management **BOE Technology Group** Bright Dairy and Food BYD Company Limited

China Animal Husbandry Industry

China Construction Bank China Development Bank China Galaxy Securities

China Great Wall Computer Group Corp.

China Guangfa Securities China Guodian Group China Guosen Securities

China Harbour Engineering Company Group

China Huaneng Group China Huaxia Bank China Huaxia Securities

China International Engineering Consulting Corportation

China Life Insurance (Group) Company

China Merchants Bank China Merchants Securities China Minmetals Corporation China Minsheng Banking China Mobile Communications

China National Blue Star (Group)

China National Cereals, Oils and Foodstuffs Imp. & Exp. Corp.

China National Chemical Construction Corporation

China National Petroleum Corporation China Network Communications Group Corp. China Nonferrous Metal Industry's Foreign Engineering and

Construction China Putian Corp.

China Shipbuilding Industry Corporation

China Southern Power Grid China Southern Securities

China State Construction Engineering Corp. China State Shipbuilding Corporation

China Telecom

China Tiantong Securities China United Telecommunications

China Wanke

Chongqing Beer Group Chunlan (Group) Corp. CNFC Overseas Fishery COMMIT Incorporated Da Cheng Fund Management

Datang International Power Generation

DESAY Holdings Dikang Medicine Dong-E E-Jiao Croup Dongfeng Motor Corporation

Duoyuan Electric Erdos Cashmere Group Fangshen Xinda Biotechnology Financial Street Holdings

Founder Group Fujian Longking

Fujian Minyue Huadiao Wine Fujian Nanping Paper Fujian Qingshan Paper Fujian Septwolves Industry Full Goal Fund Management

Guangdong Galanz Enterprise (Group) Guangdong Kelon Electrical Holdings Guangxi Guidong Electric Power Guizhou Redstar Developing Guotai Junan Securities Guotou Zhong Lu Juice

Haier Group

Hangxiao Steel Structure Hangzhou Iron and Steel Hangzhou Wahaha Group Harvest Fund Management Henan Xinfei Electric Hengfeng Paper

Hengsun Group Company

Hisense Group

Hua An Fund Management Hua Xia Fund Management Huawei Technologies Huayin Power

Hudong Heavy Machinery

Industrial & Commercial Bank of China

Jiangnan Shipyard (Group) Jiangsu Hengrui Medicine Jiangsu Shinco Electronic Group

Jiangzhong Medicine

Jinan Iron and Steel Group Corporation

Jinjian Gem Kangmei Medicine Kanion Pharmaceutical

Konka

Kunming Pharma Corporation

Langchao Group Lenovo Group Leshan Electric Power

Liaohe Jinma Oilfiled

Livzon Pharmaceuticals Group

Luthai Textile Merro Group Midea Holding Minfeng Special Paper Moutai Spirit Group Neusoft Group

North China Pharmaceutical Panda Electronics Group

Ping An Insurance Company (Group) of China Qianjiang Water Resource Development Sanjiu Medical and Pharmaceutical

Sany Group

Shandong Gold Mining

Shandong Lanling Chengxiang Juiye Shandong Lu Kang Pharmaceutical

Shandong Weida Machinery

Shandong Xinhua Pharmaceutical

Shanghai Automotive

Shanghai First Provision Store

Shanghai Pharmaceutical

Shanghai Pudong Development Bank

Shanxi Guoyan New Energy

Shanxi Yabao Pharmaceutical Group Corporation

Shanying Paper

Shenyang Huitian Thermal Power

Shenyin& Wangguo Inc.

Shenzhen Chipscreen Biosciences

Shenzhen Development Bank

Shougang Group

Shunxin Agriculture

Sichuan Tuopai Group

Sinochem Corporation

Sinopec Corp.

Sinotrans Limited

Skyworth-RGB

State Grid Corporation of China

SVA Group

TCL

Tianjin Capital Environmental Protection Tianjin Pharmaceuticals Group Corporation Tianjin Zhong Xin Pharmaceutical Group

Tonghua Wine

Tongrentang (Group) Company

Tsinghua Tongfang Tsinghua Unisplendour

V V Group

Venturepharm Laboratories Limited Wuhan Iron and Steel (Group) Corporation

Xiamen Motor Xiamen Tungsten Yanzhou Coal Mining Yaxing Chemical Yibin Paper Industry

Yili Group

Zhejiang Biochemical

Zhejiang Feida Environmental Science and Technology

Zhejiang Juhua Zhejiang Medicine

Zhengzhou Coal Industry & Electric Power

Zhongtong Bus and Holding Zhongyuan Petroleum ZTE Corporation

Letter, questionnaire and replies

Letter sent to the companies together with the questionnaire.

Dear X.

First of all, we would like to thank you for your company's attention and possible support to environmental protection work in China and the World.

From the UN Conference on the Human Environment in Stockholm (1972) to the UN Conference on Environment and Development (UNCED) in Rio de Janeiro (1992) and to World Summit on Sustainable Development in Johannesburg (2002), the concept of sustainable development received a general endorsement all over the world. How the global trade and investment flows can be directed into a more sustainable way have since become one of the top issues for WWF and many other international organizations such as UNEP etc.

WWF will now launch a project in China and other strategically important countries such as Brazil, South Africa, India and Russia. As investment is a very broad area, WWF's project will focus on sustainable energy provision.

This project has already received strong support from several China's government departments such as Department of National Economy – National Development and Reform Commission (NDRC), and Department of Regional Economy – NDRC. Because we believe that your company have an influence role in the national investment policy formulation process, and also has the potential to become a proactive company in the sustainable business arena, we hope that you have the time for a meeting / telephone conversation at your convenience to further discuss your company's understandings of the sustainable trade and investment issue.

Please also fill in the questionnaire attached with this letter and thank you very much again for your precious time and your support to sustainable development in China and the World!

Yours etc.,

Background information about WWF was also given

Questionnaire and the replies for each answer:

61 Answers of 182 (34% reply rate)

1. Do you think environmental care is important?

Answers	Yes	No	Don't know
Total	100%	0	0

2. Why is environmental care important to you? (more than one answer is possible)

	_
Answers	
It improves export possibilities	16%
We have company customers who demands this	28%
We sell environmental products/service	11%
It's part of our companies core values	54%
It saves money as we use less resources	18%
It can be used as a marketing tool to increase sales	26%
Other reason(s)	21%

3. Do you have product/services that can help the environment?

Answers	Yes	No	Don't know
Total	43%	31%	26%

If yes, do you export products/services that can help the environment?

Answers	Yes	No	Don't know
Total	27%	58%	15%

Would you like support in exporting products/services that can help the environment?

Answers	Yes	No	Don't know
Total	78%	0%	22%

4. Do you disclose your company's environmental impact today?

Answers	Yes	No	Don't know
Total	31%	42%	27%

If no, does your company plan to disclose your environmental impact in the future?

Answers	Yes	No	Don't know
Total	56%	20%	24%

5. Do you promote any of your company's products/services as environmentally friendly through advertisement?

Answers	Yes	No	Don't know
Total	51%	30%	20%

6. Do you analyse the environmental consequences when you make major investment decisions?

Answers	Yes	No	Don't know
Total	84%	4%	12%

7. Do you buy and/or use any of the following products/services:

Does your company buy energy efficient appliances (e.g. energy efficient refrigerators, air conditioners, light bulbs, etc)?

Answers	Yes	No	Don't know
Total	89%	3%	8%

Does your company use teleconferencing for any meetings?

Answers	Yes	No	Don't know
Total	64%	34%	2%

Does your company use tele-work (letting the employee work from home)?

Answers	Yes	No	Don't know
Total	28%	67%	5%

8. If it were possible would you be interested in buying green electricity (electricity that don't destroy the environment. e.g. wind power, solar energy and biomass)?

Answers	Yes	No	Don't know
Total	74%	5%	21%

9. Have you heard about the following concepts/organisations:

	Yes	No
Energy Efficiency Products (Chinese label)	84%	16%
CSR, Corporate Social Responsibility	60%	40%
WWF, World Wide Fund for Nature	74%	26%
FSC, Forest Stewardship Council	31%	69%

10. Is there any of the following Chinese concepts that you think could help Chinese and foreign companies become more environmentally friendly?

	Yes	No
Union of Nature and Man	85%	15%
Yin-Yang	29%	71%
Green GDP	88%	12%
Circular economy	96%	4%

Please list any other concepts which are helpful

- Feng Shui
- Clean Production
- Sustainable Development
- Energy Saving etc.
- The Support Sustainable Development
- Scientific Development View

11. How would you rate your company in terms of abiding by the laws and regulations for environmental protection?

Answers	
Breaking the laws	0
Trying to lower the standards	3%
Following the standards	62%
Going beyond the standards	22%
Going beyond the standards and suggesting new tougher standard	13%

12. How would you rate Chinese companies in general in terms of abiding by the laws and regulations for environmental protection?

	Very few	Few	Many	Very Many
Breaking the law	23%	38%	30%	9%
Trying to lower the standards	12%	31%	42%	15%
Following the standards	0%	32%	47%	21%
Going beyond the standards	20%	49%	24%	7%
Going beyond and suggesting new tougher standards	59%	33%	6%	2%

13. Do you think there is a need for a process that strengthens the rules for environmental reporting, transparency and monitoring for large companies?

Answers	Yes	No	Don't know
Total	85%	2%	13%

14. Would you be interested to discuss with an environmental organisation (like WWF) about promoting sustainable development in China and internationally?

Answers	Yes	No	Don't know
Total	53%	9%	38%

15. When your company makes outward investment decisions, do you take environmental concerns into account?

Answers	Yes	No	Don't know	N/A
Total	72%	0	3%	25%

16. What do you think is the most important a/your company can do to help save the environment? Selection of responses

- (1) Strengthen the training and enhance people's consciousness of environment
- (2) Save energy and reduce waste during daily operation
- (3) Promote environmental protection consciousness and make everyone know the importance
- (4) Produce more CFC free products and gradually reduce the CFC contained products
- (5) Abide to the law
- (6) We are a home appliance manufacturing company and saving energy is a very important part in our work and besides that we produce the non-radiation goods that benefit people's health
- (7) Insist on "pollution preventive strategy", and implement the high environmental standard during R&D phase and upstream manufacturing period; lower the environmental risks and avoid environmental pol
- (10) Increase the environmental requirements to potential debtors during the loan application screening process
- (11) Introducer the concepts of EP and SD into corporate cultures
- (12) In 2003, Bank of China cooperate with China EP Fund and co-launched a program called "Green Heart Passage" which provide a good way for those banks customers who want to donate their banking deposit interests to the environment protection facilities in China. This activity is the first one promoted by Chinese Banking Sectors and received good feedback from the Public.
- (13) Pay attention to EP factors in fund management investment in daily work
- (14) Clean Production, Reducing the emission of industrial rubbish
- (15) Pass EMS certificate, Follow the national environment law and regulations strictly.
- (16) Enhancing people's environmental protecting awareness, establishing relevant standards.
- (17) Building green power station, reducing emission of sulphur dioxide to the air.
- (18) Management team's environmental awareness and financial support.
- (19) Green, sustaining development is our present goal.
- (20) Using environmental protection concept in advertisement promotion.
- (21) Enhancing environmental protection awareness, using environmental protection products.
- (22) Environmental protection should be connected with our economic and law reform.

- See, for example, Goldman Sachs, Dreaming with the BRICs, 2003, available at: http://www.gs.com/insight/research/reports/report6. html Measured on a purchasing power parity (PPP) basis, China in 2003 stood as the second-largest economy in the world after the US. http://www.cia.gov/cia/publications/factbook/geos/ch.html
- National Bureau of Statistics, China Statistical Yearbook 2004; National Bureau of Statistics plan report. http://www.stats.gov.cn/english/newrelease/statisticalreports/ t20050125_402225589.htm China Statistical Yearbook, 2003 Edition, China Statistics Press, Chapter 3-1, p.55. Measured on a purchasing power parity (PPP) basis, China stood as the second-largest economy in the world after the US in 2003. See: http://www.cia.gov/cia/publications/factbook/ geos/ch.html
- 3 World Development Indicators Database, World Bank, September 2004
- 4 "By some estimates, in 1820 China's economy accounted for 36% of global GDP (by comparison, in 2001 the United States produced 33%). In the last 10 years alone, China rose from the 12th largest economy (based on exchange rate calculations) to the 6th. With continued growth China will be a key source of demand for the global economy." Beyond Transition, The Newsletter about Reforming Economies http://www.worldbank.org/transitionnewsletter/octnovdec02/pgs4-6.htm
- t20050125_402225589.htm
 China Custom Data, 12th January, 2005. See: http://www.china.org.cn/chinese/jingji/754211.htm
 Asia Times 12 January 2005, "China becomes No 3 trading nation" http://www.atimes.com/atimes/China/GA12Ad01.html.

http://www.stats.gov.cn/english/newrelease/statisticalreports/

- 6 FT Special report China, "The world is dancing to a Chinese tune", December 7, 2004 "Three years after its entry into the World Trade Organization,
 - China's influence in global commerce is no longer merely significant. It is crucial. In some international markets, such as those for most base metals, shipping, coking coal, soybeans and other agricultural commodities, Chinese demand has become either the dominant price-setter or a big swing factor." Foreign Market Access Report, 2003 Edition, MOFCOM, China, p.3.
- World Investment Report 2004, p.51, UNCTAD, July 2004.
- 8 http://www.stats.gov.cn/english/newrelease/statisticalreports/ t20050125_402225589.htm
- For example, China is setting new standards in energy production systems, DVD technology and 4G mobile telecommunications technology. In the case of energy systems, a representative from $\operatorname{Ed} F$ commented: "The important thing to remember is that China is so large that the power technology it eventually adopts, be it in nuclear, clean coal or hydro, will probably be adopted as the industry standard. China will be the main market, the standard setter." (Quoted in Asia Times, November, 2002). In the case of DVD technology, China has developed a unique standard for optical disks, the Enhanced Versatile Disk (EVD). Another example, AVS (Audio Visual Coding Standard), is a video encoding standard offering more efficient data compression than Moving Picture Coding Experts Group Phase 2 (MPEG-2). For more info see NEAsia online and the article "Chi $nese\ Standards: From\ Optical\ Disks\ to\ Encoding"``available\ at:$ http://neasia.nikkeibp.com.hk/archive_magazine/nea/200406/ $features_313697.php$

The importance of emerging standards in China is not lost on multinationals like Deloitte, which is identifying strategies to influence such standards. See the press release from August 4, 2004 "Technology of the contract of the contract

- nology Firms Risk Losing Advantage as China's Influence on Global Standards Reaches Critical Levels available at: http://www.deloitte.com/dtt/press_release/09,cid%253D56070%2526pre%253DY%2526lid%253D1%2526new%253DU,00.html.
- 10 Fortune China (Chinese version), October, 2004. p. 98.
- 11 Xie Kang, director of the Multinational Business Research Centre under the Shanghai Academy of Social Sciences (SASS) predicts that 30 to 40 Chinese enterprises might appear on the Fortune 500 in the next 5-10 years.
- 12 Red Herring, 7 February 2005, Biggest Deals of 2004
- 13 Many foreigners are familiar with Chinese concepts like Dao and Ying-Yang, but few have thought about their relationship to sustainable development. Fewer are familiar new with Chinese concepts such as the "circular economy" or "peaceful rising", with the ways in which these can contribute to sustainable development. (A forthcoming WWF publication will enumerate such concepts).
- $14 \quad http://english.people.com.cn/200311/20/eng20031120_128674.shtml \\$
- 15 http://www.china.org.cn/english/BAT/83239.htm
- $16 \quad Goldman \, Sachs, Dreaming \, with \, the \, BRICs, 2003, \, available \, at: \, http://www.gs.com/insight/research/reports/report6.html$
- $17 \quad http://www.climateark.org/articles/2000/4th/chsettob.htm$
- 18 http://www.eia.doe.gov/oiaf/ieo/world.html
- $19 \quad http://www.chinadaily.com.cn/english/doc/2004-09/04/content_\\ 371641.htm$
- 20 http://www.greencarcongress.com/2004/09/china_140_milli.html
- 21 Earth Policy News Learning From China, Eco-Economy Update 2005-2, March 9, 2005
- $22 \quad http://www.cia.gov/nic/NIC_globaltrend2020_s2.html$
- $23 \quad http://www.heritage.org/Press/Commentary/ed030403.cfm$
- $24 \quad Mining\ Magazine\ (MM)\ January, 2004$
- $25 \quad \text{Smith Barney research}, 2003$
- 26 http://www.fao.org/sd/wpdirect/wpan0004.htm
- $27 \quad Goldman \, Sachs \, quoted \, in \, FT \, 3/2/2004$
- 28 Mining Magazine, January 2004
- 29 Mineweb 10 July 2003
- 30 Mineweb 17 February 2004
- 31 Mineweb 18 March 2004
- $32 Mineweb\,8\,February\,2005\,http://www.mineweb.net/events/conferences/2005/indaba_2005/411745.htm$
- 33 WoodMarkets November 2004, http://www.woodmarkets.com/PDF/ Nov %2004%202pg.pdf
- 34 Chunquan, Zhu; Taylor, Rodney and Guoqiand: "China's Wood Market, trade and the environment", Science Press, 2004 page 24.
- $35\,\,$ Some of these predictions are based on sound science, but other are based more on paranoia.
 - $http://www.cia.gov/nic/NIC_globaltrend2020_s2.html \\ http://www.321energy.com/editorials/winston/winston020905.html \\ There are many such projections. See, for example: http://www.rff. org/rff/News/Features/ChinaandRFF/Chinas-Environmental-Problems-and-Resources-for-the-Future.cfm, http://www.ecology.com/archived-links/china-water-shortage/index1.htm, http://www.scjai.com/technote18.html, or http://www.msnbc.com/news/307034.asp?cp1=1$

- 36 The China Internet Information Center, November 7, 2003. "Market-Oriented Reforms of China's Enterprises in Retrospect", http://www.china.org.cn/english/2003chinamarket/79520.htm
- 37 The China Internet Information Center, November 7, 2003. "Market-Oriented Reforms of China's Enterprises in Retrospect", http:// www.china.org.cn/english/2003chinamarket/79520.htm
- 38 Winjing.com, Review of China's State-Owned Enterprises, 22 Sep. 2002. http://www.winjing.net/MIS/list.asp?id=596
- 39 Socialist Market Economic System, http://www.chinataiwan.org/ web/webportal/W5029261/A5040595.html
- 40 China Statistical Yearbook 2003, National Bureau of Statistics of China, China Statistics Press. p. 459.
- 41 For the last three years, China's top 500 companies were ranked by the China Enterprise Confederation (CEC) and China Enterprise Directors Association (CEDA), following Fortune's methodology. Fortune China (Chinese version), Oct. 2004. p. 159. The ranking is done by turnover, relying upon the response of the companies themselves, and based on certified financial reports.
- 42 Huaxi Metropolitan Newspaper, September 6, 2004, "Where Is the Difference Between China Top 500 and Global Top 500?", http://finance.beelink.com.cn/20040906/1671846.shtml
- 43 Ibid.
- $44\quad Fortune\ China\ (Chinese\ version)\ Issue\ 58,\ October,\ 2003,\ p.\ F-26;$ $Issue\ 70,\ October\ 2004,\ p.\ F-26$
- 45 Ibid, p. 159.
- 46 Lenovo's purchase of IBM's loss making PC business is seen as an attempt to build their own brand long-term. Other important deals include: China Netcom paid US\$1 billion (Euro750 million) for a subsidiary of the US telecommunications giant, Global Crossing; Shanghai Automotive Industrial Corporation acquired South Korea's fourth largest automaker, Ssangyong Motor Company; Chinese electronics maker TCL Corporation gained control of the US television brand RCA when it merged with France's Thomson SA after buying German TV maker Schneider Electronics GmbH.. See http://www.forbes.com/technology/feeds/ap/2004/12/08/ap1698806.html. For a discussion on the attempt to build global companies in China see: http://www.economist.com/research/backgrounders/displaystory.cfm?story_id=3535818.
- 47 Huaxi Metropolitan Newspaper (author not known), Where Is the Difference Between China Top 500 and Global Top 500?, http://finance.beelink.com.cn/20040906/1671846.shtml
- 48 Song Yan and Zhou Liping, China Top 500 Demonstrates the Main Features of Chinese Enterprises, September, 2004 http://news.xinhuanet.com/fortune/2004-09/06/content_1949392.htm
- 49 See, for example the report Is China's Rising Service Sector Leading to Cost Disease? By Duo Qin: http://www.ecomod.net/conferences/ecomod2004/ecomod2004_papers/126.pdf. There are many articles discussing this; see for example http://www.china.org.cn/english/2003/Aug/71737.htm
- 50 The following quote from Red Herring, February 7 2005 Biggest
 Deals of 2004 is telling: "China is all we heard about this year, and
 the IPO market is no exception. The country is home to three of the
 10 biggest tech IPOs and the two IPO companies with the largest
 year-end gains. China tech-mania is reminiscent of the U.S. dot-com
 boom, with Chinese Internet-focused companies making a killing
 in public markets on the Nasdaq. Shanghai-based Internet job site
 51job bettered its IPO initial offering price by an astronomical
 271%—in barely two months. Online gaming operator Shanda Interactive Entertainment, also based in Shanghai, almost quadrupled its

- initial offering price as well, in a 'more reasonable' seven months." Also available on the web at: http://www.redherring.com/Article. aspx?a=11239&hed=Biggest+Deals+of+2004%3A+Finally!§or=Capital&subsector=PublicMarkets
- 51 For example, a CSR seminar was held with UNDP in Xi'An during September 2002. Another CSR seminar was co-organized in September 2003 with the British Embassy. The UN Global Compact is also about to become more active in China. It is an issue that Kofi Annan himself has highlighted http://www.un.org/apps/sg/sgstats.asp?nid=1120
- 52 For more information on this seminar, see: http://www.globalreporting.org/guidelines/2002/2002_ChinesePR.pdf, http://www.acca21. org.cn/
- 53 http://old.ruc.edu.cn/zygx/_private/1126/44.htm
- 54 http://www.chinaeol.net/bell/english.asp
- 55 http://csri.blogchina.com
- 56 http://finance.sina.com.cn/guest436.shtml
- 57 http://www.cfej.net/
- 58 For more details of LEAD's work, see their publication "Corporate Social Responsibility in China". This includes an overview of Chinese laws relating to CSR, and an examination of specific case studies. Background available at:
 - http://www.csr.ied.cn/Archives/CSRroundtable/
- 59 http://www.csr.ied.cn/Database
- 60 http://english.mofcom.gov.cn/column/print.shtml?/counselorsreport/europereport/200503/20050300021751
- 61 For a traditional perspective see for example the article in Business respect CSR Dispatches#12/8-Sept-2001, http://www.mallenbaker.net/csr/index.html "Much of China's industry remains inefficient and highly polluting. Many factories don't treat their waste at all before discharging it into the air or water. The consequences of this over the last two decades of rapid growth have become all too apparent in the nation's grey skies and black rivers....in some areas things are starting to happen. The areas of highest exposure are as always providing the incentives. In this case, the environment leads the way....There is an opportunity at this early stage in the development of the company's business economy to spread some of the learning that has taken place amongst global companies on the business case for, and processes of, managing the expectations of key stakeholders."
- 62 For a good overview see UNDPs China Human Development Report 2002 Making Green Development a Choice: http://www.undp.se/download.asp?Attachment_id=5635&Name=CHDR+2002+final+complete+June+12.pdf
- 63 http://www.worldbank.org/transitionnewsletter/octnovdec02/pgs4-6.htm

 The expansion has got some analyst to talk about an OBC (Owned By China) trend. http://www.trendwatching.com/trends/OBC.htm
- 64 http://www.made-in-china.com/
- 65 http://english.eximbank.gov.cn/http://www.chinadaily.com.cn/en/doc/2004-01/13/content_298574.htm
- 66 http://www.atimes.com/atimes/China/FJ05Ad03.html The lack of strong brands is also becoming a problem in China. http://www. atimes.com/atimes/China/GA22Ad08.html
- 67 http://www.haier.com, http://www.lenovo.com.cn/, http://www.huawei.com/index.shtml

- 68 As one commentator has observed: "Over the next decade, it is clear that China and Chinese companies are going to have a major impact on global business. The challenge for Chinese companies is in recognizing the need to adapt to new markets, to be willing to do business differently in order to meet the demands of new consumers, and to adjust their corporate structures to take account of a whole new set of stakeholders." Hill & Knowlton, All Things Corporate Newsletter, Winter 2004. http://atc.netcomsus.com/index.php/archives.html
- 69 See List of Top 100 of China's Top 500 for 2002. http://www.ebuywww.net.cn/free_directory_34.htm
- 70 The sources for the different sectors were as follows: IT companies: Chinese Electronic Enterprises Top 100 Ranking 2004, published on China Electronic News May 28, 2004 (CEN is a newspaper managed by Ministry of Information Technology PRC). Financial Companies: a)The Banking and Insurance section from the List of Top 100 of China's Top 50 for 2002, b) Securities section from China Securities Company Brokerage Ranking published on China Securities Journal Jan. 22, 2002 (CSJ is a newspaper managed by Xinhua News Press), c)Fund management section from China Fund Management Company Ranking published on Caijin Magazine Jun. 22, 2004 (the ranking was conducted by Caijin Magazine and Financial Lab in China Science and Technology University). The Energy companies, Life science companies and Consumer product producers was picked randomly both from the Chinese public listed company database strategically to ensure a variety of different companies
- 71 In Hill & Knowlton's 2004 Corporate Reputation Watch (China), differences between Chinese companies and their western counterparts in engaging with NGOs was clear. Here companies were asked to list potential threats to their reputations. Five per cent of the Chinese companies listed NGO criticism, compared to 22% and 14% in Europe and the US respectively. http://www.hillandknowlton.com/crw/index/
- 72 See Appendix 1
- 73 Questions 1 and 2
- 74 See Appendix 1, Question 1.
- 75 In the case of banking section, a lot of banks were/are facing serious problems with non-performing loans. For many, this problem coincided with preparations for listing on the international stock market. See, for example "Non-performing China's sclerotic financial system not only fails to allocate capital properly; its frailty endangers the country's continued growth and stability." The Economist, 20th March, 2004.
- $76 \quad {\rm See \, results \, for \, Question \, 2, \, Appendix \, 1}$
- 77 See for example http://www.csrcampaign.org/CAMFicheMarathonPolandFinal_pdf_media_public.aspx and http://www.csr-survey.org/debate/press.html
- 78 Western companies are often criticized for employing CSR primarily as a public-relations tool. Even many experts focus on the public relations value of philanthropy as the core of CSR. See for example the contributions in Harvard Business Review on Corporate Responsibility, Harvard Business School Press, 2003. For WWF's perspective on CSR, see: 'Corporate Social Responsibility: a discussion paper' at www.panda.org/trade
- 79 For further discussion about the CSR work in western companies see WWFs paper "Corporate Social Responsibility - a discussion paper". Available on www.panda.org/trade
- 80 http://www.prandmarketing.com/csrawards.htm
- 81 The use on natural resources and their price is something that has been discussed in numerous reports. For example UNDPs China

- Human Development Report 2002 Making Green Development a Choice. Qi Jianguo, Researcher and Deputy Director of the Quantitative Economy Institute of the Chinese Academy of Social Sciences also discusses these challenges in the article 'Economy Needs A Healthy Environment', available at: http://www.bjreview.com. cn/200410/viewpoint.htm
- 82 Question 3 and 5
- 83 Question 4 and 13
- 84 http://www.euractiv.com/Article?tcmuri=tcm:29-128568-16&type=News
 The opposition from business is happening even though OECDs work is showing that binding rules are necessary. http://www.oecd.org/dataoecd/24/35/2423198.pdf
- 85 Questions 7 9
- 86 Question 10
- 87 Expressions of interest in Chinese concepts have encouraged WWF to explore this topic further. The organization will publish a book over the course of the next twelve months, focusing on Chinese concepts and their relation to sustainable development. To date, little has been written on this subject to date, but books like Key Concepts in Chinese Philosophy, by Zhang Dainian, Foreign Language Press, 2002, explains a number of old concepts, including union of nature and man and Yin-Yang.
- 88 Question 11
- 89 There where a number of companies who where complaining when SEPA (the State Environmental Protection Administration) suspended 30 large projects worth billions of dollars across the country in an unprecedented move carried out because they had not been approved under the Law on Environmental Impact Assessment, which came into force in 2003
 - $http://www.chinadaily.com.cn/english/doc/2005-01/18/content_410150.htm Although frustrated by the new tougher environmental legislation, the majority of the pointed companies have stopped their illegal construction later started to communicate with the SEPA to solve the problems. http://www.sepa.gov.cn/eic/64909449043430604 8/20050124/4721.shtml$
- 90 UNDP and UNEP have been very proactive in China suggesting different strategies to achieve this.
 UNEP: http://www.zhb.gov.cn/english/China-Office/
 UNDP: http://www.undp.org.cn/
- 91 Question 12
- 92 So far, work on CSR in China and the rest of the world has focused on the implementation of existing laws, or the development of new ones e.g. "[C]ompanies want to act responsibly in China, but they face several problems: government implementation of Chinese law is uneven; it is difficult for foreign investors in particular to identify what laws apply when national, provincial, and local laws are in conflict; compliance with Chinese social and environmental laws is often voluntary." "China's environmental policymakers have not been able to convince their peers in other agencies that China can achieve robust growth and sustainable development through coordinated policies. Some officials continue to believe that growth must take precedence over environmental protection. "Statement of Findings: Promoting CSR in China, Kenan Institute Working Group on Corporate Social Responsibility and China, September 2004
- 93 $\,$ The Kyoto negotiations and the REACH legislation in EU are only two processes where these reactive groups have been dominating the agenda.
- 94 Question 14

- 95 Question 6 and 15
- 96 http://www.zhb.gov.cn/english/chanel-9/index.php3?chanel=9 http://www.chinadaily.com.cn/english/doc/2005-01/18/content_410150.htm
- 97 During 2005, WWF will publish a report focussing on the rapidly growing outward investment flows from China. There are clearly likely to be competitiveness implications for those companies which take environmental concerns seriously. The fact that many Chinese companies seem to ignore the ethical consequences of their investments in, for example, Latin America or Africa has led to growing concern among many observers. It has, for example, been reported that Chinese companies are immune to many of the political or reputational pressures experienced by western companies as reasons for not investing in some areas. Peter Draper, a trade expert at the South African Institute of International Affairs, refers to this disparity as Chinas 'ethical advantage' over rivals. The Economist 27 November, 2004 p.71
- 98 ICT can make work more efficient both on a daily basis if people at relevant positions are allowed to work from home one to three days a week. Video and audioconferenses can make it easier to build networks both within China and with other important emerging markets such as India, Russia, Brazil and South Africa.
- 89 Rubens Ricupero, Secretary-General of UNCTAD, wrote in the introduction to the World Investment Report 1999: "TNCs are principal drivers of the globalization process, which defines the new context for development." (UNCTAD, 1999).
- 100 Twenty-five Chinese companies are currently listed on the Forbes 2000 list, a comprehensive ranking of the world's biggest companies, measured by a composite of sales, profits, assets and market value. http://www.forbes.com/2004/03/24/04f2000land.html
- 101 http://www.business-ethics.org/newsdetail.asp?newsid=31



WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
 ensuring that the use of renewable natural resources is sustainable
 promoting the reduction of pollution and wasteful consumption

For a living planet

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