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## **CHINA PROMOTES GREEN GDP FOR MORE BALANCED DEVELOPMENT**

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The China Policy Institute was set up to analyse critical policy challenges faced by China in its rapid development. Its goals are to help expand the knowledge and understanding of contemporary China in Britain, Europe and worldwide, to help build a more informed dialogue between China and the UK and Europe, and to contribute to government and business strategies.

## Summary

Since the reform and open-door policy of the late 1970s, China has achieved a consistently high level of economic growth, with an average annual growth rate of over 9.5%. But the ruthless pursuit of GDP growth has been highly inefficient, has caused widening income disparities and environmental degradation on a colossal scale, and resulted in insufficient industrial innovation.

These consequences put into question not only the sustainability of China's development, but also jeopardise social stability in the country. In recent years, income disparities and environmental degradation have led to an increasing number of social protests, especially in the coastal regions. The Chinese Communist Party has tightened its political control in order to maintain social stability, but the leadership also understands that it must adjust China's development model if it is to cope with the undesirable consequences of rapid economic growth.

Since the Hu Jintao—Wen Jiabao leadership came to power, China has been searching for a new development model which focuses on sustainability and social justice. China's 11th Five-Year-Plan (2006-2010) and the recent Sixth Plenum have both shown 'building a harmonious society' to be top of the leadership's agenda.

The green GDP campaign is the means by which the leadership is enforcing its new policy orientation. While green GDP is not yet a widely accepted concept, the Chinese leadership is using it to try to change traditional opinions on economic development among its party cadres and government officials.

In recent decades, local GDP growth rates have been the indicator by which the central government evaluates the performance of local government officials. This evaluation system has provided the incentive for local governments to pursue local economic growth regardless of the negative consequences such as environmental damage and social conflict.

As part of the move towards a new development model aimed at sustainability and social justice, the Chinese government has been trying to establish green GDP as one of the key indicators in evaluating its local officials. A tentative new evaluation system has been established. Although the exact details of this system are still unknown to the outside world, pilot programmes have been carried out in various provinces and cities.

The Chinese government has recently published its first green GDP accounting report based on these local experiments. However, the result remains contentious. The concept itself has not yet been scientifically justified, and how to include factors such as environmental damage and public satisfaction when GDP is calculated is very problematic. Local governments have different ways of calculating their green GDP, leading to a lack of consensus on the meaning of green GDP at the national level.

While the green GDP campaign has demonstrated the Chinese leadership's commitment to change the old development model, it is too early to tell to what degree the campaign will help the leadership determine its policies. Enormous challenges lie ahead. China is still in the process of building a modern regulatory regime. Without institutional capacity, the leadership will find it difficult to transform its intentions into actions.

Local government officials have benefited tremendously from rapid local economic growth. A change in development model will slow down local economic growth, and reduce financial benefits for local officials. It is therefore understandable that local governments are resistant to this new policy initiative.

China's economic development has varied considerably across different regions. This has led to different levels of environmental awareness in different regions. While in the richer eastern coastal provinces, people are beginning to demand a healthier environment, those in poorer areas are more concerned about income. It is obvious that green GDP goals are more easily realised in the richer areas of China.

Overall, China is still at an early stage of economic development. Rapid economic development has generated enormous problems for the leadership. Yet their only solution is further development. Thus, the main challenge faced by the Chinese leadership is the problem of balancing continuous economic development with social and environmental concerns.

# China Promotes Green GDP for More Balanced Development

Yongnian Zheng and Minjia Chen\*

## The Green GDP Concept in China

- 1.1 Environmental issues have been high on the agenda at recent sessions of the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC), especially in 2005 and 2006. China's latest Five-Year Plan (FYP, 2006) includes a pledge to reduce energy consumption per unit of output in the next five years (2006-2010). Accordingly, the Chinese government has begun to design mechanisms which are expected to prevent government officials from continuing the single-minded pursuit of gross domestic product (GDP) growth and help them to realise the government's environmental goals.
- 1.2 On the 18<sup>th</sup> January, 2005, the State Environmental Protection Administration of China (SEPA) suspended 30 large-scale construction projects, with combined investment of over RMB 100 billion (approximately USD 12.5 billion), which violated rules governing their environmental impact as required by the "Environmental Assessment Law" enacted on 1<sup>st</sup> September, 2003. During the 2005 NPC and CPPCC sessions, SEPA, together with the National Bureau of Statistics of China (NBS), launched a pilot programme for a green GDP accounting system in ten provinces and municipalities.<sup>1</sup> Those moves were acclaimed by their supporters and the media as an "environmental storm" blowing away some long-existing obstacles to improving the environment.
- 1.3 On the 7<sup>th</sup> September, 2006 SEPA and NBS together published the "China Green National Accounting Study Report 2004"<sup>2</sup> and announced the first green GDP, a GDP index with environmental losses taken into account, and claimed that it was the first time that any nation's government had succeeded in such a project.<sup>3</sup>
- 1.4 Green GDP is usually defined as an aggregate accounting index measuring real domestic wealth, which is conventional GDP less the natural resource losses. It uses the conventional GDP index and deduces the economic costs of environmental pollution, natural resource depletion, inefficiency of education, overcrowding and ineffective administration.<sup>4</sup> The green GDP tries to take into account some important determinants of human welfare and therefore is believed to be a better indicator of a country's welfare than the traditional GDP. However, a standardised

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<sup>1</sup> The ten provinces and municipalities selected are Anhui, Beijing, Chongqing, Guangdong, Hainan, Hebei, Liaoning, Sichuan, Tianjin and Zhenjiang.

<sup>2</sup> "China Green National Accounting Study Report 2004-Public Version" published by the SEPA and NBS, full content available at <http://www.sepa.gov.cn/plan/gongwen/200609/P020060908545859361774.pdf>, accessed on 26 October 2006.

<sup>3</sup> SEPA news release, 07/09/2006, "SEPA and NBS Publish the Research Achievements of Green National Accounting" [http://www.sepa.gov.cn/xcyj/zwhb/200609/t20060907\\_92529.htm](http://www.sepa.gov.cn/xcyj/zwhb/200609/t20060907_92529.htm), accessed on 26 October 2006.

<sup>4</sup> *Xinhua* news, 06/10/2006, "Focus on 'Green GDP': Optimising Economic Development by Environmental Protection", [http://news.xinhuanet.com/environment/2006-09/07/content\\_5061909.htm](http://news.xinhuanet.com/environment/2006-09/07/content_5061909.htm), accessed on 26 October 2006.

model of green GDP accounting has not yet been achieved, despite many attempts by researchers, governments and international organisations.<sup>5</sup> In China, scholars started to research green GDP nearly two decades ago. They have played an important role in introducing environmental issues and green GDP into the mainstream of public discussion on China's development.

- 1.5 In practice, a green GDP accounting method usually includes five natural resource consumption costs, including arable land, mineral resources, forest, water and fishery resources, and two environmental depletion costs, environmental pollution and ecological degradation.<sup>6</sup> In the "China Green National Accounting Study Report 2004", the green GDP index actually takes only some of these environmental indices into account. Expressed as a simplified calculation it is:

*Green GDP = GDP – the costs of natural resource consumption – the costs of environmental depletion*

- 1.6 Furthermore, out of the usual twenty categories of environmental pollution, SEPA and NBS only managed to include the costs of ten, and included no ecological degradation costs at all, due to the difficulty of obtaining data and the limited techniques.<sup>7</sup> It is clear that green GDP, both as a concept and a practice, is still at an early stage in China. Why, then, is the concept employed so frequently by the government? To answer this question, we have to examine the concept in the context of the Chinese political environment.

## **Green GDP in the Context of Chinese Politics**

- 2.1 After 28 years of rapid economic growth at the 9.5% average annual rate that the Chinese government has been so proud of, cumulative environmental problems begin to exert considerable influence on the calculation of the benefits and costs of China's development. According to SEPA's research, on average as much as 18% of China's GDP growth is attained through the "overdrawing" of resources and the environment.<sup>8</sup>
- 2.2 The single-minded pursuit of high GDP growth by local governments has had dramatic consequences of environmental degradation, amplifying resource constraints<sup>9</sup> and resulting in recent economic overheating. The last few decades have witnessed environmental destruction in China on an unprecedented scale. According to the "China Green National Accounting Study Report 2004", environmental pollution cost China RMB 511.8 billion (about USD 64 billion) in economic losses, accounting for 3.05% of the year's GDP. The environmental costs of water pollution, air pollution and solid wastes and pollution accidents accounted for 55.9%, 42.9% and 1.2% of the total costs respectively. The Report also

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<sup>5</sup> Lance L. P. GORE, "How 'Green GDP' Becomes Fashionable in China (I)", *EAI Background Brief* No. 273, East Asian Institute, National University of Singapore, February 2006.

<sup>6</sup> SEPA news release, 07/09/2006, "SEPA and NBS Publish the Research Achievements of Green National Accounting".

<sup>7</sup> *Ibid.*

<sup>8</sup> *The Beijing News*, 08/09/2006, "Beijing's Green GDP Index is Better than the Average, Pan Yue: Introduce the Green GDP Index to Change the Officials' Evaluation System", [http://news.xinhuanet.com/politics/2006-09/08/content\\_5063570.htm](http://news.xinhuanet.com/politics/2006-09/08/content_5063570.htm), accessed on 26 October 2006.

<sup>9</sup> China is experiencing a serious shortage of key raw materials such as crude oil, iron ore, natural gas, copper etc.

estimated that to treat this pollution, China would have had to spend as much as RMB 287.4 billion, equivalent to about 1.8% of the GDP in 2004.<sup>10</sup> However, in 2004 the actual investment in waste and pollution treatment was only about RMB 190 billion.<sup>11</sup> The gap between these figures cannot be ignored.

- 2.3 As the economy develops and living standards improve, the environmental awareness of Chinese citizens increases, especially in the eastern coastal regions and major cities. They are unwilling to pay the environmental costs of economic prosperity, which has led to a rise in popularity of environmental movements in those areas. For example, the strong public appeals against the heavy environmental pollution of Taizhou, Zhejiang province, finally resulted in the total closure of all the small private smelting businesses in the region in June 2005 by government forces.<sup>12</sup> In the international realm, China aspires to be a responsible big power and does not want its environment to be the focus of international criticism. The Hu Jintao leadership has made great efforts to move away from the single-minded pursuit of GDP growth towards "scientific development" which focuses on "sustainability" and the "recycling economy".
- 2.4 The traditional GDP calculates any production activities that contribute to the economy. However, when these production activities are associated with environmental pollution and harm human welfare, it is necessary to take these negative effects into account when calculating the contribution of the production activities. The drawbacks of traditional GDP calculation have been magnified in China by the speed of the country's economic growth. The ruthless pursuit of high GDP growth has meant that the main benchmark for evaluating the performance of local government officials is local GDP growth. As long as the economy is expanding, officials are likely to be promoted even if their localities are suffering from a deteriorating environment.
- 2.5 Academic researchers in the West have been working on the theory of green GDP for a long time, but there have not yet been any substantial breakthroughs. Despite the undeveloped nature of green GDP, the Chinese government decided to use the concept to justify its efforts to reorient China's development. SEPA and NBS formally started their collaboration on the green GDP project two years ago and published the green national accounting report recently as the world's first national index of its kind. The rationale behind China's unprecedented efforts in the field of green GDP is that it is hoped by the Chinese leadership that the country's future economic development will be restricted and regulated by the green GDP index and will follow a more sustainable and environmentally friendly path.
- 2.6 Another reason for the focus on green GDP is that it could potentially curb the overheated economy of recent years. Despite the steady decline

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<sup>10</sup> SEPA news release, 07/09/2006, "SEPA and NBS Publish the Research Achievements of Green National Accounting".

<sup>11</sup> *Xinhua* news, 07/09/2006, "An Interpretation of China's First Green GDP Report: What Do 3.05 % and 1.8 % Mean?", [http://news.xinhuanet.com/fortune/2006-09/07/content\\_5063137.htm](http://news.xinhuanet.com/fortune/2006-09/07/content_5063137.htm), accessed on 26 October 2006.

<sup>12</sup> Certainly, decisions on environmental issues are based on the government's calculation of the economic benefits against environmental costs. For example, small smelting enterprises only made marginal economic contribution but caused extremely heavy pollution, particularly, to the air, water and soil. Therefore, local governments decided to treat the environmental problem and social unease as a priority by closing these enterprises.

in the size of the state-owned sector in recent decades and wide-spread industrial privatisation in China, over half of the investment in fixed assets in 2004 was still undertaken by investors affiliated with the government in various ways, as in the case of the state owned enterprises (SOEs).<sup>13</sup> Since late 2003, the Chinese central government has been fighting economic overheating, caused mainly by heavy fixed assets investment. Much of the damage to the environment and the overuse and squandering of natural resources is linked to the economic activities of local governments, which further contribute towards the overheated economy. Therefore, the introduction of green GDP to China is expected to influence the behaviour of local governments and SOEs, and act as a regulatory tool to curb periodical economic overheating. The task will definitely be more complicated than the usual monetary policy methods used to smooth periodical fluctuations in western market economies.

- 2.7 The “green environmental storm” is being driven primarily by President Hu Jintao’s new policy initiative to build a “people-centred” development model. At the Third Plenum of the 11th Party Congress in 2003, this model was proposed and expanded with additional clauses promoting a “scientific view of development”, a “recycling economy” and a “harmonious society”. President Hu explained “harmonious society” as consisting of balanced development between the economy and society and between people and nature.
- 2.8 China’s environmental concerns also have their root in Chinese politics, especially in the narrow view of development in past decades. The Chinese government has long equated economic growth with development, believing that economic growth would bring the material resources needed to address various political, social, and environmental problems. Pan Yue, the Deputy Director of SEPA, believes that environmental issues in China are political in nature, and that they should therefore be addressed through political means.<sup>14</sup> The Chinese government hopes the green GDP index will become a better indicator of the state of the nation’s development, as it takes into account the value of the environment and natural resources. The green GDP index will be an important part of the implementation of the “scientific view of development”, and is expected to play a major role in the changes to China’s development model.

## **Efforts to Promote Green GDP**

- 3.1 Improving energy efficiency to promote China’s economic development was first introduced by China’s 11th Five-Year Plan (FYP) of 2006, which was proposed by the Fifth Plenum of the Chinese Communist Party last October.<sup>15</sup> This FYP showed that the Chinese government was beginning to make serious efforts to move towards green GDP growth. During the NPC and CPPCC conferences in March 2006, which approved the FYP, the Chinese Premier Wen Jiabao re-emphasised in his government work

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<sup>13</sup> Lance L. P. Gore, “How ‘Green GDP’ Becomes Fashionable in China (I)”.

<sup>14</sup> *The Beijing News*, 08/09/2006, “Beijing’s Green GDP Index is Better than the Average, Pan Yue: Introduce the Green GDP Index to Change the Officials’ Evaluation System”,

<sup>15</sup> For an analysis of the 11<sup>th</sup> Five Year Plan, see, Yongnian Zheng, “The New Policy Initiatives in China’s 11<sup>th</sup> 5-Year Plan”, *Briefing Series*, Issue 1 (Nottingham: China Policy Institute, November 2005).

report that while China needs to maintain a minimum annual growth rate of 8%, it should also try to reduce its energy consumption per unit GDP by 4%.<sup>16</sup> This was the first time that the government introduced energy consumption as an index to measure progress at a macroeconomic level, meaning that China is starting to incorporate environmental elements into its national accounting system.

- 3.2 To make the country's development model more environmentally friendly, the first thing the Chinese government is attempting to do is to loosen its strict economic growth targets and add environmental issues into its planning system. Therefore, in the 11<sup>th</sup> FYP, China dropped most of its numerical economic targets as part of an effort to resolve the country's concern about growth at the expense of harmonious society and the environment. The Chinese National Development and Reform Commission (NDRC), the chief planning agency, includes only two economic targets in the new plan: a promise to double per capita GDP in the period from 2000 to 2010; and a pledge to reduce energy consumption per unit of output in the next five years.<sup>17</sup> The new planning system is designed to reinforce the government's pledge to stop pursuing GDP for its own sake, without regard to the environment. The changes to the FYP were part of the process of reorienting incentives in the system. As Ma Kai, the NDRC chairman, suggested, the government's role now is to "create favourable conditions"<sup>18</sup> instead of taking complete control of the country's complex economy as it has in past decades.
- 3.3 However, it will undoubtedly be a difficult policy to enforce at local levels, if the central government continues to rate local officials according to economic growth in their localities. Therefore, to solve China's environmental problems, Pan Yue believes that the government should change its approach to development and introduce the green GDP index into its evaluation system when the performance of local government officials is measured.<sup>19</sup> Over the years, a consensus has been nurtured among the Chinese leadership that a new set of performance indicators needs to be put in place.
- 3.4 On February 28, 2005, after considerable preparatory work, the pilot programme of green GDP accounting was officially launched in ten provinces and municipalities. As early as 2004 NBS experts proposed two important frameworks for green GDP accounting, including "The Framework for the Economic Accounting of the Environment and Natural Resources of China," and "The Framework for the Environment-Based Accounting System of Green GDP".<sup>20</sup> On the basis of these two national frameworks, one of the main tasks of the ten selected provinces and municipalities was to develop their own green GDP models adapted to local conditions and make suggestions to improve the national model. They surveyed natural resources and pollution, collected data and

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<sup>16</sup> *Xinhua* news, 09/03/2006, "Foreign and Domestic Media Pay Close Attention to China's Effort Devoted to 'Green GDP' Growth", [http://news.xinhuanet.com/environment/2006-03/09/content\\_4279154.htm](http://news.xinhuanet.com/environment/2006-03/09/content_4279154.htm), accessed on 26 October 2006.

<sup>17</sup> *Financial Times* news, 07/03/2006, "China to Drop Strict Growth Targets as Market Forces have Greater Play", <http://www.ft.com/cms/s/a7c7295e-ad7f-11da-9643-0000779e2340.html>, accessed on 26 October 2006.

<sup>18</sup> *Ibid.*

<sup>19</sup> *The Beijing News*, 08/09/2006, "Beijing's Green GDP Index is Better than the Average, Pan Yue: Introduce the Green GDP Index to Change the Officials' Evaluation System".

<sup>20</sup> *Science and Technology Daily*, news, 01/09/2004, "China Preliminarily Established the Framework of Green GDP Accounting System", [http://61.135.129.207/gb/policy/2004-09/03/content\\_295307.htm](http://61.135.129.207/gb/policy/2004-09/03/content_295307.htm), accessed on 26 October 2006.



calculated the environment-related economic costs in their own regions by referring to the national model.<sup>21</sup>

- 3.5 The pilot programme in the ten provinces and municipalities is expected to be complete by the end of 2006. These provinces and municipalities have established their own systems to promote green development in their regions. For example, in 2005 Guangdong province produced "The Estimation of Green GDP of the Territory of Guangdong in 2003".<sup>22</sup> Both the cities of Zhuhai and Shenzhen in Guangdong have established guidelines to improve their industrial structures and encourage a recycling economy with low energy consumption and pollution. Zhuhai City's eleventh FYP, consistent with the national plan, sets the targets for reducing energy consumption per unit GDP by 2% by the end of 2006 and by 15% by 2010, even though its current figure is already considerably lower than the national average. It has also added the energy consumption per unit GDP index into its evaluation system for officials.<sup>23</sup> Shenzhen focuses on promoting the recycling economy in the city using the green GDP accounting methods to assess the effects. The Shenzhen Environmental Protection Bureau uses the national framework to set up its own green GDP accounts and manage the development of the recycling economy.<sup>24</sup>
- 3.6 Jiangsu province has been working on its local green GDP accounting and trying to "develop the economy with an improved environment" since May 2005, when it became an additional province to host the green GDP experiment.<sup>25</sup> According to the "Green GDP Research Report of Jiangsu Province" released in September 2006, Jiangsu's total GDP in 2002 decreased by 8% when the green GDP accounting methods were applied. Its economic losses caused by water, air and soil pollution totalled RMB 600 billion (approximately USD 75 billion) in 2002. The results of this research, led by the Agriculture University of Nanjing, have been recognised by the Jiangsu government. It is reported that the provincial authorities will adjust their economic development policies and environmental management policies based on these research findings.<sup>26</sup> However, Professor Qu Futian, the leader of the research project, cautioned that the research on green GDP is still in the initial stages and traditional GDP cannot yet be replaced as the main accounting index.<sup>27</sup>
- 3.7 Conditions throughout the provinces and municipalities which have been chosen to host the green GDP pilot programme vary greatly, so each locality is required to adjust its accounting methods to its own situation. The central government wants local policy makers to develop a long term view and make efforts to improve overall resource allocation in their

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<sup>21</sup> *Xinhua news*, 28/02/2005, "10 Provinces and Municipalities Launched the Pilot Programme of Green GDP in China", [http://news.xinhuanet.com/newscenter/2005-02/28/content\\_2631111.htm](http://news.xinhuanet.com/newscenter/2005-02/28/content_2631111.htm), accessed on 26 October 2006.

<sup>22</sup> *China Business Times*, news, 03/07/2006, "Zhuhai Commits to the Course of Green GDP and has Established Correspondent Evaluation System", [http://news.xinhuanet.com/fortune//2006-07/03/content\\_4787544.htm](http://news.xinhuanet.com/fortune//2006-07/03/content_4787544.htm), accessed on 26 October 2006.

<sup>23</sup> *Ibid.*

<sup>24</sup> *Shenzhen Economic Daily*, news, 06/07/2006, "Shenzhen Examines the Green GDP Accounting and Established the Assessment Index System for Recycle Economy" [http://news.xinhuanet.com/environment/2006-07/06/content\\_4800108.htm](http://news.xinhuanet.com/environment/2006-07/06/content_4800108.htm), accessed on 26 October 2006.

<sup>25</sup> *People's Daily news*, 07/09/2006, "Green GDP: Inferior Appearance Attracts More Interests", <http://unn.people.com.cn/GB/14748/4788972.html>, accessed on 26 October 2006.

<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid.*

localities. The key message promoted by the green GDP concept is sustainable development.

- 3.8 Policy implementation in the provinces has always proved a difficult task for the Chinese central government. They have to provide sufficient incentives for the local governments to induce them to follow central policies. As repeatedly emphasised by Pan Yue, there is a need for the central government to introduce a new system for evaluating the performance of local governments, which would provide an incentive for government officials to change their behavior. The old evaluation system consists of three parts with seventeen items, of which only one concerns the environment.<sup>28</sup> This is not sufficient to induce local government officials to take the environment into account in their decision-making. In August 2004 the Ministry of Personnel issued a research report on "The Assessment of the Chinese Government's Efficiency", and released an evaluation system.<sup>29</sup> This system contains three parts and eleven items, each of which has three indices (see Appendix 1).<sup>30</sup> It aims to improve government efficiency and states that its goal is public satisfaction. The environment still comprises only one item, but its relative importance seems higher, since it is now one out of 11 items, rather than one among 17.
- 3.9 Following the central government's move, local governments now also work on a more efficient governing system. For example, Beijing completed its "Evaluation System for the Efficiency of a Harmonious Economic and Social Development for Greater Beijing" in October 2005.<sup>31</sup> Beijing municipality's system consisted of five parts with thirty-nine indices. "Resources and the environment" was one of the five parts (see Appendix 2).<sup>32</sup> Clearly, environmental concerns are being given more and more weight by the Chinese government.
- 3.10 To develop a new evaluation system, NBS and SEPA have been working with the Chinese Central Organisation Department, which is in charge of personnel in China's ruling party, on a new official evaluation system. An experimental version of the new system is being carried out in three provinces: Inner Mongolia (North China), Sichuan (Central China), and Zhejiang (East China).<sup>33</sup> The new system is expected to give substantially more weight to environmental concerns and relate them to officials' performance in several ways: 1) a local citizens' assessment of the quality of the environment; 2) measurement of changes in quality of air and drinking water; 3) forest coverage rate in the local area; 4) local government expenditure on environmental protection; 5) the number of environment-related complaints and lawsuits; and 6) the enforcement of the environmental laws.<sup>34</sup>

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<sup>28</sup> Lance L. P. Gore, "How 'Green GDP' Becomes Fashionable in China (I)".

<sup>29</sup> *China Youth Daily*, 02/08/2004, "The Assessment System of Chinese Government Efficiency has been Published, 33 Indices Will be Used to Evaluate Government Efficiency", [http://news.xinhuanet.com/newscenter/2004-08/02/content\\_1691254.htm](http://news.xinhuanet.com/newscenter/2004-08/02/content_1691254.htm), accessed on 24 November 2006.

<sup>30</sup> Please refer to the appendix for brief details of the 2004 system.

<sup>31</sup> *China News*, 14/10/2005, "Beijing Published Its Evaluation System, Party and Government Officials' Performance will be Assessed Comprehensively", <http://www.chinanews.com.cn/news/2005/2005-10-14/8/638136.shtml>, accessed on 24 November 2006.

<sup>32</sup> Please refer to the appendix for brief details of Beijing's system.

<sup>33</sup> *Ibid.*

<sup>34</sup> *Ibid.*

## Challenges Ahead

- 4.1 As a long term strategy for the Chinese government, the green GDP movement in China is certainly gaining momentum. However, when it comes to enforcement, the central government will surely face daunting obstacles from local governments or even from different departments at the central level due to the divergence of their interests. For example, during the two-year period of research leading up to the publication of the "China Green National Accounting Study Report 2004", several provinces were extremely reluctant to cooperate with SEPA to carry out the work, or employed various 'strategies' to make the green GDP index factually meaningless.<sup>35</sup> In May 2005, Li Deshui, then the Director of NBS, questioned the necessity of calculating the green GDP for China in May 2005, two months after the start of the national programme.<sup>36</sup> Li's suspicion showed a degree of inconsistency between NBS and SEPA.
- 4.2 Environmental issues in China are becoming increasingly political, and the country is entering an era of environmental politics like many other countries before it. Its rapid and extensive economic growth with comparatively insignificant technological advances has resulted in cumulative environmental damage. Demands for a healthier environment from the prosperous eastern coastal regions have become increasingly difficult to ignore. The initial driving force for the green GDP was the need to improve China's development model by emphasising the necessity for balance and harmony between the economy and the environment. In the light of the overheated state of the economy since 2003, green GDP is also considered to be a way of controlling local officials' economic activities. The green GDP concept is also in line with the essential political objective of using the "scientific development" model to build a "harmonious society". Therefore, as one observer has pointed out, the combination of social trends, macroeconomic overheating and political factors has created the conditions under which green GDP has become fashionable.<sup>37</sup>
- 4.3 On the one hand, the Chinese leadership has realised that China needs to move away from rapid economic development towards sustained development which takes into account environmental and social problems. On the other hand, they do not wish to see a significant decline in China's real GDP growth, since it would have disadvantageous effects on the country's employment conditions and stability. Vast numbers of rural immigrants to urban areas and increasing numbers of urban residents are desperately in need of jobs, which can only be created by a relatively high rate of sustained growth. In this sense, China is not exempt from the classic controversy of employment versus environmental politics that is experienced by every industrialised country.<sup>38</sup>
- 4.4 When put into practise, green GDP accounting methods meet tough technical difficulties. It is very complicated, for example, to calculate the cost of pollution or the value of natural resources lost. This is one of the

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<sup>35</sup> *China News Net*, 11/09/2006, "China's Green GDP Research has been Accomplished, Some Localities Requested not to Publish the Results", <http://www.heb.chinanews.com.cn/news/gnxx/2006-09-11/8121.shtml>, accessed on 26 October 2006.

<sup>36</sup> Lance L. P. Gore, "Politics of Green GDP in China (II)", *EAI Background Brief* No. 274, East Asian Institute, National University of Singapore, February 2006.

<sup>37</sup> Lance L. P. Gore, "How 'Green GDP' Becomes Fashionable in China (I)".

<sup>38</sup> Lance L. P. Gore, "How 'Green GDP' Becomes Fashionable in China (I)".

main reasons why a standardised green GDP accounting method has not yet been developed anywhere in the world. The technical loopholes would leave space for bureaucratic infighting in China, which would further make the future of green GDP in the country ambiguous. Seeing the technical problems, NBS, which previously questioned the necessity of the green GDP, further argued that allowing zero or even negative GDP growth for some regions could be more practical than implementing green GDP, for the sake of preventing environmental damage by short term behaviour.<sup>39</sup>

- 4.5 The green GDP is actually used as a political method by the Chinese central government to 'correct' local governments' behaviour. Local governments, especially in the western and central areas, rely on economic expansion to generate their income and relieve poverty for rural residents. It is inevitable that local governments will prefer to expand the economy by investment and promote low-technology and labour intensive industries to quickly create low-end jobs for the poorly-educated peasants and low skilled workers, which are, in most cases, the types of industry causing industrial pollution.
- 4.6 In general, people in China are still lacking awareness of environmental problems. A well-functioning system of green GDP accounting for the entire country is out of reach for the foreseeable future. The central government most likely would not sacrifice economic growth purely for the sake of the environment, since they do not wish to see a lowering of employment opportunities causing social instability. According to the Environmental Kuznets Curve hypothesis<sup>40</sup>, economic growth brings an initial phase of environmental deterioration followed by a subsequent phase of improvement. It indicates that during the early development stage an economy could grow to the cost of the environment, but when the economy reaches a certain level it would gain from an improved environment. In this context, for the prosperous coastal provinces in the east, the green GDP system might be feasible since they are in some ways already at this later stage where the economy and the environment could improve simultaneously. Still, for the majority central and western provinces, the green GDP concept may not be much more than a propaganda slogan.
- 4.7 Nevertheless, some key elements and the general principle of green GDP may certainly be useful for promoting sustainable development in China. The green GDP campaign will undoubtedly generate positive effects for the public's environmental awareness. It is also a method by which the central government can encourage the provinces to develop initiatives which take local idiosyncrasies into consideration, and adopts local feedback to improve central policy. Green GDP is allowing the Chinese leadership to gradually shift the development of the economy from a basic growth-oriented model to a healthier and more sophisticated one.
- 4.8 China's efforts with the green GDP campaign shed some light on the direction of China's economic development for the future. However, most importantly, economic development remains the "hard truth" at the most fundamental level. How will green GDP as a concept evolve in China? Will the leadership be able to enforce it? To what degree will it improve

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<sup>39</sup> *International Finance News*, 01/06/2006, "Allowing GDP Zero Growth would be More Practical than 'Green GDP'", <http://finance.people.com.cn/GB/1045/4423797.html>, accessed on 26 October 2006.

<sup>40</sup> S. Kuznets, *Economic Growth of Nations: Total Output and Production Structure*, Cambridge, MA: Harvard University Press, 1971.

China's worsening environment? All these questions are yet to be answered.

**Appendix 1:** China's Evaluation System of Government Efficiency 2004

	Level One Indices	Level Two Indices
	Government Efficiency	Effect Indices
Society		
Population and Environment		
Function Indices		Economic Regulation
		Market Supervision
		Social Administration
		Public Services
		State-Owned Assets Administration
Potential Indices		Human Resource Conditions
		Honesty and Cleanness
		Administrative Efficiency

Source: *China Youth Daily*, 02/08/2004, "The Assessment System of Chinese Government Efficiency has been Published, 33 Indices Will be Used to Evaluate Government Efficiency", <http://www.zbjw.gov.cn/2004/8-5/10650.html>, accessed on 24 November 2006.

**Appendix 2:** Greater Beijing's Evaluation System for the Efficiency of a Harmonious Economic and Social Development 2005

Five parts of the system (39 indices in total):

- 1) Economic Development (4 indices)
- 2) Social Development (6 indices)
- 3) Resources and Environment (3 indices)
- 4) Administrative Efficiency (2 indices)
- 5) Regional Disparity (24 indices)

Source: *China News*, 14/10/2005, "Beijing Published Its Evaluation System, Party and Government Officials' Performance will be Assessed Comprehensively".