THE CHINA COUNCIL
FOR INTERNATIONAL COOPERATION
ON ENVIRONMENT AND DEVELOPMENT

The Fifth Meeting of Phase III
Kempinski Hotel, Beijing
November 10 – 12, 2006

SUMMARY RECORD

CCICED Secretariat and Secretariat Canadian Office
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<tr>
<td>AGM</td>
<td>Annual General Meeting</td>
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<td>CBD</td>
<td>Convention for Bio-Diversity</td>
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<td>CCICED</td>
<td>China Council for International Cooperation on Environment and Development</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>COP</td>
<td>Conference of the Parties</td>
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<td>CPC</td>
<td>Communist Party of China</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EPB</td>
<td>Environment Protection Bureau</td>
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<td>EU</td>
<td>European Union</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FYP</td>
<td>Five-Year Plan</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GOC</td>
<td>Government of China</td>
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<td>IEA</td>
<td>International Energy Agency</td>
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<tr>
<td>LDC</td>
<td>Less Developed Country</td>
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<td>NDRC</td>
<td>National Development and Reform Commission</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<td>NPC</td>
<td>National People’s Congress</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>SEPA</td>
<td>State Environmental Protection Administration</td>
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<td>SFA</td>
<td>State Forestry Administration</td>
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<td>SME</td>
<td>Small and Medium Enterprise</td>
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<td>TF</td>
<td>Task Force(s)</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>UNEP</td>
<td>United Nations Environment Program</td>
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<td>US</td>
<td>United States</td>
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<td>WBC</td>
<td>World Business Council</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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SUMMARY RECORD

I. INTRODUCTION

1. The China Council for International Cooperation on Environment and Development ("the Council") was established in 1992 by the State Council of the Government of China (GOC) to support the cooperation between China and the international community in the fields of environment and development.

2. The Council is a high-level advisory body that proposes recommendations for the Chinese Government’s consideration on the integration of environment and development. It has so far held five annual meetings in the First Phase, five annual meetings in the Second Phase and five meetings in the Third Phase.

3. The Council supports the development of an integrated, coherent approach to environment and development and encourages close cooperation between China and other countries. The Council is a non-governmental body but with strong government involvement. At present the Council comprises 31 Chinese Members and 24 International Members, all chosen for their expert knowledge and their experience.

4. The Council is chaired by Mr. Zeng Peiyan, Vice-Premier of China’s State Council. The Members of the Council attended the 5th Meeting of the 3rd Phase at the invitation of Chair Zeng Peiyan.

5. The host institution was the State Environmental Protection Administration (SEPA). SEPA has
been made responsible for inter-ministerial coordination and for supporting the activities of the Council. It has established a Secretariat Head Office to maintain and develop international and domestic contacts. The Secretariat also ensures follow-up within China to the recommendations made by the Council, and deals with the routine work of the Council when not in session. The Secretariat is assisted by the Secretariat Canadian Office, directed by Professor Earl Drake. The CCICED Secretariat Canadian Office is located at Simon Fraser University in Vancouver and is funded by the Canadian International Development Agency (CIDA).

6. This Summary Record of the 5th Meeting of the 3rd Phase of the Council was prepared for the Secretariat Canadian Office by Ms Lucie McNeill on the basis of more detailed notes recorded during the Meeting under the review of CCICED Secretariat Office. The Summary Record represents the Secretariat Canadian Office’s interpretation of the discussions and not necessarily the views of all participants. To ensure frank and direct exchanges it has been agreed that the Summary Record of the Meeting should present an overview of the discussions without attribution to individual speakers.

II. AGENDA ITEMS

ITEM 1. ADOPTION OF THE AGENDA

7. Vice-Chair Zhou Shengxian introduced the Scientific Approach to Development (Kexue Fazhan Guan) Towards a Relatively Well-off Society (Xiaokang) as the theme of the annual general meeting (AGM), and welcomed guest speakers as well as other special guests and observers to the meeting. The agenda for the 5th Meeting of the 3rd Phase was adopted as presented.

ITEM 2. OPENING CEREMONY

8. Vice-Chair Zhou Shengxian introduced Council Chair and the Vice-Premier of China, Mr Zeng Peiyan, who presented a keynote speech to Council. Vice-Premier Zeng then invited the following participants to address the AGM:
   1) Vice-Chair Robert Greenhill, President of CIDA
   2) Vice-Chair Qu Geping, Former Chair of the National People’s Congress (NPC) Environmental and Resources Protection Committee
   3) Vice-Chair Måns Lönnroth, Former State Secretary, Ministry of the Environment; Managing Director of the Foundation for Strategic Environmental Research, Sweden.

9. During his opening remarks, Vice-Premier Zeng made the following comments:
   1) During his meeting with international members, Premier Wen evaluated the work of the Council and made new requests for future efforts involving the realization of the 11th Five-Year Plan (FYP) and its pollution control and energy saving targets. Urbanization, industrialization
and household consumption are all on the increase; Gross Domestic Product (GDP) growth continues apace. Despite GOC efforts, pollution and energy consumption continue to grow. The environmental crises of the past year – the toxic spill in the Songhua River and lead poisoning in Gansu province among others – have caused both loss of life and economic losses.

2) In March 2006, the NPC adopted the 11th FYP, which is based on the scientific approach to development, saving natural resources and the greater harmony between humans and nature. Several other key meetings of the Communist Party of China (CPC) and the GOC focused on these issues. Clear goals have been enunciated: by 2010, overall environmental quality is to improve, the deterioration of ecosystems is to stop, and energy consumption per unit of GDP is to drop by 20%. In order to achieve these goals, the GOC must actively support energy and resource saving.

3) A number of key energy efficient projects have been approved; pollution control on China’s main waterways will be strengthened. Heavy polluting enterprises will be monitored and may be phased out; urban waste water and solid waste will be increasingly treated. An early warning system for environmental disasters will be put in place. Greater efforts will be made to deal with rural pollution affecting soils. Better planning will be adopted in order to set aside areas where no development should take place (nature reserves, protected forests, eco-parks).

4) Clearer responsibilities for environmental protection are being assigned to officials, provinces and enterprises – in some cases involving signed accountability agreements with the National Development and Reform Commission (NDRC). Increasingly, market mechanisms are put in place to provide clear incentives for environmental protection. In addition, civil society will be mobilized to work for sustainable development, through public education in energy and resource conservation.

5) The next Phase of the Council’s work will focus on continuing the in-depth research work begun in the first three Phases, will provide advice on key 11th FYP targets, will provide advice to China on the best and latest technologies, and will help support capacity building of China’s personnel in the areas of environmental protection and effective management.

10. During the 2006 AGM Opening Ceremony, Council Vice Chairs highlighted the following issues:

1) This meeting concludes the Third Phase of the Council; it also provides an opportunity to discuss the Council’s future work. As outlined in the report of the High Level Task Force, China’s sustainable development challenges present clear opportunities. China can act as a role model for other countries facing similar situations; it can provide other countries with valuable experience, innovation and knowledge.

2) In 1992, the GOC set up the CCICED as a high-level advisory body, and for the past 15 years, the Council has witnessed the amazing growth of China’s economy. The Council in turn has been a platform for communication, exchange and cooperation on environment and sustainable development – a bridge linking China and the world. Over the years, the CCICED has
provided policy recommendations, influencing China’s decision-makers. China’s growth will continue, with an increasing focus on the quality of this growth, encompassing pollution control and growing energy efficiency. China is aiming for harmony between growth and environment. The CCICED has an important role to play in the coming years.

3) The Scientific Approach to Development implies letting the facts speak and adopting evidence-based policies. Five facts should be underlined: China’s economic growth exceeds expectations – today’s China will grow to be 3 Chinas in 2020 – thereby putting enormous pressure on existing resources, domestic and global; the environment is increasingly lagging behind economic growth and China’s environmental institutions are not equipped to deal with the challenges; China has the potential for the needed technological innovations, with research becoming increasingly sophisticated and cutting-edge; environmental institutions in China need to be strong enough to drive the adoption of environmentally-friendly technologies – at present pollution fees are so low that enterprises simply consider them part of the cost of doing business; the coming 15 years will be key for the achievement of Xiao Kang and for the world – we have to transform from a high-carbon to a low-carbon economy and countries that are in the vanguard of this transformation will gain market share. The coming phase of the Council should focus on providing advice to help China realize its Three Transformations, which aims to change the relation between the State and the market.

11. Cheng Siwei, Vice Chair of the NPC’s Standing Committee addressed the Council during the Opening Ceremony. During his remarks, Mr Cheng highlighted several key points:

1) Since China’s economic reforms and its opening to the outside world in the late 1970s, the GOC has increasingly used market mechanisms to promote development. Living standards have improved markedly, and it is the GOC’s goal to realize Xiao Kang by 2020. In order to achieve this, existing gaps between urban and rural China will narrow, and the rule of law will be strengthened. Moreover, progress must be made in health care, education and other social needs.

2) China has a large population and a relatively small supply of key resources such as water and energy. Moreover, there is imbalance in access to such resources among China’s regions. In the past, Chinese people respected and lived in balance with nature. Regaining this balance is seen as a key goal for China now; science and technology are important tools for achieving this goal, as is enhancing the environmental awareness of China’s population.

3) Implementing China’s environmental laws is seen as essential, and the NPC has a clear role to play in this area. China has a long way to go; it is presently midway through its industrialization phase. Further burdens will be imposed on resources and energy as the industrialization and urbanization processes continue. China is eager to learn lessons from other countries, and the Council’s Fourth Phase can play an important advisory role to the GOC.
12. The second invited speaker to take part in the Opening Ceremony was United Nations Environment Program (UNEP) Executive Director Achim Steiner. During his presentation, he underlined the following issues:

1) As a member of the Council over the past four years, I have been a student of China’s search for sustainable development. Premier Wen Jiabao’s emphasis on transformation will frame the Council’s work in the coming years, as it will describe China’s efforts to achieve sustainability. While the recommendations of the High Level Task Force encapsulate the range of options open to China, they will not necessarily lead to transformation – and transformation is the only option open to humanity at this juncture. It is imperative that action be taken now against global warming, on the domestic and the international fronts. China’s challenge is also the global challenge.

2) As this Council meets, delegates are also meeting in Nairobi at the headquarters of UNEP for the Conference of the Parties (COP) of the Climate Change Convention. Evidence and data over the past two years illustrate the price we have paid for having spent the past 15 years coming to grips with the science of climate change. The world is now facing a cataclysmic scenario. The Millennium Ecosystem Assessment demonstrates that the majority of our ecosystems’ goods and services are either at the level of maximum exploitation or are in decline. A report published last week predicts that from 2050, there will be no more commercial fishing on Earth.

3) Environmental impacts are no longer local phenomena, but rather global. Humans have had systemic impacts on nature; climate, hydrology, soils and other systems have all been affected on a scale which is unprecedented. We must move from an economy focused on output, to a circular economy. Small changes to existing consumption patterns – soaps in hotels, type of light bulb used in households – can make a measurable difference.

4) Changing our mode of production is one of the transformation challenges of this century. Present steel production requires tremendous energy intensity – more than nature can provide us in a sustainable way; yet spiders produce webs that have much greater tensile strength without the enormous energy expense. Bio-technologies, bio-mimicry, bio-engineering are some of the sciences of the future, sciences which will help us use our resources for economic development, but in a different mode.

5) It is in China, more than in any other country, that transformation will take place over the coming 20 years. China has the capacity to take ideas, and turn them into action; the rapid development of the past 20 years attests to this. China is in the privileged position where 90% of its economic growth is generating additional financial resources – resources which are unavailable to other developing countries.

6) It is often said that development must take place first, before environmental issues can be addressed and transformation effected. But increasingly, the costs of not taking action are getting prohibitive. China has doubled the budgets for pollution control in its 11th FYP.
Hundreds of millions have been lifted out of poverty. And yet some 100,000 people die of air pollution in China every year. Development should not impose such a high price on people.

7) The Council’s work must move from the defensive position of containing development and saving resources, to provide avenues for sustainable development. Domestically, this means focusing both on urban and on rural economics. It is imperative that ways be found to finance and sustain the eco-system services that are provided in rural areas, and from which urban people benefit. Eco-compensation schemes have been proposed – but these services are typically not valued very highly in mainstream economic analysis. Sustainable production and consumption in the whole economy will have to be prioritized; Chinese scientists are now looking into hydrogen produced from industrial waste powering cars in its large cities. Much of the country’s waste remains an untapped resource today – a major transformational challenge.

8) Trade is a key area of concern – in some sectors, most of the value-added remains outside the country. Imported materials are assembled in China, only to be exported again. China is making progress on research and development (R&D); it is moving from less than 1% of GDP spent on R&D, to some 2.5% of GDP within the coming ten years. China is now developing six times more patents than five years ago. The power of these funds can change the fundamentals of production and consumption.

9) China is today in a difficult position. Increasingly, people view the earth as crowded boat and China’s ecological footprint is making people nervous. As a result, the developments taking place in China are being misrepresented and its engagement on the international scene is misunderstood. Rebranding China’s development is an urgent priority. In fact, China has a long way to go before meeting the basic needs of its citizens, and before it reaches the consumption and waste levels of the West. In the future, “Made in China” could refer to a sustainable, thriving economy, not detracting from global good, but adding new capacities and possibilities.

ITEM 3. KEYNOTE SPEECHES

13. Vice-chair Zhou Shengxian invited Dr Huguette Labelle, Chancellor of the University of Ottawa and former Vice Chair of the Council to address the AGM. Dr Labelle also chaired, with Dr Song Jian, the High Level Task Force reporting to Council during the AGM. During this first keynote speech on the theme of Scientific Approach to Development Towards the Realization of a Moderately Well-off Society (Xiaokang), the speaker emphasized the following issues:

1) Environmental changes are happening at an unprecedented pace and unforeseen impacts are now being felt globally – examples such as the rising price of oil and the disappearance of glaciers in well-known beauty spots of the world abound. The recent report presented to the United Kingdom (UK) government by Sir Nicholas Stern suggests that without proactive efforts, the cost of climate change to the world economy could reach 7 trillion dollars.
2) China is committed to *Xiaokang* and therefore to continued rapid GDP growth. But can this be reconciled with *harmonious society* goals involving among others harmony between the economy and environmental protection? China is facing serious challenges and predictions are ominous. By 2020, China will need up to 13 million barrels of oil per day; the number of cars will have increased to 131 million; severe air pollution in all of its mega-cities leading to rising health costs and fatalities; severe shortages of water in most of the country’s cities.

3) The conventional, business-as-usual path to economic growth is no longer feasible for China. A different future meeting the vision of *Xiaokang* could have more sustainable characteristics, such as: integrated planning reflecting environmental and resource use costs; high investments in science, technology and cleaner production; a solid legislative and regulatory framework, with financial incentives and judicious pricing policies; greater emphasis on public transport; sustainable cities; greater public information on and participation in environmental governance and in sustainable production and consumption; alternative energy sources and clean coal technologies; more efficient water use; widespread recycling. A greater proportion of China’s GDP will need to be devoted to achieving these objectives.

4) Sustainable technologies, particularly in the energy and transport sectors, are not advancing rapidly enough, and adoption of new technologies remains slow. The Council’s Task Force on Energy and Environment was visionary in advocating diverse energy sources and clean coal technologies. China’s present investment decisions in infrastructure will have impacts over the next twenty years; half of the world’s construction of major buildings is now occurring in China. There is an opportunity for China to create energy-efficient, people-friendly, “green” buildings.

5) The Council has had long standing concerns with the development of the private car industry as an engine of economic growth; hopefully China will not follow the path taken by many Western countries.

6) The renewed emphasis on China’s rural areas is crucial; water quantity and quality, soil conservation and the protection of biodiversity all depend on a healthy countryside. Fiscal reform can foster successful rural development. Economic and regulatory instruments can be used to deal with pressing problems of acid rain’s impacts on soils, non-point pollution, and eco-compensation. China has tremendous experience in water and land use, and in top-down, as well as bottom-up approaches to implementation.

7) China has worked to increase transparency surrounding environmental decision-making. Using local knowledge and scientific expertise can lead to more effective action. The Council has consistently advocated greater public participation in environmental matters.

8) China can play an important and constructive role in environmental governance and action internationally. China is now a global player, and it is sending signals that it aims to be a rules-based nation. But environmental rules are a work in progress. As a country of high standing among both developed and developing nations, China can shape precedents and press for global action. Waiting for global environmental governance systems to be perfected before
enhancing China’s own efforts in the areas of trade, biodiversity and climate change may be unwise. China is important enough to set standards that world markets will follow.

9) China cannot be expected to carry the burden of accumulated environmental effects arising from the excessive consumption and poor environmental practices of others. It cannot be expected to protect the environments of nations from which it imports raw materials. There needs to be a better sense of partnership and international cooperation in dealing with environment and development in the future.

14. Vice-Chair Zhou Shengxian invited the Organization for Economic Cooperation and Development (OECD) Deputy Secretary-General Mr Kiyo Akasaka to address the Council. During his remarks, Mr Akasaka made the following comments:

1) The OECD’s Working Party on Environmental Performance just completed its Environmental Performance Review of China. The Review, which was conducted following a peer review framework and whose results have been discussed and agreed upon by all OECD countries and China, were just presented prior to the Council AGM in Beijing. The Review examines developments in China since 1990 and evaluates the extent to which China’s own environmental objectives and its international commitments have been met.

2) Data on China’s rapid economic growth and the concomitant environmental degradation of its coastline, rivers, soils, lakes and air have been collected with the cooperation of Chinese authorities. Air quality in some Chinese cities is among the worst in the world; acid rain falls over one third of her territory. China fell short of its 10th FYP goal to have half of its coal washed prior to combustion. One third of China’s water courses are severely polluted. The amounts of municipal, industrial and hazardous wastes far exceed what can safely be treated and disposed; waste treatment targets of the 10th FYP were only partially achieved.

3) The Review recognizes the serious engagement of the GOC, but states that efforts are at present insufficient to keep pace with the environmental pressures generated by rapid growth. Overall efforts have lacked effectiveness and efficiency, due to an implementation gap. China’s environmental efforts must be urgently strengthened.

4) Fifty-one recommendations have been put forward, including specific suggestions on the management of water, air, biodiversity, waste and others. It is recommended that cleaner fuels be adopted by promoting cleaner coal technologies among other measures. Pollution charges and other price and fiscal mechanisms need to be introduced. In agriculture, fertilizer subsidies should be phased out to ease non-point pollution. More importantly, China needs to improve the implementation of its environmental laws and regulations nationwide.

5) The OECD recommends that SEPA be upgraded to a full ministry; mechanisms for policy integration need to be strengthened; a leading group on environment and development could be the mechanism to effect this change. The greatest challenge remains implementation at the local level. The present situation whereby local Environment Protection Bureaus (EPB) only receive “direction” from SEPA, but are controlled by local governments, should be changed. At
present, local incentives shield enterprises from the EPBs. The assessment criteria for the performance of local leaders should be altered; green GDP measurements should be adopted. The OECD is presently looking into environmental enforcement and compliance; it is hoped China will take part in this study. A further set of recommendations deals with pro-poor market mechanisms that would not impact negatively on China’s trade competitiveness.

6) A further set of recommendations deals with China’s role in the global economy. Before 2010, it is expected that China will overtake the United States as the main source of carbon dioxide emissions. The OECD recommends a rational plan on climate change and the determination of greenhouse gas emissions targets. It further recommends that China improve GOC oversight of its companies operating in other countries; the OECD has guidelines for multi-national corporations and could work with China towards this end. Efforts to deal with regional problems such as acid rain should be intensified; participation of China in the East-Asia Monitoring Network could lead to political agreement in this area.

7) China does not need to repeat the same mistakes of OECD countries in handling environmental problems. Learning from best practices and the lessons of other countries, China need not take as long as others to address its problems.

ITEM 4. GENERAL DEBATE ON THE THEME OF SCIENTIFIC APPROACH TO DEVELOPMENT TOWARDS THE REALIZATION OF A RELATIVELY WELL-OFF SOCIETY (XIAOKANG)

15. With Vice-Chair Zhou Shengxian presiding, Council members addressed the AGM’s theme of Scientific Approach to Development Towards the Realization of a Moderately Well-off Society (Xiaokang). During the debate, the following views were expressed:

16. Business is an indispensable partner in the transformation of consumption, production and trade into more sustainable modes; business is directly affected by the market mechanisms that are discussed to effect such transformations. It would be good if the GOC had solid grounding in how business functions, how it implements action and how it innovates. Educated public servants who dialogue with members of the business community are needed. During Phase Four of the CCICED, a greater number of members from China’s business community should be represented on Council.

17. China’s leaders are aware that the country is facing historic challenges and that the country’s future is not secure. If the GDP continues to double every ten years, while there are only marginal improvements in energy efficiency and pollution control, the environment will be overwhelmed. To reorient the Chinese economy will require reconciling conflicting objectives of managing the environment while increasing economic growth in order to improve living standards and create jobs. It is easy to plan changes on paper, but implementation is daunting due to conflicting and vested interests
in the status quo. It would be preferable if other ministries aside from SEPA were present on Council and become champions of sustainable development.

18. Progress has been made in China in the areas of soil erosion and desertification. Lessons should be drawn from China’s success in this area, so this can be replicated elsewhere. Eco-compensation mechanisms should be further considered. China’s experience can be shared with other developing countries encountering similar challenges.

19. The high degree of investment in China’s economy has not led to improvements in eco-efficiency. When factories are moved from countries like Denmark to China, energy efficiency worsens. Part of the reason may be in the business sector not transferring technologies to China as it should. Environmental regulations and requirements for energy efficiency could stimulate this further.

20. Environment and energy are the big questions of this century. Economic growth is essential – zero growth is not an option – but energy solutions must be found, otherwise the same people just now getting access to electricity will be the victims of climate change in the near future. Co-financed technological transfer should enable low-emissions innovations to be brought into China. Investments in new infrastructure or in conversions in China should be made on the basis of state-of-the-art technology. A recent International Energy Agency (IEA) report indicates that with limited investments but with improved yield, emissions levels could remain stable by 2050. China’s cooperation is essential to realize this goal.

21. The UK’s Stern Review looked at the economics of climate change. The study considers possible future impacts and concludes that the future will not necessarily be a continuation of the present. Recent books have shown how some societies have collapsed because they were not able to adapt to environmental challenges. Were electricity supply to be interrupted, or drought curtail water supply, key systems would break down and cities could not be sustained. This has happened in China’s past. Climate change implies radical transformations and China is vulnerable. The Council can help reduce the risks by supporting Chinese pilot projects in energy and water efficient cities.

22. India has been influenced by China and the CCICED; the non-governmental (but government-supported) India Council for Sustainable Development has been set up. China and India can scout a new path for truly sustainable development, something that is not taking place elsewhere at present. As an example, India is now working on new ratings systems for buildings that are better adapted to conditions in less developed countries (LDC). It is suggested joint workshops be organized between the India and the China councils to explore issues of common concern.

23. In the context of emerging environmental issues, attention must be drawn to sulphur, mercury and ozone. In the United States (US), sulphur emissions have decreased by 40% over the past 35 years,
but acid rain has not gone away. By reducing particulates in the atmosphere, we lose their buffering properties; this has also happened in the European Union (EU) and it will also happen in China. Sulphur emissions will have to be further curtailed. Mercury in the atmosphere is generated as a by-product of coal combustion – and ironically, from the combustion of high quality coal. Ozone levels are complex to analyze; most curtailment efforts have been counterproductive. At present, Beijing’s ozone levels are four times the acceptable levels in other parts of the world – a key concern for the 2008 Olympics. Academic research is needed in these areas and ways must be found to attract young scientists to this work.

24. To build an energy efficient and resource-saving society, we need to balance GDP growth with per unit GDP energy consumption. The 11th FYP is clear in requiring a 4% annual decrease in per unit GDP energy consumption – but the corresponding plans put forth by provinces and municipalities ignore such planned efficiencies and only focus on GDP growth, with many cities and provinces putting forth growth figures far in excess of 10%. Were the central government to accept these figures, consequences could be dire and the authorities could lose credibility. Local planning needs to be looked at carefully.

25. It is difficult for China to accept a “moderately well-off” society when plain “well-off” has been the goal of most other countries. Arguing for sufficiency has never been very successful in developed countries; strategies such as eco-labelling have only had marginal success.

26. China is presently undergoing industrialization and much of its industrial path is determined by market forces, with growth led by heavy industry and the chemical industry. If the market calls for steel, China produces steel. In order to reduce the per unit of GDP energy consumption and pollution, efforts must be spent on heavy industry which is generating much of the problems. In China, 60% of the steel is still produced by smaller, low technology mills; China is benefiting from the high demand for steel, cement and construction materials – employment in these areas has soared. China needs growth and development at this stage.

27. One priority for China has not been fully addressed in the draft recommendations. The speed and intensity of economic change in China is driven by incentives that dominate decision-making in enterprises. Government response, in terms of the pace of institutional change in response to shifting conditions, is more measured – especially since the legal framework to deal with these issues is still under development. There is a mismatch between the economic forces affecting enterprises and local governments, and the lagged response to problems by institutions. Even with accelerated response, we still need technological and institutional innovation to deal with the particularities of the challenges facing China. For innovation to take place, the incentives have to be right – economic and environmental goals must be harmonized and reflected in these incentives. A greater reliance on market-based instruments would allow for an accelerated response time.
28. In China, economic growth will be limited by natural capital, rather than by more conventional capital. Economists must help by finding how ecological services can be saved. Sound ecosystems that can deliver eco-services are key to economic growth. Economic arguments must be used to convince stakeholders to decrease the carbon intensity of the energy supply.

29. The Council’s Fourth Phase should highlight climate change. China will be both a victim and a contributor to the problem. Impacts such as drought, floods and the melting of the Himalayas’ glaciers are all evident. China is not the whole culprit, and the western world needs to share with China its environmentally friendly technologies. The world is now preparing for the 2nd phase of the Kyoto protocol; this presents an opportunity for China’s contribution to the reduction of greenhouse gases. Positive aspects such as energy efficiency, energy saving and energy security should be emphasized. The potential of renewable energy sources still needs to be promoted.

30. The High Level TF report demonstrates the role of China in global resource and energy consumption. It must be recognized that China cannot achieve an environmentally-friendly society if it depletes global resources. China’s ability to contribute to the global commons will affect the way China is perceived in the world. China is at present one of the largest importers of many key inputs such as steel, fish, lumber and metals. Much of the processed products are then re-exported. China, because it is now the workshop of the world, has also been bearing most of the environmental costs. This is a strong argument to diversify the economy into the tertiary sector. Self-sufficiency in primary resources should be a priority and would contribute to global security of supply.

31. Growth paths are not determined, but rather are chosen - not only the quantity but also the quality of growth. China is not assured success in its goal to double GDP this decade and double it again in the next decade, within tolerable environmental limits. The GOC is confronted with a large problem of systems management; we are in a non-linear world where small changes can have disproportionate impacts. It is not logical to assume that past rapid growth can be replicated without reaping unintended consequences. In the Council, we continue to talk about economic growth on one hand, and environmental protection on the other; they in fact should be tightly integrated – this is China’s challenge for its 12th FYP.

32. On the issue of ensuring implementation of strategies beyond Beijing into local communities, four points are emphasized: SEPA has poor reach outside the capital; capacity needs to be built at the grassroots to address problems; the generation of an environmental industry across China is needed to ensure supply of needed technologies; targeted training and education are essential to change the attitudes and ideas of government cadres and business people.
33. The vicious circle of ever worsening environmental conditions in China must be reversed. Humans have had more fundamental impacts on the climate in the past one hundred years than the previous ice age. Budgets are under-funded for dealing with environmental issues, compared to other portfolios such as defence. Yet climate change is our most urgent priority. The UK’s Stern report opens our eyes on the costs of not taking immediate action.

34. The Council’s recommendations on taxation and pricing systems for sustainable consumption and production are in line with the recommendations of the OECD Review. There is ample scope for increasing environment-related taxes in China, especially on transport fuels. China should consider setting up an inter-ministerial group or commission to look into environmental taxes and how they can be used to achieve policy objectives. Two effects need to be considered: that on the poor, and that on international competitiveness. Moreover, China would benefit from being proactive on climate change, in terms of efficiency; a national policy and strategy to combat climate change are needed. At present, China is taking some measures but efforts are dispersed and China could be more effective if this were done in the context of a coherent, national strategy.

35. If China is to achieve its growth and living standards goals, it will need to invest more heavily into science and technology. Funds should reach 2% of GDP. In addition, more inter-disciplinary research will be needed on environmental technologies – SEPA will need to be involved along with other agencies.

36. At present, China has a fragmented administrative system for dealing with pollution – much of the responsibility is beyond SEPA’s reach. Other ministries have different priorities, as do provincial and local governments. Training local officials who make key investment and infrastructure construction decisions is urgently needed. NDRC is also very influential, through its plans for resources such as coal. Only the NDRC has the authority to pull together divergent interests within government. Incentives should be considered to ensure local officials pay attention to environmental protection. They focus on GDP growth because they are rewarded for it.

ITEM 5. SEPA MINISTER ZHOU SHENGXIAN’S RESOURCE SPEECH

37. With Vice-Chair Robert Greenhill presiding, fellow Vice-Chair and State Environmental Protection Administration Minister Zhou Shengxian addressed the Council. During the course of his presentation, he highlighted the following key points.

1) Council members met with Premier Wen and the GOC’s guiding principles entitled *The Three Transformations* (*San Ge Zhuanbian*) were mentioned. It is the duty of the SEPA minister to ensure these principles are properly understood.

2) The *Three Transformations* represent a historic shift by dealing with contradictions between rapid economic growth and environmental protection. The *Three Transformations* encompass the
following elements: first, shifting from a single economic focus, to a dual and equal focus on the economy and environmental protection, whereby the economy will be restructured and consumption patterns will change; secondly, reducing the lag between economic growth and environmental protection in such a way as to ensure both are on an equal plane; thirdly, shifting from the reliance on administrative means only, to the use of administrative, legal and market mechanisms to protect the environment. The Three Transformations are an extension to the concept of Scientific Approach to Development.

3) The Three Transformations are to be achieved by enhancing awareness of conservation and pollution control work, and by studying carefully foreign advanced ideas and technologies in this area. This is why this fits so well with the Council’s Fourth Phase. Therefore during this coming Phase, the Council must really focus on its role as a high-level advisory body to the GOC. Hegel said that the environment not only determines the way people live, but it also determines how people think.

4) At the beginning of the 11th FYP, China is exceeding its target for GDP growth, while it will not be able to meet this year’s mandated targets for energy conservation and pollution control. Only by adopting the Three Transformations does China have a chance to achieve the breakthrough that is needed. Priorities have been identified – such as ensuring potable water access, treating waste water and curbing carbon dioxide emissions. SEPA has now signed 31 “responsibility and accountability agreements” with provinces and power generation companies who are operating many of the thermal plants generating greenhouse gases.

5) SEPA has been regulating industries in a more stringent way and has made public its study on “Green GDP” to highlight the costs of growth. Public awareness campaigns are now underway. The GOC is also increasingly open about the challenges it is facing. This shows that the GOC has the maturity and confidence to recognize its problems and take action. Key areas of action for implementing the Three Transformations are trade, cleaner production and energy efficiency. China is now more people-centred (Yi Ren Wei Ben), and that means putting people’s health and safety first. A more rational land use system will be adopted, with zoning determining approved uses, from urbanization to the absence of any development.

6) Environmental Impact Assessments (EIA) will continue to take place, with a more effective monitoring and reporting system that involves the public, and the prosecution of environmental law breakers. Pollution discharge fees, water transfer fees and garbage disposal fees are too low and must be increased. New mechanisms are also needed to ensure land disturbed by mining is restored.

7) China has been taking action for environmental protection and this is better understood by the international community. The GOC appreciates international cooperation in this area and is intent on adopting more effective fiscal and market instruments. This is where the contribution of the Council is essential.
ITEM 6. REPORTS BY THE TASK FORCES

38. Vice-Chairs Robert Greenhill and Måns Lönnroth presided over the presentation of the Task Force reports and ensuing Council discussions.

a) Task Force on China’s Environment and Development Review and Prospect (High Level Task Force)

39. Task Force Co-chair Dr Huguette Labelle and Lead Experts and TF members Shen Guofang and Art Hanson presented a summary of the report to Council members and highlighted the following key points.

40. The TF was co-chaired by Dr Song Jian, it included as members Professor Qu Geping, Council Secretary General Zhu Guangyao, Canadian Office Director Earl Drake and a number of other Council members and stakeholders. Some one hundred specialists took part in the work of three sub-groups or contributed papers and presentations. SEPA staff efforts were essential to the TF’s work and are acknowledged. In the document, readers will find an analysis and summary of the key issues China is facing now. The report also estimates, were present trends to continue unabated, the impacts to be expected by 2020.

41. China is facing serious environmental challenges and the GOC has proposed sets of guidelines, goals and new approaches to overcome them. The GOC is committed to achieving Xiaokang by 2020, thanks to its adherence to the Scientific Approach to Development, to the Three Transformations and to the Harmonious Environmentally-friendly and Resource Saving Society. The cumulative experience to date needs to be summed up and analyzed in order to determine the most productive future course of action – and this was the work set out for the TF.

42. The TF report summarizes the current status of environmental problems in China, as well as the achievements, challenges, opportunities and measures taken. The report then outlines the CCICED’s research work and policy recommendations. Since its inception, Council has supported 20 Task Forces and Working Groups involving some 220 experts and over 2,000 researchers; they have produced some 100 pages of recommendations to the GOC that can be grouped in eight major thematic areas.

43. The TF report assesses the CCICED’s contributions and impacts. As a high-level think-tank, the Council helped to disseminate in China new concepts and philosophies that have now been adopted. For example, the increasing support for the circular economy and for cleaner production can be traced to the Council. Similarly, the increasing reliance on the rule of law and on market mechanisms to promote sustainable development can be attributed in part to the CCICED. Because the Council is a high-level advisory group, it gains fast-track access to China’s State Council and can effect more rapid
change. The Council has been a bridge between China and the rest of the world, in terms of information exchange and in terms of promoting greater communication and mutual understanding.

44. The GOC has already approved the Council’s Fourth Phase, which means the opportunity to provide advice on more issues and more importantly, to ensure greater relevance and practicality of recommended policies.

45. A chapter of the report predicts what would happen in 2020 were China not to take further action on existing environmental issues. Economic growth would continue at an average rate of 7.2% - but conceivably, this annual average rate could be higher and per capita GDP could well reach the US $4,000 dollar mark. China is increasingly integrated in the global economy and is now the world’s “factory”, hence it will be saddled increasingly with pollution – and conversely has an increasingly heavy impact on the global environment.

46. Business-as-usual scenarios help identify very severe problems for China, among them energy security, air pollution and water shortages due both to scarcity and pollution. Urban and hazardous wastes also pose serious challenges – sources are both domestic and foreign, with China importing toxic wastes it does not have the capacity to process. Other challenges are caused by the decrease in biodiversity and the damage to eco-systems. Scenarios indicate however that by 2020, there could be an increase in forest cover; furthermore, the problems around the conservation of soil and water and the control of desertification can be contained. However, wildlife conservation remains problematic, given the use of wildlife in China as food and for medicinal purposes.

47. A positive area highlighted is the control of ozone-depleting substances. But China is to overtake the US as the largest emitter of carbon dioxide in the coming 15 years – as early as 2009 according to a US report.

48. The Report takes a look at the road ahead and states that the 11th FYP is a critical period for reversing present negative trends; the specific energy-saving and pollution control mandated targets in the Plan indicate how seriously the GOC is taking these issues. The Report also identifies the necessary conditions to satisfy in order to avert serious growth impacts, such as: the promotion of sustainable production, consumption and trade; improved management and governance mechanisms in order to implement existing policies and laws; effective fiscal and market mechanisms that promote environmentally-friendly and resource-saving behaviour on the part of economic actors; the improvement of the technological innovation system; and the emergence of China as a “soft power” in the world, promoting peaceful development and harmony among nations on global environmental issues.
49. Without such necessary conditions, China will not be able to achieve Xiaokang. China has no other option but to take resolute action during this FYP. A new development path is called for, one that is environmentally-friendly and energy efficient. China will need to stringently adhere to its strict environmental targets in the 11th, 12th and 13th FYP. The Council needs to reflect on whether or not GDP growth in excess of 8-9% can overwhelm any efforts to tackle environmental protection and resource conservation. China is coping with this with a system of environmental governance that is relatively weak.

50. General recommendations have come out of this TF’s work. Improvements are needed in the environment and development information areas – at present this is a major constraint, with present available data of poor quality and resulting analysis lacking in credibility; there is a need for the GOC to institute an Environment and Development 2020 Monitoring Centre to coordinate the collection and dissemination of key data.

51. More comprehensive reform is needed in the area of environmental fiscal reform; budgets, subsidies and pricing policies need to be revised and perverse incentives need to be eliminated. China’s present growth and new programs such as the Building the New Socialist Countryside (Jianshe Shehuizhuyi Xin Nongcun) present good opportunities for investment in energy efficiency and environmentally-friendly infrastructure. However, improvements are needed in technological change – more particularly, there is a need to accelerate the adoption of new technologies. The Council could assist China in the area of access to improve foreign environmental technologies.

52. Environmental protection needs to be good for people, and be perceived to be so as well. That China is encountering problems of non-compliance can be linked to messages that are not conveyed well or understood. Sales of environmental products and services, including green tourism, are starting to take off in China; success stories of eco-cities and provinces need to be better publicized. The right mechanisms must be found to support the greater participation of the public in environmental monitoring and enforcement.

53. The TF feels that the proposed theme for the Fourth Phase, The Environmentally-Friendly Society, is a good one. By the end of this Phase, on its 20th anniversary, it is hoped that the Council will be able to see environmental considerations well embedded in mainstream GOC decision-making – thereby realizing Premier Wen’s Three Transformations. By then, China will contribute its experience and know-how to other countries through its own international cooperation efforts.

Discussion

54. Here is an emphasis in this report on renewable energy sources such a bio-energy. But caution must be exercised in China – the situation is different from Brazil or other countries that are developing
bio-energy. China’s sources of bio-fuels are scattered – farmers have very little biomass left as surplus – and much of it is found in low volumes; it is not rational use to gasify these fuels and use them for power. A 20,000 Watt biomass power plant needs 500 tonnes of materials per day. Costs need to be carefully analyzed before this option is recommended.

55. SEPA does need to be upgraded to a full ministry, and there is also the need for a leading group on the environment under the State Council. At present, different ministries pursue uncoordinated plans – there are elaborate ones for the development of China’s mining sector and for power generation, which are not coordinated with each other, and which do not take the environment into consideration either. Similarly, plans have been made for the development of industry without including carbon capture facilities in the plans. It would be key, prior to upgrading SEPA, to develop overarching environmental targets and requirements in order to ensure greater cohesion among various government actors.

b) Special Report on Environmental Issues and Countermeasures Facing the New Rural Development in China

56. The special report was presented to Council by the vice president of Tsinghua University, professor Chen Jining. During his presentation, Professor Chen emphasized the following issues.

57. The report, compiled very rapidly on the basis of surveys conducted by some 100 Tsinghua University students, considers environmental issues and interventions in the context of the GOC’s present program entitled Building the New Socialist Countryside. The resulting analysis concludes problems can be classified into four broad categories: water quality and quantity, infrastructure, farm wastes and soil degradation. The first two relate to quality of life in rural areas; the last two are more comprehensive problems.

58. Water quality is key not only for humans but also for livestock and is strongly correlated with economic development. At present, 320 million rural residents in relatively richer and poorer areas are drinking unsafe water; water quality is decreasing and some water-borne diseases such as schistosomiasis are reappearing. Poor quality is having a direct impact on quality of life for rural Chinese. Water scarcity is also an issue, with rural areas not receiving their fair share of attention in water planning. Access to, and use of appropriate water technologies are insufficient in rural China; the ability and willingness of residents to pay for water also affects supply and maintenance of water systems.

59. Rural infrastructure is lacking, in particular agricultural and household waste management. While waste levels are increasing (present levels of solid waste estimated at 180 million tonnes per year; waste water estimated at 320 million tonnes per year), most wastes are not treated and are disposed in
the open, leading to run-off and pollution of local water courses. Waste generation is expected to grow as large-scale livestock production increases in most areas of China. Financing is a key constraint for rural infrastructure and little is spent on this at present from local budgets. Crop residues are usually burned in rural China – less than half of the straw is recycled as livestock bedding, mulch or other uses.

60. Both soil and water contamination are getting worse in China’s countryside – resulting in reduced fertility and increased erosion. Industrial pollution is also having impacts on air, water and soil quality in agricultural areas. The stability of ecosystems is decreasing as is vegetation cover, exacerbating soil erosion.

61. The Special Report recommends the establishment of an environmental investment and management mechanism for rural China. The group emphasizes the need to take into account local specificities, given that “one size fits all” is not appropriate. The protection of drinking water quality should be a top priority. China’s farmers need to be guided in the wise use of scarce water resources. The Building of the New Socialist Countryside program should adopt a long term perspective, and support interventions that are coherent with sustainable development and efficient resource use.

c) Task Force on Economic Growth and Environment

62. Task Force Co-Chairs Li Jiange and Peter Bartelmus outlined the main points of their report for Council Members.

63. There was joint work by international and Chinese scholars on the issue of indicators and green accounting; the Chinese team worked on its own on the econometric models and the policy recommendations they generated.

64. The GOC announced its interest in Green GDP in the fall of 2003; this led to a CCICED-organized seminar and then to a TF. However, due to various administrative problems, the TF members were conflicted on what should be the focus of the group’s work. It was felt that a framework for indicator development was needed; green accounting was used due to its suitability to this exercise. Further on, interest was generated on coming up with indicators for Xiaokang.

65. The TF worked on developing local indicators and testing them in cities; work on data indicated that in most cities, there has been at best no progress and at worst a regression in terms of sustainability. The development of the Xiaokang indicator led to good results, with concepts such as well-being and welfare guiding the development of the indicator; no indicator formulation has been finalized yet.
66. The TF policy recommendations focus on the need for solid environmental monitoring data to support the kind of sophisticated models people want to use for policy work. Independent assessments of data validity are needed. A greater investment in environmental protection is called for; to verify the productivity of the investment, indicators need to reflect whether or not targets have been achieved. Reform of pricing, full-cost pricing, the imposition of ecological taxes are all desirable, but these are powerful levers and they cannot be set politically – they need to be based on solid assessments of costs and benefits; there is a role here for green accounting.

67. The TF has also worked on performance measurement systems for local officials, using green GDP. A 3-e (economy, environment and ecology) composite econometric model was developed for use in macroeconomic analysis. The model developed has allowed the TF to predict developments during the 11th FYP. At present, China is industrializing, with emphasis on heavy and chemical industries; urbanization and domestic consumption will continue to be strong drivers of economic development.

68. The TF work on models has allowed it to develop alternative scenarios highlighting differences between various policy options. The work led to the development of an early-warning system on the economy, predicting a 9.6% GDP growth instead of the government’s goal of 7.6%. Work demonstrates that in order to see a 10% drop in emissions in 2010, China needs to invest up to 1.6% of GDP in the environment. Government environmental investment and emissions reduction are among the most important indicators for sustainability as determined by the TF – this can also be used for performance assessment for local officials. The work also highlights the importance of gathering solid data on emissions and material flows; monitoring and surveillance must be improved in order to obtain more reliable, transparent and reliable data.

69. The circular economy should be adopted as part of China’s environmental mechanisms. Laws supporting this need to be implemented in order to reduce pollution at source. Renewable energy sources such as biomass and biogas are also recommended. Administrative responsibilities need to be clarified for environmental protection, between local, provincial and central levels of government. It is recommended that SEPA become a full ministry; local governments should be mandated to follow central government direction on the environment. Resource pricing also needs to be adjusted in order to support the adoption of a circular economy. Pollution fees need to be increased in order to play their full role as disincentives. Tax refund for enterprises that meet environmental standards and other similar incentives should be considered.

Discussion

70. It would be useful to conduct a comprehensive study on the cost of environmental degradation on the Chinese economy. A similar study was conducted in India and has been updated over the past nine years; the study found that more than 10% of GDP is lost due to environmental damage. Such a
study could be done in China on a regional basis, for reasons of manageability; it would generate the national resolve required to take decisive action. There is a direct link: what gets measured gets managed. Environmental information and the flow of this information are essential for environmental governance.

71. The report deals mostly with information policy and with indicators for green accounting, for Xiaokang, for the performance of local governments and for the “3-e” economic model. There is still room for clarifying the linkages between the various sets of indicators. The key indicators describing harmonious development include economic well-being, social cohesion, quality of life, democratic decision-making, science, education and culture. These are for the most part qualitative indicators, whereas the ones developed to assess local governments’ performance are mostly conventional quantitative indicators. The TF is encouraged to link the macro and micro-level indicators. This would present genuine innovation in the measurement of the performance of a Xiaokang society.

72. Germany attempted to develop a system to compile the Green GDP measurement, but the effort failed because of a proliferation of environmental sub-indicators that did not mesh well with a few very general and quite rigid economic indicators; decision-makers could not interpret the figures, hence use them. But China has now made good progress; it would be preferable to start using the present indicators, even if not ideal, than to wait for the development of a perfect instrument. It would also be useful to get more information on pilot projects conducted on green accounting in China and their results. The report should also be clear on the problems that can be solved using a de-centralized approach; this can be seen with developing bio-mass energy in rural areas where decentralized power generation is possible.

73. It is a truism that consumption patterns have to change. The Johannesburg conference came to the conclusion that it will take ten years of concerted efforts to change production and consumption patterns. Developed countries must be asked what they have accomplished in this respect to this point; the only step taken has to do with pricing – but there is a “fashion” to the way people consume and this “fashion” is spread through the global media. The Council needs to delve deeper into the factors that influence consumption patterns.

74. Key to taking effective environmental action is regulatory intervention and the use of economic instruments. Both require reliable data. These data are key to improving the efficacy of monitoring systems; more disclosure of information is also a necessary condition. In addition, setting financial targets and investing in environmental infrastructure are important; but so is allocating budgets for the operation and maintenance of environmental facilities, as well as ongoing monitoring and R&D.

75. Regarding the modelling of economic growth in relation to environment, changing prices can affect behaviour as was shown in the report. But there are problems with the model used in terms of
capturing investment cycles; the model assumes long cycles for most investments, but this is far from uniform. Prices in themselves are not sufficient signals to determine investment in new plants and technologies. This classic question between sectoral analysis and macro-economic modelling, in terms of capturing past dependency problems, needs to be addressed by the TF. Nonetheless, it is important to come up with indicators, even if not ideal, in order to trigger necessary policy interventions.

76. The conservation of natural resources is directly tied to economic growth; but growth does not necessarily result in heavy environmental costs. In the early 1990s, GDP rose for the Netherlands and other countries, but energy consumption per unit of GDP did not rise. This was due to policy interventions. In China, the situation is otherwise because there has yet to be a tipping point of awareness among the public and the majority of government administrators and leaders. The pace of growth masks some of the environmental effects and the depletion of natural resources.

d) Task Force on Environmental Governance

77. Co-Chairs Daniel Dudek, Udo Simonis and Xue Lan briefed the Council on the results of their work. They underlined the following issues during their presentation.

78. Environmental governance is a broad concept, going beyond the conventional view of government intervention. Governance is a process involving institutions that collaborate and that include both government and non-governmental groups; it covers the interactions of government, business and civil society. This reflects a change from 30 years ago when environmental policy was viewed as top down, command and control mechanisms targeting end-of-pipe treatment.

79. The new understanding of governance encompasses multi-stakeholder participation involved in decision-making, with a shift to pollution prevention and protection of eco-systems. This new governance is less reactive, and calls for more integrated environmental management. The TF was called upon to study an array of governance approaches; case studies and study tours helped members clarify key issues.

80. China is facing serious environmental governance challenges. A series of legal and structural institutional problems creates a weak capacity to protect the environment. Rising environmental damage has resulted in greater pressure on the GOC to meet people’s expectations that it can stop the degradation and take action. However, the set of legal and administrative instruments available to the GOC has not been developed comprehensively, nor is it integrated in the current policy and legal regime.

81. Premier Wen, in addressing the NPC, stated that there is a need to involve civil society to a greater extent – government cannot do it all. There are examples in the TF report of attempts in this
direction. China is also having problems enforcing central policies at the local level. Case studies
revealed that penalties for exceeding pollution discharges are capped at relatively low levels, and are
thus seen as part of the cost of doing business. Environmental authorities find it hard to resort to the
more stringent measure of shutting down the violators. Lifting the cap would result in an incentive for
enterprises to invest in facilities and processes that are more in harmony with nature.

82. The TF also identified the problem of reactive and uncoordinated policies. Sulphur dioxide was
used as a case study; a matrix of interventions was drawn up. One of the latest tools adopted is a
“commitment letter”, setting out a clear timetable for investing in desulphurization facilities. There is a
green subsidy to help enterprises purchase the necessary equipment, but none to cover operating costs;
enterprises find it cheaper to release emissions, bypassing the desulphurization process. A better, more
stringent framework is needed in order to improve control levels and compliance.

83. Involving business and civil society in governance can be effective, as the past year’s campaign
to increase summer temperatures in buildings and hotels to 26 degrees demonstrated.

84. The TF recommendations focus on several areas. Government capacity needs to be
strengthened in the areas of policy coordination, enforcement and implementation of regulatory
frameworks. SEPA’s status needs to be raised to a full ministry, but this alone is not sufficient; there
needs to be an executive-level body under the State Council to coordinate policy and enforcement, and
to ensure other ministries actively support the GOC’s sustainable development objectives. More
professionalism is needed in the management of environmental issues; capacity also needs to be
increased among legislative bodies such as the NPC to deal with the environment; judges and
prosecutors need to be educated and trained.

85. The business sector has a clear responsibility when it comes to implementation. But enterprises
need to be given more flexibility in choosing methods of control – this can be achieved through market
mechanisms and incentives.

86. The involvement of civil society, and NGOs in particular, is key; but NGOs need a clearer legal
status in order to play this role. There is also a need for increased awareness on the part of the public
regarding their right to participate in public hearings on environmental impact assessments of large
projects.

87. International cooperation is seen as a good vehicle to increase China’s capacity for
environmental governance. Making this issue one that is the purview of all of society, not just
government, is key.
Discussion

88. The role of the business community in environmental governance is one of implementation and execution. The constraint to business participation is not the absence of new technologies, but rather better dissemination and adoption. Buildings use roughly 40% of the global energy consumed; 90% of China’s new buildings are energy inefficient. The World Business Council (WBC) has recently signed an agreement to work on China’s buildings’ energy efficiency. The technology exists; proper building codes and their enforcement are needed. Other examples exist with the car industry. Government can provide an enabling environment so business will adopt improved technologies. The approach should be constructive, instead of antagonistic and punitive.

89. It has been emphasized that radical transformations are called for, which imply important changes in the structure and procedures of government. New structures would have to be compatible with the objectives of China’s environmental strategy. Three important questions need to be addressed. The first question is how to ensure the “power” ministries take into account environmental concerns – without their full cooperation, there can be no sustainable development since they are responsible for the major economic plans and only they have the power to instigate cooperation among ministries. The second question is whether to strengthen the environment ministry, or to ensure environmental concerns are mainstreamed in all ministries – in actual fact the preferred option is to do both. The third question is how to coordinate with the provincial and lower levels of government; the Environmental Protection Bureaus (EPB) tend to be weak and it is the Development and Reform Bureaus that make local decisions in line with national plans.

90. While it is true that SEPA’s status needs to be upgraded and that there should be a leading group to deal with environmental issues under the State Council, more attention needs to be paid to ensuring cohesive legislation. At present, there are numerous specific and very targeted laws, but old statutes that are still in effect have not been revised with an environmental perspective. At present, legal amendments often do not mainstream environmental concerns; a recent revision of the Company Law does not mention sustainable development or environmental issues – yet companies are key to environmental governance and enforcement. Similarly, the revised Higher Education Law mentions the key role of science and technology, but does not make mention of universities’ important responsibility to train young professionals who will contribute to sustainable development.

91. The report contains definitions of environmental governance, describes existing challenges and includes useful recommendations. It stresses that government comprises both formal and informal institutions, and that both forces can be harnessed for environmental protection. Yet the final recommendations should be more explicit on the definition of governance; at present, the report deals with the more narrow definition that excludes all non-governmental actors. A strong message is needed on the role of business, industry and non-governmental organizations. Moreover, when
recommending a grant program for innovative environmental management by local governments, it would be useful for the report to outline experiences with such programs in other countries.

92. The report shows that responsibility and accountability must be clarified among local and central levels of government and other actors; incentives and penalties must be put in place in order to ensure cooperation. In other countries, even if the national governments introduce important changes, local governments and cities also take the initiative and introduce important innovations. Local initiatives should be supported; there has to be more dynamism through the inclusion of “bottom-up” decision-making and action. The Council should consider as part of its future work the issue of how globalization can support the implementation of domestic policies and the creation of a more environmentally-friendly society in China.

e) Task Force on Eco-Compensation Mechanisms

93. Council Members heard the following report from Co-chairs Li Wenhua and Hidefumi Imura. The speakers highlighted the following points from their TF report.

94. The rationale behind the concept of eco-compensation, its theories, lessons learned from foreign countries and a framework for eco-compensation in China are the topics covered in the report. Case studies were also conducted in the areas of eco-compensation in small watersheds, forests, nature reserves and mining reclamation. Surveys of key stakeholders, data gathering and conferences were held, all contributing to the TF results.

95. Eco-compensation is important due to the rapid growth of the economy, the need to conserve and protect natural resources. Most of China’s environmental legislation deals with pollution; there is relatively little on natural resource protection. Moreover, at present there is little incentive for ecological protection, threatening harmonious development since victims of growth or the stewards of protected areas are not compensated for the services they provide society. Ecological services are not included in the national accounts system. There has been some research into the concept of eco-compensation, and some pilot projects have been conducted in parts of China. The concept is increasingly prized by the GOC – as demonstrated by the People-centred Approach (yi ren wei ben) and the Scientific Approach to Development (kexue fazhan guan) advocated by the government.

96. The definitions of eco-compensation are numerous; the TF adopted the following: Eco-compensation is an institutional arrangement to adjust the relationship among stakeholders who conserve and/or use the services of an ecological system.

97. When it comes to pollution, China has a fairly complete legal framework in place to deal with the perpetrators and the victims of pollution; the TF focused its efforts on eco-compensation for
ecological services provided by systems such as watersheds. By compensating victims for ecological
damage, we would internalize at least part of the costs of environmental externalities. The theoretical
backbone of eco-compensation is the theory on the value of ecosystems, the theory of economic
externalities and the public goods theory.

98. A survey of international experience in this area reveals several key approaches to eco-
compensation, including direct payments and eco-certification programs. Successful practices have
been tried in nature reserves, protected forests, fragile watersheds and in mine reclamation.
International experience demonstrates good practices and enforceable laws and regulations. To date,
China has not made full use of market-based mechanisms of eco-compensation; the automatic response
is still to turn to the government for monetary compensation. At present, the State Forestry
Administration (SFA) is conducting a pilot study of carbon trading – another form of eco-compensation;
the “grain for green” (tuigeng huanglin) program is one as well. There are six key pilots presently
conducted in various areas by the SFA – a lead agency for eco-compensation given its current mandate.

99. China is still very much in the exploratory stage of setting up eco-compensation systems. Since
the 1990s, work has been done on Green GDP, which provides methodologies for resource accounting.
But there is still a policy vacuum without which agencies or entities cannot be compelled to implement
eco-compensation schemes; there are no standards for compensation across China at present, with some
areas paying very little for afforestation of sloped land for example, whereas more wealthy areas are
paying much higher compensation rates for the same service.

100. Eco-compensation for watershed services is more common: for example, Beijing is paying Hebei
province for watershed use. Some provinces are also compensating others for such services. However,
more complex problems are created when upstream peoples provide an ecological service for
downstream residents; the multiplicity of victims and beneficiaries makes implementation of a
compensation scheme problematic.

101. In the mining area, China is now looking at ensuring that mines post bonds, or deposit the
funds necessary to reclaim disturbed areas once the mine closes. One problem however emerges in that
funds collected for environmental uses are often recycled into general revenue. Other problems are
caused by the difficulties of assessing values and of ensuring equitable compensation by all
beneficiaries to all contributors of the ecological service. There is at present a legal vacuum for this in
China; and no implementation modalities have been developed.

102. An international convention governs biodiversity conservation, so a framework has been
developed for eco-compensation. The TF proposes to the GOC a set of priorities that would enable it to
gradually put in place an eco-compensation system. In addition, standards should be determined with
the aid of criteria such as how essential the eco-system is, and the opportunity cost of the resources that will not be exploited.

103. The framework proposed is dynamic, in order to ensure mechanisms can be changed to suit circumstances. Case studies show that the main methods of eco-compensation are cash payments, in-kind payments, and market mechanisms (such as green certification). Eco-compensation systems need to be put in place for a long period of time in order to ensure lasting effects and sustainability; they also need to be flexible in order to fit local conditions.

104. The central government needs to provide the guidance and set up the legal framework to support implementation of eco-compensation programs at local levels. The TF recommends the State Council issue guidelines emphasizing the importance of the concept, in order to ensure local governments are better informed and support implementation. The central government should also provide some funds for the establishment of eco-compensation schemes. More research is needed in actual models of eco-compensation programs and on their implementation modalities.

105. The new term applied to eco-compensation is called Beneficiary Pay Principle. There are three aspects to the usual eco-compensation mechanisms: who should pay and for what purpose; who collects; and how much. The funds collected should be dedicated to environmental projects, or at the very least to enhance eco-service functions of ecosystems; the principles according to which funds collected are redistributed need to be clear, and governance mechanisms, with proper oversight, need to be established.

106. The eco-compensation schemes will require negotiations among interested parties (if government is not wholly funding them), since it is unlikely beneficiaries will agree to pay the providers of the ecological service. Valuation of services and allocation of rights to the resources being shared are essential to the process. Transparency is needed for financial flows for eco-compensation schemes to be equitable and sustainable.

Discussion

107. The valuation of eco-system services is one of four areas of focus for the WBC. Local businesses are key in the assessment process of eco-system services; if this process is not market-based, eco-systems will always be a secondary priority after the economy. A key element of the discussion is the ownership of assets; if we are talking about government assets, then eco-compensation funds can be drawn from the tax base; but if assets belong to companies or individuals, then the process becomes one of price setting between buyers and sellers. This aspect has not been fully addressed by the TF in its report.
108. The TF mentions the global dimension of eco-compensation; the Convention on Biodiversity (CBD) contains provisions for the sharing of benefits from knowledge and genetics acquired from indigenous peoples; property rights are linked to this issue. A similar discussion is happening at this time in Nairobi because afforestation could be integrated in the Clean Development Mechanisms (CDM) involving carbon trading, but at present standing forests cannot be used in the calculation of compensation. There is also a regional aspect to the issue in that most watersheds involve trans-boundary rivers, and mechanisms are not yet developed for eco-compensation in this context. The approach of the TF is the correct one, which is to start with concrete case studies and work on a pilot basis, step by step.

109. There are good examples in China and Vietnam of eco-compensation schemes which illustrate the complexities involved in implementation. In the Mount Wuyi area of China, there is a stark difference between the area managed by the Construction Ministry’s landscape and scenic area, and the protected forest area managed by the SFA. Residents of the scenic area have access to income from tourism enterprises, whereas the residents of the protected forest have no access to timber or non-timber resources, and cannot develop tourism enterprises. However in Vietnam, the government has set up the village responsibility system; villagers are paid based on their collective performance in managing the resources and protecting them from illegal logging, poaching and forest fires. Mutual responsibility ensures that in areas where policing and administrative control systems are not strong, results are nonetheless achieved.

110. A broader concept of eco-compensation should have been explored by the TF. Recommendations to the GOC could have dealt with a wider array of situations.

111. It should be recognized that property rights must always be subsidiary to the public good, as judged by the government. If a resource needs to be preserved, property rights should be deemed less important than the need to secure resource protection. In some cases, property owners will lose out, as happens in any market.

112. NGOs can play useful roles in the implementation of eco-compensation schemes. In other countries, NGOs have set up schemes that do not require the involvement of government authorities. In the case of compensating upstream residents for benefits received by downstream users, the issue is often difficult for governments that have no framework for these kinds of negotiations. Several examples of successful schemes exist and can provide useful lessons and models for China.

113. China is already spending vast sums on various eco-compensation schemes – one of which is the fund to fight desertification. The central government and the provinces affected need to contribute to this fund so the affected provinces can invest in fighting the advance of the sands. Property rights are key to this process and China is increasingly moving to quasi-property rights, as demonstrated by
the grasslands family responsibility system that contracts areas of grasslands to individual herder families. Market-based mechanisms should be preferred to administrative decrees because they are more effective. There is a need for this TF to continue working on the problems linked to eco-compensation – a relatively new area for China.

ITEM 7. DISCUSSION ON THE FUTURE DEVELOPMENT OF THE CCICED

114. Vice-Chair Qu Geping presided over a discussion on the Fourth Phase of the CCICED. Council Secretary-General Zhu Guangyao presented a preliminary outline of the future direction and function of the advisory body. Following this presentation, members provided feedback to Council. The Secretary General highlighted the following points during his remarks.

115. Over the past fifteen years and since the Council’s founding, China has seen dramatic social and economic changes spurred on by rapid GDP growth. China has also been integrated into the global economy, due to its accession to the World Trade Organization (WTO) and its increasing presence in global markets. But growth has also brought along increasing pressures on resources and the environment; biodiversity degradation and climate change have been worsening. The challenge now is to better manage this relationship between growth and environment in order to ensure a sustainable future for China.

116. China is actively implementing multilateral agreements and isshouldering its responsibilities regarding protection of the global environment. China’s leaders understand the country is at a critical juncture, which is why there is now emphasis on resource saving, the promotion of a harmonious society and of harmony between humanity and nature. While committed to achieving Xiaokang by 2020, China believes that by implementing the Three Transformations, it can promote the coordinated development of the economy and the environment.

117. Therefore, the Fourth Phase of the Council should focus on the delivery of strategic advice and policy recommendations to support the development of a harmonious society and the increasing interaction between China and the rest of the world. The Council needs to take into account the GOC’s important concerns regarding energy and resources security, information technologies and globalization, negotiations related to international conventions and modalities of public participation.

118. The Council should therefore work on the following issues, some of which have not yet been addressed during the past three phases, and which have been identified by the High Level Task Force as important. Issues identified include the policy environment required for the development of a harmonious society; an assessment of long-term strategic environmental options, including the measures needed to combat climate change, support environmental security and the management of eco-services and systems. Additional issues identified are sustainable marine environments;
environmental and economic policies required for the building of the new socialist countryside (jianshe shehuizhuyi xin nongcun); long-term strategies for international conventions; and issues of public participation, gender and poverty reduction as related to the environment. More suggestions are expected from members.

119. Operational considerations for the Fourth Phase have been identified by the Council Secretariat. The Council needs to be tied more closely to the policy needs of the GOC and should help research emergent problems, thereby providing the GOC with timely strategic advice.

120. Working operations of the Council need to be changed; the efficiency of the expert teams, the quality of the research and the utilization of funds need to be enhanced. Closer relations need to be sustained with countries, NGOs and other organizations, thereby increasing the intensity of the exchanges and cooperation. It is also necessary to maximize the impacts of the Council recommendations; this can be achieved by improving the mechanisms used to communicate recommendations with line agencies of the GOC; new modalities suggested include round-tables, conferences, seminars, publications and greater dissemination through the popular media.

121. The Bureau is presently looking into the Council membership for the Fourth Phase; nominations will be approved by the State Council before being announced. This process is expected to be completed by April 2007, allowing ample time for the preparation of the 2007 AGM in the fall.

Discussion

122. The critical issue of our century is that of environment, energy and climate change. In five year’s time, there should be some progress towards China becoming an energy efficient and low carbon emission society. This topic should be the focus of one of the Fourth Phase TFs; some countries now have Kyoto targets and detailed mechanisms for achieving these targets – this is something China could look at, with special emphasis on implementation. Part of the solution has to be the increased effectiveness of public participation, the dissemination of environmental information and an expanded role for NGOs.

123. More work needs to be done on climate change during the Fourth Phase. The Kyoto Protocol will go into a new phase after 2012; much research is being conducted, and there is some question on the continued rise of temperatures after 2012, due to the expected role of sulphur dioxide. Another expected impact from climate change is the increase in frequency and severity of droughts due to increased presence of aerosol particles in the atmosphere; this issue is one of special concern for China. The importance of research in all these areas cannot be stressed enough; this research is needed for the development of policy options.
124. Two points should be emphasized for the Council’s future work. The OECD report identifies clearly the “implementation gap” in China; transformation is needed rather than marginal change. The Council needs to provide advice and experience that is consistent with the transformation required, which is to consider environment and growth as one and the same integrated issue; were this achieved by the 12th FYP, the development of China could be significantly different. Secondly, there should be a TF focusing on improving the implementation of policies for sustainable development. To date, the Council has not addressed the poor reach of policies beyond Beijing, nor has it considered in a targeted, pragmatic way as to how to get progressive ideas disseminated to cities and provinces. This TF on Implementation could encompass issues of science and technology innovation and dissemination, small and medium enterprises (SME) and the role of business, training and education, and public involvement.

125. Three procedural changes would improve the work of Council in future. Other key ministries such as the NDRC and others should be more actively engaged in the Council’s work; they need to not only sit in Council but to take part in the debates. Provincial and municipal leaders should similarly be invited to take an active part. And the capacity of new members, international and Chinese, to think independently will be key to their effectiveness and therefore should be a criterion for selection.

126. China has to innovate because it faces dramatic changes; the capacity and solutions have to be developed to “de-carbonize” the economy; energy policies that are climate-friendly must be put forward. The next phase of the Council could make an important contribution in this direction for China. Moreover, as China emerges as a global power, the focus of the Council should shift from domestic considerations to more international dimensions; domestic environmental considerations should also integrate to a greater extent international aspects.

127. The suggestion to host round-tables between Council AGMs is endorsed. In addition, it would be a good innovation to bring people together in a more relaxed, informal atmosphere which would support more productive exchanges. Moreover, the role of China following the first phase of the Kyoto Protocol in 2012 needs to be considered, with emphasis put on the many problems of severing our dependence on carbon-based fuels. Another possible area of research for a Council TF would be human health and the environment.

128. Third Phase TF topics were focused mostly on economic and technological issues; research in these areas needs to continue at greater depth. But the mobilization of forces necessary to face challenges needs to be considered as well. A proposal for a TF focusing on higher education and sustainable development was put forward at the end of the Second Phase. This should be implemented during the Fourth Phase because today’s students will be tomorrow’s leaders. It is necessary to mobilize this human capital as well as the research capacities of universities; this may involve a reform of the higher education system in China.
129. Energy security in the context of climate change is a necessary area of research for the Council during its next phase. In addition, the global role now played by China cannot be ignored by the CCICED. A TF should look into the role of foreign direct investment (FDI) and the need to require best available technologies of investors. And public participation should also be the subject of Council work.

130. Round-tables held between Council meetings should consist of participants from government, research organizations and the private sector; the private sector is key to the realization of full integration of environmental issues in economic development. A TF on the environmental problems, prospects and responsibilities of the private sector could be created to further explore this question; participation of private sector stakeholders will be critical to the success of this TF.

131. With world population soon reaching 9 billion, the challenge will be how we can all survive on our planet. The Council is a good educational experience and can exert influence on the creation of institutions in other countries to foster better knowledge and understanding. Influenced by the Council, Harvard University instituted an inter-disciplinary study to better understand China in the global context; the study involved specialists in areas such as law, business, science and culture. This approach has generated mutual understanding among specialists who come from a host of nations.

ITEM 8. DISCUSSION AND APPROVAL OF THE RECOMMENDATIONS

132. With Vice-Chair Qu Geping presiding, the draft Council recommendations to the Government of China for 2006 were discussed and approved. During the course of these deliberations, members made the following substantive points.

133. Discussion of public participation in the recommendations should reflect the need to close the present data gap; it is important to mention the need to develop and generate environmental information, and make reference to the use of and access to this information. Moreover, it is necessary to specifically mention social as well as environmental data, since these data are also very critical.

134. One point should be stressed in the passage dealing with improving efficiency and industrial structure. There is mention of innovation and R&D; but it does not reflect the importance of adoption of environmentally-friendly technologies. The majority of needed technologies for enhanced efficiency already exist but have not been adopted yet; not being specific on this distinction could lead to a wrong-headed emphasis on innovation.

135. Recommendation number five extends the concept of circular economy to the agriculture sector; it responds to recommendations of the Stern Review on Climate Change that more needs to be
done to reduce non-carbon dioxide emissions from agriculture; and finally the recommendation is directed at reducing China’s ecological footprint and long distance air pollution.

136. The Fourth Phase of the Council is promising because of the importance it is granted by the GOC. Minister Zhou is encouraged to champion the suggestion to create a Leading Group on Environment under the State Council; such a group existed until 1998 and it fulfilled important policy coordination responsibilities. Many of the present environmental initiatives were started under the aegis of this leading group.

137. It is hoped that during the Fourth Phase, there will be more active involvement in the CCICED of key stakeholder ministries such as the Commerce, Transport, and others. They were actively involved in the early years of the Council but progressively have drifted away. Minister Zhou is kindly enjoined to push the Council Secretariat to liaise more effectively with these ministries. And given that many of the recommendations address specifically the responsibilities of other ministries, the Secretariat should provide Council with feedback from these entities to the Council’s ideas. It would also be possible for the Prime Minister or the Vice Premier to charge relevant ministries with such tasks – to take part in Council and to provide feedback on recommendations. SEPA should attempt to implement these suggestions.

ITEM 9. CLOSING CEREMONY

138. Vice-Chair Robert Greenhill presided over the closing ceremony of the CCICED’s AGM for 2006. During their closing remarks, Vice-Chairs Måns Lönnroth, Robert Greenhill and Zhou Shengxian summarized the proceedings and made the following points.

139. In looking back at the Third Phase, it can be seen how important this period was for the Council. Initially, mostly domestic issues were addressed, but increasingly the focus shifted to China’s relations with the world. The Swedish International Development Agency has been a supporter of the Council during the Third Phase and is pondering its continued support for the Fourth Phase. Changes suggested for the Fourth Phase could improve the impact of the recommendations. China and SEPA have daunting challenges ahead; but so do other governments. The participation of international members in the Council adds to the pressures put on all governments to take action because transformation begins at home.

140. In looking back over the past five years, the Council can be proud of the contribution it made. Tribute is due to the GOC that has allowed this advisory process to take place, and to the international experts who contribute their knowledge and time. International members witness the determination and commitment demonstrated by Premier Wen Jiabao and Minister Zhou Shengxian. Although China and the Council face tough battles for the environment in the coming five to ten years, there is
confidence the goals can be achieved because of the leadership demonstrated by China’s leaders, the willingness of the international community to work with China, and because of the institutional strength built in the Council over the past fifteen years.

141. Proceedings of this Fifth Meeting of the Third Phase were successful; once amended, final Council recommendations will be submitted to the State Council. The following points summarize the consensus reached during this AGM: it is necessary to accelerate the historic transformation of China because it will lead to the full integration of the economy and the environment; the CCICED is still needed as a high level advisory body to the GOC and has a unique role to play; there is a need to improve the mechanisms needed for environmental protection, including rational resource pricing reflecting scarcity and environmental costs; pollution prevention needs a range of methods, from cleaner production to sustainable distribution, allocation, consumption and trade.

142. The AGM produced two important results: the adoption of recommendations to the GOC, and the definition of a future direction for the CCICED. The Council’s glorious past has become part of the process that supports environmental protection in China. The CCICED has allowed China to engage in closer international cooperation and to become more integrated in the global community. The role of the Council is expected to become even more important as China moves forward.

143. Vice Premier Zeng Peiyan has entrusted Minister Zhou Shengxian with the task of conferring on all CCICED members and Task Force Co-Chairs a medal of appreciation for their contribution to the Third Phase of the Council.

144. With Council Vice-Chair Robert Greenhill presiding, the AGM of the Fifth Meeting of the Fourth Phase was declared closed.

III. MEETING WITH PREMIER WEN JIABAO

145. Premier Wen Jiabao met with international CCICED members at the Great Hall of the People on the first day of the AGM. The Premier opened with welcoming remarks and engaged Co-Chair Robert Greenhill in discussion. The following notes were made during the course of this meeting.

146. Premier Wen Jiabao (WJB): I extend a very warm welcome to our distinguished guests and friends from so many countries and international organizations, who care about environmental protection and development in China. The CCICED is completing its 3rd Phase with this 15th Meeting. I’ve taken part in 10 of them, and I know Qu Geping has attended all 15. In order for us to have a more lively discussion, I encourage you to ask questions directly. I promise I will not disappoint you – I will tell the truth.
147. Robert Greenhill (RG): Premier Wen, thank you for receiving us again this year, our 15th Anniversary. The Council has benefited from your personal involvement and support for a decade and we appreciate this greatly. This is no doubt why this Council is one of the best organizations for environment and development. We are honoured that the State Council has approved the Council’s 4th Phase. I am pleased to let you know that Canada has now also committed its support to this new phase. This demonstrates our belief in the Council itself and in the warm friendship between our two countries.

148. WJB: Thank you to Canada for this support and also to all countries that aid the China Council. On the question of how long this Council will exist, I can tell you that we will continue until the international community is satisfied with China’s efforts towards environmental protection. This is not an easy task; it will require the effort of many generations, perhaps dozens. I will not be around by then, but the Council itself may be.

149. RG: We would appreciate your advice. During the past three Phases of the Council, we provided China with advice. We see this next phase as an opportunity to communicate to the world China’s progress in terms of technology, policies and new approaches. These need to be better known internationally. We therefore envision a two-way exchange of ideas on these issues. We need your direction as we develop our plans in this direction.

150. WJB: Personally, I have mixed feelings. I have many worries but also I see much to hearten me. Overall, the burdens are heavy. I take comfort in the fact that increasingly Chinese people and officials pay attention to the environment and the ecology. This is unprecedented. In the new Five Year Plan, we have set an anticipated yearly target for GDP growth, but we have also mandated targets for energy consumption and emissions. Our anticipated target for GDP growth is 8% and I am confident we will achieve this. Our mandated target for energy consumption is for a 20% reduction over the next five years, which means a 4% annual decrease. For SO2 and COD emissions, our target is a 10% reduction over 5 years, which is a 2% annual reduction. We are into the first year of the Plan, and I can say that we have slim hopes of achieving those two mandatory targets. This is not because we are not trying hard – rather it is because this reflects the problems of our present economic structure and of our current model of economic growth. This problem emerges in the process of development and it is the focus of our attention, otherwise this country will not develop in a sustainable manner. In fact, China’s environment and ecology are not only our concern, but that of the whole world. China has an obligation to the international community in this regard. During the rest of my tenure, I will exert all my efforts in this direction. I am trying to turn this situation around. I suggest that the assessment of our success in this endeavour form part of the focus of your work during this Fourth Phase.

151. RG: This is precisely what we are considering this year, specifically suggestions to help China achieve the “Three Transformations” that you laid out last April, emphasizing the balance between the environment and the economy, the synchronicity between the two, and a comprehensive approach.
Over the coming three days, we will discuss and finalize our recommendations to your government in this regard.

152. **WJB**: You took notice of the “Three Transformations”?

153. **RG**: Yes, this is one of the good pieces of advice we want to communicate more broadly to the international community. Our recommendations deal with environmental governance. We recommend that each ministry or commission under the State Council strengthen its responsibility for environmental protection, and that the environmental impacts of new initiatives be assessed. The responsibility, power and authority of SEPA should be increased, transforming it into a cabinet ministry. I understand that the OECD has just completed a comprehensive assessment of the environment in China and has come to similar recommendations.

154. **WJB**: On your first point, let me add that not only have we made Ministries responsible for environmental matters, but we also established an accountability system. On your second point, we are giving SEPA more responsibility to supervise and monitor this.

155. **RG**: This will increase the pressure from the central government to achieve compliance. But we also need to change the way the thousands of local government officials, staff and workers see their work and behave.

156. **WJB**: On your recommendation of raising SEPA’s status in government, if I continue to work and serve in my present capacity, I will give serious consideration to your proposal. I hope that when SEPA does its job, it shows the strength of steel instead of being soft and feeble as bean curd (tofu).

157. **RG**: A key tool in order to support the effectiveness of SEPA will be the gathering and sharing of information. Strong advice and good quality environmental information, shared at the local level, is the best way to change the behaviour of people, businesses and government. Our experience is that, where companies have had to share information on pollution levels openly, they have started to change because the information acts as a self-regulating mechanism of industrial and corporate behaviour.

158. **WJB**: Regarding enforcement by local officials, we think it is key to have them pay attention to the following two concepts. First, that good environment and sound ecology are also elements of productivity. Secondly, good officials not only pursue short-term goals but also take care of long-term objectives, thereby responding to the needs of future generations. I have noted that our northern rivers are increasingly drying up and becoming more polluted. But a few days ago, I was in Guangxi, in the city of Liuzhou, where the Liujiang River flows. I was happy to see that water quality there has been kept at class three, with local people able to swim in the river. In 2008, we will host the Beijing
Olympics and we want it to be successful. But success depends as much on well-built venues as on the athletes being able to compete under blue skies and white clouds. That won’t be easy.

159. **RG:** Prices have to change for people’s behaviour to be affected, changing consumption patterns and benefiting future generations. You emphasized that very point last year when we met you. We have a Task Force working on this issue and we note that resource prices have been adjusted, namely the prices of petroleum and coal are going up. We also note that fines are imposed on polluters. But for behaviour to change, the fines should be higher, instead of just another charge that can be added to the cost of doing business. If polluters are only charged RMB 200,000, this will not change their behaviour. We also see a good opportunity for exploring eco-compensation in China, thereby rewarding those who are doing the right thing for the environment. For example, farmers who are helping to conserve water and soils in upstream areas of watersheds, benefiting people downstream, should be compensated. So far, there are good examples of this in China and the potential for more is excellent, but there is no coherent policy governing this area at this time. We also think government need not bear the entire burden of eco-compensation, but can share it with the beneficiaries.

160. **WJB:** The three aspects of this question which you’ve outlined are all correct and relate to institutions and systems needed for environmental protection. First, we need to set the correct prices. In China at present, our most precious goods are also the cheapest – water and food. As a result, people don’t value them, take them for granted and waste them. Secondly, we need a strict system of penalties and rewards – not only legal ones, but economic as well. Those who damage the environment and contravene the laws should be punished according to the laws. When polluters are assessed fines, they should not be too low. Thirdly, government and enterprises need to invest in environmental protection the same way that they invest in productive capacity. Both for factories and for infrastructure investment, we need an effective environmental governance system. We are not doing enough in these areas. Some of our factories have sewage treatment facilities but they do not use them; only when an inspection team shows up do they turn on the equipment, and it’s shut down as soon as the inspectors leave. In recent years, we have noted mass protests when the public is dissatisfied – and the proportion of protests that can be traced to environmental causes is on the rise. As the public becomes more aware of its rights, it becomes more aware of its living environment. However, some of our officials lack this kind of awareness.

161. **RG:** You will find the engagement of the public is the best ally for the central government to ensure its policies are implemented on the ground. Local communities are best placed to ensure government and industry abide by the regulations. To emphasize, pricing is a powerful tool and pricing changes require the same level of careful analysis as policy changes. It is important to open a dialogue with the private sector to ensure the right signals are sent. A mechanism needs to be set up to support this dialogue. You need the right conversation between government and industry in order to set the right prices and improve behaviour. To sum up, we recommend changes in governance,
changes in environmental information dissemination and changes in pricing, especially eco-compensation. China can then accelerate its progress towards the achievement of its 5-year targets.

162. **WJB**: I agree. In fact, the “Three Transformations” is a plan for a sea change in terms of China’s model of economic growth. It is a way to ensure a more realistic, scientific approach to sustainable development. The “Three Transformations” point to the future direction in this respect and we agree that pricing changes require careful study. I call this the “three instruments”: economic, legal and administrative. I would add a fourth one, the improvement in environmental awareness of our population and an increase in their environmental competence. Government has the authority and the ability to administer environmental protection; there is a need for a sound and strict regulatory system. This is not something that we can accomplish in a day – but we recognize it must be done and we have started making the necessary preparations for implementation. I welcome you, through the Council, to pay more attention to the environment in China.

163. **RG**: We will improve and refine our recommendations over the next few days. We appreciate your strong commitment to the environment in China – which is important for China itself but also for the whole world. The Council will continue its work with you on those issues.

164. **WJB**: Please, come up with more advice, recommendations and views. Some may be direct, but we know they are well intended. The American scholar Lester Brown wrote an article entitled “Who will feed China?” a few years back and some thought his views were incorrect and should be refuted. But I agreed with some of his views. He brought up several fundamental and critical issues for China, namely the shortages of energy, food and water that we could face. More recently, he has raised the issues of population growth and environment. We should not let our own views be confined, as though in a box – but rather, we should liberate our thinking in order to ensure the next generations will benefit and we leave them “green mountains and clear waters.”

IV. RECOMMENDATIONS OF THE COUNCIL

165. **Recommendations of the CCICED to the Government of China**

GENERAL REPORT OF POLICY RECOMMENDATIONS

CCICED 2006 Annual General Meeting

OVERVIEW
On November 10-12, 2006 the CCICED Annual General Meeting was held in Beijing. It discussed the theme of “Scientific Development and a better-off Society” and put forward policy recommendations on the basis of the work of four Task Forces and one special research\(^1\).

Since the beginning of the reform and opening-up in 1978, China’s rapid economic and social development yielded remarkable progress, which not only has brought a strong boost to China’s national strength and people's living conditions, but also had a definite impact at the global level. China’s rapid economic development comes at the cost of tremendous pressure and sometimes adverses impacts on resources and the environment.

The Chinese government and public have gone through a gradual process of recognition of the relationship between development and environmental protection. After the current administration took office in 2003, China’s economic and social development has entered into a new stage, along with intensifying environmental protection measures. The Chinese government has put forward a series of new development concepts, development goals and guiding principles, the most recent of which were the “three transformations”\(^2\) emphasized by Premier Wen Jiabao during the Sixth National Conference on Environmental Protection.

The “three transformations” represent the new strategic approach to environmental problems by the Chinese government, and a higher degree of integration of environmental and economic concerns. It manifests the continuous exploration of the new alternative environment and development path that will help China relieve the massive resource and environmental pressures it would face, should it stay with the conventional economic growth mode.

It is at this crucial juncture that CCICED completes its work of the third phase, the output of which was highly praised and supported by Premier Wen Jiabao during his meeting with CCICED representatives, as well as by SEPA Minister Zhou Shengxian who was present during the entire course of the meeting. The meeting output was also applauded by both international as well as domestic CCICED council members.

1. Reform of the government’s environmental management capacity

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1 TF on Economic Growth and Environment; TF on Eco-compensation; TF on Environmental Governance; TF on China’s Environment and Development Review & Prospect; and special research on the development of the new countryside initiative.

2 The first “transformation” concerns the change from economy-centered development to equal attention on both environmental protection and economic development. The second is the change from delayed environmental protection after economic development to simultaneous environmental protection and economic development. The third is the change from sole administrative measures to an integrated approach of legal, economic, technical and necessary administrative measures.
The successful achievement of China’s environmental and scientific development targets and the integrity of environmental management systems in China depend on a strong environmental governance capacity. In order to achieve this CCICED recommends to:

- Elevate SEPA to full cabinet rank in the government. Enhance the capacity of the environmental administrative system of China’s central government by increasing the budget and capacity of SEPA in order for it to adequately meet its responsibilities of regulation, enforcement, analysis, monitoring, regulation, and professional training.

- Establish a leading group on national environmental issues chaired by the Premier, with membership comprised of the Ministers of all relevant agencies with the Secretariat provided by SEPA. Establish environmental accountabilities for all ministries involved and enforce them.

- Reinforce compliance by establishing stronger penalties for non-compliance with environmental laws and regulations. Use the penalty structure to create a deterrent to pollution. Strengthen civil penalties for pollution damage and criminal penalties for the most severe violations.

- Improve multi-level governance by realigning local environmental management to create a direct line of authority to provincial environmental protection bureaus (EPBs). Equip SEPA with more human and financial resources to be provided to local EPBs to enhance their performance; charge new regional SEPA offices with the responsibility to coordinate, guide, supervise, and when necessary enforce local implementation efforts.

- Charge SEPA, together with other related ministries and authorities, to conduct environmental assessment of local development plans to make sure local economic development is in line with local and national environmental targets.

- Special attention should be given to the particular roles that the government on the one hand, and the private sector (business and industry) as well as civil society (NGOs) on the other can play.

II. Improvement of efficiency and industrial structure to realize sustainable growth

In the new 11th 5-year plan period, China has set an anticipated target of yearly growth of 7.5%, which could be easily surpassed if no strong control measures are adopted. At the same time China imposed challenging mandatory targets for reduction of energy consumption and emissions by 20% and 10%, respectively. Because of the intensive industrialization and urbanization that China is going through, and the increased globalization of the market, a better equilibrium needs to be sought if GDP growth, industrial restructuring, and environmental performance are all to be met at the same time. More efforts need to be made on industrial restructuring, efficiency improvement and adjustment of the current production mode.
Through the introduction of effective market-based instruments, the Circular Economy, the increase of flexibility and innovation, as well as the testing and adoption of existing and new environmental technologies, China can move towards much greater resource efficiency and lower emissions, thus avoiding expensive pollution control measures. Technological innovations and their application as well as the deployment of existing environmentally friendly technologies should be promoted through management as well as institutional reforms. These should include:

- Expansion of the financial channels to a combination of government, domestic and international funding sources, such as the GEF (Global Environmental Facility) and the CDM (Clean Development Mechanism).
- Leapfrogging in technological research, development and deployment through expanded international cooperation and appropriate legislation, institutional structures and investment.

### III. Comprehensive fiscal reform in favor of “resource saving, environmentally friendly, harmonious and sustainable development”

A reform of the existing taxation and pricing system should reflect the scarcity of resources and address the internalization of environmental costs as well as encourage technological innovation and lower implementation costs, through:

- The establishment of inter-ministerial evaluation mechanisms in environmental fiscal reform to guarantee they are in accordance with the implementation of environmental targets.
- The reduction and lifting of subsidies that have significant adverse impacts on resources and the environment.
- An eco-compensation mechanism that should be created to adjust the relations between stakeholders with regard to the distribution of environmental interests and economic benefits. Laws and policies should be established to encourage environmental protection behavior.
- The overall promotion of sustainable production, consumption and trade at the national provincial and municipal level, through possible means like tax deduction, a gradual shift from production to consumption taxes to avoid wasteful consumption, and the establishment of government procurement procedure to encourage green consumption.

### IV. Information disclosure and public participation

China should improve the quality, reliability and usefulness of environment data and development indicators. Key actions should include:

- Establishment of an environmental and economic data collection and analysis center within the government, with possible participation from civil society.
- Initiation of a centrally-funded program to upgrade local and provincial capacity and
willingness to improve environmental data gathering and analysis.

- Establishment of reporting requirements for data to assure comparability of data across facilities and over time. Provide funding for the establishment and maintenance of an internet-based reporting system, with source by source data publicly available to all stakeholders. Public access to and analysis of environmental, natural resources and social data will enhance data quality and accountability, e.g. through “Green GDP”.

- Outreach and education of the public about the chances and opportunities to participate in environmental decision-making. Improve public access to environmental information concerning emissions and their consequences in order to empower meaningful public participation. Widely publish advance notice of proposed regulations or permit proceedings for industrial and natural resource projects to facilitate public participation.

V. Enhance environmental management in the country-side

The fast growth of intensive development patterns and the transformation of lifestyles in rural areas have accelerated the deterioration of the rural ecology and the environment. This has consequences for people’s health and quality of life and is thus an obstacle to building a new countryside. Practical solutions should be considered to:

- Establish environmental management system in the country-side.

- Improve the access to clean drinking water; promotion of highly effective and efficient water treatment equipment.

- Manage non-point source pollution in the country-side and promote low-cost technologies and solutions.

- Promote the development of methane digesters, as well as solar and renewable energy sources when applicable.

- Study and explore potential carbon sequestration potential of altered agricultural practice to achieve social, environmental and global benefits.

Successful implementation of such solutions will extend the concept of Circular Economy to agriculture, reduce greenhouse gas emissions and reduce long-range air pollution.

VI. China’s role in global environmental governance

China is gradually evolving into a world economic power in terms of production, consumption and trade. The challenge is how to create a harmonious world in which China and the international community join forces in the fields of environment and development. China should prepare to take a
more active role and international responsibilities in global environment governance and sustainable
development. This will increase China’s positive global image and China’s influence to ensure the
peaceful development of the country and the world society. Among other measures this should include:

- Active participation in establishing international environment institutions; providing scientific
evidence of potential impacts; promoting global sustainable development; making continued
efforts in implementing international environmental agreements.

- The introduction of production standards for Chinese enterprises in terms of environment,
health and safety, and accelerating the pace of innovations in sustainable development.

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