Achieving Sustainable Economic Development in the Asia Pacific

An Outcomes Paper from the 2010 Second Track Dialogue
Shanghai, 12 August 2010

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Background

On 12 August 2010, the annual Australia-China Futures Dialogues, Second Track Dialogue was hosted by the Australian Pavilion at Shanghai World Expo. The event is delivered by the Queensland Government as a Platinum Partner of the Australian pavilion.

A range of Australian, Chinese, and regional experts—drawn from business, government and universities—met over three sessions to exchange perspectives, and to formulate recommendations, on the overarching theme of “Achieving Sustainable Economic Development in the Asia Pacific”. Under this general theme, participants focussed in particular on climate change and tourism.

Each session involved three speakers and a chair. Following the completion of presentations, the chair of each session opened up discussion to plenary debate. Background papers were prepared for participants and the day’s discussion addressed the following key questions:

- What does sustainability mean, in practical terms?
- Do ideas about sustainability vary across the region?
- How can the challenge of sustainability be addressed across the region?
- Is regional tourism sustainable?

For the purpose of clarity, the Dialogue's focus was broken into three discrete parts: 1. Sustainability and its meanings in the 21st Century; 2. The Impact of Climate Change on Economic Sustainability; and 3. Sustainable Tourism and Economic Growth.

1. Sustainability and its Meanings in the 21st Century

The most authoritative definition of sustainable development was laid down in the subsequent Brundtland Commission Report of 1987. Sustainable development was defined as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. The level or content of “needs” has never been made clear and remains contested. However, the definition is generally held to imply intra and inter-generational equity, demographic stability and the protection of natural ecosystems as the core conceptual foundations of sustainable development.

In 1992, the Rio “Earth Summit” adopted a strategic plan for global sustainable development in the 21st century known as Agenda 21. In conjunction with this, the UN General Assembly released a Declaration on Environment and Development. The Declaration comprises 27 principles within which the programme areas of Agenda 21 operate. These principles continue to guide the current sustainable development agenda under the UN Division for Sustainable Development (DSD). While the recent media and political focus has been concerned with environmental sustainability, it is important to remember that the sustainable development agenda also incorporates poverty reduction and human development goals as integral. The UN’s principles of sustainable development may be grouped around three interrelated “pillars”: social development, environmental protection and economic prosperity.

Within these pillars, the specific elements of the Agenda 21 strategic plan provide a practical focus for sustainable development in the 21st century:

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The social development pillar is dedicated to:

- Meeting primary health care needs; control of communicable diseases; and reducing health risks from environmental pollution and hazards.
- Provision of adequate environmental infrastructure, especially for water, sanitation, drainage and waste management.
- Improving human settlement management with a focus on urbanisation trends and disaster-prone areas; ameliorating poorly serviced, unsafe, unsanitary and polluted urban environments.
- Dissemination of knowledge and education about demography and sustainable development.
- Sustainable land use planning and management, including housing, property markets, and forms of land tenure and access.
- Sustainable construction, including the use of local materials and energy-efficient designs.
- Sustainable energy and transport systems, including R&D, commercialisation, dissemination and economic integration of renewable energy sources.

The environmental conservation and protection pillar is dedicated to:

- Protection of the atmosphere through CO² emissions reduction, preventing stratospheric ozone depletion and other transboundary atmospheric pollution.
- Conservation of biological diversity.
- Combating deforestation and land degradation by rehabilitating degraded areas and the sustainable use and management of soils, forests and woodlands.
- Effectively managing fragile ecosystems such as coastal and marine areas, mountain regions, freshwater ecosystems, and those prone to desertification and drought.
- Sustainable agriculture and rural development, with a focus on food security, local participation, diversification, infrastructure development, education and information.
- Sound biotechnology management to increase the availability of food, feed, fertilisers and renewable raw materials.
- Sustainable development of small islands: ameliorating global warming and sea-level rise, protecting unique biodiversity.
- Management of toxic materials and hazardous wastes, including information, labelling, risk reduction and anti-trafficking strategies.

The economic prosperity pillar is dedicated to:

- Promoting sustainable economic development through open and equitable trade liberalisation.
- Making trade and environment mutually supportive through international cooperation, open and efficient resource allocation and use.
- Providing adequate financial resources to developing countries including investment and debt reduction.
- Encouraging economic policies conducive to sustainable development through sound governance and public administration and effective legal and regulatory frameworks.
- Promoting sustainable patterns of production and consumption that reduce environmental stress at both national and international levels.
- Integrating environment and social development at the economic policy, planning, and management levels of government and industry.
- Effective use of market instruments to incorporate environmental costs into the decisions of producers and consumers; integration of environment and economic accounting systems.
In 2002, the World Summit on Sustainable Development was held in Johannesburg, South Africa. The term, “sustainable” had by this time entered the global lexicon. The 2002 Summit reaffirmed its commitment to the Rio principles and implementation of Agenda 21. It also incorporated a regional focus. The critical trends in sustainable development that emerged from the Summit suggest that the Asia-Pacific may be approaching an environmental tipping point in the first decade of the twenty-first century. The dramatic but uneven improvements in socio-economic development across the region in recent decades are putting increasingly unsustainable pressures on the natural environment.

2. Climate change and economic sustainability

Climate change is usually portrayed as a future threat, but it is already estimated to be responsible for 300,000 deaths a year, US$125 billion in economic losses, and to have damaging impacts on 325 million of the earth’s population. Climate change is also a threat multiplier. It has the potential to exacerbate existing security tensions and create new ones. Climate change will lead to a transformation of human socio-economic prospects as we know them even if some level of meaningful mitigation through reductions in greenhouse gas (GHG) emissions can be achieved. The question is whether that transformation is undertaken by choice over the next few decades or dictated by events later in the twenty-first century.

The relationship between climate change and sustainable development is complex and multidirectional. Sustainable development can reduce climate change vulnerability by enhancing adaptive capacity and increasing resilience. However with the current focus on mitigation, few sustainability strategies have been offered that explicitly include adaptation to the adverse effects of climate change or that promote increases in adaptive capacity. On the other hand, the effects of climate change will likely impede or reverse progress toward sustainable development either directly through adverse impacts or indirectly by the erosion of the social and economic capacity to adapt. Effective mitigation of climate change by reducing emissions can only make the inevitable adaptation task much easier to achieve.

The United Nations Framework Convention on Climate Change (UNFCCC) defines this problem as ‘a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’. The majority scientific position on climate change is that since at least the mid-twentieth century, human activities have caused significant global warming. Continued growth in emissions will generate high risks of dangerous climate change and associated extreme weather events. GHG emissions continue to grow rapidly in the early twenty-first century, as the below tables show.

Strong economic growth in recent decades has mainly been concentrated in very large developing countries, mostly in Asia, such as China, India and Indonesia. This growth is highly energy-dependent, and largely reliant on coal as the lowest-cost and most readily available energy supply. Coal is also the energy source with the highest concentration of GHG emissions. No change in these sources of emissions growth is likely to occur without decisive policy action by states. Current levels of world food production are also highly dependent on cheap energy at every point on the supply chain from farmer to consumer. Agriculture is responsible for about one-third of global emissions. There is expected to be a doubling of world food demand by 2050 in the likely context of tightening constraints on land, water and energy availability, and with more stringent emissions controls.

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China is one of the largest sources of the global growth in emissions due to the emissions intensity of its rapid economic development. In 2007, China overtook the United States as the world’s largest emitter, and on current trends, will account for 35 percent of global emissions by 2030. The Garnaut Report argues that all developed and high-income countries, but also China, must be subject to binding GHG emissions limits from the beginning of the post-Kyoto commitment period in 2013. Other major developing countries also need to observe targets below business as usual.3

Currently, however, most developing countries reject constraints on emissions growth through mandatory targets. China’s commitments involve reducing the energy intensity of its economic activity, but not its net growth in emissions. India has pledged not to surpass the per capita emission levels of developed countries, which provides no constraint at all on its emissions growth. Other large developing country initiatives involve increasing investment in renewables, reforestation and carbon sinks, and implementing adaptive strategies and technologies.

The current stalled trend in international negotiations and mechanisms, from the UFCCC through Kyoto, the Bali Roadmap and then Copenhagen, is also modelled on past emissions projections that have been overtaken by the acceleration in GHG emissions in the first decade of this century. Any meaningful global mitigation in the near term appears extremely unlikely. Without effective mitigation, the trend in emissions growth is expected to intensify over the next few decades and only moderate slightly beyond that. Strong mitigation measures in the near term may still reduce the risk of catastrophic climate change, but some natural systems will be critically damaged in any case. Adaptation to climate change will be a necessity in the twenty-first century with or without a global agreement on emissions reduction.

3. Sustainable Tourism and Economic Growth
The global tourism sector grew by 25 percent between 1995 and 2005. In the first decade of the twenty-first century it accounts for around 10 percent of world economic activity, 8 percent of employment, and 12 percent of international exports. The number of international arrivals is expected to increase steadily over time, and domestic tourism is also increasingly important for many countries and often outweighs international tourism in volume and revenues.

Tourism is considered to be one of the most highly climate-sensitive of global economic sectors. The tourism industry has a large impact on natural, human and built environments in host countries, and therefore engages directly with sustainable development and environmental concerns. The goal of sustainable tourism is that all countries should integrate sustainability principles and practices into their tourism management, while policies to promote sustainable development should make the most of the opportunities of tourism. Yet, climate sensitivity is not evenly distributed, being especially manifest in beach and ski resorts, but not so much in the tourism of large urban places and business travel sectors.

Tourism is integral to the three interdependent pillars of sustainable development: economic, social and environmental sustainability. Tourism makes a major economic contribution to national economies and local destinations, but it also involves a special relationship between consumers (visitors), the industry, the environment and local

communities’. With the tourism industry, the consumer travels to the product and its producers, which makes it quite unlike most other economic sectors and activities. The unique relationship between tourism and sustainable development rests on three main factors.

- Interaction: as a service industry based on providing new experiences of places, tourism involves a large amount of direct and indirect interaction between visitors, hosts and local environments.
- Awareness: tourism highlights the differences between nations and cultures, environmental issues, and different attitudes and concerns about the environment and sustainability.
- Dependency: tourism is increasingly dependent on sustainability. Visitors seek clean and attractive natural environments, authentic historical and cultural traditions, and welcoming hosts (that said, these sensitive ‘new’ tourists still only constitute a small proportion of tourism flows).

Currently, tourism has both positive and negative attributes. The positives include growing opportunities for investment, enterprise development, employment creation, and improvements in local services and infrastructures. Putting a tangible value on the natural environment also encourages conservation and protection. Tourism can also contribute to inter-cultural understanding and harmony. The negatives of tourism can include pressure on fragile ecosystems, social dislocation in host communities leading to the erosion of traditional societies and ways of life, pollution, and competition for scarce land and water resources. Tourism is sometimes also a vulnerable and unstable source of revenue for host communities.

The UN’s World Tourism Organization (UNWTO) defines sustainable tourism according to the three pillars of sustainable development. There must be a sustainable balance between the environmental, socio-cultural and economic dimensions of tourism.

Sustainable tourism is a continuous process that requires the informed participation of all stakeholders, appropriate policy, monitoring and strong leadership to ensure wide participation and consensus building. It should also provide a meaningful experience for the tourist, raising awareness about sustainability and encouraging sustainable tourism practices among them. Ecotourism is a particular tourism niche and is not synonymous with sustainable tourism overall. In short, sustainable tourism is ‘tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities’.

However, the “ideal” of sustainable tourism is being criticised increasingly as excessively stringent and unattainable in the real world. An alternative idea that is gaining currency is that sustainable tourism employs planning and management that minimise attendant negative impacts while maximising attendant positive impacts. This recognises the simple reality that all tourism comes with a cost attached.

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5 Ibid., p. 12.
Key Recommendations

The recommendations provided by participants stressed the need for forward-looking policy approaches on the part of governments in the Asia Pacific. Participants also recommended a continuing dialogue on the key issues that were raised during the course of the forum.

Primary recommendations included:

1. Rapid changes in population density have a deleterious impact on endeavours to mitigate and adapt to climate change and regional countries therefore must place increased importance on managing sudden population movements and population growth. There is a need for a greater emphasis on the link between management of climate issues, ecological preservation, and productivity.

2. Governments must show a greater willingness and capacity to plan for the future by addressing climate change challenges comprehensively while at the same time emphasising the role of sustainable economic development. This is a particular challenge for democratic governments, subject as they are to short term electoral cycles. A striking paradox is that while the climate change/sustainability challenge is much greater for China than it is for Australia, the former is much better positioned than the latter to deal with the challenge through long term strategic planning.

3. Regional governments need to more actively explore alternative energy generation options. Nuclear power in particular presents a clean (in carbon emission terms) energy alternative that can help address rapidly increasing energy demand occasioned by rising economic growth, something already recognised by China and India.

4. Lifestyle expectations are difficult for governments to manage. The idea that economic sacrifices should be made in order to achieve economic growth levels that are both sustainable and responsible from an environmental perspective is a difficult message for governments to “sell”. This is a particularly salient challenge in China and India where rapidly rising middle classes expect greater material standards of living than their forbears enjoyed.

5. Asia Pacific states should consider distinctively regional approaches to addressing the climate change challenge. In the wake of the failure of Copenhagen, it appears the UN Framework for Climate Change is unable to address the issue in a comprehensive global fashion, thus regional approaches should be explored. This could be achieved through existing regional architectures such as the Association for Southeast Asian Nations (ASEAN), the Asia Pacific Economic Cooperation (APEC) forum, and the East Asia Summit (EAS) process.

6. Governments need to be exercise caution in making linear projections of climate change impacts. The effects of climate change will be uneven at many levels. These include: differing impacts at the global, regional, and individual country level; changing severity of impacts over time as temperatures rise gradually; and the possibility of exponential (i.e. nonlinear) climate change as occurred at the end of the last Ice Age (where the planet heated by 5 degrees centigrade over the space of one decade).

7. There needs to be greater support and encouragement of nature based tourism among regional states. Particular support needs to be targeted at tourism destinations that comply with and promote sustainable tourism principles.
Appendix One
Assessing sustainable development in the Asia-Pacific

There is at present no internationally recognised standard set of indicators to measure sustainable development. However, it is possible to make a comparative assessment using the three pillars: economic prosperity, social development and environmental protection. Figure 1 below shows per capita GDP measured in purchasing power parity (PPP) for selected Asia-Pacific countries, and aggregates for the world, OECD, Asia-Pacific and ASEAN.

Figure 1: GDP per capita (2008)

Figure 1 shows that GDP per capita in 2008 in the Asia-Pacific region ($5446) was a little more than half the world average ($10394), and only about one-seventh the OECD average ($37736). Per capita GDP in the ASEAN area outperformed the world aggregate in 2008 although the data is inflated by high-income Singapore. Figure 1 also shows that per capita GDP in developed OECD countries Australia, Japan and South Korea was significantly higher than the Asia-Pacific and world aggregates. By contrast, per capita GDP in Indonesia ($3994), Thailand ($8086) and China ($5971) is comparable with the Asia-Pacific average. In terms of economic prosperity, figure 1 shows great disparity across the Asia-Pacific region, which also lags substantially behind the world average.

Figure 2 below shows scores on the Human Development Index (HDI) and Environmental Performance Index (EPI), which use a similar scale. The HDI is measured across the three dimensions of health and longevity, education and living standards, and is a useful proxy for social development. The EPI is measured across six major categories of environmental health, air pollution, water, biodiversity, productive natural resources and climate change, and approximates the environmental protection pillar. Figure 2 shows that the regional disparities in economic prosperity are much less pronounced when considered in terms of social development and environmental performance. The graph also shows that currently, performance in environmental sustainability closely follows patterns of social development.
Figure 2 shows that the Asia-Pacific average scores for the HDI (77.0) and EPI (77.2) are almost identical with world averages. The performance of ASEAN is also comparable with the world average. In contrast to figure 1, the disparity between the Asia-Pacific and OECD in terms of human development and environmental performance is also much less. Of the individual countries shown in figure 2, Australia shows the largest gap between human development (97.0) and environmental performance (79.8), while Thailand’s environmental performance was marginally better than its HDI score.

Figures 1 and 2 indicate that the Asia-Pacific region has been performing reasonable well in the social and environmental aspects of sustainable development, although with great disparities in economic prosperity. A comprehensive 2005 UN assessment of the state of the environment in the Asia-Pacific, however, poses some difficult questions. It implies that further improvements in socio-economic development on the current pattern are likely to diminish environmental sustainability in the future.
Appendix 2
Assessment of key climate change indicators in the Asia-Pacific

Figure 1 below shows aggregate growth in emissions between 1971 and 2007 for the world, OECD and Asia-Pacific. Figure 1 clearly demonstrates the increasing trend in world emissions growth that shows little sign of abating. Most of this growth in emissions is from developing countries. Emissions growth from the OECD area has started to level off since the early 2000s. Growth in emissions from the Asia-Pacific region follows a similar pattern to that of the world aggregate, and is clearly converging with, and likely to surpass, the OECD total on current trends.

Figure 2 below shows the increasing trend in emissions growth in the Asia-Pacific region between 1971 and 2007. Figure 2 shows that the sharply escalating emissions growth from China from the beginning of this century comprises the bulk of emissions from the region, and also closely mirrors the overall trend for the Asia-Pacific. China’s escalating growth in emissions dwarfs that of the other largest regional emitters Japan, Korea and Australia, which have begun to level off just as Chinese growth has accelerated.

Figure 1: Change in CO2 emissions, 1971-2007

[Graph showing emissions growth from 1971 to 2007 for World, OECD, and Asia-Pacific regions]
Figure 3 below shows per capita emissions in 2007, and demonstrates a vastly different pattern from figures 1 and 2. Australia’s per capita CO2 emissions are by far the highest in the Asia-Pacific region, and remain the highest in the world, almost double that of Japan and South Korea. China’s per capita emissions are comparable with the world average, but somewhat higher than developing ASEAN states Thailand and Indonesia. Emissions from the Asia-Pacific are about 2 tonnes per person greater than the world average, but still significantly less than the OECD average.

Figure 4 below shows the carbon intensity of GDP growth, which almost reverses the pattern shown in figure 3. The carbon intensity of growth is much higher in developing countries China, Indonesia and Thailand than in Japan, Korea, Australia, and also the...
OECD average. The carbon intensity of growth in the Asia-Pacific in 2007 is shown in figure 4 to be almost double the world average.

The unpropitious trends and patterns shown on these graphs suggest that constraining emissions growth in the Asia-Pacific will be extremely challenging and unlikely to occur in time to mitigate potentially dangerous climate change. The International Institute for Environment and Development (IIED) has identified the regions, nations and populations most at-risk from dangerous climate change. Some of these, such as low-lying island states and coastal regions, and the Asian “mega-deltas”, are in the broader Asia-Pacific region.
Appendix 3
Assessment of tourism sectors across Asia-Pacific

Figure 1 below shows international tourist arrivals to the Asia-Pacific by sub-region between 1990 and 2009. Apart from Oceania, the general patterns are of sharp increases in tourist numbers between 1990 and 2005, more moderate growth until 2007, then a slowdown with the global financial crisis of 2008-09. The pattern for Oceania shows a slight increase between 1990 and 2007, followed by a slight decline. Northeast Asia accounts for the largest share of Asia-Pacific international arrivals at 57.4 percent in 2009. China and Hong Kong comprised the largest shares of the Northeast Asian market at 52.5 percent and 17.1 percent respectively in 2008.

These patterns are also reflected in data for average annual growth in international arrivals. Between 2000 and 2008, Northeast Asia experienced the highest annual average growth rate of 7.1 percent. Southeast Asia was not far behind at 6.9 percent, while annual average tourism growth in Oceania was 1.8 percent. Overall, the Asia-Pacific region recorded an annual average growth rate of 5.3 percent in international arrivals between 2000 and 2008.

Figure 2 below shows international tourist arrivals for major Asia-Pacific markets. China is by far the largest tourist destination in the Asia-Pacific region in terms of numbers. 54.7 million tourists visited China in 2007, up from 31.2 million in 2000. In Southeast Asia, figure 2 shows that arrivals to Malaysia and Thailand have increased steadily between 2000 and 2008. Both countries recorded approximately 10 million arrivals in 2000, with the Malaysian market growing to 22 million arrivals in 2008 and the Thai market to 14.6 million. Singapore and Australia have experienced only marginal growth in numbers of international arrivals compared with other faster growing markets in the region. Arrivals to Singapore were 7.8 million in 2008, compared with 5.6 million for Australia.

Figure 1: International tourist arrivals by region, 1990-2009
Figure 3 below shows the importance of the tourism sector in the export markets of the region in 2008. New Zealand has the most tourism-intensive export market in the Asia-Pacific region at 12.4 percent, which is 10th in the world. Australia closely follows with tourism comprising 10.5 percent of total exports. Figure 3 also shows that Southeast Asian countries Thailand (8.7 percent), the Philippines (7.5 percent) and Malaysia (6.7 percent) also have significant shares of tourism in total exports. By contrast, even though it is the largest tourist destination in the Asia-Pacific in terms of numbers, tourism comprised only 2.6 percent of China’s total exports in 2008.