



Summary policy brief on low carbon competitiveness in Cambodia

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Enhancing trade is a key focus in the Cambodia National Strategic Development Plan of 2010, which sets out a number of policies to promote export competitiveness and growth. The success of these policies will depend to a large extent on the global trade patterns shaping the opportunities that Cambodia faces.

Our analysis suggests that over the next ten years, climate change, international mitigation, and natural resource scarcity will transform global trade patterns, and result in an inevitable shift over time to a low carbon global economy. What will this look like? What impact will it have on Cambodia's competitiveness and growth? What threats and opportunities will it create? And how should policymakers and businesses respond?

Our analysis suggests that:

1. Increasing natural resource scarcity – particularly relating to energy, land and water, and partly driven by economic growth in the emerging economies – could result in:
 - Higher energy prices, reducing the competitiveness of energy-intensive industries in oil importing countries like Cambodia.
 - Increased global competition for water and land (including forest areas), which is likely to boost the returns to land assets and agricultural production, but also increase pressure on already stretched resources.
2. Mitigation policies introduced at the global level or by trading partners are likely to affect export opportunities and import prices faced by Cambodia. For example:
 - Requirements for carbon footprinting of products and imports, as currently being discussed in the EU for example, or voluntary sustainability ratings for services such as tourism, could jeopardise competitiveness for energy-intensive or uncertified products and services;
 - carbon taxation in richer countries could lead to energy-intensive industries shifting to non-mitigating countries, generating economic opportunities but also undermining the potential to achieve low carbon growth;
 - Increased climate finance may become available to support the development of new green industries such as renewables (most likely from public funding sources in the short term, given the slow development of carbon markets), but may be targeted at countries who can demonstrate a low carbon growth trajectory.
3. The impact of climate change will be significant for some sectors - for example:
 - It will reduce yields and productivity of certain agricultural crops and forest products, undermining competitiveness.
 - It will reduce the reliability of hydropower as a source of energy - on which Cambodia is becoming increasingly dependent – with important ramifications for industrial development and efficiency.

This report examines how these issues could play out in Cambodia over the next decade, particularly focusing on the energy, tourism and manufacturing sectors. It identifies opportunities and threats to Cambodia's competitiveness and growth, and discusses possible policy responses.

The energy sector

Until now, the competitiveness of Cambodian business has been significantly undermined by the high and variable costs, poor access, and unreliability of energy. With the substantial investment in electricity generation currently underway, however, prospects for an improved electricity supply and lower prices within the next few years are promising. A diversified energy mix is preferable, given the impact of climate change on hydropower generation capacity.

Within the current mix, there is still a fairly high proportion of imported fossil fuels in Cambodia, which raises concerns about energy security. Developing alternative, renewable energy sources could provide greater energy security and improved competitiveness in the long term. Some firms in Cambodia are at the forefront of innovation to secure alternative sources of energy for their own use and also to sell to the grid, and it would seem sensible to encourage this as a way to enhance competitiveness and improve the energy supply in Cambodia, particularly in underserved areas. This innovation could be further incentivised by putting in place a conducive policy and regulatory framework.

With the recent discovery of fossil fuels, Cambodia may now face some strategic decisions about the uses of those fossil fuels, and this will have important implications for the future energy mix and competitiveness of industry. Exploitation of these fossil fuel reserves – if and when their commercial viability is confirmed – seems inevitable, and it will be important to utilise them and the resources they generate in a way that does not undermine the country's wider long-term competitiveness, or undermine incentives for the development of renewable energy sources.

Possible policy responses:

1. Introduce an appropriate regulatory framework, including feed-in tariffs and other measures, such as energy-efficiency provisions in building codes, to incentivise investment in renewable energy technologies, and to diversify beyond hydropower. Introduce mechanisms to support access to finance in order to overcome upfront costs and encourage foreign investment to bring capital and technology, for example in solar and biogas technologies. Allowing tax-free imports of green technologies such as solar panels may also help the development of the sector and increase the uptake of renewable energy technology.
1. In order to ensure Cambodia's competitiveness in a future low carbon global economy, utilise Cambodia's domestic fossil fuel reserves (if their commercial potential is confirmed), in ways that support the development of renewable energy e.g. by exporting the fossil fuels and investing the revenues in renewables. Specify a clear direction for energy policy in order to avoid undermining incentives for private investment in energy generation – particularly of renewables – due to ongoing policy uncertainty.
2. Explore the feasibility of models for reforestation and sustainable forest management by communities and the private sector – such as the creation of tree farms to provide a continuous ('coppiced'), sustainable supply of wood biomass – in order to develop a sustainable source of fuel necessary to underpin economic development.

The manufacturing sector

The high price, poor access and unreliability of energy have significantly undermined the competitiveness of Cambodia's manufacturing sector to date. However, as firms are beginning to respond – by innovating to find or generate alternative sources of energy, and to introduce energy-efficiency measures – Cambodia could gain a

competitive advantage in an international low carbon economy with rising energy prices. Despite some progress in this direction, it seems relatively slow compared with some other LICs, such as Kenya, which is introducing mandatory regulation requiring energy audits to be undertaken by energy intensive companies. Regulatory changes could help stimulate investment in new energy sources by the manufacturing sector.

A lack of environmental regulation, standards, certification or other forms of incentive could prove to be a competitive disadvantage for Cambodia's manufacturing industries in future, as environmental standards or certification increasingly become requirements to access certain international markets. The Cambodia Chamber of Commerce states that China, one of Cambodia's main competitors, is already a decade ahead in developing its regulatory environment, which is strengthening the capabilities of Chinese companies to adhere to such standards; they argue that Cambodian manufacturers could be left behind if Cambodia does not adhere to more rigid 'green' standards.

Multinational companies can often be first adopters of these kinds of innovations, following best practice standards set in their home countries. This can yield spillovers for local firms if managed well.

Public climate finance or carbon markets could be a source of funding for investments in renewable energy technologies or energy-efficiency measures. However, carbon markets such as CDM unfortunately now seem unlikely to yield much finance in the short term. Nonetheless, strategies seeking public climate finance support for the kinds of investments discussed here could yield better results.

Possible policy responses:

1. Introduce environmental regulation of the manufacturing sector, and develop appropriate standards and certification mechanisms and other incentives to encourage environmental good practice. Encourage FDI and promote lesson learning on energy efficiency and sustainable business models by organising training and demonstration projects through public-private partnerships.
2. Implement regulations regarding energy-efficiency audits. Publicise benefits of energy-efficiency measures, implement training and awareness-raising through small and medium enterprises (SME) organisations and financial services sector.
3. Create incentives for manufacturing firms to invest in alternative renewable energy sources, such as solar energy or waste to energy, through an appropriate regulatory framework and feed-in tariffs.

The tourism sector

Cambodia has benefited enormously from the fast growth of tourism in the last 10 years, and there is still much potential for further growth in the industry. However, appropriate management of natural resources is required to ensure continued growth is not undermined. There is a need to diversify Cambodia's tourist attractions beyond the world heritage sites located at Siem Reap in order to reduce environmental pressures in those areas, capitalise on Cambodia's other natural assets, and share the economic benefits of tourism more widely.

Increasing international emphasis on environmental credentials within the tourism industry is inevitable going forward, and will reward those tourism destinations that are perceived as relatively green. Therefore, establishing Cambodia's brand as a green tourism destination could be important to creating a competitive advantage for the future. Within that context, investment in renewable energy and energy-efficiency measures by hotels can provide both cost advantages and reputational benefits, but there appears to be less awareness about these issues within Cambodia than within other countries.

There is enormous potential to develop the ecotourism sector, which could create new sources of growth and income that will help to protect natural assets, including forests, and create a stronger economic case for improved natural resource management. However, this sector is as yet fairly underdeveloped, and there is much that needs to be done to overcome the many challenges it faces.

Possible policy responses:

1. Manage the growth of the tourism industry to ensure its sustainability, and to create a competitive advantage, help establish Cambodia's brand as a green tourism destination by introducing environmental impact assessments, by regulating the industry's waste and water management, and by adopting relevant standards, labels, and award schemes that reward green credentials, such as the international Travelife scheme.
2. Introduce a coordinated strategy for the development of the ecotourism industry, involving all relevant Ministries and stakeholders to balance competing objectives, and establishing an appropriate legal and regulatory framework. Strengthen the protection of ecotourism sites; make targeted investments in infrastructure, services, skills of local communities, and marketing of particular attractions; and undertake public-private dialogue to understand how best to attract private investment into ecotourism.
3. Identify opportunities for using climate finance to support the development of a green tourism sector, for example by supporting energy audits or the introduction of green energy by hotels, or by supporting ecotourism projects as a way to promote sustainable forest management.

