

with the green growth initiative and development. Due to the limited knowledge on this technology at both national and sub-national levels, mainstreaming of energy efficient lighting into the development plan for both levels shall be included in the agenda and this should be aligned with the overall 5-year planning cycle of the Government (2013-2018). Ministry of Industry, Mines and Energy should be a key player with a contribution from Ministry of Environment. Since implementation of these tasks requires considerable resources, and due to the current Government budget constraint, financial support from potential development partners, both bilateral and multilateral, should be looked into.

**Public awareness improvement** – Currently, there is a lack of information accessibility to new developed technologies that could provide co-benefits for both reducing the electricity bill and contributing to GHG emission reduction, which are in line with the Government priority to promote energy security. To improve the accessibility to information and with a purpose to enhance public awareness, the first important step is to develop awareness raising materials in local language to enable the better understanding of the general public. Awareness raising materials should be developed and made ready for dissemination by 2015 under the cooperation between Ministry of Environment; Ministry of Industry, Mines and Energy; Ministry of Information; and academic institutions. For a long term education, the integration of energy efficiency and climate change into the education curriculum, especially at either primary or secondary levels, should be carried out by 2017 in which the Ministry of Education, Youth and Sports should take a lead with contribution from key agencies such as Ministry of Environment, Ministry of Industry, Mines and Energy.

#### **1.4.2 Technology Action Plan for the Transfer and Diffusion of Household Energy Efficient Appliances**

**Promoting local market investment** – All imported products including the energy efficient products are subject to import tax charge and thus making the prices of products higher. It is important to look into the existing import duty tax policy to explore possibility for tax incentives for energy efficient products including household appliances. This task shall be under the responsibility of Ministry of Economy and Finance and Ministry of Industry, Mines and Energy. By 2017, the import tax for the energy efficient appliances should be refined to provide a favorable condition for the local market expansion. Another important step is to promote the private sector involvement in technology development and local production of appliances to lower their prices and to provide jobs for local people. This initiative should be led by the Ministry of Commerce and Ministry of Industry, Mines and Energy.

**Refinement of regulation to enhance public use** – All household appliances are imported and lack clear information on their energy efficient specifications. Thus, it is important to develop new or update the existing guidelines and standards for these technologies and to implement them at both national and sub-national levels. The guidelines/standards should be prepared by 2017 with Ministry of Industry, Mines and Energy being the lead agency in cooperation with Ministry of Environment. The second important action that could be considered is the development of energy efficient labeling since all imported products have labels in foreign languages which are difficult to understand for local users. Ministry of Industry, Mines and Energy, and Ministry of Environment should prioritize what products to be selected and included in the labeling. By 2020, the energy efficient labeling system, including comprehensive capacity to test products, shall be established

and fully functional in Cambodia. Beyond this, institutional capacity development is also an important part to be considered in the process of formulating the energy labeling system in Cambodia. Establishing a country own labeling system requires significant financial resource and expertise, thus the Government will need to work closely with bilateral and multilateral development partners.

**Improving information accessibility for the public** – Research and dissemination activities associated with energy efficient appliances and other related issues are absent in Cambodia. Promoting research and dissemination activities should be considered in the technology action plan. To make this initiative implementable, key agencies to be actively involved are Ministry of Industry, Mines and Energy; Ministry of Environment, Ministry of Information, research/academic institutions as well as relevant NGOs. To promote awareness for the general public, awareness raising materials should be developed in local language and disseminated using a wide range of media such as TV, radio, brochures and other possible means. By 2015, the level of the public awareness on the energy efficient appliances should be improved significantly. Collective effort of key stakeholders is required together with financial support from potential development partners. Another possible action is initiating a demonstration project on the energy efficient appliances in which public awareness is included. This could provide a success story or positive lesson learnt that can be used to improve public awareness and support the replication and scaling up of these technologies. For the demonstration project, Ministry of Environment should co-lead with the Ministry of Industry, Mines and Energy in partnership with relevant universities, private sector and NGOs. At least two demonstration projects shall be implemented by 2015.

#### **1.4.3 Brief Summary of Project Ideas for International Support**

1. Promoting energy efficient lighting through demonstration and outreach
2. Mainstreaming energy efficient lighting into sub-national and national development plans
3. Energy efficient labeling in Cambodia
4. Promoting research and development in low cost energy efficient household appliances

Detailed descriptions of the project ideas are attached in Annex III.

#### **1.4. 4 Other External Barriers**

The existing technical capacity of and financial resources available to responsible Government agencies are limited. Therefore, the development and implementation of these proposed projects can be realised only if external technical and funding supports become available. Furthermore, a holistic approach in designing full project proposal is needed to ensure that all key elements are put in place related to technical and institutional capacity building, legal and policy framework establishment, awareness raising and information sharing, public-private partnership, strategy to ensure sustainability, etc. Furthermore, The absorbing capacity of key stakeholders need to be improved to facilitate a more effective access to available international funds such as the Global Environment Facility, Least Developed Country Fund, Green Climate Fund, etc.