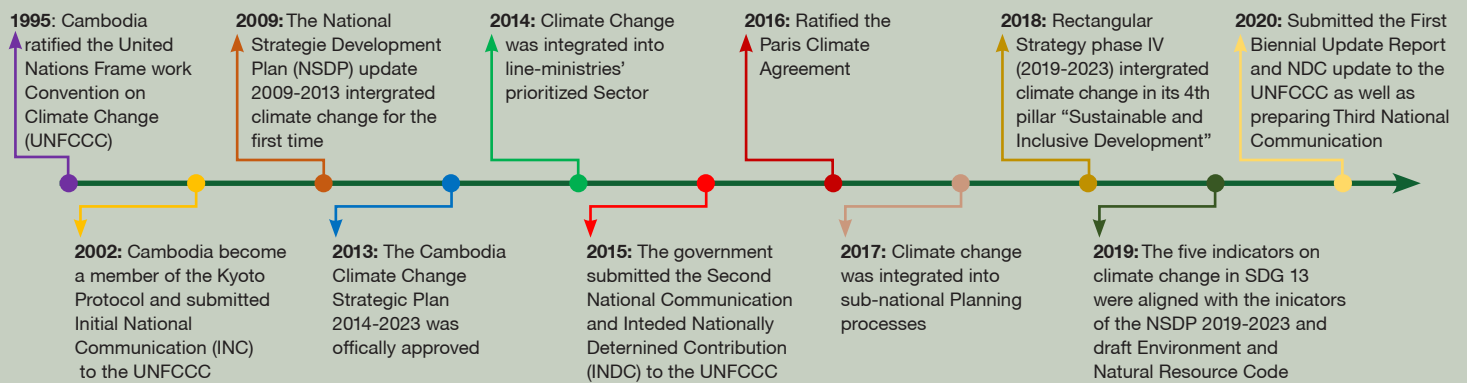




PROJECT “LOW CARBON DEVELOPMENT FOR PRODUCTIVITY AND CLIMATE CHANGE MITIGATION THROUGH THE TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY (TEST) METHODOLOGY” OUTPUT 1.1.4: AWARENESS RAISING AND LESSON LEARNED DISSEMINATION WITH FOCUS ON RESOURCE EFFICIENCY IN CAMBODIA

Brief Information on Climate Change Events in Cambodia

Climate Change Policies And Plans in Cambodia



Project Background

Currently, around 70,000 manufacturing companies are established in Cambodia, 600 of which constitute large enterprises. The UNIDO project in 2013 collaborated with 11 enterprises and trained representatives of approximately 50 others on the different tools constituting the Transfer of Environmentally Sound Technology (TEST) integrated approach. Although success in its endeavors, the project only impacted one region and limited number of companies. Hence greater awareness and assistance are required and essential towards replicating and up scaling past and existing efforts.

The Global Environmental Facility (GEF) through its 6th cycle funds the UNIDO to continue promote the TEST integrated approach in Cambodian industries. It aims to improve the resource efficiency and productivity of factories as well as improving the working conditions, while reducing their environmental footprint by adopting climate change mitigation practices to reduce GHG emissions in industry. The UNIDO, in close coordination with the Ministry of Industry, Science, Technology and Innovation (MISTI) as the chair and the Ministry of Environment (MOE) as a co-chair, implements the project's approach combining policy and advocacy elements with technology transfer in the areas where most manufacturing industries are located and present major negative effects to the environment and biodiversity. An awareness-raising component under responsibility of the Department of Climate Change of the General Secretariat of the National Council for

Sustainable Development/MoE is designed to develop dedicated communication materials, information dissemination and organizing advocacy and awareness raising events. The results and achievements of the initial project along with the policy and incentives developed under this proposed project will serve as a basis for future advocacy activities to promote environmentally sound technology adoption.

Industrial sector as a key stakeholder

Greenhouse Gas emissions (GHG) in Cambodia from the Industrial Processes and Product Use (IPPU) have been reported in the first Biennial Update Report of the Kingdom of Cambodia (fBUR), which sources of emissions derived from production of cements, engine oil, refrigerators, air conditioners, fire extinguisher, and electronics. However, the Royal Government of Cambodia (RGC) considers the industrial sector as a growth strategy priority, aimed at promoting economic diversification, effectuating profound structural change, and improving competitiveness. It plays an important role for the Cambodia's economy with its share to the GDP increased from 12.6% to 29.9% in 1993 and 2013, respectively. Furthermore, it is expected to increase to 30.0% by 2025 with the manufacturing sector growing from 15.5% in 2013 to 20.0% in 2025. As a major economic pillar for many years to come, GHG emissions from the industrial sector is expected to increase significantly in the long-run. Hence, its participation in this initiative should be motivated.

Climate Change Awareness Raising on Adoption of Environmentally Sound Technologies to Reduce GHG Emissions in Manufacturing Companies

The Department of Climate Change (DCC) is an implementing partner to carry out the Output 1.1.4 of the project “Low Carbon Development for Productivity and Climate Change Mitigation through the Transfer of Environmentally Sound Technology (TEST) Methodology” with objectives to develop dedicated communication material and to organize advocacy and awareness-raising events. It targets manufacturing companies and key stakeholders to promote the adoption of environmentally sound technologies to reduce GHG emissions.

Scope of Work

- ❖ Development of case studies on energy efficient technology;
- ❖ Information and lesson learnt dissemination event; and
- ❖ New academic curricula proposal to incorporate TEST in engineering fields.

Application of the TEST method in model companies and implementation of output 1.1.4

50 factories from the garment sector (including laundry, textile, footwear), and the food beverage sector are the target group to receive technical services for energy efficiency audits and resource efficient and cleaner production (RECP) advice. 15 companies have already joined as model factories to receive technical support from the project. The project provides technical training on several tools as part of the TEST approach such as RECP, energy efficiency and environmental management systems. The DCC is responsible for preparing case studies to document good experiences and best practices of garment factories, and food and beverage factories to be applied in accordance with the TEST method. In addition, this project has collaborated with the Institute of Technology of Cambodia (ITC) to mainstream Sustainable Industrial Development into curriculum through Memorandum of Understanding (MoU) and to collaborate with the General Department of Environmental Protection Agency (EPA) of the Ministry of Environment to organize a training on Air and Water Pollution Management in laboratory.

Some technological methodologies are being used in partner factories

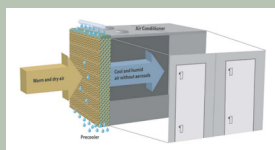
Installation of PV Solar systems, ranging 300 kWp in Garment factories



Replace fluorescent lights by LED lighting technology



Install evaporative cooling at all AC condenser fans



Install steam traps for all irons used in garment production



Repair all compressed air leakages



Expected outcomes

- ❖ The Low Carbon Productivity and Climate Change Mitigation through Transfer Environmentally Sound Technology (TEST) Methodology widely promoted and disseminated;
- ❖ The TEST guideline mainstreamed into the curriculum on Sustainable Industrial Development of Institute of Technology of Cambodia (ITC);
- ❖ All participants gained knowledge on air and water pollution management and laboratory-related knowledge; and
- ❖ The technical report of the project aligned with the policy of the Royal Government of Cambodia and as a basis for future outreach activities.

For more detail information about the project please contact:

Dr. Hak Mao

Director of the Department of Climate Change and Project Manager
maohakccd.se@gmail.com

Mr. Doeun Dara

National Project Coordinator
doeun_dara@yahoo.com

Mr. Pich Sokhim

Technical Advisor
sokhim_rua@yahoo.com