

CEE Comp: The Cambodia Energy Efficiency Competition is an innovative competition between commercial buildings seeking to boost energy efficiency by addressing behavior change. It is inspired by CUBE, a French competition that has successfully completed 6 editions.

The project is funded by the Cambodia Climate Change Alliance (CCCA), which is a joint initiative of the Royal Government of Cambodia and a partnership between UNDP, the European Union and the Swedish Government. CCCA is implemented by the National Council for Sustainable Development (NCSD) and managed by its Department of Climate Change to address climate change in Cambodia. The competition is also sponsored by Schneider Electric.

The first edition of the CEE comp between private buildings started in September 2021 with 22 buildings from 14 well-known companies. For one year, they aim to save as much energy as possible by implementing behavior change and improving equipment management.

CEE Comp has also enlarged its focus on public buildings with a university and a ministry challenge whose objective were to raise awareness of energy efficiency to the public sector.

The university challenge involved 6 universities competing over a 90-day period. The activities implemented during the university challenge particularly involved students as they could earn points for their universities through contests on the theme of energy efficiency. This 90-Day Challenge was also supported by the GreenCap project funded by the Erasmus+ Programme of the European Union.

The ministry challenge involved the Ministry of Industry, Science, Technology and Innovation (MISTI), the Ministry of Environment (MoE) and the Ministry of Mines and Energy (MME). Among other initiatives, employees had the opportunity to participate in a training and workshop on energy efficiency.

CEE COMP: 90-DAY UNIVERSITY CHALLENGE

The 90-Day University Challenge is a competition between public universities, running from May 23 to August 19 2022, to raise awareness about energy efficiency.

OBJECTIVES:

- Learning more about the energy use in university's buildings
- Taking action by implementing energy saving measures
- Participating in fun contests about energy efficiency

SIX PUBLIC UNIVERSITIES PARTICIPATED







National University of Management



Royal University of Fine Arts



Institute of Technology of Cambodia

opportunity to:

other appliances



Royal University of Law and Economics

During the 90-Day challenge, students had the

· Be introduced to energy efficiency in the field

by learning about air conditioning, lighting and



Royal University of Agriculture

KEY ACTIVITIES:



Universities field visit



Energy efficiency training



Action plan by Green Team



Contests for students



Energy efficiency survey

efficiency in Cambodia.
Compete showing talents and efforts through creative work.

· Take quizzes to test their knowledge of energy







Organised by:























90-DAY UNIVERSITY CHALLENGE: ACTIVITIES



Universities field visit

OBJECTIVES:

- To explain some key points about energy consumption in buildings;
- To conduct a simplified energy assessment in selected rooms and classrooms;
- To provide simple and low-cost site-tailored advice to improve energy efficiency in the rooms visited.



Universities field visit during the challenge

To carry out this activity, the Green Team and interested students from each university, with the support of the CEE Comp team, visited different rooms selected by the Green Team.

The Green Team and the students were able to observe the different electrical equipments, accompanied by engineers from the Institute of Technology of Cambodia and Sevea Consulting. The information collected in checklists was used to produce a simplified report on the room's electricity consumption, with tips on how to reduce it.



Energy Efficiency Training

An energy efficiency training was provided by the Institute of Technology of Cambodia (ITC). The six universities were invited to attend and the objective was to present key knowledge about energy, energy efficiency, common myths / facts and best practices.





Action plan by Green Team

Each university's Green Team was in charge of creating an action plan for the 90-day challenge, planning few simple activities to sensitize students and reduce energy consumption in the university.



90-DAY UNIVERSITY CHALLENGE: INTERNAL MANAGEMENT

To achieve the objective of the challenge, an active involvement of the university is relevant. Since the CEE Comp team could not interact directly with the whole university, a motivated team, known as the Green Team, was in charge of managing the challenge internally, interacting with top management and students.





In order to relay information about the activities throughout the challenge, the CEE Comp team communicate with the green team mainly in Telegram channels, and by mail. Face-to face meetings were also held.



Example of material to engage the Green Team

THE GREEN TEAM



Role of the Green Team:

- Main interlocutor with the CEE Comp team.
- · Managing the competition internally
- · Raising awareness among students
- Leading the 90-day challenge activities
- Writing and carrying out an action plan

Each university was able to build its own Green Team, usually consisting of 5 or 6 people. The success of the challenge would not have been possible without their strong involvement

STUDENTS



- Making teams between 2 or 5 students;
- · Participating in 2 students contests;
- Encouraging other students to participate in activities along with grtheeen team;
- Responding to the energy efficiency survey

90-DAY UNIVESITY CHALLENGE: ACTIVITIES



Contests for students

Two contests were organised for students to encourage them to join the challenge and take an interest in energy efficiency.



POSTER CONTEST

Student teams were asked to design and draw one poster about the theme of energy efficiency, specifically:

"Be smart and be energy efficient in your classroom: what do you propose to do? Why?"

THEMATIC CONTEST

The students participating to this second contest have been instruted to answer the following question:



"What would you do to promote energy efficiency in your university?". Team of students were free to choose the format they prefer (examples: video, audio, drawing, a short movie, a play, a poem, a writing, etc).

121 students joined the contests

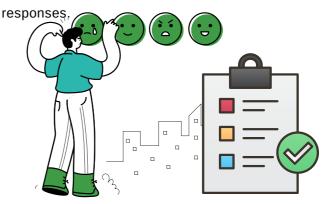
- **39** Poster productions
- 13 Thematic productions





Energy efficiency survey

A baseline survey and a final survey were also shared to the students in order to understand more about their energy habits and the extent to which they were aware and informed about energy efficiency. In total, CEE Comp team received 2006



Key figures from student respondents:

- 68% of the students knows the definition of energy efficiency;
- 81% thinks that energy efficiency is important;
- 65% gained knowledge about energy efficiency thanks to the challenge;
- after the competition, 67% changed most of their habits to save energy.

The fight against climate change has been placed at the heart of the CEE Comp project. We believe that the 90-day challenge has contributed to raising young people's awareness of the climate crisis. The challenge could help them to define feasible solutions that they can implement, even after the competition, in their lifestyle and daily life.

90-DAY UNIVERSITY CHALLENGE: ENERGY DAY



The **Energy Day** is the event celebrated on Friday September 2, 2022, that marked the end of the 90-day University challenge as part of the Cambodian Energy Efficiency Competition (CEE Comp).





A variety of representatives and experts participated to a **conference** to share their perspectives on the issues surrounding climate change and energy efficiency in Cambodia. This helped understand how important it is for young people to be actively involved in these issues.



Furthermore, more than 15 companies joined the energy themed career fair, which was a great chance for students to discover opportunities, internships and job offers in the energy and green sectors.



In addition, we were pleased to congratulate the winning student teams (North East Youths team for the poster contest and Chheang Bun's team for the thematic contest), as well as the best University Green Team: NUBB one. Congratulations to them for their contribution to the adoption of energy saving measures on their campuses.



Last but not least, we would like to thank the **host**, the National University of Management, and the **sponsors** of the event: Schneider Electric, Yamaha Motor, Comin Khmere, EGE company, Decathlon, Phillip Bank and GC Property. Thanks to media: Chhin Studio and Excellent Media. The organizers were Greencap, Sevea and the Institute of Technology of Cambodia.

CEE COMP: 45-DAY MINISTRY CHALLENGE

The 45-day Ministry Challenge is a component of the CEE Comp project, that ran from July 4 to August 12, 2022. The challenge's major goals are to increase awareness of energy efficiency and to get the ministry's buildings to adopt even more energy efficient practices.

OBJECTIVES:

- Learning more about the energy use in ministry's buildings
- Taking action by implementing energy saving measures
- Promote energy efficiency through social media during the challenge period



KEY ACTIVITIES:



Energy efficiency training



Energy efficiency workshop



Social media post every week and take action



Final quiz



THREE MINISTRIES PARTICIPATED







Ministry of Environment

Ministry of Mines and Energy

Ministry of Science, Technology and Innovation





During this challenge, ministries staff had the opportunity to:

- Take part in a training to deepen and broaden their knowledge on energy in Cambodia, particularly on energy efficiency
- Actively participate in a workshop to discuss and come up with creative solutions for reducing their building's energy usage
- Act by cooperating in the practice of energy efficiency in the building and by helping to implement the ideas selected during the workshop
- Challenge themselves through a quiz about energy efficiency
- Promote energy efficiency to the public on their social networks



Organised by:





Participants:







Sponsored by:

CAMBODIA CLIMATE CHANGE ALLIANCE









45-DAY MINISTRY CHALLENGE: ACTIVITIES



The Green Teams are composed of representatives of the ministries in charge of implementing the program internally. They attended

to an onboarding meeting held by CEE Comp team in the first week to discuss the overall perspective of the challenge.



Energy efficiency training

Trainings and workshops were held at the ministries, bringing together employees from various departments. The Institute of Technology of Cambodia (ITC) team led the training to expand participants' knowledge of energy efficiency. The training focused particularly on how to achieve energy efficiency while maintaining the level of comfort.





Ministries attended the energy efficiency training

Energy efficiency workshop

Sevea team led the workshops with the purpose of identifying one or two realistic energy-saving measures. The measures should be easy for other staff members to be implemented.





Ministries attended the energy efficiency workshop



Social media campaign and take action

Each week of the challenge, the three ministries posted an article on social media about energy efficiency to sensitize the public. They have also implemented new energy efficiency measures within their building.



Social media post and action taken in ministries



Final quiz

Finally, 105 ministry staff took part in a quiz at the end of the challenge. The questions focused on participants' knowledge about energy, after their participation in the challenge, and the results from the three ministries were excellent.

We appreciate the efforts of the Green Teams from each ministry, who actively assisted CEE Comp in organizing the training and workshop; and who carried out a social media campaign on energy efficiency. It was amazing to see how each Green Team highly promoted the challenge in both media and in-person interactions. After this competition, we hope that the three ministries will once again take the lead in promoting energy efficiency to the general public.

45-DAY MINISTRY CHALLENGE: CLOSING MEETING



Closing meeting at ITC

The CEE Comp concluded its ministry challenge with a meeting held at the Institute of Technology of Cambodia (ITC) on September 9, 2022, bringing together the three participating ministries.

The meeting was opened with a speech by Dr. Hak Mao, Director of Climate Change Department of General Secretariat of The National Council for Sustainable Development, who recalled that by 2026, global temperatures will have risen by 1.7 degrees and that it is therefore crucial to raise awareness on climate change. Dr. Sarin, Head of Energy Technology and Management Research Unit at ITC, then presented the importance of the energy sector in the fight against climate change, as energy production is highly responsible for greenhouse gas emissions



Speech by Dr. Hak Mao





Outcome of the challenge

A summary of the activities carried out was given, followed by feedback from each of the green team representatives. The meeting also provided an opportunity to discuss the next steps to continue the energy efficiency efforts in their buildings.



60% of staff respondents stated that they gained knowledge about energy efficiency and 85% has started changing their daily life habits.

