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CAMBODIA ENERGY
EFFICIENCY COMPETITION



CEE COMP QUARTERLY BRIEF N°4

FIRST EDITION OUTCOMES

The Cambodia Energy Efficiency Competition (CEE Comp) is an innovative multi-year campaign seeking to boost energy efficiency in buildings by addressing behavior change through games and challenges. It aims to raise awareness and responsibility, foster collaborations and creativity, while providing accessible and easy solutions.

The first edition started in September 2021 with 22 commercial buildings from 14 private companies. It was a successful 1 year competition with an overall average accounting for 9.2% energy savings amongst all participants. The savings also represent a significant amount of 200 tons carbon dioxide equivalent prevented from entering the atmosphere. This was the first time such an initiative was executed in Cambodia which demonstrated noteworthy results, the best building achieving 36.7% savings.

The CEE Comp also intends to raise awareness on energy efficiency amongst the youth, governmental entities and the general public by organizing student, university, and ministry challenges. In the first edition, the project involved more than 200 students, 6 universities and 3 ministries who participated in challenges over periods ranging from 1 to 3 months. Activities were proactive and engaging, including energy efficiency trainings and workshops, student contests, an energy career fair.

CEE Comp was inspired by a French competition that successfully completed 5 editions. It is funded by the Cambodia Climate Change Alliance, which is funded by the European Union, Sweden and UNDP. The competition is also sponsored by Schneider Electric. It is implemented by Sevea and the Institute of Technology of Cambodia, in partnership with EuroCham, EnergyLab, the Liger Leadership Academy, and the IFPEB.



Organised by



With the support of



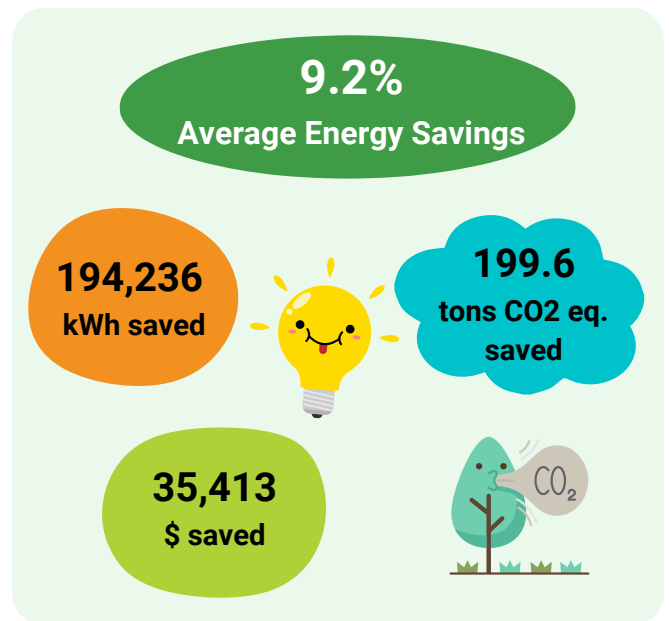
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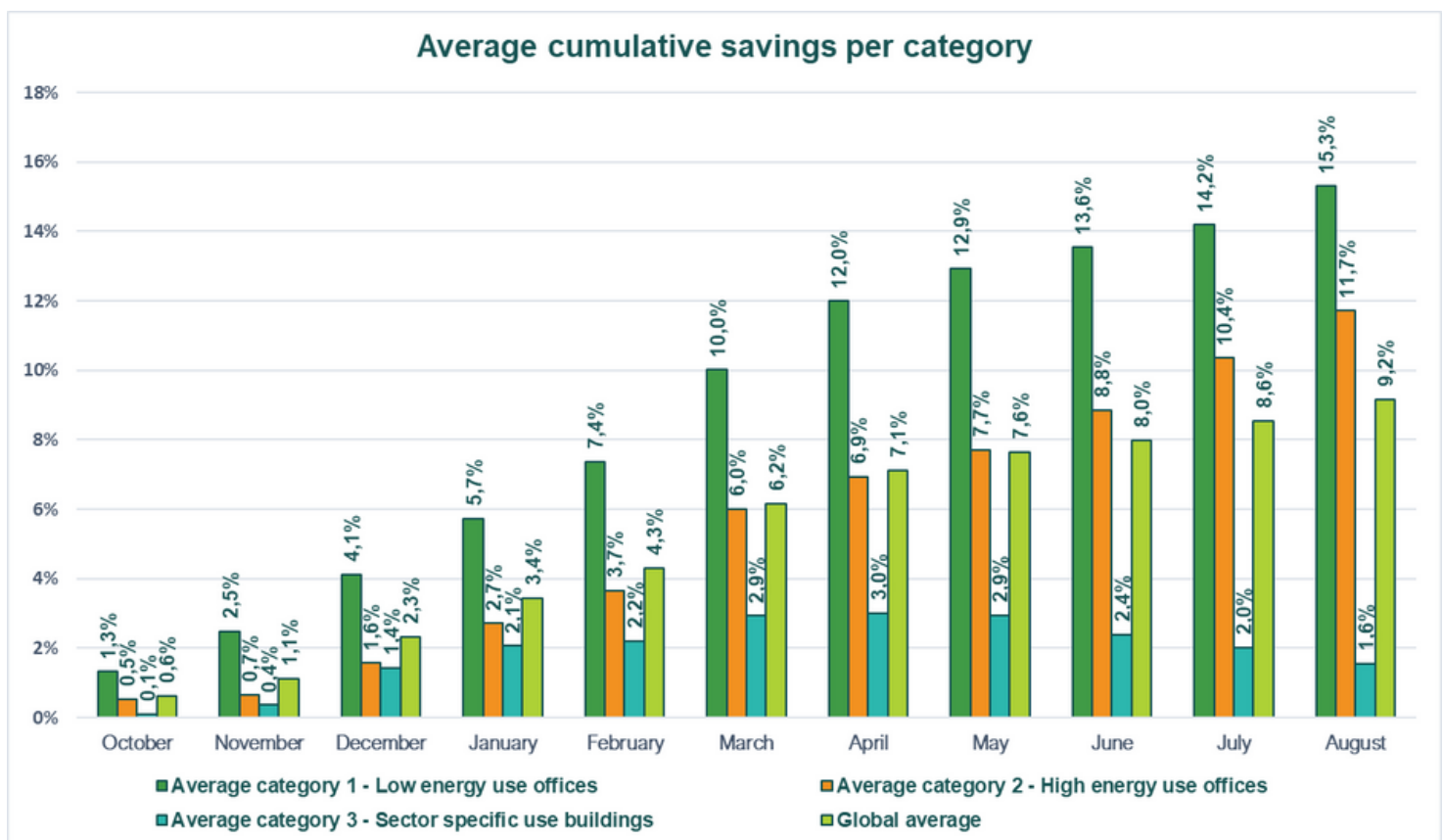
FIRST EDITION KEY RESULTS

This was the first time such an initiative was launched in Cambodia, where the CEE Comp team is proud to say that the proof-of-concept exhibited promising results with an average of 9.2% energy savings in this first edition amongst all private company participants. This equates to 200 tons of carbon dioxide equivalent prevented from entering the atmosphere, a mechanism that can facilitate in the mitigation of climate change and contribute to the National Energy Efficiency targets of Cambodia.

Julien Chevillard, Chief Technical Adviser at UNDP/CCCA, said "The competition confirmed that energy efficiency is one of the most cost-effective ways to reduce CO2 emissions, but it also benefits the economy, businesses, and Cambodia in general. If you manage your energy demand, you are more resilient to external shocks, such as the costs of energy.



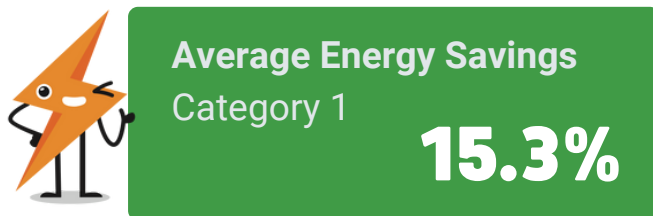
However, the results are heterogeneous. For some candidates, it was easier to achieve savings while for others, external factors which were difficult to control, prevented them from achieving the savings they were hoping for. It was respectively easier for office buildings to regulate savings compared to other sectors (stores, gas stations, airport...).



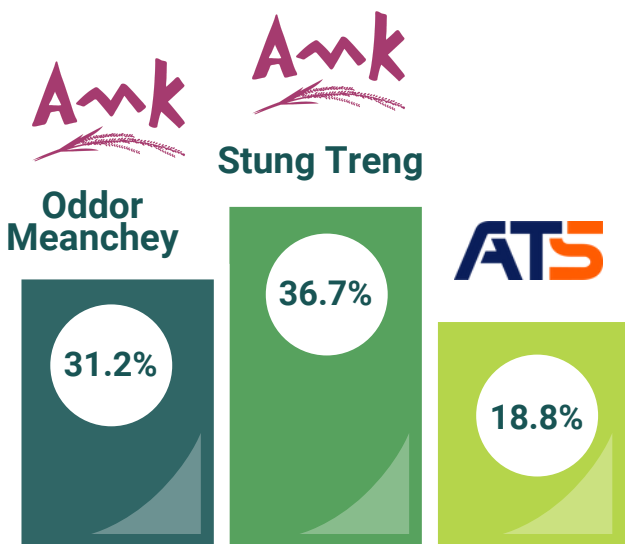
CEE COMP RESULTS

PRIVATE BUILDING CATEGORY 1

Considering the diversity of the building participants, the CEE Comp team decided to create 3 building categories to make the competition fair. Category 1 includes low energy use offices, meaning offices with an annual consumption of less than 120 kWh/m². This category achieved remarkable results with an average of 15.3% energy savings during the year of the competition.



The first 3 ranks were awarded to two branches of AMK Microfinance, located in the provinces of Stung Treng and Oddor Meanchey, and to the company ATS, which has committed to energy efficiency measures for several years already. AMK Stung Treng achieved the best performance in this edition with energy savings of 36.7%.



Lucas Moro
Chief Financial Officer
AMK Microfinance

"At AMK, we really look forward to taking what we have learned in this competition and rolling it out to all of our branches across Cambodia because, even if each branch makes small savings, together we can have a really strong impact"

The winner, AMK Stung Treng, achieved these results owing to minor changes, such as turning on the air conditioning later in the day, turning it off during lunch breaks, increasing the set temperature to 24°C and cleaning the air conditioning units frequently etc. The green team regularly communicated face-to-face with colleagues to emphasize energy efficiency issues and tips.

For ATS, raising awareness was attained by internal challenges with prizes to be won:

- Best monthly energy savings by department
- Energy quizzes for all employees

Green days are held on the last Friday of each month to sensitize staff and celebrate the winners of the challenges.



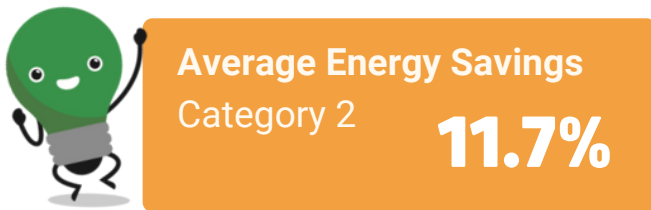
ATS team celebrating Green Day



CEE COMP RESULTS

PRIVATE BUILDING CATEGORY 2

Category 2 includes high energy use offices, meaning offices with an annual consumption of more than 120 kWh/m². This category achieved positive results with an average of 11.7% of energy savings throughout the competition.



For the Category 2 ranking, the top 3 places are: EuroCham Cambodia, Archetype and HEINEKEN. Congratulations to them!

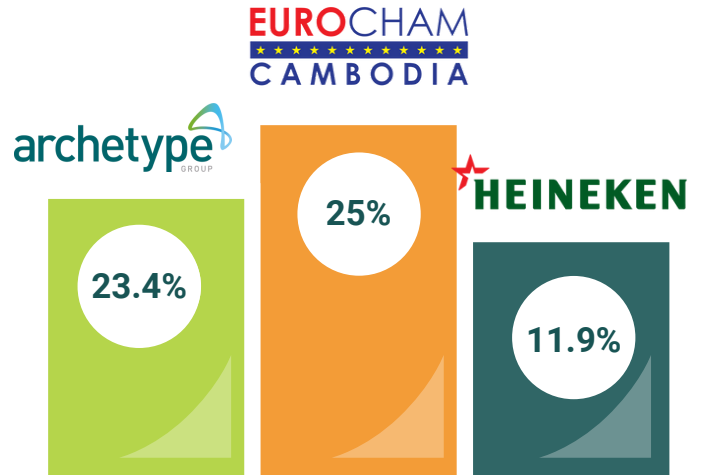


Thomas Hesketh
Deputy Executive Director
EuroCham Cambodia

"Small changes can make massive differences, especially when targeting young people like the ones currently employed at Eurocham. The young generation is willing to make changes."



Example of stickers for energy efficiency measures



What energy efficiency measures?



EuroCham achieved excellent results by implementing measures that focused especially on air conditioning and lighting. Stickers were placed in the offices as a reminder of energy efficiency measures, employees adopted eco-gestures such as setting the air-conditioning to 25°C as well as utilizing natural light. The maintenance of the air conditioning during the competition notably contributed to energy savings.

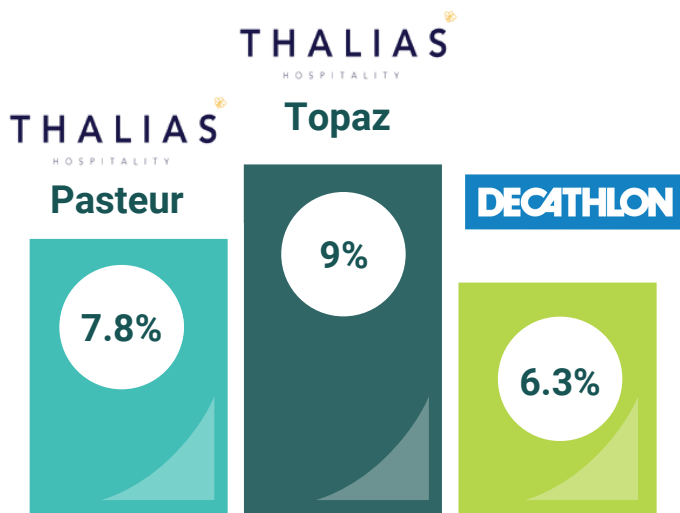
Archetype ranked second place in category 2. Employees received a short training on energy efficiency in office settings at the beginning of the competition. Air conditioning was set at temperatures of 27°C in open spaces. Additionally, energy saving measures were regularly reminded of by the green team through informal communication to all staff.



CEE COMP RESULTS

PRIVATE BUILDING CATEGORY 3

Category 3 includes buildings of sector specific use ; meaning all other buildings such as stores, restaurants, airports, gas stations... This category endured more difficulty in achieving energy savings due to the buildings' activities which made them less flexible to implementing energy efficiency measures (use of extensive electrical appliances, customer constraints, etc.). Therefore, an average of 1.5% of energy savings were achieved.



The top 3 results in category 3 were performed firstly by two restaurants of the Thalias Hospitality Group: Topaz and Khema Pasteur, followed by the sporting goods shop Decathlon in third place.



Picture from Decathlon's presentation

1.5 % Average Energy Savings
Category 3

Thalias Group restaurants and Decathlon were able to attain effective energy savings while considering customer comfort and requirements. Both organizations implemented similar actions such as setting all air conditioners to a minimum temperature of 25°C. They also made an effort to reduce the use of air-conditioning and lighting outside of customer opening hours. Finally, they ensured that all appliances were switched off outside operating hours.

Furthermore, Topaz restaurant installed an Energy Management System (EMS) that provides clear insights on the building's energy consumption patterns. In like manner, Decathlon plans to invest in more efficient equipment for their new store in Phnom Penh and to integrate energy efficiency in their initial phase of operation.



Settha Yok
Human Resources Director
Thalias Hospitality

"This achievement is the result of the cooperation and close follow-up of our green team members. [...] Changing behavior not only saves money but can also save our environment."



SPECIAL PRIZES WINNERS



Best Communication

The winner of the best communication prize is:



Decathlon used different communication channels to reach a large proportion of employees. The green team created a giant banner to showcase energy savings and other key performance indicators. Stickers and signs were placed in the office to remind everyone of energy efficiency tips.



Stickers and signs displayed by Decathlon

Additionally, the green team organized "Let's talk about Energy" workshops for employees who wanted to learn more about energy efficiency. They also carried out quizzes and surveys to test their knowledge, with prizes for the winners. Finally, the green team shared an energy report to all staff monthly and presented their performance in mid year as well as annual meetings with all staff.

Best energy savings of the portfolio

This award recognises the organisation with the best average energy savings for multi-site candidates. The winner of this special award, with an average of 21.1% energy savings between its 4 buildings is:



Best Green Team

Congratulation to the Best Green Team:



Smarts' green team was distinctly motivated and dynamic. They demonstrated exemplary organization from the start of the competition by setting clear objectives and KPIs and prepared an action plan including tasks, responsible persons, deadlines and budgets.

Smarts' green team developed creative and innovative ideas to raise awareness, such as, 30-minute talking sessions, quizzes with prizes, sticker designs, Energy Savings Video competition and an Energy Efficiency Pocket Book.



Smart's 30-minute talking session n°1



ENDLINE SURVEY RESULTS

The endline survey on energy behavior was designed to assess the evolution in employee habits of our participants. The results were compared with the baseline survey that was conducted at the beginning of the competition.

Participating staff already exhibited a good level of awareness of energy efficiency in the baseline survey. Nonetheless, they still showed an improvement of knowledge and habits when both surveys we compared. For instance, an increase of 11% of respondents answered correctly that "AC" is the most energy-consuming equipment in South East Asia.

The respondents mentioned that the competition was satisfying to be a part of. Most regard energy efficiency measures of great importance to gain savings. Also, an astonishing majority of respondents recommend companies to participate with CEE Comp due to valuable knowledge gains, as well as the environmental and financial benefits that the competition brings.

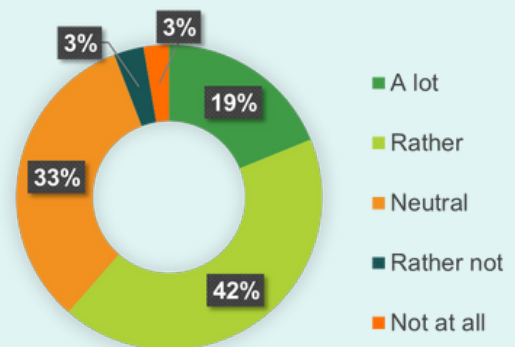
In addition, 81% are positively convinced that energy efficiency measures can help reduce building energy consumption. 61% stated that they changed their energy-saving habits after participating in the CEE Comp.

The efficiency of the green teams were praised by the respondents. Some highlighted the extensive involvement of some green teams: internal competitions, sticker campaigns and workshops.

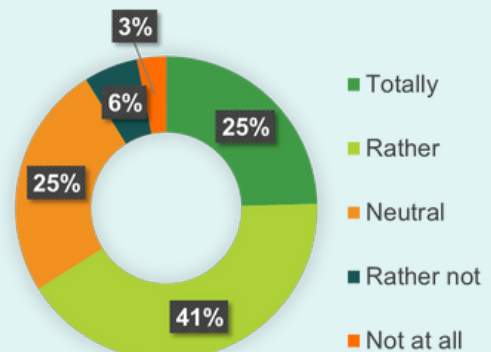
However, most participants felt that communication could be improved, especially on social media.

Key responses from the endline survey

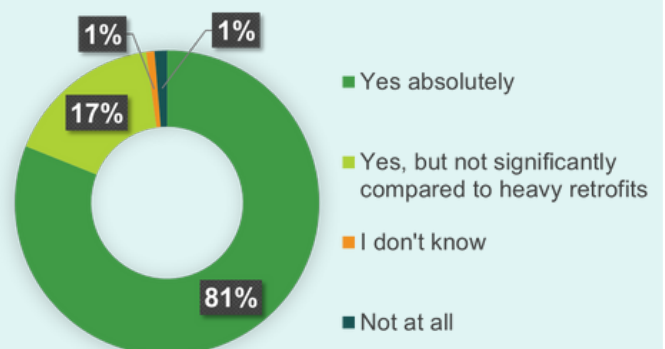
Did you change your energy-saving habits after participating in the CEE comp?



Did you feel engaged and involved by the green team of your organization?



Do you think that energy efficiency measures (especially changing habits) have a chance to reduce building's energy consumption ?



AWARD CEREMONY



Closing of the First Edition

The Award Ceremony of the CEE Comp was held on October 28, 2022 at the Ministry of Environment (MoE). This event celebrated the end of the CEE Comps' first edition and rewarded the winning participants which included ministries, universities and private companies, who enthusiastically committed to implementing energy efficiency practices.

His Excellency Dr. Tin Ponlok, Secretary of State at the MoE and Second Vice Chair of the National Council for Sustainable Development (NCS), chaired the ceremony. He reaffirmed the importance of the competition for Cambodia's environmental strategy: "Energy efficiency is one of the best solutions to reduce greenhouse gas emissions in Cambodia, and [...] it also enhances Cambodia's economic sustainability, as energy production increases the impact of climate change and the current rise in energy prices puts more pressure on regions and policies."

Frantz Vaganay, co-founder of the CEE Comp welcomed the successful awareness raising campaign that the competition triggered: "This generated an additional 2900 followers due to sharing tips, energy newspaper articles and news about the competition".



Winners on stage at the CEE Comp Award Ceremony



The awards were handed over by H.E. Dr. Tin Ponlok together with Mr. Bryan Fornari, Head of Cooperation of the EU Delegation, Ms. Alissar Shaker, UNDP resident representative, H.E. Dr. Po Kimtho, Director of the ITC and Ms. Agnes Kim, Country Manager at Schneider Electric.

Due to their proactive involvement, the jury decided to reward the 3 ministries that participated in the 45-Day CEE Comp Challenge. The Ministry of Environment (MoE), the Ministry of Mines and Energy (MME) and the Ministry of Industry, Science, Technology and Innovation (MISTI) were thus recognized for their efforts to raise awareness of energy efficiency among their staff.

The National University of Battambang (NUBB) ranked first in the 90-day University Challenge, having shown enthusiasm to participate in the activities proposed by CEE Comp and to develop its own student awareness campaign.



Future of CEE Comp



Due to its success, the CEE comp will return for a second edition! This time, the competition aims for greater participation from private companies "Prospects will include at least doubling the number of participants for the 2023 edition combined with expanding to the tourism sector" stated Cécile Dahome, co-founder of the CEE Comp. New types of participants like hotels will take part in the competition. The CEE comp has a long-term vision: establishing a sustainable multi-year competition between private buildings, and thus contribute to Cambodia's efforts to achieve its energy efficiency targets.



ACKNOWLEDGMENTS

Funder and sponsor

We would like to warmly thank our funder without whom the competition would not have been possible: the Cambodia Climate Change Alliance – Phase 3 (CCA3), that is a joint initiative of the Royal Government of Cambodia and a partnership between UNDP, the European Union and the Swedish Government. Many thanks to our sponsor Schneider Electric for its support.



Implementers

We would like to thank the Institute of Technology of Cambodia (ITC) and Sevea for the implementation and organization of the competition.



Partners

We would also like to thank our partners Energy Lab, a4mt, EuroCham and Liger, for their precious collaboration during the competition.



Participants

Last but not least, the entire CEE Comp team would like to thank all participants from private buildings, universities and ministries. Their strong involvement and enthusiasm made the competition a success.

