United for Efficiency (U4E) is a global initiative supporting developing and emerging economies to switch to energy-efficient lighting, appliances and equipment. This public-private partnership is convened by UNEP and brings together a range of stakeholders who are united in a common cause to improve energy efficiency in developing and emerging economies.

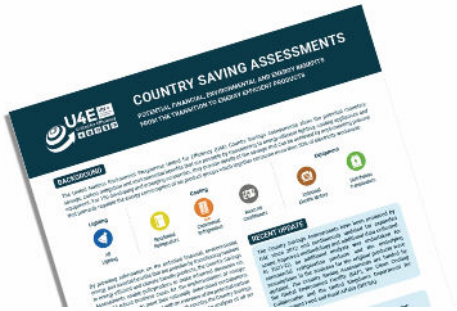
YOUR QUARTERLY CONNECTION TO HIGH-EFFICIENCY SOLUTIONS | Vol. 5, Issue 4

NEWSLETTER 2022

Welcome to the October 2022 newsletter

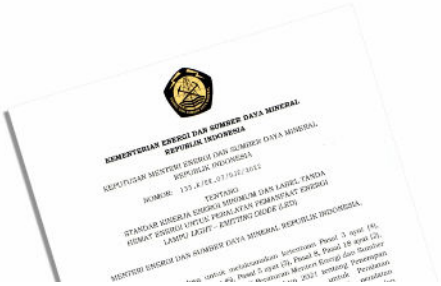
The U4E newsletter provides a digest of the progress and upcoming developments of U4E and its partners. During the last quarter, we were delighted to see the release the 2022 update of our Country Savings Assessments, which for the first time, includes details of the savings potential for commercial refrigeration, and the improved COVID situation allowing many postponed capacity building activities to be undertaken.

News

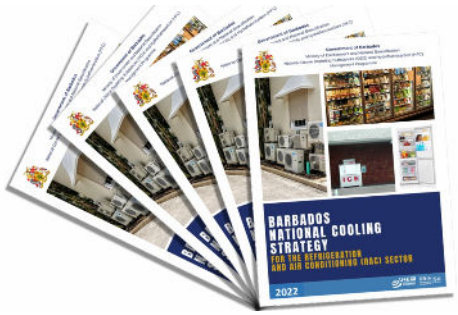


Analysis of the 2022 update of United Nations Environment Programme United for Efficiency (UNEP-U4E)'s Country Savings Assessments estimates that, if all developing and emerging economies adopted minimum energy performance standards (MEPS) for six key product areas, over 910 TWh of electricity consumption could be saved annually in 2040, equivalent to 416 large power stations or more than the total current consumption of Türkiye, Indonesia and South Africa combined. The associated climate benefits include mitigating 820

million tonnes of CO_2 annually and a USD 130 billion saving for consumers on their electricity bills annually. The updated assessments were released in September 2022 and for the first time include details of the savings potential for commercial refrigeration. They also include information on other potential opportunities for savings from additional steps such as the use of occupancy and daylight sensors and dimming controls for lighting, control systems, sensors and thermal zoning for air conditioning, variable speed drives for motors and improved management practices for distribution transformers. For more information, see the Country Savings Assessments factsheet and explore assessments for 156 countries.


KEMENTERIAN ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA

The approval of the Ministerial Decree for minimum energy performance standards (MEPS) and energy labels for light emitting diodes (LEDs) marked a significant milestone for Indonesia's Global Environment Facility (GEF) ADLIGHT, *Advancing Indonesia's Lighting Market to High Efficient Technologies*, project. The decree, which was officially approved by the Minister of Mineral and Energy Resources on 5 July 2022, specifies the scope of the MEPS and energy labels, thereby providing the legal basis for their implementation. It sets the minimum luminous efficacy of the LED MEPS at 80 lumens per watt which, in keeping with the ASEAN goal of regional harmonization of MEPS for lighting products, aligns with the ASEAN regional lighting harmonisation level.



On World Ozone Day on 16 September 2022, the Barbados National Cooling Strategy was made publicly available by the Ozone Unit team at the Ministry of Environment and Natural Beautification (MENB) following its national approval earlier in the year. The strategy is a product of the collaborative effort of the National Ozone Depleting Substances and Hydrofluorocarbon Management Programme of MENB and the Caribbean Cooling Initiative (C-COOL), a Clean Cooling Collaborative funded project led by the United Nation's Environment Programme (UNEP) United for Efficiency (U4E) team, with contributions provided by key stakeholders from governmental and non-governmental organisations during consultations, meetings and the document development and review stage.

In September, Ghana Energy Commission and UNEP U4E were pleased to announce the approval of Novotec as a new partner vendor approved to sell two refrigerator models

which are compliant with the rigorous requirements of ECOFRIDGES GO. Novotec is joining four existing partner vendors: SML Ghana, Ederick, Sun Electronics, and Nesstra. ECOFRIDGES GO is a key component of the ECOWAS Refrigerators and Air Conditioners Initiative (ECOFRIDGES) – a joint project in Ghana and Senegal which aims to accelerate adoption of energy-efficient and climate-friendly domestic refrigerators and room air conditioners, saving consumers money on their electricity bills, relieving demand on the power sector, and mitigating impacts on the environment.

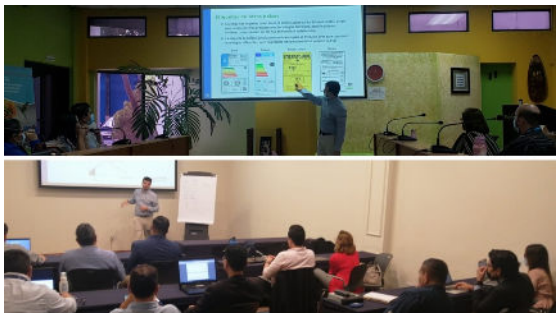
Once again, this was a busy period for the Africa Centre of Excellence for Sustainable Cooling and Cold-chain (ACES). As part of a study tour to the UK in September, ACES Rwandan and Kenyan partners visited cold stores, ACES partner Cranfield University, as well as Birmingham Energy Innovation Centre (BEIC) at Tyseley Energy Park. The tour culminated in *The Local to Global Cold-chain Summit* hosted by the University of Birmingham on 29 September 2022 where the University of Birmingham and the Indian State of Haryana signed a Memorandum of Understanding (MoU) to develop a Haryana Centre of Excellence on crop post-harvest management and sustainable cold chain which builds on the model for ACES. At the *ACES Engagement Day* on 21 October 2022 at the Centre's Headquarters in Kigali, more than 70 experts gathered to share perspectives on leading existing initiatives and discuss activities and where ACES is uniquely placed to address strategic needs. Attendees identified testing and certification services, joint research opportunities, capacity building and other aspects to pursue as preparations are in full swing for the full opening of the Centre in 2023. The event was captured by RwandaTV and you can view coverage [starting at 13:50] on their YouTube Channel.

Capacity Building

A key part of U4E's work is helping to develop the capacities of developing and emerging economies to effectively implement and enforce energy-efficiency regulations. This was particularly the case this quarter, with the permitted return to face-to-face meetings allowing many postponed project capacity building activities to be undertaken.

During October, in preparation for making the final specifications to

purchase the photometry equipment necessary for testing lamps, senior staff from Tunisia's National Agency for Energy Management and the national test laboratory, CETIME, spent four days on a study tour in France to develop a fuller understanding of the technical features and quality of the key measurement systems required to effectively equip a photometric test facility to undertake the testing required to underpin the regulation of energy efficiency of lighting products in Tunisia. The study tour, which included two days at the Laboratoire National de Métrologie et d'Essais (LNE) just outside Paris and one day at LED Engineering Development, an accredited private test facility for lighting products in Toulouse, was carried out under the umbrella of the GEF-funded, *Leapfrogging Tunisia's Lighting Market to High Efficiency Technologies* project.



In September 2022, key national stakeholders from El Salvador and Honduras attended workshops, as part of the GCF Readiness Programme-funded *Leapfrogging to Energy-Efficient and Climate Friendly Air Conditioners in Cuba, El Salvador and Honduras* project, to gain a full understanding of the monitoring, verification and enforcement (MVE) best practices and requirements for the new Central American technical regulation for inverter type air conditioners (RTCA 23.01.78:20) which comes into force in December 2022, and which applies to these countries as members of the Central American Integration System (SICA). In addition to familiarising the participants with the MVE requirements of the new legislation, they shared MVE good practice guidance on market surveillance activities to provide a solid foundation on product compliance, testing standards and MVE process and implementation.

In September, in preparation for a drive towards a major switch to efficient and climate-friendly cooling thanks to new sustainable public procurement (SPP) protocols introduced with technical assistance from UNEP U4E, representatives of Ghana's Energy Commission, led by Hubert Zan and Edwin Kwasi Tamakloe, and UNEP-U4E experts delivered training on SPP to government officials from the Ministry of Health and Ghana Health Service. The training focused on air conditioning with the objective of helping procurement officers improve their understanding of the economic benefit of sustainable cooling solutions. Participants learned about the different types of air conditioning systems available in Ghana, the technical criteria that may be used in

public tenders and were presented with tools that facilitate an economic analysis of the various options.

In August, representatives from several key government agencies and test facilities from Pakistan, including the Ministry of Science and Technology, the Pakistan Council of Scientific and Industrial Research (PCSIR), National Institute of Electronics (NIE) and the Centre for Energy Research and Development (CERAD) spent four days at the Electrical and Electronics Institute (EEI) in Bangkok, Thailand to reinforce and develop national capabilities for lighting product testing. The study tour was undertaken as part of the *Delivering the Transition to Energy Efficient Lighting in Residential, Commercial, Industrial, and Outdoor Sectors* GEF-funded project in Pakistan and included two representatives from the Sudanese Standards and Metrology Organization (SSMO) as special guests representing the *Energy Efficient Appliances and Lighting in Sudan* UNDP-GEF project, with the aim of sharing experiences and practices with the relevant technical equipment, acquiring new knowledge on terminology, calibration and test methods, and exchanging with their Pakistani peers. The training was delivered by EEI laboratory staff and experts, with support from the International Institute for Energy Conservation (IIEC), who also coordinated all the logistics for the study tour. To download a copy of the case study providing full details of the study tour, click here.

Partner Spotlight

IIEC is a non-governmental, not-for-profit organization established in 1984 to accelerate the promotion of sustainable energy and environmental programmes in developing countries and emerging economies. Its mission is to apply global knowledge and experience to customize local sustainable solutions that are replicable and adaptable, to make a global mainstream impact toward sustainable development and greenhouse gas emissions reduction. It focuses on implementation, resulting in policies developed in partnership with key policymakers and industry in target countries as well as the bilateral and multilateral institutions that help to shape energy policy and investment priorities globally.

IIEC has worked in more than 50 countries across Africa, Asia and the Pacific region, and has been working with U4E for over a decade. Recent projects with U4E include the ASEAN Harmonization project and development of the U4E prototype product registration system and ASEAN regional product database, and national projects in Pakistan and Lao PDR.

UPCOMING EVENTS

31 OCTOBER 2022
Defra/U4E side event: Economic Growth through Policy Harmonisation
Thirty-Fourth Meeting of the Parties to the Montreal Protocol Montreal, Montreal, Canada

7-18 NOVEMBER 2022
UN Climate Change Conference 2022, Sharm El-Sheikh, Egypt
The 27th session of the Conference of the Parties (COP 27) to the UNFCCC Sharm el-Sheikh, Egypt

12-16 December 2022
Olade Energy Week, Panama City, Panama
In parallel with the seventh annual Olade Energy Week, U4E will host a two-day energy efficiency seminar on 13-14 December 2022 and will be a panelist in the main Energy Week energy efficiency session on 14 December 2022

For further details on any of these events, please email us atunep-u4e@un.org.

With thanks to our funders

gef GREEN CLIMATE FUND Clean Cooling COLLABORATIVE Department for Environment Food & Rural Affairs

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