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 3



Welcome to the July 2022 newsletter

The U4E newsletter provides a digest of progress and upcoming developments by U4E and its partners. During the past quarter, we were particularly pleased to see the resumption of face-to-face meetings and training for many of our projects and the addition of another key resource in the form of our prototype product registration system which we hope will help countries overcome the barrier in implementing a system for the first time.

News



The Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES) in Rwanda has been much in the news since the last newsletter. In his keynote address on the first day of SEforALL Forum in May, the President of Rwanda, HE Paul Kagame, <u>praised the</u> <u>centre</u> [at 05:29] stating, *"In addition to*

delivering financial security to farmers, this centre will respond to the growing need for medical cold chains to store vaccines and medicines.". Later in the week, dignitaries, delegates and subject matter experts gathered at the ACES Open House, held in parallel to the Forum, to hear about the centre's vision and how they can help shape and engage with its work. Most notably, this included Rwanda's Minister of the Environment, Jeanne d'Arc Mujawamariya, who has been a staunch supporter of the centre since it was founded. In June, it received a further <u>endorsement from COP26 President</u>, Rt. Hon. Alok Sharma, when he visited the centre during his attendance at the Commonwealth Heads of Government Meeting, "*ACES is a demonstration of how we can work together, to help tackle rising emissions and keep alive the goal of limiting average global temperature rises to 1.5°C… [it] is dedicated to developing innovative cooling technologies and providing training to apply those technologies.*"

In May, U4E technical experts visited La Paz to meet with national stakeholders implementing the three-year lighting market transformation project, *Delivering the Transition to Energy Efficient Lighting in Bolivia*. The objective of the visit was to facilitate high-level discussions on the



implementation of the various aspects of the countrywide project, to provide technical advice on ongoing activities and to help identify areas where support can be targeted to build in-country capacity to meet the project objectives. The transformation of the entire Bolivian market to modern eco-efficient lighting in all sectors could save Bolivian consumers, including government, over \$50 million a year at current electricity costs, as well as bring significant climate and pollution emissions savings.

The past quarter was particularly busy one in terms of U4E participation in third party events. In addition to the ACES Open House mentioned already, U4E was pleased to co-lead two sessions in the Capacity Hub at the SEforALL Forum. These showcased specific U4E projects working to help countries make the transition to more energy-efficient lighting, appliances and equipment.



The Energy Efficiency Policy Actions and Market Development session was led jointly with UNEP and UNIDO and highlighted energy efficiency as the 'first fuel' for energy security and alleviating energy poverty while reducing greenhouse gas emissions. It recommended policy actions for energy

efficiency in lighting, appliances and equipment, which consume over half of electricity globally, including applying U4E's <u>Model Regulation Guidelines</u> through voluntary financial mechanisms, mandatory MEPS and labels, regional policy harmonization, and market transformation approaches.

The Designing Sustainable Cold-Chains

for Food and Health session, co-led with ACES and The World Bank, described the systems approach necessary for developing sustainable cold-chains. This must be built on understanding scale (current and future), cooling needs and equitable business models. The session walked through how to model, define



and cost the actions needed to facilitate the deployment of cold chain in equitable, sustainable and resilient ways, using examples and analysis from Bangladesh, Kenya and Nigeria.



In June, U4E's Patrick Blake took part in the <u>Mission Efficiency Financing Charette</u> hosted at the UNEP Copenhagen Climate Centre. It brought together two groups: the world's finance community (private sector, development banks, philanthropic organizations, climate finance facilities, etc.) and the projects

and initiatives that are at the forefront of delivering the transition towards energy efficiency. Through two-way dialogue and extensive audience participation, it aimed to undo the fundamental disconnect between the finance community and energy efficiency.

The *Third Global Climate & SDGs*

<u>Conference</u> on strengthening synergies between the Paris Agreement on Climate Change and the 2030 Agenda for Sustainable Development took place this month. It focussed on the progress made over the last few years on synergistic action in raising climate



ambition towards the 1.5 degrees goal of the Paris Agreement while putting the world on the right track for achieving the Sustainable Development Goals by 2030. U4E contributed two technical briefs (on *Delivering Efficient Power Supply Networks for all in the Southern Africa Region* and *Transforming Global Markets to Energy Efficient Lighting and Appliances*) in support of the conference.



Also this month, U4E's Paul Kellett was pleased to introduce our work on transforming markets to energy-efficient lighting, appliances and equipment to representatives of the <u>SwitchMed</u> countries at a UNEP-hosted workshop in Paris. We hope that this, and the example set by our current <u>Leapfrogging</u> <u>Tunisia's Lighting Market to High Efficiency Technologies</u> project, will encourage other countries in this region to consider applying our <u>integrated policy approach</u> to transition their markets to more energy-efficient products.

U4E's Madeleine Edl gave two presentations at <u>EEDAL'22 International</u> <u>Conference on Energy Efficiency in</u> <u>Domestic Appliances and Lighting</u> – on product registration systems as a tool to transform markets in ASEAN and energy efficient and climate friendly cooling in EAC and SADC.





At the eceee Summer Study, in June, Maarten van Werkhoven represented U4E with a display discussing accelerating energy efficiency in electric motor systems, and our work on updating the motors <u>policy guide</u> and <u>model</u> <u>regulation guidelines</u>.

In a U4E webinar in April, we shared practical insights on the conception, design, and implementation of the ECOFRIDGES financial mechanisms. Opportunities to adopt similar interventions in other countries were also discussed, along with other elements of a holistic approach,



including minimum energy performance standards, labelling, enforcement, collection and recycling of old products, and communications campaigns. The audience included ECOWAS officials from Ministries of Energy, Environment, and Infrastructure (or similar) who may be interested in pursuing similar initiatives and we hope they will be inspired to pursue further such initiatives in the area. An overview of the <u>ECOFRIDGES</u> projects can be found on our website.



The project <u>Leapfrogging to Energy</u>– <u>Efficient and Climate Friendly Air</u> <u>Conditioners in Cuba, El Salvador and</u> <u>Honduras</u> follows an integrated policy approach to transform the market into energy–efficient air conditioning products and includes the development and improvement of regulations, minimum energy efficiency standards (MEPS), labels, testing capabilities and market awareness activities. It also provides support to increase the capacity of the implementing organizations and develop the strategy and tools for monitoring and surveillance of the market. At a <u>workshop in Cuba</u> in June, U4E expert, Víctor Mínguez, presented the results of the recently finalized <u>market</u> <u>assessment for Cuba</u>, along with a proposal for MEPS, which was discussed during the workshop. Based on these discussions, it is hoped to finalise this proposal in August.

New Resources & Tools



In May, U4E was pleased to <u>launch its new</u> <u>prototype Product Registration System</u> which is built for countries which do not have their own system and would like to use it (in whole or part) to implement one. It includes lighting, air conditioners and refrigerators, but can be easily expanded to other product categories due to its modular structure. The

functionalities of the system can be customised for individual country needs, for example to include individual MEPS in the system, enable bulk upload or define authorized laboratories. It is based on global best practices and contains the essential elements of a registration system, including user input forms, data tables and output reports. It uses open-source software, and therefore is free to use, is designed to work with slow connections, can be deployed flexibly on Windows, Linux or cloud/on-site and is fully secure (having been securely developed and coded by using OWASP (Open Web Application Security Project) Secure Coding Practices and the Transport Layer Security (TLS) communication protocol. Details of the prototype and all our product registration system resources can be found on our website.

The <u>ECOWAS Refrigerators and Air</u> <u>Conditioners Initiative (ECOFRIDGES)</u> is

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. A cornerstone of ECOFRIDGES activities in Ghana is <u>a Green On-wage (GO)</u> financial mechanism to help make these cooling products more affordable and accessible. In June, U4E and the Basel Agency for Sustainable Energy (BASE)<u>launched a video</u> tracing the market transformation achieved thus far in Ghana through ECOFRIDGES GO. Interviews with different stakeholders explore the key benefits realised by the programme and its anticipated impacts. The <u>video</u> runs for 15 minutes and includes the perspective of partner vendors, government officials,

beneficiaries and financial institutions. A shorter, <u>six-minute version</u>, is also available.



Pakistan's <u>Delivering the Transition to</u> <u>Energy Efficient Lighting in Residential,</u> <u>Commercial, Industrial, and Outdoor</u> <u>Sectors</u> was formally launched in February 2019. The project, through the U4E team of experts, provided technical assistance to the National Energy Efficiency and Conservation Authority

(NEECA) in the promotion, demonstration, deployment, and transfer of innovative high efficiency and usage-controlling lighting technologies. A new <u>case study</u>, published in June, describes the development of a framework for an innovative financing mechanism under the project. Through a risk guarantee mechanism, it mitigates some of the risk to lenders, thereby stimulating commercial lending for replacement of conventional lighting with energy-efficient light emitting diode lighting in all end-use sectors in Pakistan.

Partner Spotlight



The International Copper Association (ICA) brings together the global copper industry to make a positive contribution to the UN Sustainable Development Goals. ICA was one of the original founding partners of U4E

and has supported U4E's communications since that time. It has provided technical expertise and policy support to many of our projects all over the world, championing energy efficiency as a foundation of the green transition. ICA has helped lead the development of minimum energy performance standards (MEPS) in developing economies through its contribution to U4E's training programmes and manuals, particularly in relation to motors and distribution transformers. Headquartered in Washington, D.C., ICA has offices in three primary regions: Asia, Europe and North America. ICA and its Copper Alliance[®] partners are active in more than 60 countries.

UPCOMING EVENTS

23-24 AUGUST 2022 <u>Power & Electricity World Africa</u>, Johannesburg, South Africa, Germany

21-23 SEPTEMBER 2022

13th Clean Energy Ministerial, Pittsburgh, USA Convening jointly with the 7th Mission Innovation Ministerial as part of the <u>Global</u> <u>Clean Energy Action Forum</u>

18-20 OCTOBER 2022

<u>Global Off-Grid Solar Forum & Expo</u>, Kigali, Rwanda U4E's next model regulation guidelines for cooling equipment, which will focus on weak- and off-grid refrigerating appliances, will be discussed with industry and technical assistance providers at this event.

7-18 NOVEMBER 2022

<u>UN Climate Change Conference 2022</u>, Sharm El-Sheikh, Egypt The 27th session of the Conference of the Parties (COP 27) to the UNFCCC

For further details on any of these events, please email us at<u>unep-u4e@un.org</u>.

