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.

Welcome to the January 2022 newsletter

The last quarter of 2021 saw the release of a number of new U4E publications and third-party resources which were featured at COP26 in Glasgow and other high-profile outreach opportunities. U4E was pleased to be involved in events driving recognition of the importance of appliance efficiency in the energy transition. This newsletter provides a digest of progress and upcoming developments by U4E and its partners.

News

A further $3.3 million (£2.5 million) funding boost from the UK Department for Environment, Food & Rural Affairs was announced in November 2021 which enables the Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES) to scale-up its work toward developing a pan-continental network of outreach centres that deploy technologies and innovative business models in rural communities. The first of these Specialized Outreach and Knowledge Establishments (SPOKEs) will be in
Kenya, with another to follow in Rwanda – helping to kick-start the spread of energy-efficient, sustainable refrigeration for food and vaccine supply chains.

U4E’s *Model Regulation Guidelines for Energy-Efficient and Climate-Friendly Refrigerating Appliances* were expanded in November 2021 with the publication of new *Model Regulation Guidelines for Energy-Efficient and Climate-Friendly Commercial Refrigeration Equipment*. The possibility of harmonised implementation of these guidelines in the ASEAN region was discussed in two ASEAN Centre for Energy/U4E workshops at the end of 2021, and a two-year *Green Climate Fund* (GCF) readiness project has been launched with the Brazilian Ministry of Energy and Mines that will put the new Guidelines into practice. Work is also getting started this February on the next Guidelines which will address off-grid refrigeration.

In November 2021, Chile launched [Refriclaje](http://refriclaje.cl), a refrigerator replacement campaign, that aims to replace and recycle old and inefficient devices and raise awareness of their impact on the environment and on household budgets. The campaign target is to replace 1,600 appliances and collect around 100 tons of material to be sent to a recycling plant for environmentally sound management. Refriclaje marks the culmination of the *Accelerating the Energy Transition Towards an Efficient Refrigerator and Freezer Market in Chile* project, which is funded by the *GEF* and aims to transform Chile’s markets to energy-efficient residential refrigerators/freezers.

COP26 in Glasgow in November 2021 included a particular focus on energy efficiency. U4E is proud to support the *Product Efficiency Call to Action* asking governments, business, NGOs and consumers to work towards doubling the efficiency of four key appliances globally ahead of 2030. The U4E Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES) and ECOFRIDGES projects were cited as exemplars in the *Be Bold: Sustainable Cooling for All* and *Sustainable Cold Chain: For the People, For the Planet* side events. In parallel with COP26, U4E engaged with partners to run a social media campaign sharing their thoughts on why energy efficiency matters and to highlight the U4E tools and resources available to achieve an energy efficiency market transformation.

U4E’s product registration system
New Resources & Tool

Published in November 2021, U4E’s new *Green Public Procurement Technical Guidelines and Specifications for Energy-Efficient Air Conditioning* provide step-by-step advice on building sustainability and current best technical criteria for air conditioners into public procurement activities. Its sister publication, *Green Public Procurement Technical Guidelines and Specifications for Energy-Efficient Lighting*, will be available later this month.

Published in December 2021, the new *Model Regulation Guidelines for Energy-Efficient and Climate-Friendly Commercial Refrigeration Equipment* provide voluntary guidance for developing and emerging economy governments that are considering a regulatory or legislative framework requiring new commercial refrigeration equipment to be energy efficient and use refrigerants that have lower global warming potential compared with typical legacy refrigerants.

Transformers are a critical part of the electrical infrastructure of a country. This publication, ‘*A Guide to Using Total Cost of Ownership When Purchasing Distribution Transformers*’, provides information on, and guidance for using, the Total Cost of Ownership (TCO) approach that is based on the IEC methodology. The TCO approach allows purchasers to capitalise the value of future losses and incorporate them into the purchasing decision process. It therefore helps to ensure that utilities and companies purchase and install cost-
optimised transformers into their network. To support the guide, U4E has produced an Excel spreadsheet tool which puts the TCO equations into a user-friendly spreadsheet to facilitate the derivation of the calculation of the loss evaluation factor.

In November 2021, as part of their ongoing project, U4E and the ASEAN Centre for Energy (ACE) published a Regional Savings Assessment for the region. This provides a summary of the potential benefits that could be achieved from the implementation of minimum energy performance standards for lighting, appliances and equipment at a regional level in ASEAN. The impacts are assessed at minimum and high ambition levels as detailed in U4E's Model Regulation Guidelines.

Find out more about the U4E project, Regional Project for Leapfrogging to Energy-Efficient and Climate Friendly Air Conditioners in Cuba, El Salvador and Honduras, in our new factsheet.

Throughout 2021, U4E was pleased to take part in the 2021 Vienna Energy Forum Virtual Series and make a significant contribution to the resulting Products Track Policy Brief, issued in November 2021. The brief focusses on how energy efficiency can support economic development and energy security, achieve climate targets and support the alleviation of poverty.

The Green Cooling Initiative Measurement, Reporting and Verification (MRV) Handbook is a comprehensive handbook for the measurement, reporting, and verification of greenhouse gas emissions. It outlines a blueprint MRV system based on international best practices, which will be applicable for the refrigeration and air conditioning in any country and provides a practical step-by-step approach for policy makers and enforcement bodies in the RAC sector. The handbook draws on U4E's product registration system work for guidance on how to set up a product registration system and introduces the U4E product registration system prototype.
Partner Spotlight

**BASE** is a Swiss not-for-profit foundation which develops innovative business models and financing mechanisms to mobilise investments in climate solutions, including sustainable cooling solutions, for enterprises, public buildings and households. They have just celebrated the 20th anniversary of their founding and have been a U4E partner since 2016. During this time they have been key partners in establishing the on-wage and on-bill financial mechanisms in the [ECOFRIDGES](#) and [Rwanda Cooling Initiative](#) projects, ‘Coolease’ in Rwanda, Cooling-as-a-Service in the [Caribbean Cooling Initiative](#), and the [Manual of Financing Mechanisms and Business Models for Energy Efficiency](#), among many other areas of collaboration.

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**UPCOMING EVENTS**

**25 JANUARY 2022**
Virtual Event Series: The Asia Regional NDC Clinic – Deploying Energy Efficiency Solutions in the Use of Appliances

**15 MARCH 2022**
Summit on Sustainable Cold-Chains in Africa. Washington, D.C., USA. Co-organized by U4E, Centre for Sustainable Cooling, US Department of Agriculture and Millennium Challenge Corporation.

*An in-person event to foster linkages across cold-chain programmes underway on the continent*

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

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**STAY CONNECTED**