

KIGALI

COOLING EFFICIENCY PROGRAM

K-CEP 2018 ANNUAL REPORT

ABOUT K-CEP

The Kigali Cooling Efficiency Program (K-CEP) is a philanthropic collaboration launched in 2017 to support the Kigali Amendment of the Montreal Protocol and the transition to efficient, clean, affordable cooling solutions for all. K-CEP's program office, the Efficiency Cooling Office, is housed at the ClimateWorks Foundation.

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FOREWORD

BY ERIN ROGERS

CHAIR OF THE FUNDER STEERING COMMITTEE



MARCH 2018

In October 2016, I stood facing hundreds of delegates at the UN Montreal Protocol meeting in Kigali, Rwanda. I was there to deliver a promise on behalf of the diverse foundations and individual donors that had collectively pledged more than \$50 million in support. For those developing nations that agreed to rapidly phase down super-polluting refrigerants, we pledged support for adopting energy-efficient cooling at the same time. We committed to rapidly deploy the funding, to match the countries' commitment to a rapid transition of refrigerants to cleaner varieties.

The adoption of the historic Kigali Amendment was not only an important moment for the Montreal Protocol, but also for philanthropy. Philanthropic funders had united around the goals of improving

human health, livelihoods and comfort while generating huge climate benefits. We moved quickly within a short window of opportunity in ways that neither government nor the private sector can easily do. The scale and speed of this initiative (the largest philanthropic energy efficiency fund ever created), the potential for impact, and the intensity of ongoing collaboration as K-CEP moves into implementation in partnership with government and the private sector have been exceptional.

Within five months of the adoption of the Kigali Amendment, we formed a Funder Steering Committee, agreed to principles of collaboration, hired three expert staff who formed the Efficiency Cooling Office, launched a 20-member Technical Advisory Committee, and sought input from around the world to develop a robust strategy. We officially launched the Kigali Cooling Efficiency Program in March 2017.

K-CEP is able to report even more exciting progress in this first Annual Report. At the end of its first year in operation, K-CEP is reporting on close to \$30 million committed

to projects, including direct support to 38 countries. Alongside new partners, K-CEP is charting new territory: for the first time, the UN's Montreal Protocol experts are diving into energy efficiency and connecting with energy policy-makers. For the first time under the Kigali Amendment, the Montreal Protocol's Multilateral Fund will support an industrial manufacturing conversion project (which K-CEP is co-financing to bring in efficiency). K-CEP's grantee community is collectively tracking results, and we are all learning and adapting as we go.

On behalf of all of the K-CEP philanthropic funders, I offer deep appreciation for the years of hard work by NGOs, governments, and many others that led up to this moment, and for all of the continued work that is to come. I'm inspired by the creativity, passion, tenacity, and spirit of collaboration that pervades this effort, and hopeful that we will be successful in saving lives, increasing health and prosperity, and cooling the planet.



Erin Rogers,

Program Officer, Environment, William and Flora Hewlett Foundation

K - C E P ' S F I R S T Y E A R

BY DAN HAMZA-GOODACRE

EXECUTIVE DIRECTOR, K-CEP

EFFICIENT, CLEAN COOLING IS ONE OF THE BIGGEST SOLUTIONS TO CLIMATE CHANGE AND UNLOCKING BENEFITS FOR HEALTH, LIVELIHOODS, AND ACCESS TO ENERGY



DAN HAMZA-GOODACRE

EXECUTIVE DIRECTOR, K-CEP

I'd like to start by saying thank you to everyone working to make cooling more efficient and clean. You are advancing **one of the biggest solutions to climate change and unlocking benefits for health, livelihoods, and access to energy.** These collective efforts will make our planet safer, more equitable, and more prosperous. I hope you enjoy reading the first annual report for the Kigali Cooling Efficiency Program (K-CEP), and that it fills you with a bit more optimism about the future.

Our focus in this first year has been laying a solid foundation for program “take-off.” K-CEP was established to help developing countries transition to efficient, clean and affordable cooling technologies, while they phase out super-polluting fluorinated gases (HCFCs and HFCs) used as refrigerants in cooling. This is required under the Kigali Amendment to the Montreal Protocol, the world’s most successful environmental agreement, and can

avoid up to 0.5° Celsius of warming by end of this century. Our parallel efforts to improve the energy efficiency of air conditioners and other cooling devices could double the size of the climate prize to 1° C of avoided warming, essential to the goal of limiting global average temperature rise to well below 2° C.

The baseline on cooling efficiency is unacceptable – the market average efficiency of air conditioners is three times less than the best available efficiency. In many developing countries it is far worse. The majority of countries still have no or extremely low minimum energy performance standards for cooling technology. The impacts of needless inefficiency are dreadful: **Approximately 500 million people are at high risk from heat stress, most of them women, children, and the elderly;** and 400 million tons of food is wasted each year, much of which is a result of non-existent cold chains needed to preserve food. Another 2

million lives are lost each year due to a lack of vaccines, many of which spoil in the absence of cooling. We can and must do better to bring efficient, clean cooling to all.

In K-CEP's first year, we have offered support to 38 countries which together constitute a huge opportunity to cut climate pollution. We have also supported a global training platform to be launched in Beijing this April, to provide capacity building for all 147 developing countries. In shaping our work, the K-CEP community of international organizations, NGOs, academics, businesses, and expert advisors, has responded to country needs, whilst pushing for *the greatest ambition*. That is why K-CEP philanthropic funding is committed to those countries pledging to go furthest and fastest with their commitments to the Montreal Protocol F-gas transition. Of course more needs to be done by us and by others, but with focus, resolve and the

capacity to act, **we can make a quantum leap forward in efficient, clean cooling** in the next few years.

There's a lot for you to discover.

As you read about early stage policy and private sector action and global leadership by the United Nations, you will see how the movement is building. Only together will we realize the huge prize from efficient, clean cooling and avoid a downward spiral where inefficient cooling continues to warm the planet, while spurring demand for even more damaging cooling. By helping governments, businesses, and consumers step up, together we can raise cooling technology standards, unlock capital, and transform markets so that efficient, clean cooling can be used by all.

With "cool" wishes



Dan

THE YEAR IN NUMBERS



38 COUNTRIES

receiving direct K-CEP support in our first year



27 NATIONAL
COOLING PLANS

being drafted with technical assistance from K-CEP



23 MEPS

K-CEP is supporting countries to draft or revise their minimum energy performance standards (MEPS) for cooling appliances



147

countries offered cooling efficiency training for their ozone and energy policy makers



100 +

experts consulted on K-CEP strategy development



~ \$30M

value of grants committed in K-CEP's first year



15 BUSINESSES

offered technical assistance for efficient, clean cooling



16 FOUNDATIONS

signed the K-CEP Principles of Collaboration



18 ORGANIZATIONS

established working partnership with K-CEP

WINDOW 1

INSTITUTIONAL STRENGTHENING FOR EFFICIENCY

K-CEP is working with Montreal Protocol institutions and associated agencies, parties and companies, to support developing countries in integrating energy efficiency into the F-gas transition, thereby cutting pollution and costs, while improving access to clean, efficient cooling. K-CEP's approach is to promote ownership by countries, with fast implementation

and *south-south sharing of knowledge* to ensure more effective progress. Early-adopter countries and companies can catalyze similar work in other countries. Events in our first year, such as our conferences in Asia and Africa, and presentations at meetings of parties to the Montreal Protocol, provided opportunities to share and scale K-CEP work.

SUPPORTING AMBITIOUS GOVERNMENTS TO DEVELOP NATIONAL COOLING EFFICIENCY PLANS



BANGLADESH, CHINA, LEBANON, MALAYSIA, PHILIPPINES,
THAILAND, VIETNAM



EGYPT, GHANA, KENYA, NIGERIA, RWANDA



BAHAMAS, BARBADOS, BRAZIL, CHILE, COLOMBIA, COSTA
RICA, CUBA, DOMINICAN REPUBLIC, JAMAICA, PANAMA,
SAINT LUCIA, TRINIDAD & TOBAGO, URUGUAY, VENEZUELA

EXAMPLE: NATIONAL COOLING PLANS IN 13 COUNTRIES

WHO

» United Nations Development Programme (UNDP), with National Ozone Units leading implementation in-country.

WHERE

» Chile, Costa Rica, Cuba, Panama, Trinidad & Tobago, Uruguay, Venezuela, Malaysia, Bangladesh, Sri Lanka, Ghana, Nigeria and Lebanon.

HOW

» National Ozone Units are working with energy efficiency experts to build their capacity, support coordination with national energy efficiency policymakers, convene country level dialogues, and develop national plans or roadmaps assessing approaches to improve energy efficiency. Such approaches include: bulk procurement, replacement programs for inefficient equipment, alternative cooling strategies, and analysis of national standards and labeling for AC and refrigeration.

WHY

» Filling the gap in energy efficiency expertise is needed for countries to incorporate energy efficiency into existing plans for the F-gas transition (as required by the Montreal Protocol), as well as finding links to other national plans such as Nationally Determined Contributions or development plans.

TRAINING AND CAPACITY BUILDING FOR NATIONAL OZONE OFFICERS AND ENERGY EFFICIENCY POLICY-MAKERS



PROVIDING TRAINING THROUGH “TWINNING” NATIONAL OZONE OFFICERS (NOOS) WITH ENERGY EFFICIENCY POLICY MAKERS FROM THEIR OWN COUNTRIES

WHO

» UN Environment, supporting all 147 developing countries.

WHERE

» Global, with ten regional ‘twinning’ events.

HOW

» This two-year “twinning” project is providing regional workshops in conjunction with UN Environment OzonAction network meetings. Policy makers receive training in market transformation and policy development and implementation, covering common solutions like standards and labels as well as practical action, such as how to integrate cooling efficiency into training of the cooling service sector.

WHY

» Bringing together and building the capacity of NOOs and national energy policy makers to link energy efficiency with objectives in support of the Kigali Amendment should raise developing country awareness and capacity, and better inform Parties what they can do collectively on energy efficiency through the Montreal Protocol.

SUPPORT TO ENHANCE AND INTEGRATE EXISTING KNOWLEDGE RESOURCES SUCH AS TRAINING MANUALS, KNOWLEDGE PLATFORMS AND TOOLKITS ON ENERGY EFFICIENT COOLING



GHANA, NIGERIA, RWANDA



LEBANON



GLOBAL

EXAMPLE: TRAINING FOR SERVICING TECHNICIANS ON ENERGY EFFICIENCY

WHO

» UNDP, with Lebanon’s National Ozone Unit.

WHERE

» Lebanon

HOW

» K-CEP is funding a training module on energy efficiency which will complement Montreal Protocol funded activities in the refrigeration and AC servicing sector. A ‘train the trainers’ approach will promote further replication of the training benefits.

WHY

» Technicians regularly service cooling equipment for refrigerant performance but typically do not look at energy efficiency. Neglecting the optimization, monitoring, and maintenance of cooling equipment results in increased energy use, lower cooling performance, and shortened equipment life. Better educating technicians promotes best practice and associated energy savings. We calculated that improving these practices for all cooling equipment could reduce cumulative emissions by 30 gigatons of CO₂ globally by 2050.

CASE STUDY:

MAXIMIZING THE EFFICIENCY OF DOMESTIC REFRIGERATORS BY WORKING WITH MANUFACTURERS IN BANGLADESH



» At MOP29 in Montreal in November 2017, the Multilateral Fund approved the co-financing for this project in Bangladesh. Photo credit: Ministry of Environment - Rwanda

The international HFC phase down will mean that many manufacturers must retool their production lines to produce appliances which use climate-friendly refrigerants. This transition provides an opportunity to switch to energy efficient appliance designs at the same time.

In November 2017, the Multilateral Fund (MLF) Executive Committee approved the first ever manufacturing plant conversion investment project under the Kigali Amendment. This financing will allow Bangladesh to eliminate 85% of HFC-134a, a super-polluting refrigerant which is largely consumed by the domestic refrigerator manufacturing sector. K-CEP is co-financing with the MLF in order to maximize the energy efficiency of domestic refrigerators produced in Bangladesh as the country moves to using low-GWP refrigerants.

K-CEP's support, combined with MLF and Walton funding, will directly promote the phase-out of 282 tons CO₂e in the Walton plant.

UNDP and Bangladesh's Department of the Environment are working with Walton Hi-Tech Industries Ltd, the leading domestic refrigerator manufacturer in Bangladesh. Walton is at a decision point around designs and appliance sizes, however there is a lack of in-house knowledge on how to incorporate best practice energy efficiency design into their appliances. K-CEP support will provide technical advice and capacity building to help Walton to improve its equipment design, use efficient components, and optimize appliance energy consumption.

This first of its kind project will enable Bangladesh and Walton to meet their aims to manufacture energy efficient equipment that uses climate friendly refrigerants and optimize the conversion of Walton's plant. More broadly, there is an opportunity to shift the domestic refrigerator market to efficient, clean products, build capacity to help further develop energy efficiency standards, and raise public awareness of energy efficiency in the domestic refrigeration sector.

K-CEP'S SUPPORT, COMBINED WITH MLF AND WALTON FUNDING, WILL DIRECTLY PROMOTE THE PHASE-OUT OF 282 TONS CO₂E IN THE WALTON PLANT.

WINDOW 2

POLICIES, STANDARDS AND PROGRAMS

K-CEP engages with countries willing to ambitiously and quickly integrate energy efficiency into solutions to deliver cooling. Partnerships with these countries are helping governments to develop and accelerate efficient, clean cooling, policies, standards, and programs, including compliance schemes and financial incentives, with the potential to reduce emissions and contribute to sustainable development.

These policies, standards, and programs are helping to inform and implement cooling efficiency plans (Window 1) and can be integrated into F-gas transition plans as required by the Montreal Protocol, as well as into Nationally Determined Contributions as required by the UNFCCC.



» Erik Solheim's remarks at U4E COP23 event, 2017.

SUPPORTING STANDARDS AND LABELING TO DRIVE BEST PRACTICE EFFICIENT AC MARKETS



EGYPT, GHANA, KENYA, NIGERIA, RWANDA, SOUTH AFRICA



CHINA, LEBANON, PALAU AND COOK ISLANDS, THE PHILIPPINES, THAILAND, VIETNAM



BAHAMAS, BARBADOS, BRAZIL, DOMINICAN REPUBLIC, JAMAICA, MEXICO, SAINT LUCIA

EXAMPLE: ESTABLISHING STATE OF THE ART ENERGY EFFICIENT STANDARDS AND LABELING IN THE AC SECTOR

WHO

» Instituto Clima e Sociedad, and the Energy Research Office of Brazil, Contributing partners include LBNL, INMETRO, PROCEL, University of Santa Catarina, IGSD and International Energy Initiative Brasil.

WHERE

» Brazil.

HOW

» By providing technical assistance to the Brazilian Government to help develop policy for room AC manufacturers in Brazil to transition to greater energy efficiency and take up low-GWP refrigerants.

WHY

» ACs are responsible for a major share of domestic electricity consumption in Brazil, yet there is low market penetration of high efficiency / low-GWP AC units. The majority of ACs contain high GWP refrigerants HCFC-22 and HFC-410A, leading to high greenhouse gas emissions.

HIGHLIGHT

» Brazil moved quickly to announce a new consultation on MEPS for room AC in late 2017, making it the first K-CEP supported country to progress policy action for more efficient, clean cooling.

 GOVERNMENTS SHOULD IMPLEMENT NEW POLICIES THAT HELP MANUFACTURERS' ENERGY-EFFICIENT AND CLIMATE-FRIENDLY APPLIANCES ENTER MARKETS TO MEET GROWING DEMAND FOR COOLING SERVICES.

ERIK SOLHEIM, EXECUTIVE DIRECTOR OF UN ENVIRONMENT, HAKAN BULGURLU, CHIEF EXECUTIVE OFFICER AT ARÇELİK AŞ, AND EGEL LARSSON GROSSMAN, CHIEF EXECUTIVE OFFICER AT MABE

DESIGNING AND IMPLEMENTING FINANCIAL MECHANISMS FOR EFFICIENT, CLEAN COOLING



COOK ISLANDS, PALAU



BAHAMAS, BARBADOS, DOMINICAN REPUBLIC, JAMAICA, SAINT LUCIA

EXAMPLE: TECHNICAL SUPPORT TO IDENTIFY FUNDING OPTIONS FOR EFFICIENT COOLING SYSTEMS

WHO

» Institute for Energy Conservation (IIEC).

WHERE

Cook Islands and Palau.

HOW

» Providing technical support and capacity building to national energy officials, NOUs and financial institutions to help identify funding options for investing in high-efficiency, climate friendly ACs. This will in turn support the development and implementation of MEPS and labels for climate-friendly ACs for the Pacific Appliance Labelling and Standards (PALS) project.

WHY

» To get financial institutions focused on energy efficiency projects to unlock funding, and catalyze other energy efficiency project funding in the Pacific region.

SUPPORT WITH COMPLIANCE AND VERIFICATION SYSTEMS



WEST AFRICAN STATES, KENYA, RWANDA



ASEAN



BRAZIL

EXAMPLE: BUILDING THE FOUNDATION FOR A REGIONAL COOLING EFFICIENCY COMPLIANCE NETWORK

WHO

» CLASP and the Economic Community of West African States (ECOWAS).

WHERE

» West African States.

HOW

» Providing expertise and facilitation to help national compliance agencies share test results and market intelligence on non-compliant or sub-standard cooling products and safeguard the benefits of cooling efficiency activities in the region.

WHY

» To develop a cost-effective regional network with best practices, collaboration and enhanced understanding of the issues in order to encourage similar programs in other regions in Africa, and to overcome the problem of policing borders between African countries.

BY GATHERING TOGETHER THE LOW-CARBON SOLUTIONS USED IN THE CONSUMER GOODS SECTOR – FROM MANUFACTURING TO DISTRIBUTION TO FINAL CONSUMERS – WE WILL BE ABLE TO ACCELERATE THE IMPLEMENTATION OF EFFICIENT AND PROVEN TECHNOLOGIES, THUS INCREASING THE SECTOR'S CONTRIBUTION TO THE CLIMATE TRANSITION

ALEXANDRE BOMPARD, CHAIRMAN AND CEO OF CARREFOUR, A MAJOR INTERNATIONAL SUPERMARKET WHICH HAS COMMITTED TO THE 2016 CGF RESOLUTION



SUPPORTING PRIVATE SECTOR LEADERSHIP INITIATIVES IN ENERGY EFFICIENT COOLING



GLOBAL

EXAMPLE: IMPLEMENTING A NEW REFRIGERATION RESOLUTION FOR MEMBERS OF THE CONSUMER GOODS FORUM (CGF)

WHO

» EIA, shecco and CGF - a global industry network which brings together consumer goods retailers and manufacturers to drive positive change, including greater efficiency.

HOW

» The 2016 Resolution commits CGF members to install new equipment that uses only natural or ultra-low global warming potential refrigerants, in all refrigeration equipment along the food and beverage supply chain. K-CEP's support will help to implement the existing resolution, and to incorporate energy efficiency. Implementation requires engagement with and education of the industry on efficient, clean cooling. The growing recognition of the need to combine energy efficiency with the HFC phase-down was highlighted in a report by CGF in December 2017. Shecco is producing a report in 2018 on efficient HFC-free supermarket refrigeration, which will be used to develop thinking on a potential CGF commitment on energy efficiency.

WHY

» The world's biggest supermarkets have large carbon footprints and global reach, and can provide best practice examples of energy efficiency for the rest of the sector.

WHERE

Global supermarkets, including AEON, Walmart, Carrefour, Tesco, Metro, AHT, and Ahold Delhaize.

CASE STUDY: COOLING EFFICIENCY IN CHINA – A GLOBAL SCALE OPPORTUNITY



» The inaugural project meeting was held in Beijing in January 2018, with 40 China project partners, representing government, local NGOs and academia. EFC and key project stakeholders signed the *China Cooling Efficiency Initiative Principles*.



CHINA WILL MAKE SUSTAINED EFFORTS TO PROMOTE COOLING EFFICIENCY

WANG SHANCHENG, DEPUTY DIRECTOR GENERAL OF
THE DEPARTMENT OF RESOURCE CONSERVATION AND
ENVIRONMENTAL PROTECTION (NDRC)

China is the world's largest manufacturer, consumer and exporter of room air conditioners. As well as Chinese leaders Gree, Haier and Midea, the major global manufacturers, such as Korea's LG and Samsung; Japan's Panasonic, Mitsubishi, Fujitsu and Hitachi; and Fedders from the US, have all established factories in China.

AC ownership in China's cities skyrocketed from almost 0% in the 1990s to over 100% in 2005. For the Chinese market alone, shifting the 2030 stock of room air conditioners to ones using improved efficiency technology and low-

GWP refrigerants would reduce annual emissions by an estimated 0.85 gigatons CO₂e, equivalent to over eight times the capacity of the Three Gorges Dam. Raising domestic standards for efficiency in residential ACs has a knock on potential, because China exports a similar volume of room ACs to what it sells domestically.

K-CEP is supporting the Energy Foundation China (EFC) to maximize the mitigation potential in residential and commercial air conditioning in China through the development of energy efficiency standards and labels and complementary market transformation programs. The estimated pollution reduction potential is 43.6 gigatons CO₂e over the period 2020-2050. This work is being coordinated under the China Cooling Efficiency Initiative with a project led by IGSD with LBNL and CNIS to strengthen MEPS for China's room ACs.

EFC is working with the Ministry of Ecology and Environment (MEE, formerly the Ministry of Environmental Protection) and National Development Reform Commission (NDRC), as well as supporting partners from research institutes, NGOs, industry associations, AC manufacturers and retailers. The approach includes standard setting, labeling, financial incentives, training and policy enforcement, underpinned by techno-economic analysis of policies and the production of a best practice guide for efficient cooling solutions in the domestic and global markets. EFC also supports a technical steering committee on cooling efficiency to advise on the integration of energy efficiency improvements led by NDRC and Montreal Protocol implementation led by MEE.

CHINA'S PROGRESS ON COOLING EFFICIENCY IS CRITICAL TO GLOBAL SUCCESS IN REDUCING EMISSIONS. K-CEP AIMS TO HELP CHINA LEAD THE GLOBAL TRANSITION TO CLEAN, EFFICIENT COOLING THROUGH ENABLING POLICY AND BUSINESS LEADERSHIP.

WINDOW 3 FINANCE



Finance is an important barrier to advancing energy efficiency in cooling solutions. K-CEP's Window 3 aims to help implement cooling efficiency plans, policies, standards, and programs and to widen access to cooling. It complements support provided under other K-CEP Windows and seeks to demonstrate how relatively modest K-CEP grants can unlock the additional finance needed to integrate efficiency improvements with the F-gas transition.

In our first year, we worked with finance sector professionals and others to explore what is needed to drive increased investment in higher efficiency cooling solutions. We studied examples of energy efficiency financing initiatives with a view to learning lessons and determining how philanthropy can best add value in helping to unlock much needed finance for cooling efficiency.

» In a business-as-usual scenario, cooling could account for almost 20% of global greenhouse gas emissions by 2050, however less than 0.1% of total overseas development assistance is currently directed to cooling solutions. While K-CEP is targeting the gap on energy efficiency in the global refrigerant transition, *vast financing* is needed for a transformational shift to efficient, clean cooling everywhere.

“ FINANCE CAN BE AN ESSENTIAL LIFELINE TO PROGRAMS DESIGNED TO SUPPORT EFFICIENT, CLEAN COOLING. WE'RE EXCITED ABOUT THE RANGE OF PROGRAMS THIS FINANCE WINDOW COULD SUPPORT BY PROVIDING TECHNICAL ASSISTANCE FOR ACTIVITIES SUCH AS PROJECT IDENTIFICATION, ENERGY AUDITS, AWARENESS RAISING AND INCENTIVES SUCH AS GUARANTEES OR INTEREST RATE SUBSIDIES ON LOANS TO END CUSTOMERS.

SHILPA PATEL, HEAD OF K-CEP'S FINANCE WINDOW

Our research revealed two needs:

1. Finance for technical assistance (TA): specialized assistance is required to devise the appropriate technical specifications and performance metrics and generate the demand for the financing mechanism. It is also important to make the case for cooling efficiency investment when suppliers and buyers have other options to maximize their utility. TA is also often needed for project management as energy efficiency projects can be complex (e.g. monitoring, reporting and verification needs).
2. Finance for capital costs – which may include some concessional funding to cover the incremental cost of the higher efficiency option.

Our consultations also confirmed that there are multiple paths to achieving higher efficiency in cooling during the refrigerant transition. To allow for learning and to encourage creativity in the field, we agreed that K-CEP should offer Window 3 support in an open process, building on the approach that has been successfully implemented for Windows 1 and 2. K-CEP has

established a partnership with The Carbon Trust to help implement our approach for Window 3. They will manage an application process to invite potential partners to submit proposals for funding from USD 2 million to USD 5 million to support efficient, clean cooling finance programs. Successful applicants will be able to use the funding for technical assistance or concessions on capital finance for activities that unlock finance.

Shilpa Patel, Head of K-CEP's Finance Window, said, "Finance can be an essential lifeline to programs designed to support efficient, clean cooling. We're excited about the range of programs this Finance Window could support by providing technical assistance for activities such as project identification, energy audits, awareness raising and incentives such as guarantees or interest rate subsidies on loans to end customers."

In our first year, K-CEP has also launched a landscape review of impact investing in cooling in recognition of the growing interest in both fields and a lack of comprehensive, reliable information to guide investment decisions. We expect the first results of this work to be available in the second half of 2018.

WINDOW 4 ACCESS TO COOLING



Cooling is an essential part of everyday life – our food is kept chilled, life-saving vaccines and temperature-sensitive medicines are stored safely, agricultural products are delivered to the market, and our work, home, religious, educational and recreational environments are kept comfortable. Cooling helps maintain productivity, sleep and health, increasing prosperity for all.

However, access to cooling is not universal. The poorest people and communities are often underserved, creating major productivity losses as well as adverse impacts on the provision of quality health care, nutritious food,

and education. This in turn undermines the efforts and opportunities for many countries to fully realize the Sustainable Development Goals, such as ending poverty and hunger, reducing disease, and preventing dangerous climate change. Access to efficient, clean cooling is critical to avoid locking in high carbon cooling, while populations in emerging economies pursue thermal comfort.

As part of our work to improve access to cooling, K-CEP is supporting the Cooling for All initiative, led by Sustainable Energy for All (SE4All); an initiative to spur action and political leadership in increasing access to cooling. The work of SE4All focuses on achieving growing cooling demands within a clean energy transition, and in turn, supporting faster progress to achieve the goals of the Kigali Amendment. It also aims to create a direct intersect between the Paris Climate Agreement; the Sustainable Development Goals; and the Kigali Amendment.

In 2017, SE4All established a Global Panel on Access to Cooling, led by co-chairs President Hilda Heine of the Marshall Islands and Dr. Vincent Biruta, Minister of Environment for the Republic of Rwanda. The panel brings together eminent leaders from industry, academia, philanthropy and international organizations to provide data and evidence for access to sustainable, affordable and efficient cooling solutions for citizens; especially those in low income countries. The Global Panel met in New York and Kigali to develop a report, due in July 2018.

» Developing countries shoulder the greatest burden when it comes to heat stress – due to both their existing climatic conditions and the onset of climate change impacts. The 30 hottest cities in the world are in developing countries, while over 1 billion people globally lack access to energy and therefore are likely to lack access to cooling as well.

Rachel Kyte, Chief Executive Officer of Sustainable Energy for All and Special Representative of the UN Secretary-General for SEforALL said, “As temperatures soar, cooling demands risk creating a significant increase in energy demand, that if not managed through super-efficient technologies or clean sources, will cause further climate change impacts and a rise in emissions. The work of the Global Panel will therefore be critical to develop the evidence we need to understand the challenges and opportunities of providing cooling access for all.”

The Global Panel has identified three critical areas for action on cooling for all, indicators of progress and their connections with the SDGs.

Following the launch of the Cooling for All report in July 2018, K-CEP and SE4All will announce follow up work to help implement the report’s recommendations.



» Rachel Kyte with delegates at the 2017 Sustainable Energy for All Forum

“THE WORK OF THE GLOBAL PANEL WILL BE CRITICAL TO DEVELOP THE EVIDENCE WE NEED TO UNDERSTAND THE CHALLENGES AND OPPORTUNITIES OF PROVIDING COOLING ACCESS FOR ALL.

RACHEL KYTE, CEO OF SE4ALL

SECTOR	INDICATOR	UNIT	SUPPORTS ACHIEVEMENT OF SDG	SUPPORTS MEASUREMENT OF SDG INDICATOR
Buildings	Mortality from heat stress	Number of (vulnerable) people	SDG 3: Healthy Lives SDG 11: Sustainable cities and communities	11.5.1 Number of deaths affected by disaster per 100,000 people
	(Expansion of) Power generation	KWh/TWh	SDG 7: Affordable Clean Energy	7.2.1 Renewable energy share in total final energy consumption 7.3.1 Energy intensity measured in terms of primary energy and GDP
Cold chains - fresh produce	Levels of food wastage	Tons	SDG 1: End Poverty SDG 2: End Hunger SDG 12: Sustainable Consumption	2.3.2 Prevalence of undernourishment 12.3.1 Global food loss index
	Level of access to a refrigeration device	Number of refrigeration devices / capita	SDG 2: End Hunger SDG 3: Healthy Lives SDG 7: Affordable Clean Energy	1.4.1 Proportion of population with access to basic services 7.3.1 Energy intensity in terms of primary energy
Cold chains - vaccines	Level of a target group vaccinated	Percent of target group	SDG 3: Healthy Lives	3.b.1 Proportion of population with access to affordable medicines and vaccines

AN INTERVIEW WITH: HON. DR VINCENT BIRUTA MINISTER OF ENVIRONMENT FOR RWANDA

WHY IS EFFICIENT, CLEAN COOLING SO IMPORTANT FOR RWANDA?

Rwanda's vision is to become a developed, low carbon economy by 2050. To achieve this, we need to foster economic growth that is inclusive and sustainable. By harnessing the latest technologies, we can improve access to efficient cooling appliances including air conditioners and fridges, while also reducing government spend on energy generation and electricity bills for consumers. This has a positive economic impact as energy costs in sectors, e.g. industry, health and education, shall be reduced. Efficient cooling is central to our green growth ambitions.

RWANDA SHOWED GREAT LEADERSHIP IN SECURING THE NEXT PHASE OF THE MONTREAL PROTOCOL. HOW CAN THE STRENGTHS OF THE MONTREAL PROTOCOL BE APPLIED TO REALIZE MORE EFFICIENT, CLEAN COOLING?

The Protocol's success lies in the partnerships between policy makers, scientists, and industry. It is an agreement for which everyone is on board and working to agreed goals to phase out ozone depleting substances and to phase down HFCs. We now have an opportunity to apply the strengths of the Protocol to energy efficiency. Doing so could double the climate benefits of the Kigali Amendment, and avoid

up to one degree Celsius of warming by 2100.

WHAT OPTIONS IS THE GOVERNMENT OF RWANDA CONSIDERING TO PROMOTE EFFICIENT, CLEAN COOLING?

We are pleased to be working with K-CEP and UN Environment on the Rwanda Cooling Initiative. This includes an energy efficiency market survey, development of a National Cooling Strategy, and exploration of energy performance standards and labeling. We are confident this will support Rwanda to promote efficient, clean cooling as required by the Kigali Amendment. We are also developing green building standards to encourage smart design and the use of construction materials and techniques for passive cooling.

WHAT WILL THE WORLD OF COOLING LOOK LIKE IN FUTURE?

In the future the world of cooling will be efficient, connected and smart. Demand for cooling will no longer be a major cause of global warming. Cooling will be available and affordable for all. Cooling appliances, from the household level to industry, will utilize the latest technology meeting stringent efficiency standards and the requirements of the Kigali Amendment. These systems will be connected, with thermal cooling and demand management enhancing efficiency and efficacy.

» Jürgen Fisher,
President of Danfoss
Cooling



AN INTERVIEW WITH: JÜRGEN FISCHER

PRESIDENT OF DANFOSS COOLING

A GLOBAL BUSINESS THAT ENGINEERS TECHNOLOGIES
THAT COOL PEOPLE, PRODUCTS AND THE PLANET.



» Hon. Dr. Vincent
Biruta, Minister of
Environment for Rwanda



WHAT IS DANFOSS DOING TO PROGRESS
SUSTAINABLE COOLING?

As an industry leader in air conditioning and refrigeration, we work with our customers and organizations such as SEforALL and EPEE. We also support international efforts such as the Montreal Protocol, to advance a pathway to sustainable cooling. Through continued investment in innovation we actively develop low-GWP refrigerant technologies and ways of combining energy efficient heating and cooling to unleash the full potential of cooling technologies.

WHAT CHALLENGES DO BUSINESSES FACE IN MAKING
SUSTAINABLE COOLING ACCESSIBLE TO ALL?

A united effort is needed if we are to seize the potential of sustainable cooling technology. Two actions are key to make sustainable cooling accessible for all: First, existing minimum energy performance standards need to be enforced and second, installers and users need to be trained in handling and optimal maintenance of cooling systems.

IF YOU WERE A POLICY MAKER WHAT WOULD
YOU DO TO PROGRESS SUSTAINABLE COOLING AS
QUICKLY AS POSSIBLE?

At Danfoss we trust in regulatory

frameworks that shape the sector in two ways: by raising awareness about the energy savings from existing best-in-class cooling technology; and enabling the cooling sector to accelerate the uptake of renewable energy by utilizing its thermal storage capacity. We need to incentivize energy-efficient technology by using a total cost of ownership perspective. For example, if European standard cold chains are implemented in developing countries, a significant reduction in the post-harvest losses of fruits and vegetables for 2-3 years could finance the technology and enhance farmer incomes.

HOW CONFIDENT ARE YOU THAT CLIMATE
IMPACT FROM COOLING WILL COME DOWN AS
NEEDED AND WHY?

There is great CO₂ saving potential by implementing best-available technology today, so we are confident. Take the food cold chain, for example, where globally one third of all food produced is either lost or wasted due to inadequate refrigeration. By leveraging existing elements of their cold chain, like refrigerated trucks and storage rooms for farmer cooperatives, we can improve the lifespan of food and reduce food wastage.

THE EFFICIENCY COOLING OFFICE

K-CEP HAS MADE IT POSSIBLE FOR OUR UN ENVIRONMENT TEAMS WORKING ON ENERGY EFFICIENCY AND OZONE LAYER PROTECTION TO JOIN FORCES IN A DEEP WAY. WE HAVE VERY COMPLEMENTARY KNOWLEDGE, SKILLS, AND NETWORKS BUT HAVEN'T EVER WORKED TOGETHER ON A COMMON CAUSE. THE KIGALI AMENDMENT PROVIDES THE RATIONALE AND K-CEP PROVIDES THE FRAMEWORK AND FUNDING THAT'S MADE THIS DEEP COLLABORATION POSSIBLE.

MARK RADKA - CHIEF, ENERGY AND CLIMATE BRANCH, ECONOMY DIVISION, UN ENVIRONMENT

The Efficiency Cooling Office (ECO) serves as the K-CEP program office, housed at ClimateWorks Foundation. ECO provides grant-making, reporting, program and knowledge management, and other services to help K-CEP funders and partners collaborate and maximize the climate and development benefits of K-CEP.

The team is led by **Dan Hamza-Goodacre**, K-CEP Executive Director. **Dr. Gabrielle Dreyfus** is Head of Policies, Standards, and Programs. **Hu Min** is the China Adviser and Head of Access to Cooling. **Shilpa Patel** is Head of the Finance Window and **Helen Picot** is the Program Management Officer. They are supported by finance, administration, collaboration, events and reporting, monitoring, evaluation and learning experts.

So what have we been doing in our first year?

PROGRAM STRATEGY, ENGAGEMENT AND COLLABORATION
Our strategy and theory of change were devised in consultation with over 100 experts. We support the Montreal Protocol process while embedding energy efficiency into the refrigerant transition. Engagement with experts and funders was built into our way of working from the outset, including setting up a diverse Technical Advisory Committee (TAC) to provide guidance on strategy, investments, and implementation. Funder engagement is core to our approach. We report to our Funder Steering Committee (FSC) during quarterly meetings, based on a cumulative 'scorecard'. The K-CEP Business Plan sets out our systems, procedures and approach. Because learning is a key part of our program, an independent evaluation is being set up.

Collaboration within our K-CEP community of grantees, advisors and

funders is the backbone of ensuring an effective program with a lasting legacy. K-CEP launched an online collaboration portal as a dedicated informal space for information sharing, updates and discussion. This provides a unique opportunity for program partners to collaborate in real time and help ensure that K-CEP's impact stretches beyond direct implementation benefits, to a wider, major shift in awareness around efficient, clean cooling within the climate and development fields.



» Panelists from Rwanda and Nigeria discuss cooling initiatives in Kigali, at K-CEP's Africa Cooling Efficiency Conference held in collaboration with Rwanda's Ministry of Environment, UN Environment, UNDP and GIZ.

COMMUNICATIONS

Our communications share news of activities and progress with our partners and stakeholders. Our website houses program information, along with knowledge products and news. We also share updates via our quarterly newsletter and Twitter feed. In the last year, we have launched the following:

OUR JOURNEY

OCTOBER 2016

- » MOP28 in Kigali, Rwanda
- » Funders agree to collaboration

MARCH 2017

- » Theory of change and strategy signed off by funders
- » Funders sign principles of collaboration
- » Technical Advisory Committee (TAC) setup
- » Initial K-CEP Business Plan drafted
- » Chicago Funders Launch

APRIL 2017

- » First request for proposals

MAY 2017

- » First fund disbursement (IEA Kigali Tracker)

SEPTEMBER 2017

- » Window 4 launch alongside General Assembly, New York City

NOVEMBER 2017

- » MOP29 in Montreal, Canada. UNE institutional strengthening package launched
- » Grantee reporting training

JANUARY-FEBRUARY 2018

- » China work package kick off meeting, Beijing
- » Asean Cooling Summit and Annual Strategy Meeting, Bangkok, Thailand
- » Lebanon kick off meeting

MARCH 2018

- » Rwanda kick off meeting
- » Africa Cooling Efficiency Summit, Rwanda
- » Cooling For All Global Panel Meeting

END OF YEAR 1

Q4 2018

- » Window 3 request for proposals and contracting

Q1 2019

- » Second Annual Strategy Meeting with funders and grantees

WEBSITE



KNOWLEDGE



PROJECT LIST

COUNTRY	K-CEP FUNDED PROJECTS	DESCRIPTION
Bangladesh	UNDP	Boosting EE during HFC phase-out in the domestic refrigerator manufacturing sector in Bangladesh
Bangladesh, Chile, Costa Rica, Cuba, Ghana, Lebanon, Malaysia, Nigeria, Panama, Sri Lanka, Trinidad & Tobago, Uruguay, Venezuela	UNDP	National cooling efficiency plans and consultancy staff support in 13 countries
Brazil	iCS LBNL	Brazil: AC MEPS, compliance, cooling efficiency roadmap, financing inverter technology, and implementation support Technical analysis on Brazil AC MEPS
Caribbean - Bahamas, Jamaica, Dominican Republic, Saint Lucia, Barbados	UNE	Supporting Financial Mechanisms and Policies for Energy Efficient and Climate Friendly Cooling in the Caribbean tourism sector, MEPS, national cooling plans
China	EFC Development Reimagined	China: Commercial AC standard, national cooling roadmap, early peaking cities cooling initiative, and bulk procurement South-South Cooperation for environmentally friendly air cooling between China and Group 1 countries
Colombia	UNDP	Embedding EE into the Colombian supermarket sector during the F gas transition
Costa Rica	UNDP	Costa Rica efficient district cooling
ECOWAS	CLASP	Regional compliance program
Ecuador, Guatemala, Jordan, Lebanon, Morocco, Tunisia, Uganda	UNIDO	Embedding EE into the refrigeration sector during the F gas transition
Egypt	LBNL	National cooling strategy, AC standard, compliance and implementation support
Ghana	UNDP	AC sector rebate and enforcing EE in the servicing sector
Indonesia	Global Initiative Communications	Development and Implementation of the Cooling Efficiency Award and Roundtable Discussion at Sustainable Business Awards
Kenya	CLASP	Kenya: AC MEPS and implementation support
Lebanon	UNDP	Service training and manual, roadmap, MEPS, finance and incentives
Mexico	UNIDO LBNL	Mexico refrigerator replacement pilot MEPS support for mini split AC and commercial buildings AC
Nigeria	UNDP	Integrating EE into the RAC Servicing Sector in Nigeria and transforming the market of inefficient RAC equipment
Palau and Cook Islands	IIEC	Designing Financial mechanisms, MEPS
Philippines, Thailand, Vietnam	WB CLASP	Strategy support: National cooling efficiency strategies, RAC market assessment, industrial capacity building and AC standards, MEPS review Build regional compliance capacity across ASEAN, provide technical analysis on MEPS
Rwanda	UNE	Supporting an Integrated Policy Approach for Energy-Efficient and Climate-Friendly Cooling in Rwanda: National strategy, MEPS, labeling scheme, financial mechanism
South Africa	LBNL	South Africa: MEPS for AC and capacity for testing
Global	EIA	Consumer Goods Forum (supermarkets), MP engagement
Global	IEA	Kigali Action Tracker
Global	NRDC	Standards and labelling
Global	NRDC	Spot testing
Global	NRDC	Cooling efficiency engagement for MP parties
Global	SE4All	Global panel & report on Access to Cooling. Funding & delivery plan
Global	Toby Peters	Guide to impact investment in clean cooling
Global	UNE	Global High-Level Leadership, Advocacy, and Communication
Global	UNE	Capacity Building for National Ozone Officers and Technical Support for Linking Energy Efficiency with Montreal Protocol objectives

WINDOW	MEPS WORK	NATIONAL COOLING PLAN	COMPLIANCE PROGRAM/TESTING	INDUSTRIAL CONVERSION	SERVICING/ MAINTANANCE	REBATE	FINANCIAL MECHANISMS
1				X			
1		X					
2	X	X	X	X			
2	X	X					X
2	X	X	X			X	
1				X			
1		X					
2			X				
1				X			
2	X	X	X				
1&2		X			X	X	
2							
2	X	X					
1&2	X	X		X	X	X	
1&2	X			X		X	
1&2		X			X	X	
2	X						X
1&2	X	X		X			
2	X	X	X			X	
2	X		X				
2							
Tracker							
2	X						
2			X				
2							
4							
3							
1							
1							

RESULTS FRAMEWORK

The K-CEP results framework is key to our progress. It enables us to use our strategy and intended impact in order to determine activities during the years of the program, and the longer term outcomes we are aiming to achieve. This table shows activities set out for the first year of K-CEP, and our progress against them. The overall results framework has been agreed with our funders, and we have worked with our partners to determine the activities and outcomes that individual projects contribute towards achieving.

	ACTIVITY DESCRIPTION	MEASURE OF SUCCESS	PROGRESS
A1	At least 15 K-CEP Immediate Action projects (with verified emissions methodology) are announced.	A1.1 # of K-CEP Immediate Action projects (with verified emissions methodology) that are announced.	✓
A2	A5 Group 1 parties submit views that advance energy efficiency.	A2.1 # of A5 Group 1 parties submitting views that advance energy efficiency in the Montreal Protocol (with support from K-CEP).	✓
A3	A 'strengthening for efficiency' package of support is launched.	A3.1 Launch meeting or event for the 'strengthening for efficiency' package of support is held.	✓
A4	Technical assistance is provided to approximately 10 countries for energy-efficient cooling policies, standards, and programs.	A4.1 Number of countries receiving technical assistance for energy-efficient cooling policies, standards, and programs.	✓
A5	Opportunities are identified for K-CEP and MP funds (including the \$27m announced in Kigali) to be co-invested, coordinated, or enhanced.	A5.1 Dollar amount of MP funding (including the \$27M pledge in Kigali) allocated for co-investment with, coordination with, or enhancement of K-CEP funds.	In progress
A6	A UN global panel on access to cooling is convened.	A6.1 UN global panel on access to cooling is convened.	✓
A7	A corporate cooling-efficiency buyers and/or sellers club is launched.	A7.1 # of companies signed up for corporate cooling efficiency buyers and/or sellers clubs.	In progress
A8	The K-CEP implementation finance facility is launched and is active.	A8.1 The K-CEP implementation finance facility is launched. A8.2 The K-CEP implementation finance facility is active.	Not yet completed
A9	The Kigali Cooling Efficiency Tracker is launched, and market and technology baselines are established.	A9.1 Kigali Cooling Efficiency Tracker is launched. A9.2 Market baseline is established. A9.3 Technology baseline is established.	✓

KIGALI PROGRESS TRACKER

A SINGLE RESOURCE FOR ALL COOLING-RELATED INFORMATION

The International Energy Agency (IEA) tracks, analyzes and manages global energy data and is developing the new Global Exchange Platform as a one-stop resource on energy efficiency. The first deep-dive module within this platform is on cooling. The module serves as the Kigali Progress Tracker and brings together all cooling-related information into a single resource.



» IEA's new Global Exchange on Cooling brings together key global data and enables users to generate charts, maps and download data on cooling energy, policy and technology.

TRACKING MARKET PROGRESS TOWARDS EFFICIENT, CLEAN COOLING

This new Global Exchange on Cooling is collecting information on cooling efficiency and enables users to generate charts, maps and download data on cooling energy use, policy and technology data, including information on: minimum energy performance standards and appliance labels across 57 countries; summaries of cooling equipment efficiencies (data mined for more than 2 million pieces of cooling equipment); and cooling energy use by country and region.

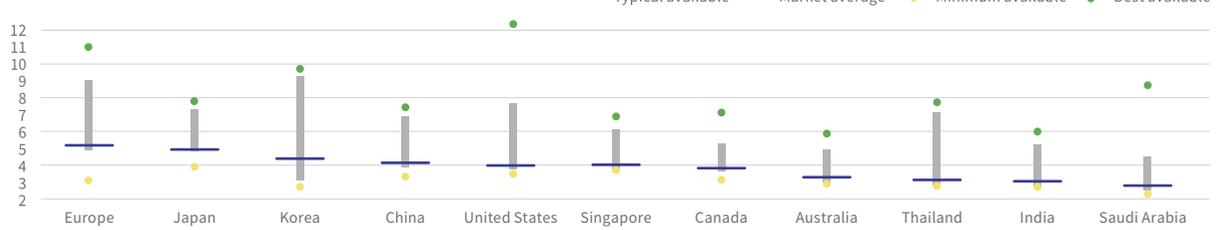
energy performance standards for cooling technology. This platform is enabling the IEA and K-CEP to track the success of the program while also using the improved data and analysis to design improved policies, better allocate funding, and identify appropriate technology opportunities.

In addition to setting up the Exchange, this first year has focused on establishing baselines. As the graph below demonstrates, the baseline for penetration of efficient air conditioners in various markets around the world is low - the market average efficiency of air conditioners is three times less than the best-available efficiency. In many developing countries it is far worse. The majority of countries still have no or extremely low minimum

LIVE FEEDBACK AND IMPROVEMENT

In addition to IEA research, the new platform is also developed to enable partners and the public to provide feedback directly inside the platform to enable improved data collection and information sharing. Reporting from K-CEP partners can also be imported into the platform to enable improved data and information for countries that K-CEP is supporting. The Global Exchange on Cooling is already generating fresh insights into cooling emissions, markets and policies that are being used to understand market variations and track progress by country, technology and policy.

SEASONAL ENERGY EFFICIENCY RATIO (W/W)

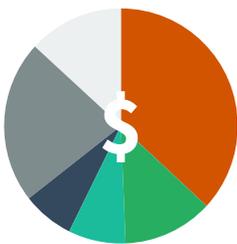


» The market average residential air conditioners tend to be only half as efficient as the best models on the market. Note: seasonal energy efficiency ratio metrics are not directly comparable across countries.

FINANCIAL UPDATE

K-CEP seeks to align our grant-making approach with our mission. Our work to promote efficient, clean cooling for developing countries means that we aim to be:

- FAST START - measures are put in place and implemented on a rapid timescale
- VALUE FOR MONEY- maximizing impact and funding to the field
- ANCHORED BY WORK ON THE GROUND - fund local organizations where possible
- FOSTERING A COLLABORATIVE LEARNING ENVIRONMENT - encouraging best practice sharing



Awarded by region

- Global
- Africa
- Asia & Oceania
- Brazil
- China
- Latin America



Awarded by window

- Strengthening for Efficiency
- Policies, Standards and Programs
- Finance
- Access to Cooling
- Kigali Tracker

A FAST START

Our mission is an urgent one, and for K-CEP to deliver against our results framework within our program lifespan we must move quickly. In the first year, K-CEP has committed \$30m of funding, of which over \$22m has been awarded to date.

DELIVERING VALUE

K-CEP provides many multi-year grants, allowing grantees to create effective multi-year implementation plans, and operates on a milestone driven approach to ensure value for money and accountability for results.

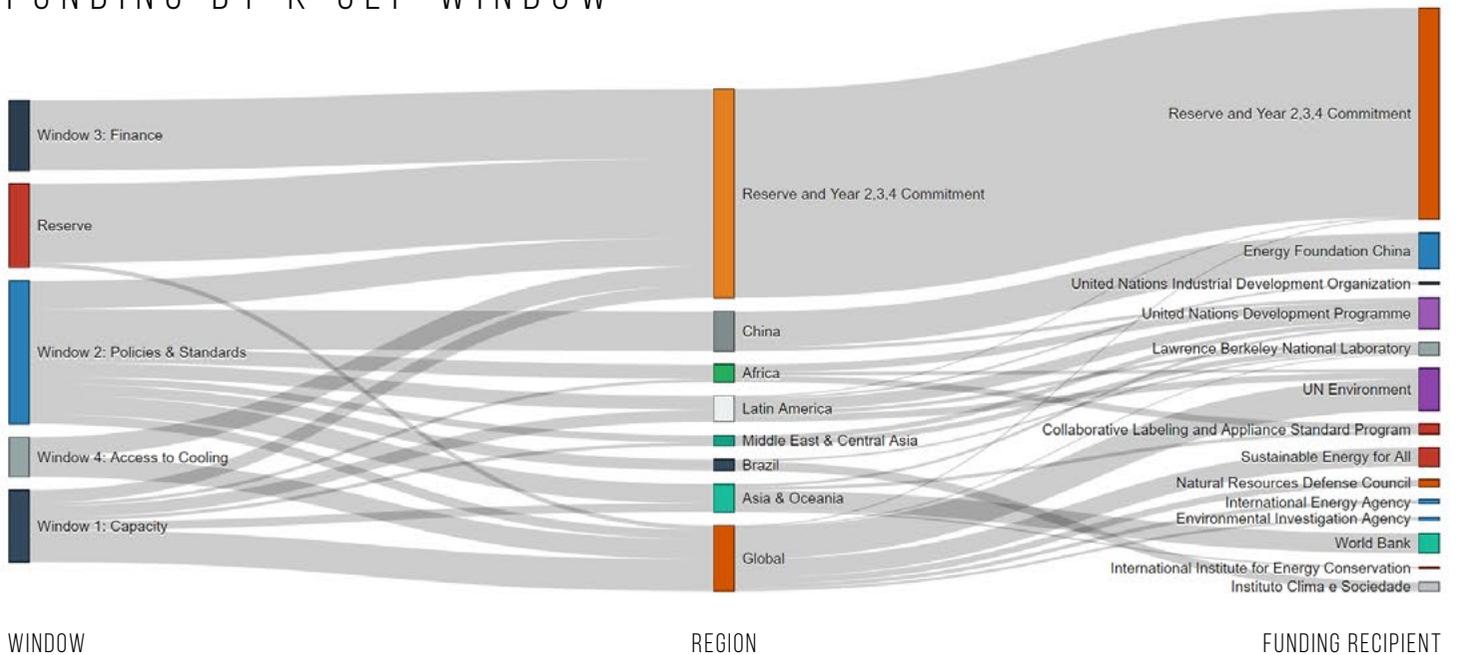
The ECO team implements K-CEP on a lean staffing model, in order to maximize the percentage of K-CEP funding which goes to grants. We also seek opportunities to co-fund with other organisations, and to find partnerships with organizations and individuals, in the public and private sector, through which our efforts can enhance theirs for greater collective impact.

FEET ON THE GROUND IN DEVELOPING COUNTRIES

K-CEP’s grant-making provides an opportunity to promote capacity building within developing country institutions and south-south knowledge sharing. Encouraging our grantees to contract local experts increases the likelihood of our impacts being sustainable in the long term in the countries in which we work.

In year 1, 30% of funds awarded have gone to developing country organizations and individuals, and 48% has gone to UN organizations and the World Bank. The percentage of funding going towards developing country institutions is set to increase as our grantees such as UN agencies contract developing country experts to deliver capacity building and technical assistance on the ground.

FUNDING BY K-CEP WINDOW



» This Sankey diagram shows total K-CEP funds allocated according to Window, region, and funding recipient. At the end of our first year, a portion of funds remain in reserve, which will be committed in years 2-4 of the program.

CREATING A COLLABORATIVE LEARNING ENVIRONMENT

K-CEP seeks to leverage the vast amount of talent and expertise within our grantee institutions in order to create greater impact within the K-CEP program and related efforts. K-CEP invests to bring together grantees, experts and funders for in-person and virtual collaborations, allowing best practices sharing on common challenges, and

creates a strong and supportive network. Learnings can be applied to other cooling projects beyond K-CEP to create even more impact on the refrigerant transition and cooling efficiency.

In our first year, K-CEP funding has gone to support 38 countries, working through 15 organizations.

LOOKING AHEAD

In year two of the program our finance aims are to commit the rest of the funds available, increase the amount of funding going to local organizations and individuals, unlock additional finance using our funds, and improve efficiencies in the running of the program.

SPECIAL THANKS

K-CEP would like to thank all our partners for their contributions to efficient, clean cooling for all.



