

## Pathways to Accelerate Sustainable Cooling and Cold-Chain

Date: 19 May 2022

Location: University of Rwanda, Rubirizi Campus  
290 KK 18 Ave, Kigali

Time	Track 1	Track 2	
8.30 – 9.40	<b>WORKSHOP 1: Academic and Education</b> <i>Interactive discussion of facilities, teaching and training plans, opportunities for research, and engagements. <b>This workshop is primarily for academics, educators, early-stage researchers.</b></i>		
9.10 - 9.40	<b>Campus walk-through</b>		
9.45 - 11:15	<b>WORKSHOP 2: Farmers, rural communities</b> <i>Is ACES fit for <b>your</b> needs? Join us to discuss how ACES plans to support the needs of <b>small-holder farmers and their communities</b> through training and technical assistance and to accelerate the delivery of needs-driven resilient, sustainable, cold-chain (and Postharvest Management) and cooling in Africa - and the opportunities this can bring.</i>	<b>WORKSHOP 3: Technology</b> <i>An interactive workshop for <b>technology companies, start-ups and installers</b> for us to understand how ACES and our partners can support your business objectives and also your chance to find out how you can demonstrate your technology; get support across research and testing - and developing business models; and help us design the training programmes.</i>	<p><b>Want to discuss how you can engage with ACES?</b></p> <p><b>One-to-one Meetings</b></p> <p>Throughout the day, ACES team members will be available for pre-booked side meetings for Open Day attendees. <b>Please contact Dr Leyla Sayin: <a href="mailto:l.sayin@bham.ac.uk">l.sayin@bham.ac.uk</a> (please include a short profile so we can connect you to the right expert).</b></p>
11.20 - 12:50	<b>PARTNER SESSION - Open Session</b> <i>Hear from some of our founder industrial and international partners on their plans with ACES and potential pathways for your engagement. This will include discussing their plans to develop commercial engagements conduct market research and training, as well as potential opportunities to assemble / produce new technologies in market.</i>	<b>WORKSHOP 4: Vaccine &amp; health cold-chains</b> <i>An interactive workshop for those in the <b>health sector and cold-chain service providers</b> to discuss challenges and how ACES plans to support the design, testing demonstration of energy-efficient and sustainable cold-chain for pharma and provide technical assistance.</i>	
12.50 - 14:15	<b>VIP comments followed by lunch and discussions</b>		
13.45 - 14.15	<b>Campus walk-through for new delegates joining afternoon sessions</b>		
14.15 - 15:45	<b>WORKSHOP 5: The supply chain</b> <i>An interactive workshop for those working in the food sector (retailers, food processors) and cold-chain logistics and service providers to understand how ACES can support your business objectives and in identifying new technology, new services, use of data analytics and quality control through the supply chain.</i>	<b>WORKSHOP 6: The ACES SPOKE programme</b> <i>Interested in starting an ACES SPOKE in-country? ACES is setting up a network of SPOKES across Africa to demonstrate technology solutions and offer training and technical assistance in-country. The first of these is in Kenya. <b>African officials and donor agencies and industry</b> are encouraged to join us and our colleagues from Kenya to discuss the support we can provide along the journey from location selection to operational staffing.</i>	

To attend Open Day or visit site

Workshop places will be limited to ensure interactive discussion. Please contact Issa Nkurunziza to reserve a place for Open Day, confirming which morning and afternoon workshops you wish to attend (lunch will be provided for all-day delegates) - or if you wish to only attend one specific workshop: [issa.nkurunziza@un.org](mailto:issa.nkurunziza@un.org)  
**A transfer shuttle from the Kigali Convention Centre to the Rubirizi Campus will be available on the day at 8.50 and 13.25 for those who book into morning or afternoon workshops. There will also be regular shuttles during the day for those SEforAll delegates from who wish to attend Campus for a walk-through and overview of the plans. A timetable will be announced during the Forum.**

## Pathways to Accelerate Sustainable Cooling and Cold-Chain

**Date:** 19 May 2022

**Location:** University of Rwanda, Rubirizi Campus, Kigali

**ACES** is a first-of-kind Centre dedicated to sustainable cooling, cold-chain and post-harvest management. It is hosted by the University of Rwanda in Kigali with Specialized Outreach and Knowledge Establishments (SPOKES) being rolled out throughout Africa to deploy ACES solutions in real-world settings; the first of these is in Kenya. The permanent Centre is developed by the Governments of Rwanda and the United Kingdom (UK), the United Nations Environment Programme and the UK's Centre for Sustainable Cooling leading a consortium of leading UK universities with more than \$20M of seed investment committed by governments and industry.

The mission of ACES is to accelerate the uptake of sustainable cooling and cold-chain solutions in the agriculture and health sectors in Africa, improving livelihoods, health, food and nutritional security of rural communities, thereby bringing environmental, social and economic development.

Globally, 536 million tonnes (12% of total food production) are lost due to lack of cold-chain; around \$380 billion of lost value and enough to feed ~1 billion people. In Rwanda as an example, food loss equates to 21% of its total land use, 16% of GHG emissions, and 12% loss to its annual Gross Domestic Product. Similarly, 25% of vaccines are wasted globally due to failures within cold-chains; more than 1.5 million people globally die from vaccine-preventable diseases each year. At the same time, conventional cooling technologies account for 7% of all global greenhouse gas (GHG) emissions, further warming the planet and contributing to their own demand. Global cooling emissions could double by 2030, and triple by 2100. The challenge we face is *how to provide access to cold-chains for all in an efficient, affordable, equitable and sustainable manner that builds resilience and achieves the Sustainable Development Goals (SDGs)*.

Working with governments, industry, academia, communities and wider stakeholders, ACES will (i) develop optimised sustainable cold-chain strategies; (ii) demonstrate technologies and solutions, and (iii) provide the skills, capacity building and business models to accelerate the deployment of fit-for-market solutions to meet the needs of underserved communities. It will showcase new concepts, provide incubation and holistic support for new businesses including development of finance and business models, policies, skills and capacity and offer technical assistance to communities.

We are also working with industry and other partners to develop and deliver funded SPOKES across the continent to showcase how solutions can be deployed in practical applications and act as outreach learning, training and knowledge transfer centres to support local community uptake. The SPOKES will exchange best practices and lessons learned through the ACES headquarters hub as part of an inter-connected whole.

With in-country and multi-national funding and industry founder partners in place, we are now moving from design to delivery, building a start-of-the-art Technology Demonstration Hall, a prototype off-grid Community Cooling Hub, an Innovation Centre (to include partner offices and meeting rooms) as well as training and teaching facilities - and developing further SPOKES.

To co-incide with the SEforAll Forum we have arranged an ACES Open House. Join us for a series of **tailored workshops** at an ACES Headquarters Open House to visit the campus, see the site plans and discuss how you can help shape and engage with ACES.

See overleaf for programme and how to join / contact details

