Team member
Eurovent Middle East

Phone
+32 (0)466 90 04 01

Email
office@eurovent.me

Date
2021-06-28

Saudi Arabia's Road to COP26

Interview with Henrietta Trippett

Henrietta Trippett, Climate Attaché British Embassy Riyadh, speaks to Eurovent Middle East on the role that sustainable cooling technologies play in meeting COP26 targets and provides an update on the programmes and multi-sectoral collaborations within Saudi Arabia aimed at driving more energy-efficient standards and practices…

The importance of energy-efficient and climate-friendly cooling solutions has been recognised by the UN in the form of the Cool Coalition, a global network launched by UN Environment Programme, the Climate & Clean Air Coalition, the Kigali Cooling Efficiency Program (K-CEP), and Sustainable Energy for All (SEforALL), which Eurovent Middle East is a member of. Could you comment on how especially relevant that is in countries such as Saudi Arabia owing to the country's high-ambient condition? How can promoting sustainable cooling within the Kingdom and fellow GCC-region countries positively contribute to these wider targets for COP26?

There are two main sources of greenhouse gas emissions from cooling equipment. Around 80% of the warming impact comes from indirect emissions from the energy consumption and around 20% from direct emissions of climate-damaging hydrofluorocarbon (HFC) refrigerants within the equipment. Delivering climate-friendly, sustainable cooling by reducing the use of HFCs and, at the same time, raising the energy efficiency of refrigeration and air conditioning equipment have the potential to contribute to strong climate commitments and deliver other co benefits.

Given the high-ambient nature of the climate in Saudi Arabia, there is considerable emphasis on the importance and dissemination of cooling equipment across the country. If there is rising ownership of high energy consuming products this will threaten energy security, access and affordability, as well as lock in inefficient appliances within Saudi Arabia for a 10–15 year cycle. By raising the efficiency of key cooling products this will lower energy demand, as well as ensure the provision of affordable, highly efficient products to those who need them. Saudi Arabia is one of the 18 member nations of the Super-efficient Equipment and Appliance Deployment (SEAD) initiative. The SEAD initiative is the main driving force within the COP26 Product Efficiency Call to Action – the joint COP26 and SEAD ambition is for SEAD member nations to double the efficiency of four key energy-using products sold globally by 2030: lighting, cooling, refrigeration, and motor systems. Through Saudi Arabia working with the UK, as incoming COP presidents, and the IEA, as a SEAD operating agent, we can ensure the use of the most energy-efficient appliances in Saudi Arabia and across the GCC region.

What is to be expected from COP26 with regard to cooling?

The UK's COP26 Presidency has four core goals aimed at accelerating progress towards achieving the aims of the Paris Agreement through increased ambition in: Mitigation, Adaptation, Finance and Collaboration. Sustainable cooling solutions fit under all four goals. Cooling keeps our vaccines safe

and food fresh, ensures we have comfortable buildings to live and work in, and is central to our industrial and transport infrastructure. Actions on sustainable cooling encompass, active, passive and nature-based solutions.

In July 2020, the UK published a guide on sustainable cooling, "from COVID-19 to COP26," launched by UK Environment Minister Lord Goldsmith in collaboration with the UK Carbon Trust and K-CEP. The document outlines action those national governments, private organisations, and local businesses can take to promote sustainable cooling.

There is also a COP26 Product Efficiency Call to Action with two key aims:

- to drive international ambition on product efficiency policy which is consistent with doubling the efficiency of key products sold globally by 2030; and
- to strengthen the Super-efficient Equipment and Appliance Deployment initiative (SEAD) to support countries in achieving raised ambition more quickly, easily and at a lower cost.

The COP26 Call to Action is being delivered through SEAD. Key partners include the International Energy Agency (IEA) and the SEAD leadership team (EU Commission, India, and Sweden). The UK, as incoming COP President, aims to amplify the policy ambition and key messages that the SEAD initiative is striving to deliver. Through the COP platform, the UK can help the IEA and SEAD leadership team to set SEAD countries on a trajectory to double the efficiency of these four key appliances by 2030.

Could you tell us more about the local campaign of the British Embassy in Saudi Arabia to raise awareness of climate issues ahead of the COP26 in November? Are you planning to have any initiatives that would touch on issues related to sustainable cooling or sustainable construction?

Ahead of COP26 in November, we at the British Embassy in Riyadh, launched a social media campaign, #TogetherforourPlanet, to bring together voices from across society and raise awareness on climate issues and the commitments we can all make to take urgent action to protect the planet. The campaign was driven by strong collaboration among the Saudi government, NGOs, the private sector, educational institutions, and the Saudi media to encourage pledges for climate action.

We are continuing to work on plans for the coming months, as we approach November. We hope to run a series of events raising awareness on climate issues and COP26, including events to support *Race to Zero* and *Race to Resilience*, the UN-backed, global campaigns to rally leadership and support from all non-state actors for climate change action to mitigate and adapt to climate change impacts. All members of the *Race to Zero* campaign are committed to the same overarching goal: reducing global emissions in half by 2030 and achieving net zero emissions by 2050 at the very latest. Sustainable cooling and sustainable construction are part and parcel of the initiatives for mitigation, adaptation, and resilience.

How has the Kigali Amendment impacted the Middle East reason?

The Kigali Amendment to the Montreal Protocol is a legally binding agreement for countries to phase down their use of hydrofluorocarbon (HFCs). HFCs are powerful greenhouse gases up to thousands of times worse for the climate than CO_2. HFCs are widely used as refrigerants in refrigeration and air conditioning equipment and were introduced to replace ozone depleting substances that are being phased out under the Montreal Protocol. Due to the high and growing demand for cooling in the Middle

East and other countries in a developing and warming world, action under Kigali is expected to have significant impacts on greenhouse gas emissions and associated climate targets. Kigali is expected to globally prevent up to 0.4 degrees Celsius of warming by 2100 towards Paris climate targets. All countries must play their part to achieve these gains. If actions to tackle HFC use can be combined with improvements to energy efficiency of the equipment, the World Meteorological Organization (WMO) estimates that the climate impacts could be doubled.

The HFC phasedown obligations for most Middle East countries are not due to start for another few years. Saudi Arabia, classified as an Article 5 Group 2 country*, is required to start reducing their HFC consumption from 2032.

However, there would be strong benefits to taking early action to reduce HFCs to avoid developing a large installed base of the most climate damaging HFCs. It would also be beneficial to take additional national measures, such as strong mandatory controls on leakage and recovery of HFCs to reduce emissions and making energy efficiency improvements to RAC technology at the same time as replacing the refrigerant. We would encourage countries to incorporate ambitious actions on HFCs as part of their UNFCCC Nationally Determined Contributions.

What is being done to encourage policy makers and Saudi companies to pledge to make a real change to help slow the impact of climate change through regulation of equipment being sold and distributed in the field of HVACR?

The IEA and SEAD leadership team are asking countries to sign a Joint Statement for Action on Product Efficiency to commit SEAD member countries to take action towards energy efficiency, and cooling is a key aspect of this. This Joint Statement involves ensuring that countries, and businesses that agree to work towards the SEAD 2030 goal, will commit to act on at least one of the following:

- To work towards aligning our product standards with the goal of doubling the energy efficiency of products sold globally by 2030 in order to meet our Paris goals, and to advocate for this internationally.
- To commit to leading or co-leading a programme of action on one of the four high-energy consuming products associated with the COP26 Call to Action, or another globally relevant high energy-consuming product, and identifying opportunities in pursuit of the 2030 goal.
- To actively engage in efforts to promote ambitious products policy nationally, regionally, and globally to create stronger incentives, larger markets, and lower costs for more efficient products.

Compliance obligations under the Kigali amendment to the Montreal Protocol will require countries cut their use of HFCs, meaning the industry must adopt alternatives. As mentioned, Saudi Arabia will be required to start reducing their use of HFCs from 2032.

How can the public and private sector, the HVACR sector in particular, work closer together to promote better standards and practices within the Kingdom's construction sector?

We understand that all country's national circumstances are different, and it is up to local policy makers and businesses in Saudi Arabia to decide how best they can implement policies and practices. Again, the UK government's guide, "from COVID-19 to COP26", is a helpful reference for actions that

national government, private organisations, and local businesses can take to promote sustainable cooling.

Globally, governments are adopting ambitious cooling action plans and raising minimum energy performance standards. Cities have initiated directives and are using their planning powers to advance heat mitigation policies that promote green landscaping or cool roofs and surfaces, district cooling, and passive buildings/sustainable public procurement standards. Businesses are developing innovative new technologies and business models. Civil society, academia, and enabling organisations are helping to mobilise action. Each has a crucial role to play in developing better standards and practices.

How important is this cooperation among GCC region countries, not only to ensure energy efficiency but also better indoor air quality considering countries such as the UK sees responding to COVID-19 as an opportunity to improve cooling policy and technology as a pathway not only to zero emissions but also to saving energy costs, improving health creating jobs and enhancing resilience*?

Cooling is vital for a variety of essential needs as well as adapting to warmer temperatures. However, most cooling is currently energy intensive and highly polluting due to the refrigerants used and the emissions from the electricity generated to power this equipment. Existing pollution needs to be cut urgently and the booming demand for future cooling must be met sustainably, to benefit from enhanced energy efficiency and air quality improvements.

We are happy to share the examples of good practice of sustainable cooling solutions with other countries. It is for policy decision makers in the GCC countries to decide how to implement those solutions in line with national circumstances.

**"Cool Coalition in the UK" report*

**Note: Countries are split into three groups under the Kigali amendment:*

Non article 5 countries (developed/donor countries) must phase down their use of HFCs 85% by 2036 and contribute to the Multilateral Fund to support developing countries meet their compliance obligations. In the Middle East these are: Israel, Cyprus

Article 5 group one countries must phase down their use of HFCs 80% by 2045, from 2020-22 levels, and are eligible for MLF funding. In the Middle East these are: Turkey, Jordan, Lebanon, Syria, Yemen, Egypt

Article 5 group 2 countries must phase down their HFCs 85% by 2047 from 2024-6 baselines levels and are eligible for MLF funding (other than UAE who have opted out voluntarily). Group 2 countries have negotiated a slower phasedown than group 1 countries because of the challenges posed by high ambient temperatures. In the Middle East these are: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates