Öresundskraft Kraft and Varme AB, wins 2017 Climate and Clean Air Award for Innovative Technology

Bonn, November 12, 2017: The 2017 Climate and Clean Air Award for Innovative Technology has gone to Öresundskraft Kraft and Varme AB, for using climate safe and energy efficient technology to cool downtown Helsingborg, Sweden.

The company's district cooling expansion project uses sea water and absorption cooling technology to pump cold water underground to offices and commercial buildings, replacing individual chillers with cooling from a single source. Fewer chillers mean less hydrofluorocarbons (HFCs), a potent greenhouse gas and short-lived climate pollutant, and lower power consumption and less carbon dioxide (CO_2).

Helsingborg's district cooling eliminates 1173 tonnes of CO_2 equivalent emissions annually, of which energy efficiency accounts for 92%.

Peter Danielsson, Governor of Helsingborg Stad, thanked the Climate and Clean Air Coalition for recognizing the city's work to reduce short-lived climate pollutants.

"It inspires the work that we started 44 years ago when we started to replace fossil fuels with residual heat from our local industry. Today our carbon footprint from heating is one of the lowest in Europe and with our district cooling expansion we aim to reduce the footprint from cooling as well."

Helsingborg's district cooling expansion project is a very good example of a solution to phase down HFCs and increase energy efficiency on a city-wide scale. District cooling in general is a powerful tool to phase-down HFCs because:

- city or district wide centralization reduces refrigerant charge even if conventional cooling technology is used to produce district cooling;
- the large-scale nature of district cooling allows the use of otherwise unavailable energy sources and minimizes the need for chillers of any kind;
- the use of natural refrigerants is highly feasible in central district cooling production because flammable and hazardous substances can be effectively managed and controlled.

Moving to District cooling can also help countries meet their commitments to the Kigali Amendment of the Montreal Protocol. Under the amendment countries have committed to drastically cut the production and consumption of HFCs. The amendment also calls for increased focus on energy efficiency to further reduce the increase in global warming.

The EU Energy Efficiency Directive states that district cooling has significant potential for saving primary energy. Such focus on energy efficiency makes a lot of sense since the vast majority of the global warming impact from air conditioning and refrigeration is due to indirect emissions related to energy use.

Öresundskraft Kraft and Varme AB's Helsingborg project shows that there are innovative and technological alternatives to HFCs, and that these technologies can be replicated in other places.

The 2017 Climate and Clean Air Award Winners

Öresundskraft Kraft and Varme AB joins the following winners of the 2017 Climate and Clean Air Awards

- The **State of California** win the A**ward for Outstanding Policy** for putting into state law the most comprehensive and strongest set of targets for reducing short-lived climate pollutants, and for developing a detailed plan to meet these targets. **California Governor, Edmund Gerald Brown Jr, and California State Senator, Ricardo Lara**, accepted the award on California's behalf.

- The **National Petroleum Authority of Ghana** also received the **Award for Outstanding Policy** for putting in place strong measures to reduce vehicle emissions. Ghana is the first West African country to move to low sulfur diesel and with a new sulfur content standard of 50 parts per million (ppm), down from 3000 ppm. The award was accepted on behalf of the National Petroleum Authority by **Prof. Kwabena Frimpong Boateng**, Minister of Environment, Science, Technology and Innovation, Ghana.

- **Mr Sameer Maithel won t**he **Award for Individual Achievement**, for his work to reduce black carbon emissions from brick kilns in India. By helping install cleaner, more efficient brick kiln technologies, Mr Maithel has demonstrated that significant emission reductions of black carbon can be achieved by retrofitting and converting existing kilns, benefitting workers, owners, and the environment.

- An **Honorary Award for Individual Achievement** was given to **Marcelo Mena Carrasco, Minister of Environment Chile**, for his work to reduce air pollution in Chile. Under Mr. Carrasco's leadership, Chile created "Plans of Prevention and Decontamination of Atmospheric Pollution (PPDA)" for 14 cities. Implementing these plans has led to significant reductions in air pollution and has made Chile a global leader in actions to improve air quality.

- An **Honorary Award for Innovative Technology** was given to **Durban (eThekwini) Municipality** for its Durban Landfill Conservancies project, a successful landfill that reduces emissions of methane, provides safe waste disposal, produces electricity for the local grid and employs workers from the surrounding communities. Councillor **Ntombifuthi Zamathomoya Maluleka** accepted the award on behalf of the Municipality**.**

- The **Award for Transformative Action** was given to the **International Council for Clean Transportation** (ICCT) for its initiative to conduct checks of real-world emissions of diesel cars in the United States. This work uncovered a global scheme by Volkswagen to deliberately avoid motor vehicle standards. The scandal continues to reverberate in the auto industry and has raised global awareness of the impact of diesel vehicles on air quality. Nic Lutsey on behalf of the ICCT.

About the Climate and Clean Air Award

The Climate and Clean Air Awards recognize exceptional contributions and actions to implement projects, programmes, policies and practices that reduce short-lived climate pollutants (SLCPs) – black carbon, methane, hydrofluorocarbons and tropospheric ozone.

Reducing these dangerous air and climate pollutants is key to improving air quality, slowing the rate of climate change and provides multiple benefits for health, ecosystems and the sustainable development goals.

The award is global in scope and the nominees cover a wide range of activities and actions from individual efforts to transform a polluting sector to state and national policies that are transforming attitudes, sparking innovation, and providing business opportunities. As a collective, this group of nominees show what real climate action looks like.

Awards will be presented in four categories:

- Individual Achievement: recognizes the efforts by an individual to reduce short-lived climate pollutants.
- Outstanding Policy: recognizes air quality improvement and SLCP reduction policies (and their implementation) that are bold and transformative.
- Innovative Technology: recognizes technological interventions to reduce air pollution and protect the climate that are ground-breaking, accessible and scalable.
- Transformative Action: recognizes an action or activity that has fundamentally changed attitudes, practices, and/or policies related to air pollution and climate change.

An Honorary Award may also be awarded to nominees that are deemed to have considerably contributed to SLCP reduction efforts, awareness, and/or leadership.

Jury Panel

The Jury for the Climate and Clean Air Award are:

- **Ms. Annika Markovic**, Permanent Representative of Sweden to the Organisation for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO),
- **Mr. Manuel Pulgar-Vidal**, former Minister of State for Environment, Peru, and President of COP 20. He is the current head of WWF's global climate work.
- **Dr. Youba Sokona**, Vice-Chair of the Intergovernmental Panel on Climate Change (IPCC),
- **Mr. Kaveh Zahedi**, Deputy Executive Secretary for Sustainable Development a t the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).

About short-lived climate pollutants

The Climate and Clean Air Coalition works to reduce four short-lived climate pollutants: black carbon (or soot), methane, tropospheric (or ground level) ozone, and hydrofluorocarbons (HFCs). These pollutants are powerful climate forcers many times more potent at warming the atmosphere than carbon dioxide. Some, like black carbon and ozone, also have serious immediate impacts to human health and food security.

The four SLCPs contribute about 40% of the manmade heat energy being added to the planet every year. Reducing emissions of methane, black carbon, and HFCs can help reduce predicted global warming by as much as 0.6 degrees Celsius (^{o}C) by 2050, helping to achieve the global goal to limit warming to 1.5 ^{o}C.

Air pollutions is responsible for approximately 6.5 million premature deaths every year and the plant growth. Fully implementing the Coalition's SLCP reduction measures can prevent 2.5 million premature deaths and avoid up to 52 million tonnes of crop losses every year.

The Coalition works on a range of measures across key polluting sectors – diesel, brick production, municipal solid waste, oil and gas production, agriculture, household energy, and HFCs. It also works

to improve national planning and capacity through its SNAP initiative, improves the understanding and actions of the health sector, works to finance SLCP mitigation and increases understanding of the impacts of and solutions to SLCP emissions by carrying out regional assessments.

Information on each pollutant can be found here.

The 2017 shortlist

The inaugural Climate and Clean Air Awards attracted a large number of stellar candidates. From these 14 were shortlisted by the Climate and Clean Air Coalition's Steering Committee for consideration by a panel of four judges. You can see the full list here.

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