

WECP

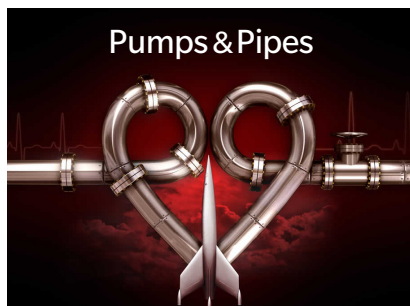
WORLD ENERGY CITIES PARTNERSHIP

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The **World Energy Cities Partnership** is an international, city-led organization headquartered in Houston, Texas, comprised of some of the world's leading Energy cities, including:

ABERDEEN SCOTLAND • **ATYRAU** KAZAKHSTAN
CALGARY CANADA • **CAPE TOWN** SOUTH AFRICA
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DOHA QATAR • **DONGYING** CHINA
ESBJERG DENMARK • **HALIFAX** CANADA
HOUSTON USA • **KARAMAY** CHINA
KUALA LUMPUR MALAYSIA • **LUANDA** ANGOLA
PERTH AUSTRALIA • **RIO DE JANEIRO** BRAZIL
ST. JOHN'S CANADA • **STAVANGER** NORWAY
VILLAHERMOSA MEXICO

WECP goals are to collaborate on opportunities for economic growth, best practices and to ensure city-to-city learning.



'Pumps & Pipes' share innovations across the Atlantic

Houston and Stavanger partners in fostering cross-industry collaboration

Founded in Houston in 2007, *Pumps & Pipes* brings together professional groups to share ideas and technology know-how. Through innovative cross-industry collaboration, groups share "toolboxes" to solve challenges from "pumps & pipes" in the human body, on the seabed or in space.

In Houston, *Pumps & Pipes* partners include ExxonMobil, Houston Methodist DeBakey Heart & Vascular Center, the University of Houston and NASA (pumpsandpipes.com).

Pumps & Pipes was introduced to the WECP-Board in Houston in 2013 and the WECP-delegate group quickly recognized the potential of the project for the Stavanger region.

While Norway is a world leader in the oil and gas sector, recent market downturns combined with demographic challenges have presented a need for adaptation and innovation. A partnership between Stavanger and Houston is an opportunity to garner cross-industry collaboration between oil and health sectors.

Stavanger and Houston have worked closely for many years as sister-cities, WECP partners and oil capitals. However, the relationship stems beyond oil. The Stavanger University Hospital (SuS) has worked with the world-renowned MD Anderson Hospital and with the Memorial Hermann Hospital.

In 2015, key players from the Stavanger-region including University of Stavanger (UIS), International Research Institute of Stavanger (IRIS), Stavanger University Hospital (SUS),

Norwegian Smart Care Cluster, the City of Stavanger and Greater Stavanger visited Houston. They began to establish both a regional initiative and a *Norwegian Pumps & Pipes*.

To start, 60 scientists participated in a *Pumps & Pipes* seminar in Stavanger. Next, researchers and representatives from the oil & gas sector and health sector came together to identify areas for technology transfer. While Houston's model could not be replicated, it could be adopted to fit the Norwegian reality. Areas identified fell within cardiology, stroke treatment technology, simulation and modeling, signal and image processing and risk modeling.

After receiving national attention, the Norwegian Ministry of Health allocated funds for the project to take off.

In December 2015, Houston and Norway signed a Letter of Intent for collaboration. While the *Pumps & Pipes* seminar took place in Houston, more than 50 researchers gathered in Stavanger for the event live stream.

This year, there are plans for a joint webinar and a presentation of a Norwegian cross-industry project at the December 2016 *Pumps & Pipes* seminar in Houston.

Norway Pumps & Pipes hopes to reach academic and research communities across the continent and become a European hub for the program.

By coming together through the WECP, Houston and Norway have developed a strong, mutually beneficial relationship that will continue for years to come.



Norway Pumps & Pipes was announced in Houston on December 7, 2015. Participants from Stavanger are, from left; Dr. Oystein Lund Bo, Dean, University of Stavanger; Dr. Ole Ringdal, International Research, Institute of Stavanger; Kristin Reitan Husebo, CEO, Greater Stavanger Economic Development; Dr. Stein Tore Nilsen, Director of Research, Stavanger University Hospital