**World’s largest engine power plant by Wärtsilä to be inaugurated today in Jordan**

**Wärtsilä Corporation**

* **Press release**

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The inauguration of IPP3, the world’s largest internal combustion engine (ICE) power plant, takes place today at the plant site near Amman, Jordan. The plant is powered by 38 Wärtsilä 50DF multi-fuel engines with a combined capacity of 573 MW. In recognition of its world record size, the plant has been accepted into the Guinness book of records.

The ceremony will be hosted by the owner of the plant AAEPC (Amman Asia Electric Power Company) and will be held under the patronage of His Majesty King Abdullah II Ibn Al Hussein of Jordan. Wärtsilä has been responsible for leading the EPC (engineering, procurement and construction) consortium delivering the largest Smart Power Generation plant in the history of the company.

“It is a great pleasure to witness the inauguration with Wärtsilä and other project partners. We are very proud of the world’s largest engine power plant,” says Taemin Kim, Administration Manager of AAEPC.

IPP3 will be used for covering the sharp daily peaks of electricity demand in Jordan. Fast starting and the capability of ramping output up and down quickly and efficiently are key features of ICE technology. “By starting one engine at a time, the plant can follow the demand very precisely,” Kim confirms.

IPP3 and its sister plant, the 250 MW IPP4, have been in commercial operation since late 2014. According to data provided by the Jordanian grid operator NEPCO, their impact on the Jordanian power grid has been remarkable. Since the two engine plants have covered most of the peak demand, large gas turbine power plants in the grid have been released from this task. As a result, turbines now produce steady baseload, operating much more efficiently. This leads to significant savings in fuel, energy costs and CO2 emissions.

“This empirical evidence shows how our Smart Power Generation power plants can optimise entire power systems by providing much-needed flexibility. Using ICEs for peak load and gas turbines for baseload is the perfect combination in improving overall efficiency of the grid,” says Upma Koul, Business Development Manager at Wärtsilä.

Fast-reacting back-up capacity will also be needed to balance variable renewable power. 600 MW of solar and 1200 MW of wind energy are expected to be installed in Jordan by 2020.

In addition to operational flexibility, IPP3 provides fuel flexibility. The tri-fuel plant can run on heavy fuel oil (HFO), light fuel oil (LFO) and natural gas. Currently HFO is used due to shortage of natural gas. The plant will start to use LNG-based natural gas later this year, as soon as it becomes available. “The readiness to use different fuels was essential for us, and Wärtsilä’s engines are the optimal technology for this,” Kim says.

Wärtsilä sees strong growth in the Middle East and has attracted new orders recently from Oman and Saudi Arabia. Wärtsilä’s total installed capacity in the Middle East is approximately 7000 MW.

[Download image 1](http://www.wartsila.com/Imagebank/A/Digital%2BMedia%2BLibrary/7775?encoding=UTF-8) (graph)
Caption: Since late 2014, IPP3 (537 MW) and its sister plant IPP4 (250 MW), have captured the daily peaks in electricity demand in Jordan. As a result, the operation of combined cycle gas turbine (CCGT) and steam turbine plants has decreased and flattened to steady baseload. This leads to significant savings in fuel, energy costs and CO2 emissions.

[Download image 2](http://www.wartsila.com/Imagebank/A/Digital%2BMedia%2BLibrary/7776?encoding=UTF-8) (photo)Caption: The tri-fuel power plant IPP3 is the world’s largest internal combustion engine power plant. It comprises of 38 Wärtsilä 50DF engines with a combined capacity of 573 MW.

For further information please contact:

Upma Koul
Business Development Manager
Wärtsilä Power Plants
Tel: +971 50 553 8071
upma.koul@wartsila.com

 Jussi Laitinen
Communications Manager
Wärtsilä Power Plants
Tel: +358 50 4042006
jussi.laitinen\_external@wartsila.com

**Wärtsilä Power Plants in brief**
Wärtsilä Power Plants is a leading global supplier of flexible baseload power plants of up to 600 MW operating on various gaseous and liquid fuels. Our portfolio includes unique solutions for peaking, reserve and load-following power generation, as well as for balancing intermittent power production. Wärtsilä Power Plants also provides LNG terminals and distribution systems. As of 2015, Wärtsilä has 58 GW of installed power plant capacity in 175 countries around the world.
[www.smartpowergeneration.com](http://www.smartpowergeneration.com/)

**Wärtsilä in brief**
Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. By emphasising technological innovation and total efficiency, Wärtsilä maximizes the environmental and economic performance of the vessels and power plants of its customers. In 2014, Wärtsilä's net sales totalled EUR 4.8 billion with approximately 17,700 employees. The company has operations in more than 200 locations in nearly 70 countries around the world. Wärtsilä is listed on the NASDAQ OMX Helsinki, Finland.
[www.wartsila.com](http://www.wartsila.com/)

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