



## PRESS RELEASE

---

Genoa, May 5, 2017

### New Ansaldo Energia GT36: validation accomplished

The first GT36 Unit, Ansaldo Energia's H-Class gas turbine model, has successfully completed the first phase of the comprehensive validation program at the Birr Test Power Plant in Switzerland. The test power plant is a full scale simple cycle power station, built in 2015/2016, that can be used for the operation and validation of the fully instrumented engine under real power plant conditions, because the power is dispatched to the Swiss Power Grid.

The tests fully confirm the high performance, low emissions over the entire load range, and resulting very wide operation window of this engine.

The test program included stress testing of the two stages of the sequential combustion system, part and full load mapping, transient operation and performance testing. The validation engine is equipped with more than 3,000 measurement points, including a telemetry system which transfers more than 500 measurements from the rotating parts.

Full engine validation is an integral part of the development of Ansaldo Energia's new turbine. The thorough validation process includes design validation with engineering tools, component validation, full engine validation and, finally, field monitoring.

The GT36's combustion system has already been tested as single component in a combustor test rig, at full size and under full massflow, at the DLR (the German Aerospace Center) in Cologne since 2013.

The test results reported for the GT36-S6 (60Hz rating) confirmed power output above 340 MW at 41% efficiency. In combined cycle this corresponds to performance exceeding 500 MW at 61.3% net efficiency in ISO conditions and 720 MW at 61.5% efficiency for the GT36-S5 (the 50Hz scaled version).

The unique characteristics of the GT36 provide a very useful response to power market requirements today and in the future, where combined cycle plants need to offer high efficiency coupled with high operational flexibility, because power output has to follow the fluctuating needs of the grid in order to compensate and back-up generation using intermittent renewable sources.

---

Ansaldo Energia Group is a leading international player in the power generation industry, to which it brings an integrated model embracing turnkey plants, components (gas turbines, steam turbines, generators and microturbines), servicing and work in the nuclear energy sector. Ansaldo Energia is 45% owned by CDP Equity in the Cassa Depositi e Prestiti Group, an Italian state-owned entity which has been promoting the country's economy since 1850, and 40% by Shanghai Electric, the world-leading producer of power generation machinery and mechanical equipment. Visit us at [ansaldoenergia.com](http://ansaldoenergia.com).

For media inquiries: Luciano Gandini, Head of Communications and Events, Ansaldo Energia  
Ph. +39 010 6556295 Mob. +39 331 6742485 E-mail [luciano.gandini@ansaldoenergia.com](mailto:luciano.gandini@ansaldoenergia.com)