

MIT Technology Review names ABB on its list of Top 50 global innovators

ABB's development of a high voltage DC breaker will help shape the grid of the future

Zurich, Switzerland, Feb. 25, 2012 – MIT Technology Review, the official science and technology journal of the Massachusetts Institute of Technology (MIT), named ABB to its 2013 list of [top 50](#) global innovators.

ABB, the leading power and automation technology group, was cited for a [technology breakthrough](#) in 2012 that solved a 100-year-old electrical engineering puzzle and paved the way for a new generation of highly efficient and reliable power transmission grid. After years of research, ABB developed the world's first circuit breaker for high voltage direct current (HVDC). It combines very fast mechanics with power electronics, and will be capable of interrupting power flows equivalent to the output of a large power station within 5 milliseconds - that is 30 times faster than the blink of a human eye.

The breakthrough removes a 100-year-old barrier to the development of DC transmission grids, which will enable the efficient integration and exchange of renewable energy sources on a large scale and enable the construction of a new more efficient grid able to transport electricity over very long distances. DC grids will also enhance the reliability and capacity of existing AC (alternating current) networks. ABB is in discussions with power utilities to identify pilot projects for the new development.

"ABB's historical breakthrough will make it possible to build the grid of the future and will be a big boost for renewable integration. We are proud that the MIT Technology Review acknowledges the significance of our innovation," said Prith Banerjee, Chief Technology Officer of ABB. "This new technology will make it possible to build the grid of the future. Overlay DC grids will be able to interconnect countries and continents, balance loads and reinforce the existing AC transmission networks."

The development of the Hybrid HVDC breaker has been a flagship research project for ABB, which last year invested more than \$1.4 billion in R&D and employs about 8,000 researchers..

HVDC technology is needed to facilitate the long distance transfer of power from hydropower plants, the integration of offshore wind power, the development of visionary solar projects and the interconnection of different power networks. ABB pioneered HVDC nearly 60 years ago and continues to be a technology driver and market leader. With over 70 HVDC projects, ABB accounts for around half the global installed base, representing an installed capacity of more than 60,000 megawatts (MW).

For more information on the HVDC breaker, multimedia material or to speak to ABB experts please click [here](#).

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 145,000 people.

For help with any technical terms in this release, please go to: www.abb.com/glossary

For more information please contact:

ABB Group Media Relations:

Thomas Schmidt; Antonio Ligi

(Zurich, Switzerland)

Tel: +41 43 317 6568

media.relations@ch.abb.com

 <http://twitter.com/ABBcomms>