

## PRESS RELEASE

## **Electric Site wins Volvo Technology Award**

Ground-breaking project saw autonomous, hybrid and all-electric concept machines electrify a quarry in Sweden.

Volvo CE's Electric Site solution involved the development of an all-new concept of an autonomous, battery electric, load carrier. The prototype machine, HX02, was just one element of an electric site research project that delivered up to a 98% reduction in carbon emissions, a 70% reduction in energy cost and a 40% reduction in operator cost – demonstrating the Electric Site solution's environmental, efficiency, safety and cost benefits.

The project, which ran for more than 10 weeks during late 2018, aimed to electrify each transport stage in a quarry – from excavation to primary crushing and transport to secondary crushing. It involved developing new machines, work methods and site management systems. As well as a fleet of HX02s, other prototype machines that made-up the Electric Site system included a hybrid wheel loader (LX01) and a grid-connected excavator (EX01). New technology encompassed machine and fleet control systems and logistic solutions for electric machines in quarries. The Electric Site project was a partnership between Volvo CE and Skanska Sweden, the Swedish Energy Agency and two Swedish universities – Linköping University and Mälardalen University.

"This award recognized not just *one* innovation – but a whole raft of them that were necessary to reimagine how an age-old process – quarrying – could be modernized in order to radically cut emissions," says Lars Stenqvist, Volvo Group Chief Technology Officer. "In a company that is so alive with new research and innovation as the Volvo Group, Volvo CE's Electric site project stood out both for its scope and its results. This is a great example of what we can achieve by pushing boundaries and working in partnership with our customers."

The Volvo Technology Award is a mark of recognition for outstanding technical advances that contribute to the enhancement of the Volvo Group's high-tech competitiveness and technological expertise. Recipients over the years have included



world-famous innovations, such as the Duo-prop marine drive, the City Filter used to purify truck and bus exhausts, and Volvo's side airbags (SIPS).

The winners of the Volvo Technology Award 2019 are:
Marcus Broberg, David Dujmovic, Bobbie Frank, Peter Johansson, Chongchul Kim,
Marcus Kreku, Joakim Lundin, Uwe Müller, Albin Nilsson, Markus Rombach, David

Marcus Kreku, Joakim Lundin, Uwe Muller, Albin Nilsson, Markus Rombach, David Rylander, Ted Samuelsson, Johan Sjöberg, Mikael Skantz, Erik Uhlin, Joakim Unnebäck and Jimmie Wiklander

Link to a video explaining the Electric Site project: <a href="https://youtu.be/Mg\_84wy0v5Y">https://youtu.be/Mg\_84wy0v5Y</a>

Learn more about the Electric Site at <a href="https://www.volvoce.com">www.volvoce.com</a>

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For more information, please visit volvogroup.com/press

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