

### Atos partners with Total to tackle decarbonization using quantum algorithms

**Paris, 7 July 2020** – [Atos](#), a global leader in digital transformation, announces a multi-year partnership with French multinational energy company Total, to explore new and more effective pathways to a decarbonized, energy-efficient future using quantum technologies. Leveraging Atos' unique [Center for Excellence in Performance Programming](#) (CEPP) and [Quantum R&D Program](#), this partnership aims to use quantum calculation to identify new materials and molecules that will accelerate society's journey to carbon neutrality.

This announcement follows Total's [acquisition, in 2019](#), of the world's highest-performing commercially available quantum simulator, [Atos Quantum Learning Machine](#) (Atos QLM). Atos QLM is used by Atos and Total to test and accelerate existing quantum algorithms or create new ones to achieve breakthroughs in various fields, in particular the discovery of new materials for **carbon capture or energy storage**. Their work focuses, amongst other things, on simulating larger complex molecules than what is currently possible with HPC technologies in order to uncover more efficient and affordable adsorbents.

As part of the partnership, Atos' team of quantum experts supports Total in finely tuning quantum algorithms for optimal results and offers technical support on the Atos QLM.

**Philippe Duluc, SVP, Chief Technology Officer for Big Data and Security at Atos** said: *"We are proud to be working with our long-standing partner Total in fighting climate change using the most advanced quantum technologies available. Achieving carbon neutrality will be one of society's most difficult challenge in the upcoming decades and together with Total, we are committed to leverage our mutual capacity for innovation to find actionable insights and patterns that will facilitate our collective efforts to build a sustainable future".*

\*\*\*

## **About Atos**

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion. European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

## **Press contact**

Marion Delmas | [marion.delmas@atos.net](mailto:marion.delmas@atos.net) | +33 6 37 63 91 99 |