

The Problem

The world is currently experiencing rapid growth in various DC applications such as data centers, fast charging stations for electric vehicles and energy storage systems such as battery systems. At the same time, the integration of renewable energy sources to fight against climate change is increasing.

The only available option today is to connect energy sources to consumers via the traditional AC network. The energy from renewable sources must therefore be converted from direct current to alternating current and back to direct current.

This results in energy losses, additional costs as well as unnecessary system components.

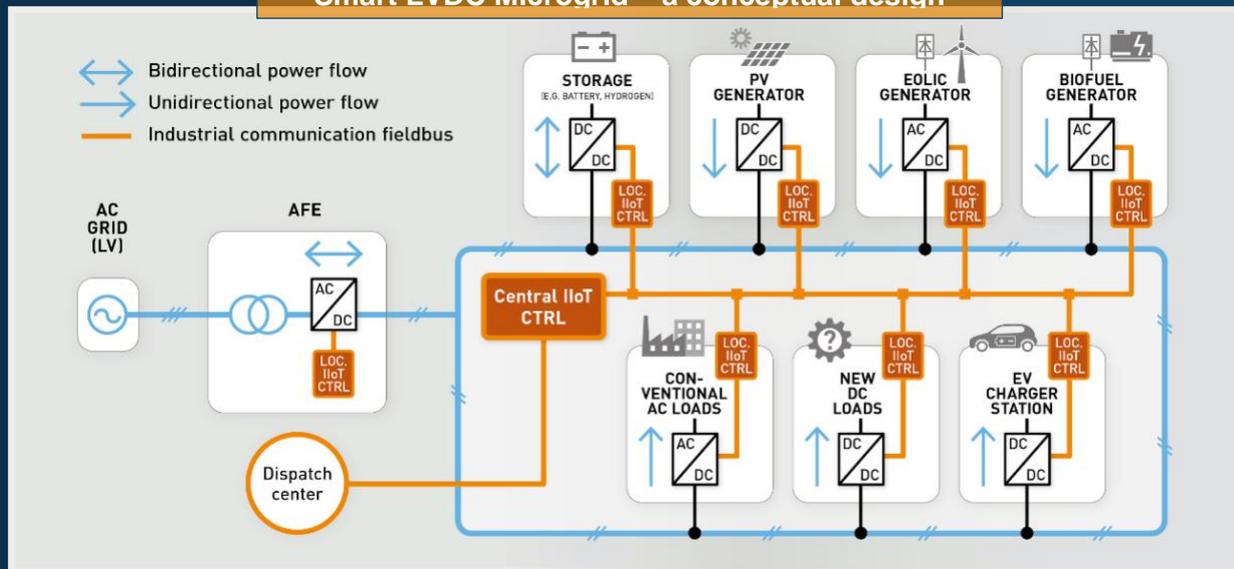
Our Solution

We aim to provide **smart & local DC microgrid solutions** which considerably simplify the connection of renewable energy sources and variable DC loads.

Cost savings are achieved due to improved **efficiency, stability** and **reliability** of the system. In addition, the reduction of unnecessary system components for energy conversion means **leaner processes** and thus a **reduction in operating- and maintenance costs**.

Our goal is to develop a **standard portfolio of DC components** in order to cover the integration of various **applications in the low and medium power range** in connection with **intelligent functionality** through the use of intelligent control algorithms.

Smart LVDC Microgrid – a conceptual design



The Quantum Guys – Who are we?

The Quantum Guys AB is a Swedish startup that was founded in Lund (Sweden) back in 2018. The expertise of our international team from Europe, Asia and North America is based on years of experience in the field of scientific development and technological innovation, as well as experience in the startup- and industrial automation sector. Innovative ideas in areas such as IoT, automation, high power electronics and open source (hard- and software) are united in a vision to offer the world first-class products and services in the field of environmentally friendly and sustainable technologies. Our vast experience in connection with modern standards, products and tools enables us to offer our products and services at competitive prices on the market.

If we have piqued your interest, we look forward to hearing from you soon!