Accelerating the energy transition

At ABB Electrification, we are supporting the path to a net zero future.

>50%
of decarbonization is driven by electrification [1]

1 Integrating more renewable energy

From wind farms to solar parks, we collect and distribute electricity where it is needed — reliably, safely and efficiently.

3x
more renewable integration
needed by 2030 [2]

A SMARTER GRID

Renewable power generation growth is decentralizing the grid with bi-directional energy and communications flow. Our electrification, automation and digitalization technologies support a smarter network.

DC POWER PROTECTION

Photovoltaic (PV) systems and battery storage operate in DC power, increasing demand for DC solutions. We are growing our DC offerings for renewable applications.

2 Storing renewable energy

Battery energy storage helps balance supply and demand by saving excess renewable energy for later use. This bridges gaps due to high demand or lower renewable generation.

120 GW
battery energy storage growth
needed annually [3]

INTEGRATED SOLUTIONS

Our fully-digitalized energy storage portfolio raises grid efficiency with factory-built, pre-tested solutions. They can be deployed straight to customer sites for fast installation.

COST SAVINGS

Energy storage solutions offer opportunities to flatten demand peaks and shift loads to off-peak hours to reduce operational costs.

3 Solving for growing electricity demands

From the electrification of transportation to heating systems, the shift from fossil fuels is increasing demand for electricity.

2–3x
projected growth in electricity demand
by 2050 [4]

RELIABLE ELECTRICAL DISTRIBUTION

ABB's medium- and low-voltage solutions with digital technologies support growing needs. We support customers' net-zero targets with energy management solutions.

OPTIMIZING EFFICIENCY

Energy efficiency is critical to avoid energy demand. ABB Ability™ Energy Manager can help unlock energy savings of up to 30%.

1. IEA 2023 report 2. IEA 2023 report, NZE scenario 3. World Economic Forum article: "How battery energy storage can power us to net zero." Sept. 5, 2023.
4. McKinsey & Company report: Global Energy Perspective 2023.