



ELECTRIFICATION BUSINESS AREA | NOVEMBER 2022

Electrifying the World

in a safe, smart and sustainable way

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ABB's Business Areas

Electrification

REVENUES – \$13.2 BN

Motion

REVENUES – \$6.9 bn

Process Automation

REVENUES – \$6.3 bn

Robotics & Discrete Automation

REVENUES – \$3.3 bn



Electrification at a glance



\$13.2 billion
in revenue
(2021)



~50K
employees
worldwide



100+
countries



1.7 million
products
shipped/day



4200+
patent families



8
Regional
Distribution
centers



105
Manufacturing
sites



100+
local
standards

The megatrends shaping Electrification

The world is going digital, urban and electric whilst facing an increasingly rapid changing global environment



Electrifying the World

in a safe, smart and sustainable way



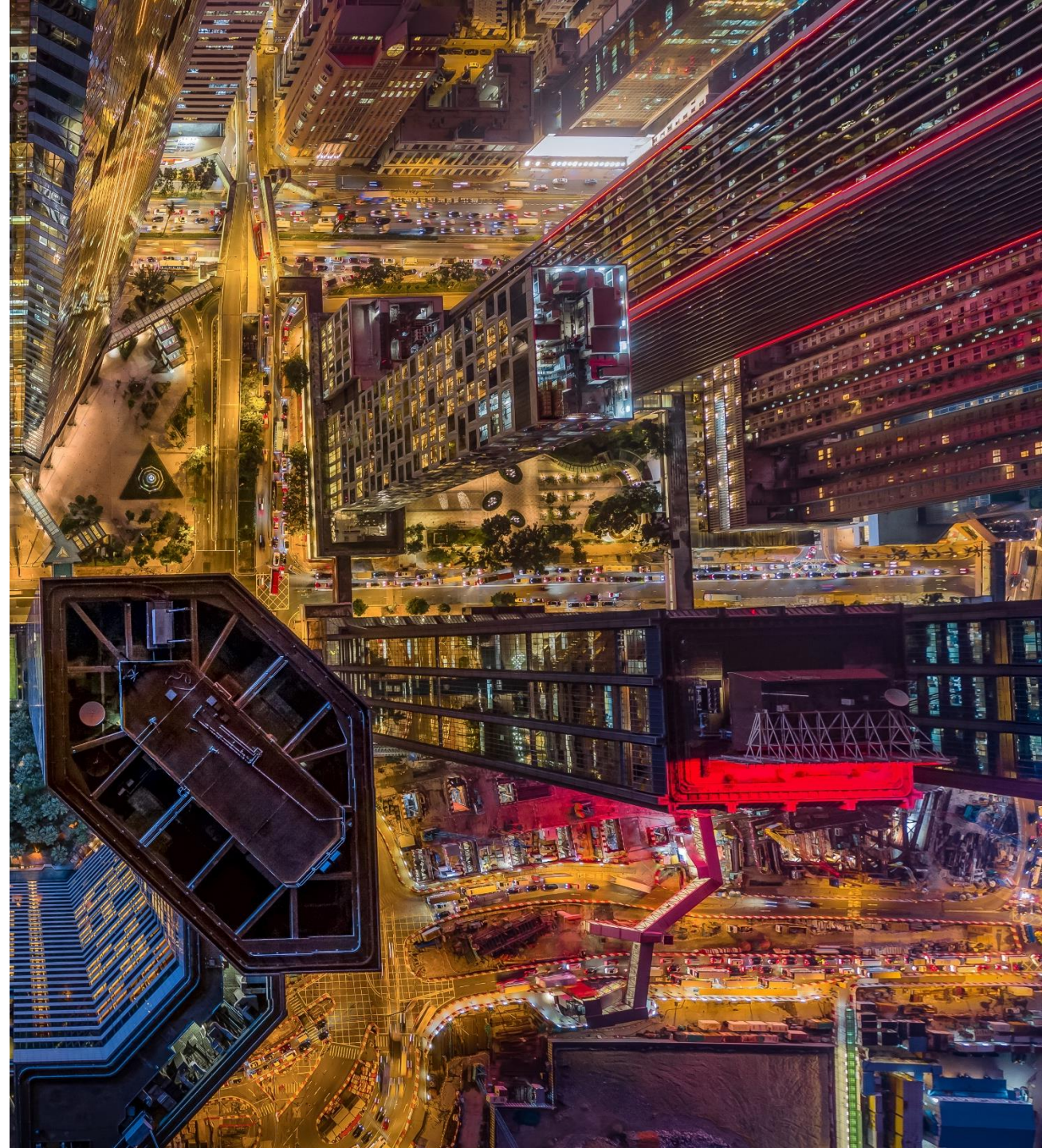
Electrification

Electrifying the world in a safe, smart and sustainable way, ABB Electrification is a global technology leader in electrical distribution and management from source to socket.

As the world's demand for electricity grows, our 50,000+ employees across 100 countries collaborate with customers and partners to transform how people connect, live and work.

We develop innovative products, solutions and digital technologies that enable energy efficiency and a low carbon society across all sectors.

By applying global scale with local expertise, we shape and support global trends, deliver excellence for customers and power a sustainable future for society.



Electrifying the World

in a safe, smart and sustainable way

SAFE

Where we protect our people, customers, society, assets, the environment and the world around us.

SMART

Where we power progress and energy efficiency with our digital solutions and intelligent technologies.

SUSTAINABLE

Where we protect our planet and empower people with technology to drive energy transformation, by innovating how we work and live.

Burj Khalifa, Dubai
Solution: Lightning protection



Viettel Headquarters, Vietnam
Solution: Energy efficient technologies



Ljusgård Vertical Farm, Sweden
Solution: SF₆ free technology



Electrification

Our Divisions



Distribution Solutions

We improve electric power quality and reliability while strengthening grid resilience through automation. With ABB Ability™ enabled digital products and solutions our customers can unlock the full potential of their electrical systems.



E-mobility

ABB E-mobility is the world leader in EV charging solutions and the partner of choice for the world's biggest electric vehicle OEMs and nationwide EV charging network operators, building a zero-emission mobility future from home to highway.



Installation Products

Building on its 100-year history of innovation, Installation Products creates product solutions to safely connect and protect electrical systems that power businesses, cities, homes and transportation.



Power Conversion

We design, develop and manufacture solutions to power and safeguard life's everyday moments. Our customers are in industries where power reliability, efficiency and quality are essential, and they rely on us to solve their most difficult power challenges.



Smart Buildings

We ensure safe and reliable energy distribution, and we make buildings and homes smart and sustainable.



Smart Power

Our technologies enable buildings, factories and transportation to make energy management smarter, renewables more productive and operations more resilient.



Service

Through a range of innovative, scalable electrical service solutions, we bring peace of mind to the security, safety and reliability of electrical infrastructure, help customers to optimize their electrical assets, and partner with them as their future energy challenges evolve.

Developing innovative products, solutions and digital technologies that enable energy efficiency and a low-carbon society across all sectors

Electrification

Aligned to market needs



Distribution Solutions



E-mobility



Installation Products



Power Conversion



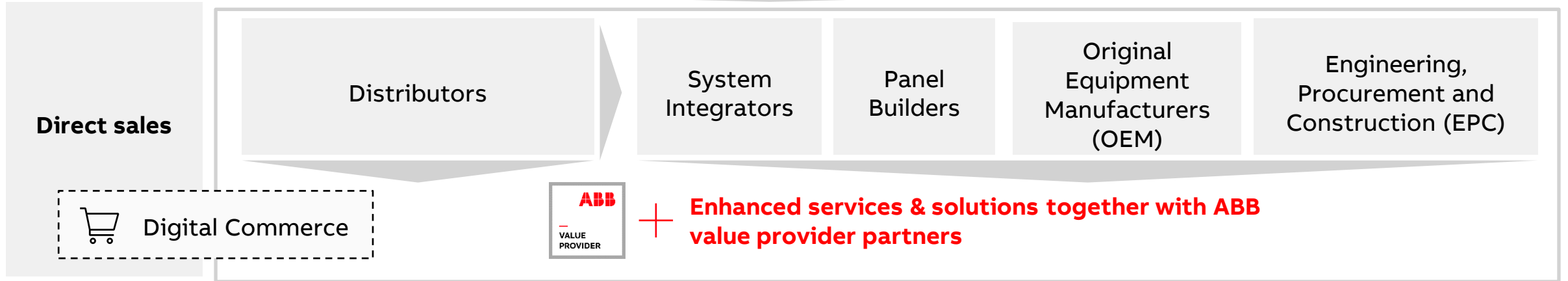
Smart Buildings



Smart Power



Service



Customers

Distribution Solutions

Offerings:

- Air Insulated Switchgear MV + LV (excluding ANSI)
- ANSI Air Insulated MV + LV Switchgear
- Gas Insulated Switchgear
- Control and Protection Products
- Packaging & Solutions



UK Power Networks

Solution: SF₆ free Ring Main units for secondary substation

E-mobility

Offerings:

- DC fast and high-power chargers
- DC & AC Wallbox
- Bi-directional charging
- Heavy vehicle and bus charging
- Site and load management solutions

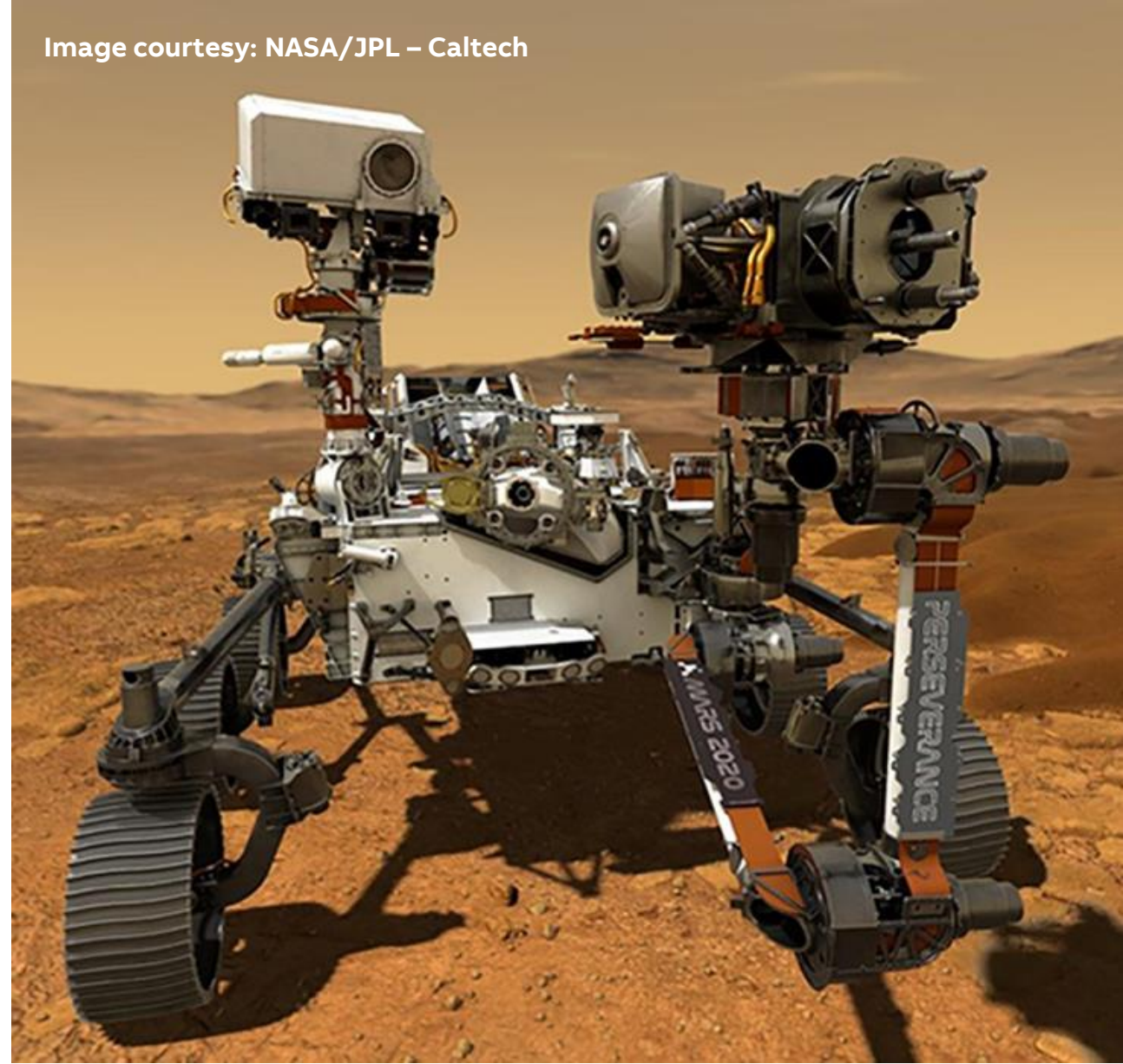


IONITY EV charging network, Europe
Solution: EV charging infrastructure

Installation Products

Offerings:

- Wire & cable management
- Cable protection systems & conduits
- Connectivity & grounding
- Boxes and Fittings
- Fastening
- Metal Framing
- Solid dielectric switchgear & reclosers
- Capacitor switches & controllers
- Current-limiting fuses
- Fault current indicators
- Substation connectors
- Utility distribution connectors

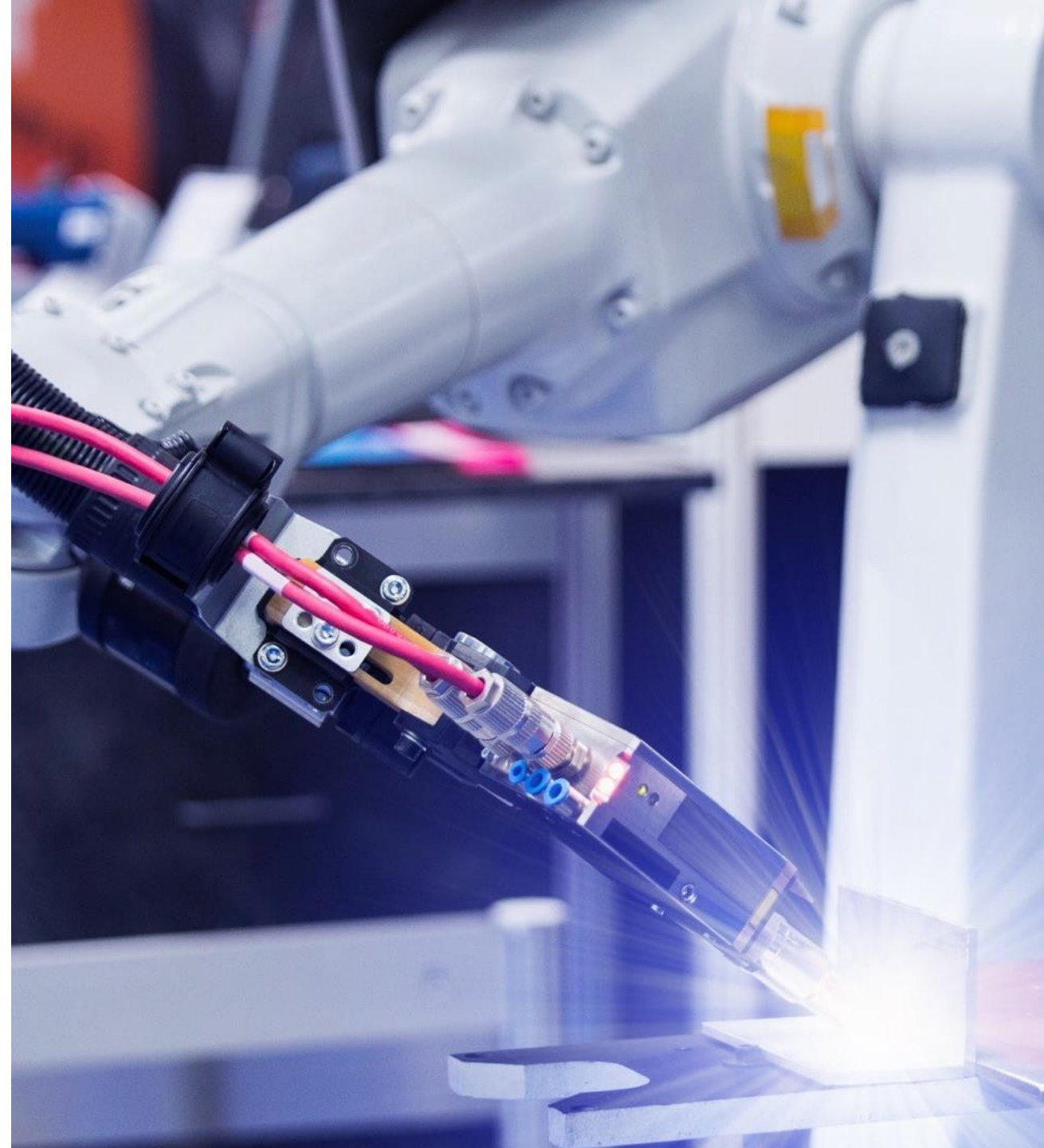


NASA Mars 2020 Perseverance Rover Mission, Mars
Solution: Cable protection with TyRap® cable ties

Power Conversion

Offerings:

- Small, Medium and Large DC Power Systems
- DC Distribution Systems
- Equipment Management Software & Controllers
- Inverters
- Lifecycle Services
- 1-phase AC to DC Power Supplies
- 3-phase AC to DC Power Supplies
- Open-frame Power Supplies
- Isolated & Non-Isolated DC to DC Power Converters
- Power Regulators
- Custom Power Supplies



Smart Buildings

Offerings:

- Smart Home
- Building Control
- Door Entry Systems
- Access Control & Security
- Emergency lighting & Battery Systems
- Wiring Accessories
- Industrial Plugs & Sockets
- DIN-Rail products
- Distribution Enclosures



Calvary Adelaide Hospital, Australia
Solution: Building Automation solutions

Smart Power

Offerings:

- Breakers & Enclosures
- NEMA Enclosed Products
- Motor Starting & Safety
- Power Protection
- Switches & Fusegear



Chengdu Tianfu International Airport, China
Solution: Energy efficiency

Service

Offerings:

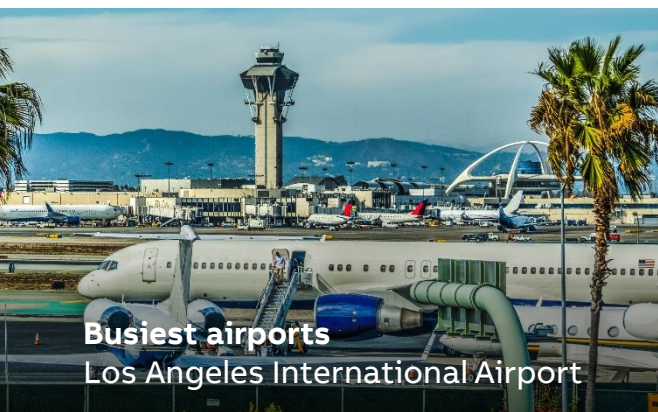
- Installation and commissioning
- Training
- Spares and consumables
- Maintenance
- Repairs
- Engineering and consulting
- Lifetime extensions
- End of life service
- Replacement
- Advanced services (Smart Assets Management)



AstraZeneca pharmaceutical manufacturing, Sweden
Solution: Retrofitting electrical assets

Our products and solutions are all around us

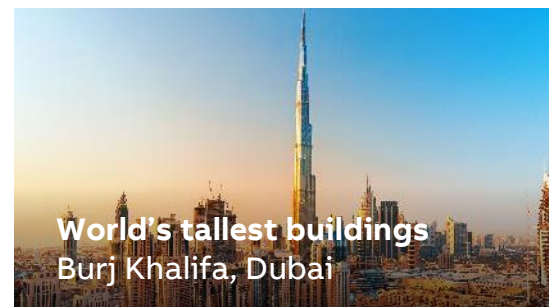
Supporting some of the world's largest, highest, and most extreme projects



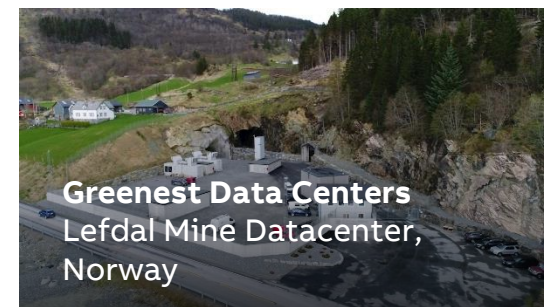
Busiest airports
Los Angeles International Airport



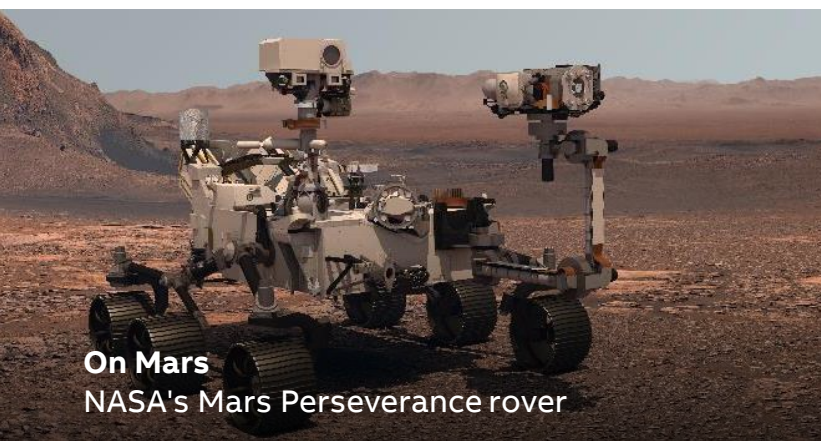
Most efficient yachts
Maid of the mist, Niagara falls



World's tallest buildings
Burj Khalifa, Dubai



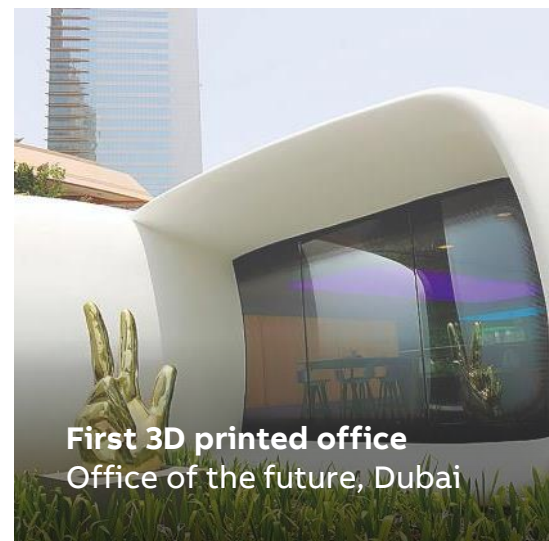
Greenest Data Centers
Lefdal Mine Datacenter,
Norway



On Mars
NASA's Mars Perseverance rover



Fastest EV Chargers
ABB Terra 360



First 3D printed office
Office of the future, Dubai



World's oldest metro system
London Underground



Explore our digital solutions



Data-driven insights enable our customers to reduce costs, increase comfort, and drive efficiency.

With our ABB Ability™ solutions we empower our customers to drive their digital transformation by electrifying in a **safe, smart, and sustainable way.**

ENERGY MANAGEMENT

ASSET MANAGEMENT

E-MOBILITY

BUILDING MANAGEMENT

Find more about our products and solutions with ABB Connect

The digital assistant for all your electrification needs



Find the **latest product** details

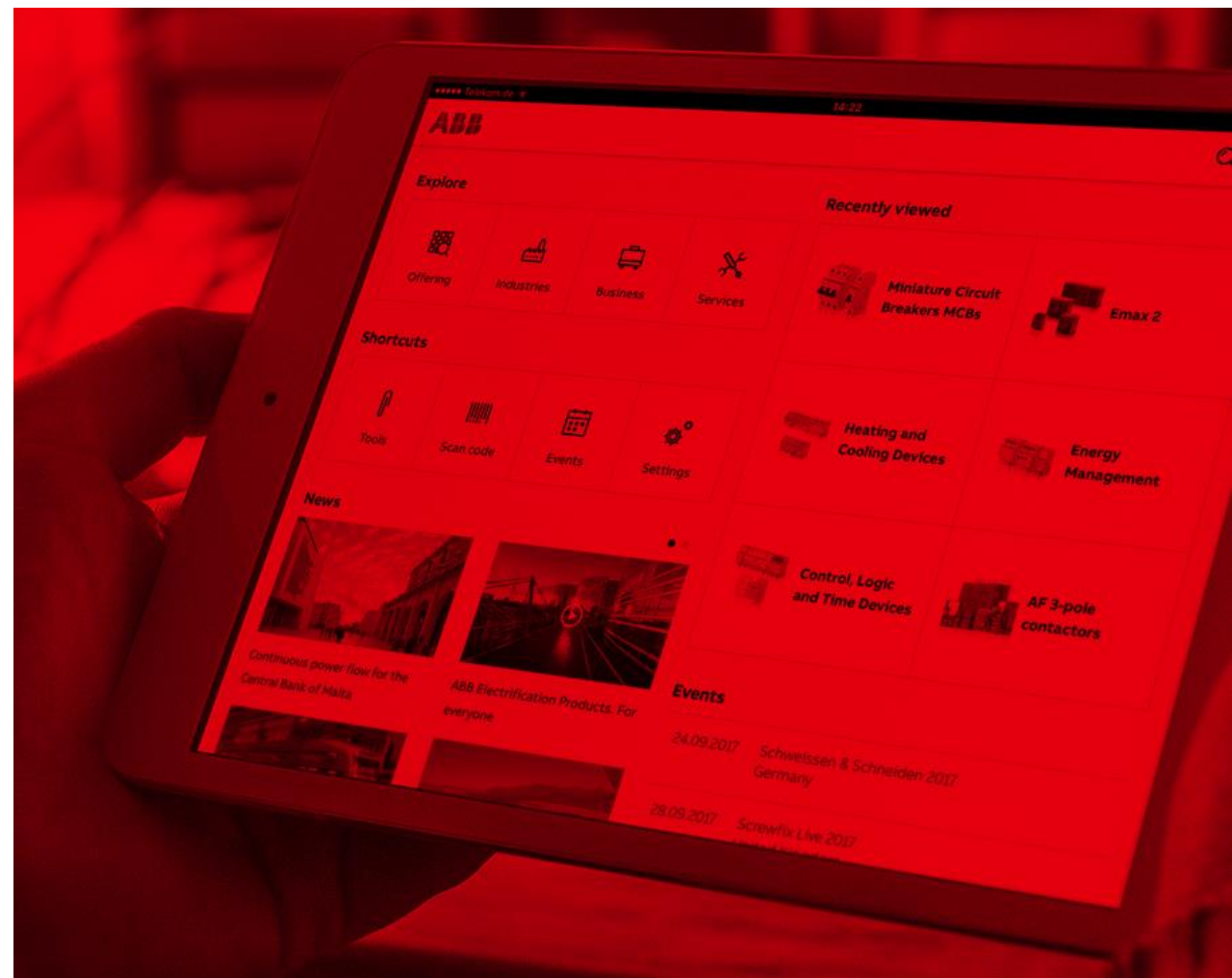
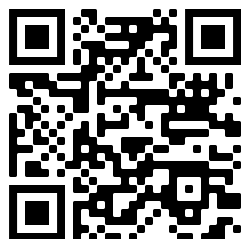


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the QR code





Sustainability



Committed to sustainability

Across our own operations and supporting our customers' sustainability goals



Enabling a low-carbon society



Reducing emissions in industries
ABB Ludenscheid factory, Germany



Eliminating harmful greenhouse gases
Ljusgarda Farm, Sweden



Reducing emissions in mobility
Qbuzz, Netherlands

Preserving resource



Zero-waste to landfill
ABB, Frosinone factory, Italy



Recycled plastic
Used for manufacturing Surface Mounted Junction Box



Design for closing resource loops
ABB MegaFlex™ DPA UPS systems

Driving social progress



Jürgen Dormann Foundation
for Engineering Education



ABB and ICRC
helping those in need



United Nations (UN) Women's Empowerment Principles
Committed towards promoting gender equality

ABB EcoSolutions™

Leading the way to the circular economy

Together with our customers and partners, ABB is innovating to make circular, more sustainable solutions and operations a reality. ABB's EcoSolutions provides full transparency of environmental impacts across a product's entire lifecycle.

go.abb/EcoSolutions



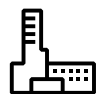
Making the case for energy efficiency



The global population is expected to rise to **9.7 billion** by 2050



The global economy is expected to **double** over the same period



Urbanization, and the rise of living standards will increase the **demand for energy**



Energy efficiency can drive **more than 40% reduction** in emissions in the next 20 years



Critical processes can't stop, but need to be energy efficient to **reduce CO₂ emissions**



ABB energy efficiency solutions can help customers reduce their energy bills and overall operating costs by **up to 30%**

www.energyefficiencymovement.com



Electrifying the world in a safe, smart and sustainable way

Stories from around the world



1 Finch West Light Rail Transit line
Canada



2 Volvo LIGHTS project for electric trucks
USA



3 UFV Vale Formoso and UFV Paraisópolis solar projects
Brazil



4 Sasol's petrochemical plant
South Africa



5 Grand Tower Frankfurt
Germany



6 Delhi International Airport
India



7 Kunshan Jinqiao Data Center
China



8 Te Papa National Museum
New Zealand



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in a safe, smart and
sustainable way

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