



ABB Ability™ Electrification Smart Power

Power and Productivity through IoT

James Kelly, Smart Cities 14/05/19



ABB Ability™ – Electrification Smart Power

Presentation Overview

The Transmission and Distribution Systems

LV and EVI IoT Connected Infrastructure

IoT Microgrids – Stronger through Connectivity

The Transmission and Distribution Systems

Pillars of the Energy and Industrial Revolutions

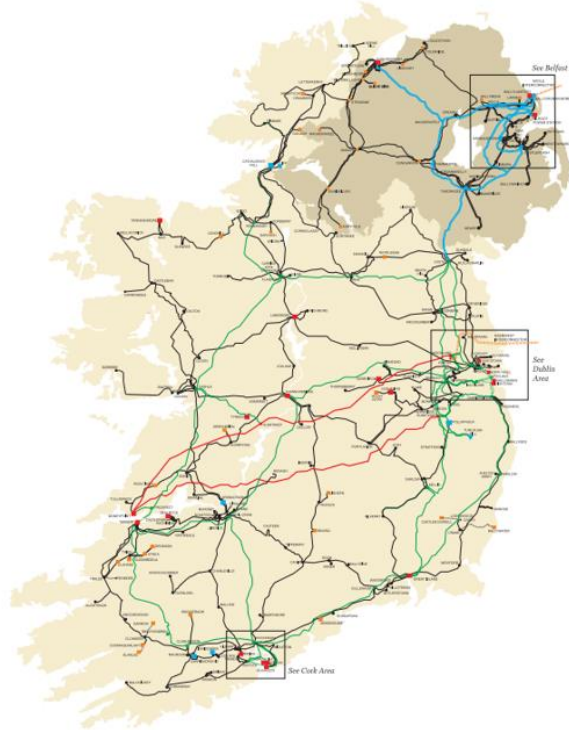
The Transmission System

Intelligent Planning and Operations to unlock green energy

Innovation and Engineering Excellence



Real Time Control of the Energy Highways



To Unlock Green Energy



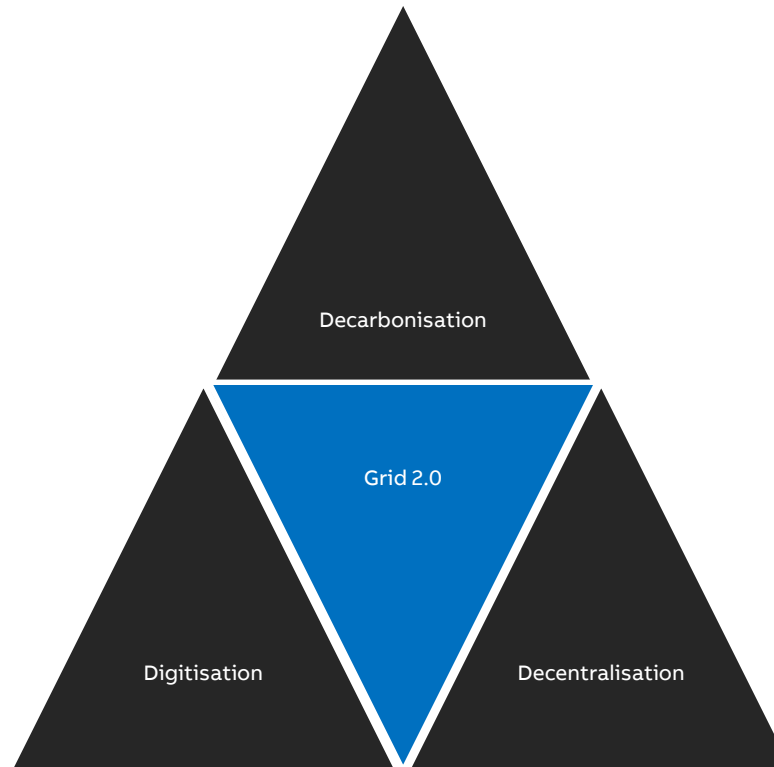
The Distribution System

Facilitating an Active Distribution Network

World Leading Distribution System



The Energy Revolution Driven by the 3 D's



Facilitation of the Smart Grid to the End User

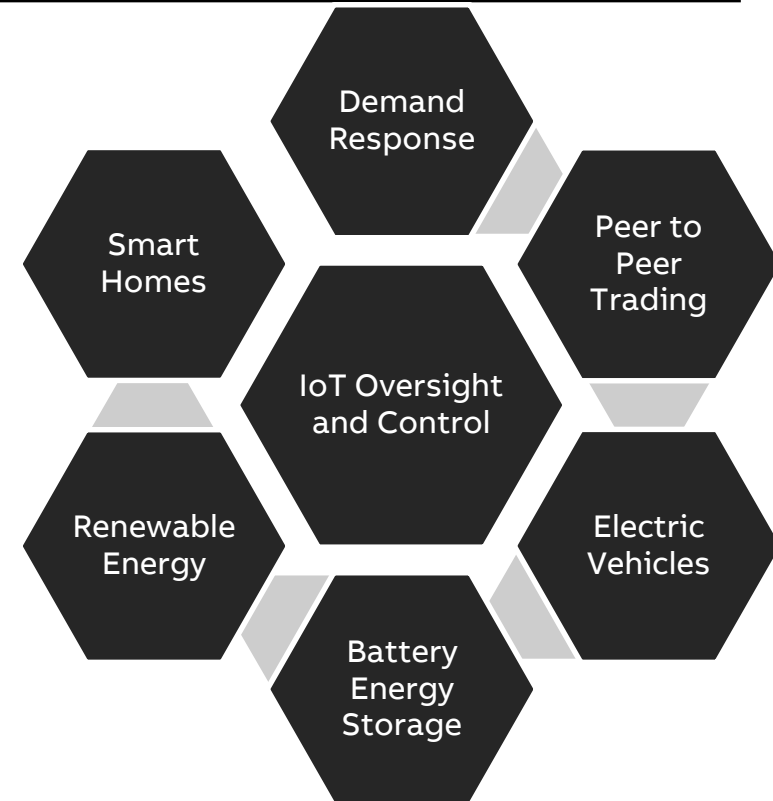


ABB Ability™ – LV IoT Connected Infrastructure

Connecting Intelligent Hardware to the Cloud to form IoT networks

ABB Ability™ - The Internet of Things (IoT) and the Cloud

The Internet of Things (IoT) and the Cloud. Helping us to do things better

Key Point: IoT devices can talk, the cloud takes the data from IoT devices and processes it into Information through Applications

ABB Emax 2 – an IoT Device

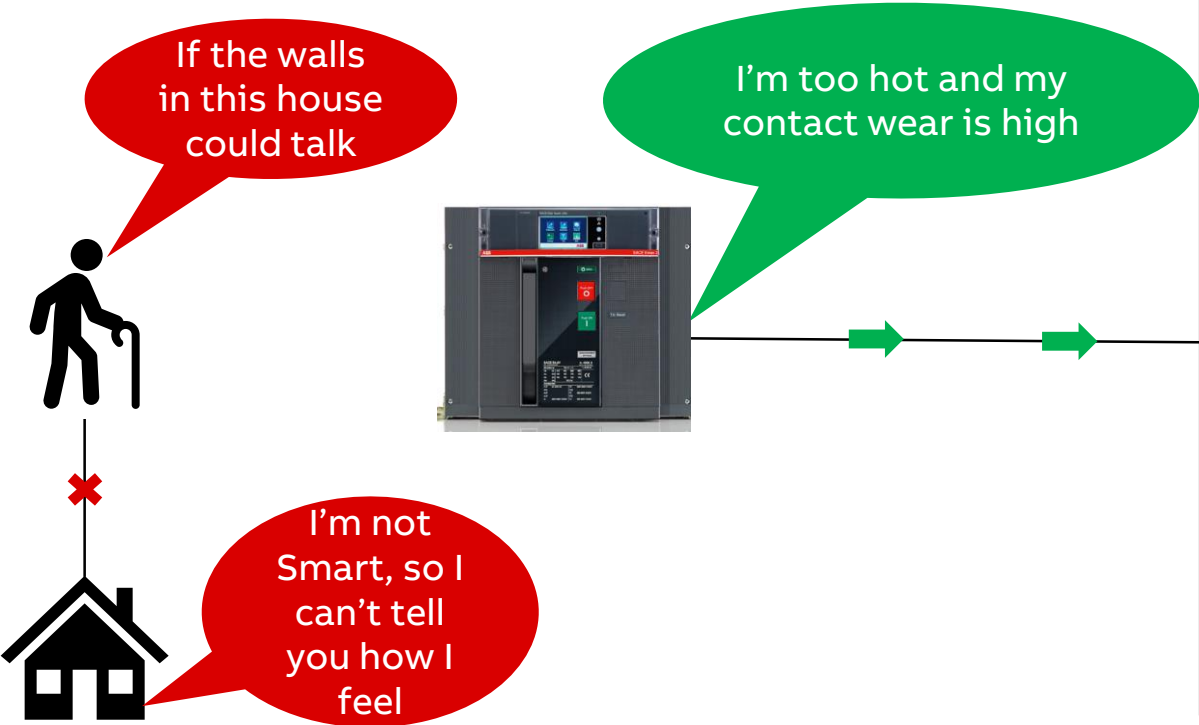


ABB Ability lives on the Cloud

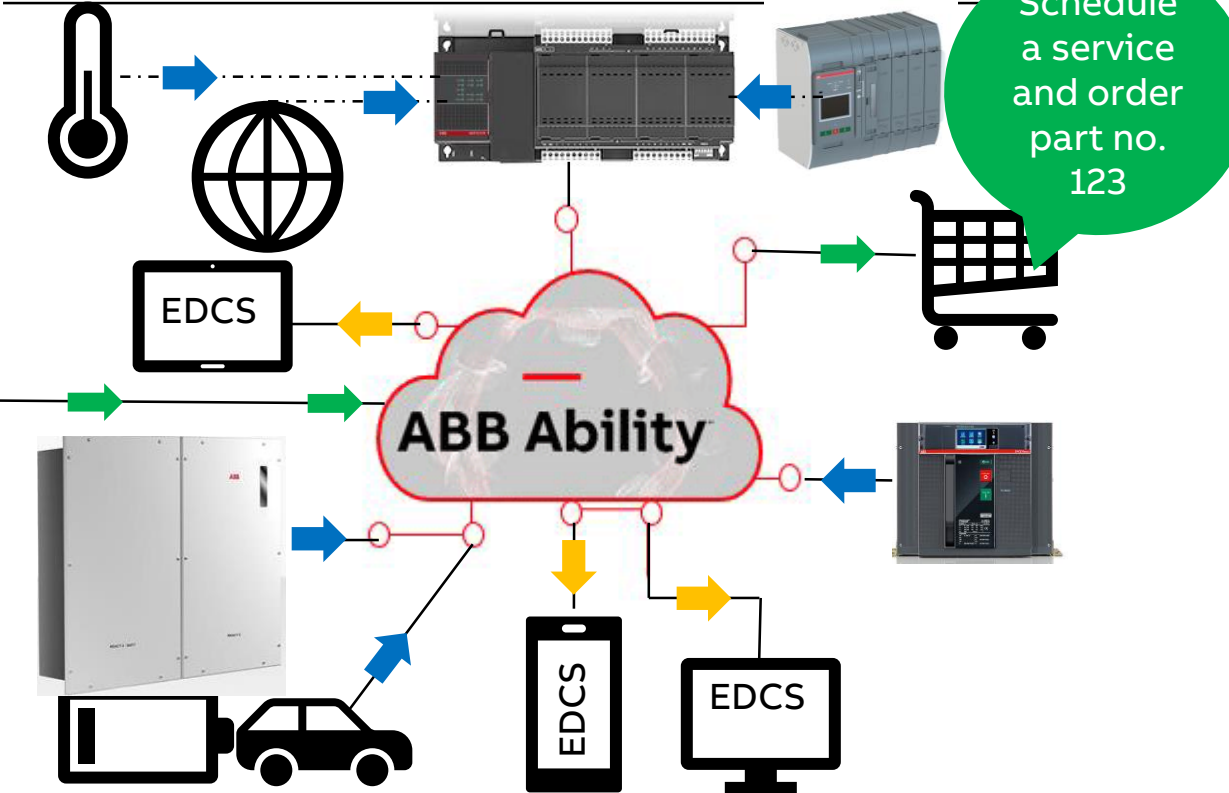


ABB Ability™ - The Internet of Things

ABB Ability Connected Services with the ABB Terra 54 DC Fast Charger

The Terra 54 Charger



I'm due a service

Authorise User?

Initiate Demand Response

Reservation confirmed

The Cloud Interface

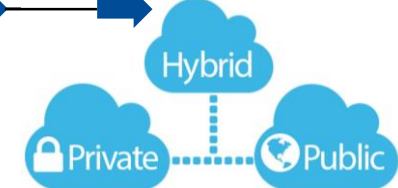
ABB Ability

Consumer Functionality



Charger Management Functionality

Grid-side Functionality



Remote Control Centre

Reserve a CCS charge session at location X from 15:30 to 16:05

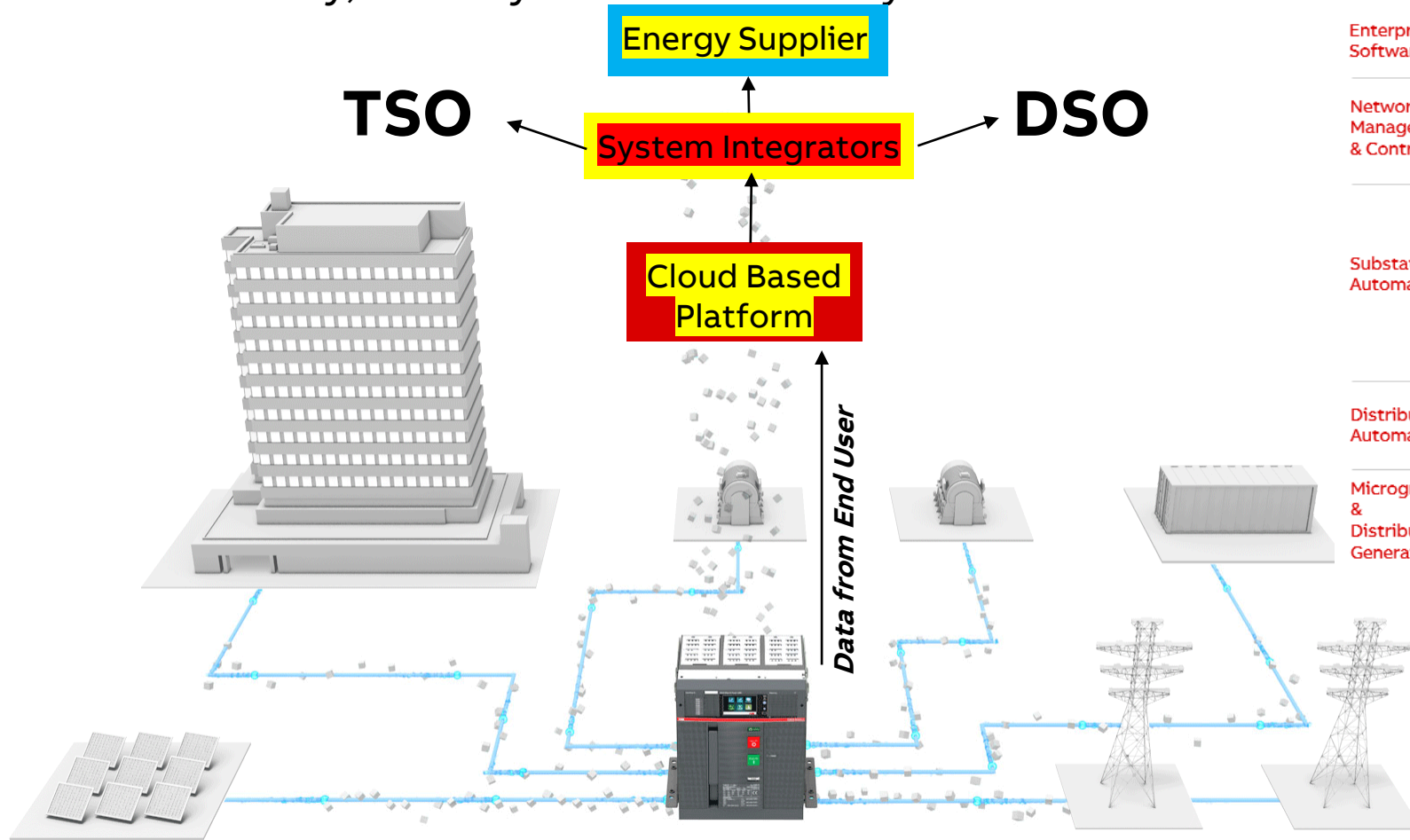


ABB Ability™ – IoT Microgrids

IoT facilitating a secure Ecosystem, and Active Participation by the End User

ABB Ability™ – Low Voltage Control and Oversight

IoT for Connectivity, Security and Sustainability



Industries

Enterprise Software

Network Management & Control

Substation Automation

Distribution Automation

Microgrids & Distributed Generation

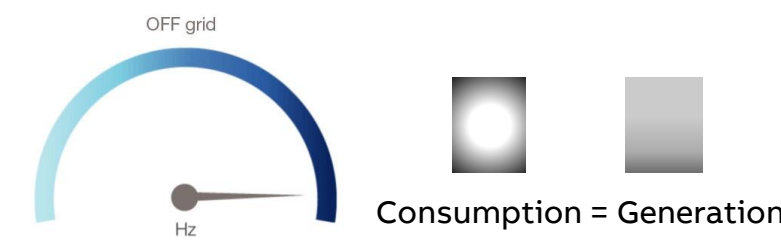
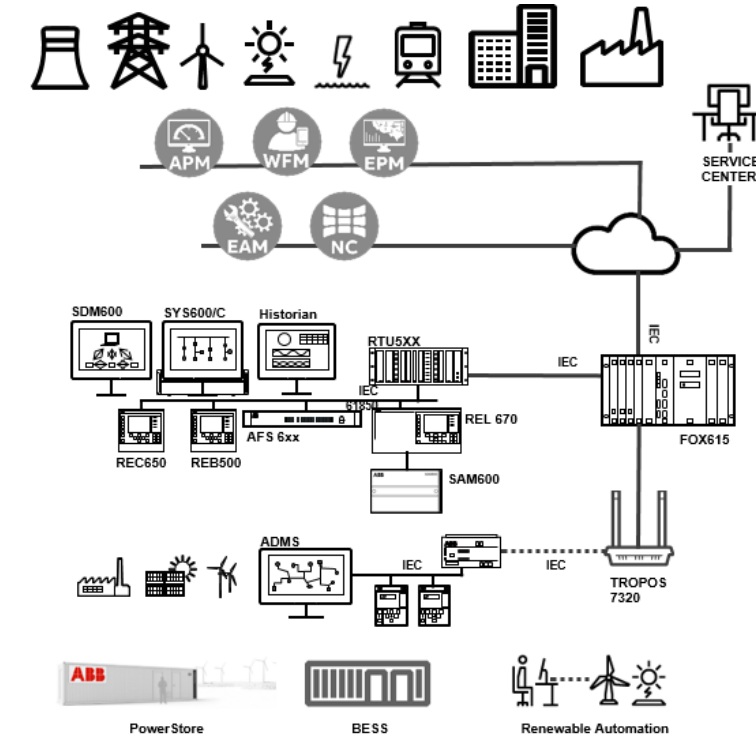
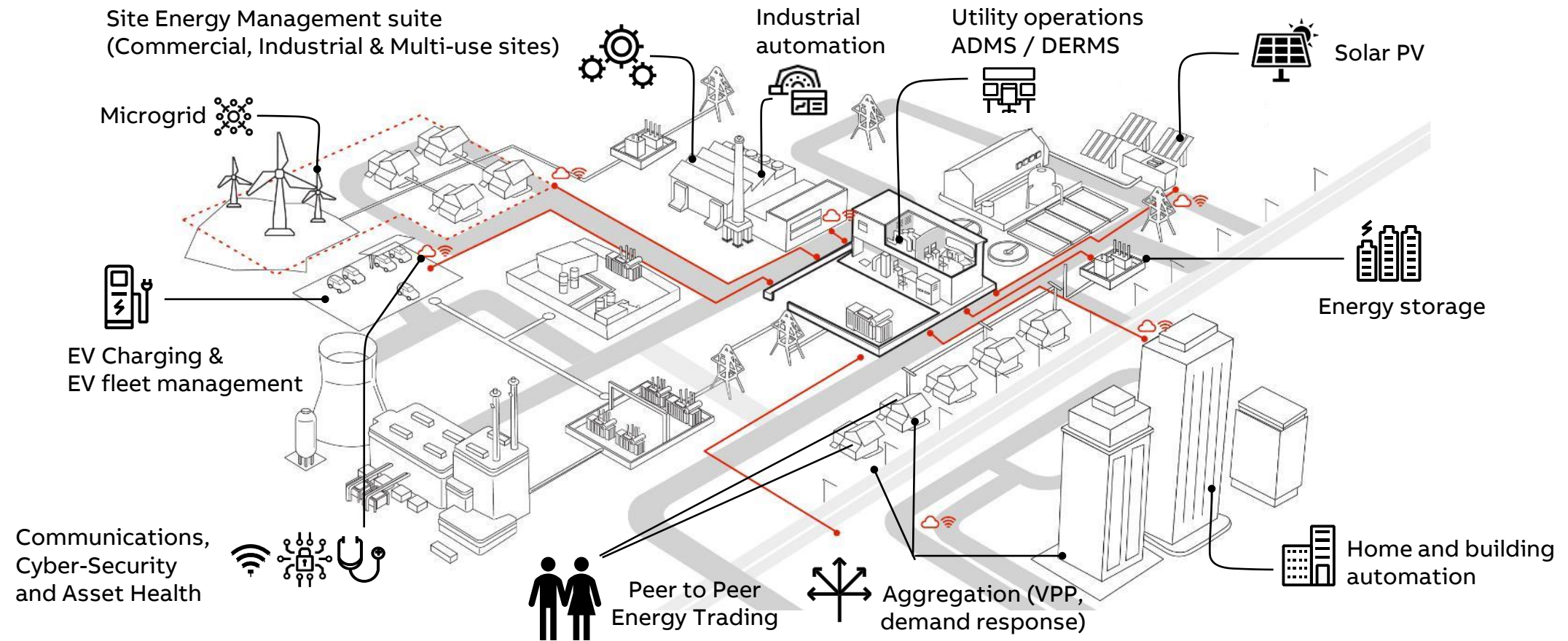


ABB Ability™ in Grid Edge Technologies

Enabling new economic opportunities while improving reliability and performance



ABB