

ABB ELECTRIFICATION SVERIGE

# Vi skapar säker, smart och hållbar elektrifiering – för alla

EDCS för Voltimum -2020



## Megatrenderna som formar elektrifieringens framtid

Världen blir mer digital, urbaniserad och elektrifierad

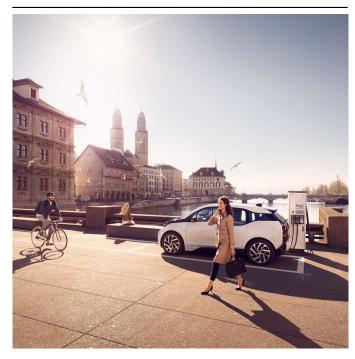
#### **Digitalisering**



### **Urbanisering**



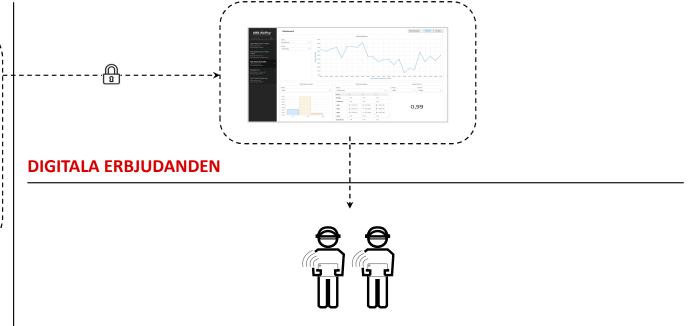
### **Elektrifiering**



## **ABB Ability**<sup>TM</sup> **Electrical Distribution Control System**

#### **SMART CONNECTED PRODUCTS**

#### **ABB ABILITYTM PLATFORM**



**ABB Ability**<sup>TM</sup> **Electrical Distribution Control System** ABB Ability $^{\text{TM}}$ or 3<sup>rd</sup> party Solutions **APIs** Architecture ABB Ability™ **MV** relay **Electrical Distribution Control System** Ekip Temperature Com sensors Hub CSS **ACB** МССВ **ATS Ekip UP** |8|8|8 **SWITCHBOARD** Ekip E-Hub **EQmatic ENERGY & POWER FUSEGEAR METERS** MCC **POWER** 3RD PARTIES **FINAL DISTRIBUTION PANELBOARD** LOAD **CONTROL SAFETY SUBMETERING CENTER PANEL SWITCH** 

## **ABB Ability**<sup>TM</sup> **Electrical Distribution Control System**

## **Energy Management**







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## **Monitoring and Audit**



### • Datainsamling

- Start collecting data of energy from sources to loads
- Create an accurate baseline in terms of consumed energy and electrical system.
- Visualize the load and process baseline consumption





## Analys

A generated report will identify potential savings on:

- Energy Inefficiencies
- Penalties
- Operating costs
- Constraints



#### **B** Sätt mål

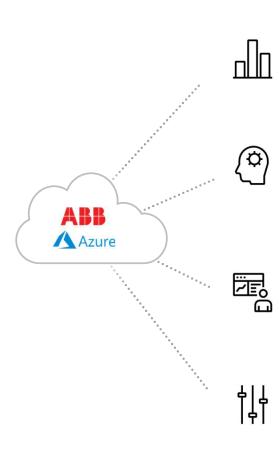
- Identify reference target and expected behaviors
- Estimate current CO2 emissions
- Provide Energy Consumptions targets



Target Set



## ABB solutions ensure efficient energy management



#### Real time view of Energy flow

• EDCS offers a open platform for energy distribution. The platform is open for any 3<sup>rd</sup> party to utilize for energy optimization purposes.

#### **Predictive maintenance**

 EDCS gathers data from your electrical distribution system, analyses how the equipment is used and provides state-of-the-art recommendations for optimized maintenance.

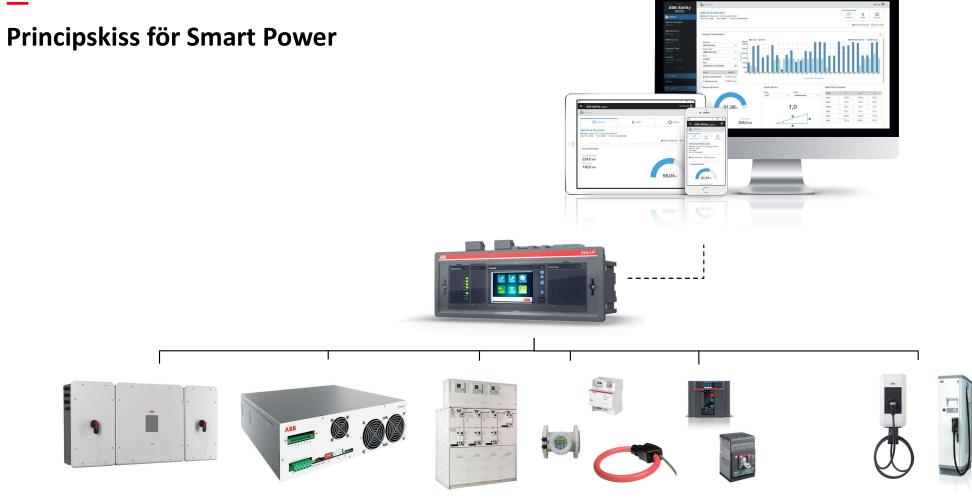
#### **Asset Management**

• EDCS provides an overview of the installed base, pin points all necessary data and gives information when the system needs your attention

### **Logic control**

• EDCS lets you implement rules and restrictions in the electrical system to ensure that you meet your strategic targets.







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# **Energy Management Commercial Building**



#### **Plant**

**EMAAR** 

Burji Kalifa, UAE 66 LV switchgears, 400+ Emax



#### **Customer needs**

Reduce routine time based maintenance costs and move towards predictive maintenance.



#### **Digital offering**

Plug'n'play upgrade of installed Emax towards ABB Ability™ EDCS to enabled predictive analytics, with Ekip UP devices and Emax+PR122.

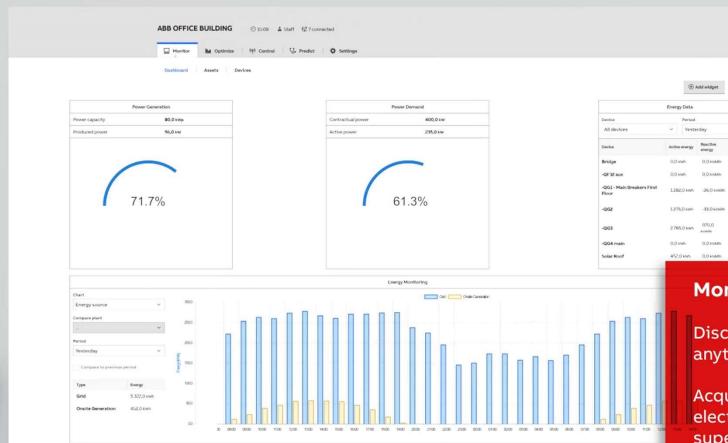
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The ABB system provides managers and service teams with real time data on energy, power, temperature, current, voltage, temperature, harmonic, and power quality plus backup safety protections."

- ✓ Ekip UP can digitalize any LV breaker with metering, control and protection, and connectivity to ABB Ability™ EDCS.
- ✓ ABB Ability™ EDCS offers several analytics, also about power forecast.
- ✓ ROI < 3 years



ABB Ability™ Electrical Distribution Control System



#### **Monitor**

Discover plant performance anytime, anywhere

Acquire deep knowledge of electrical performance through supervision of real-time power production and demand, peak trends, power factor and power quality information

