Give your buildings a new dimension
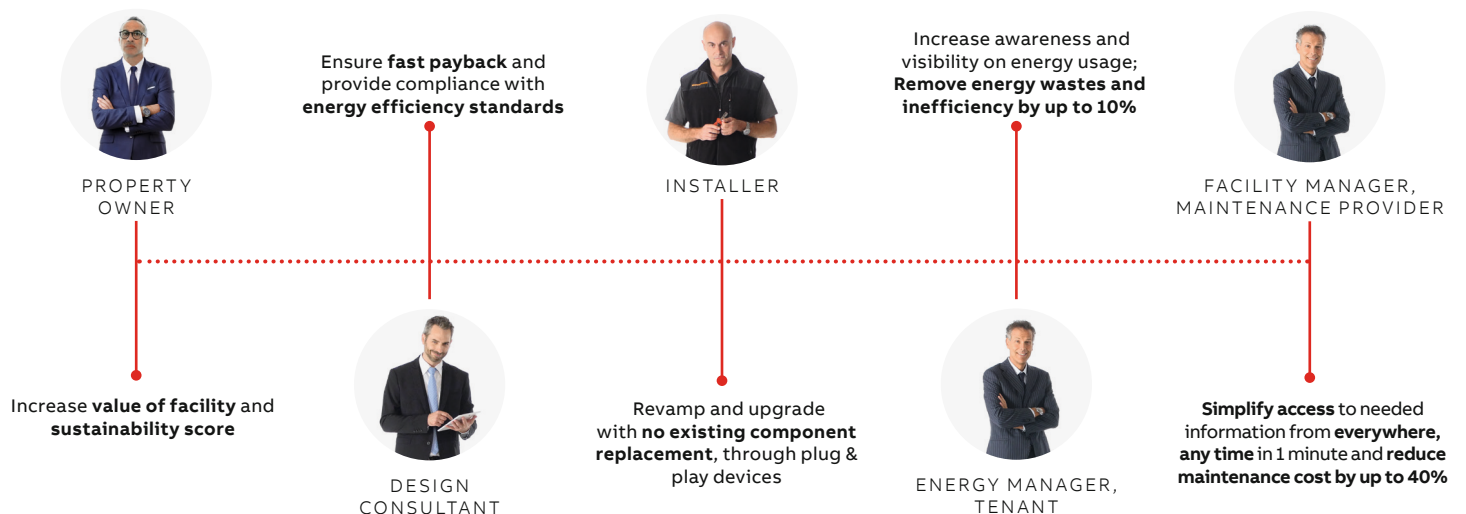## Saving costs by revamping public buildings

"Give your buildings a new dimension" allows retrofitting existing installations in public buildings and brings tangible advantages by leveraging digital services.

Use case description

One fifth of all carbon dioxide emissions are caused by public buildings.

The great majority of them is deemed energy inefficient and not compliant to consistently arising energy efficiency standards and regulations. Revamping old buildings can bring considerable advantages in terms of savings and sustainability.

Moreover, more and more cities are working to become smart: their digitalization starts turning buildings and infrastructures smart. Existing facilities should be connected easily, minimizing downtime to none, while improving service continuity, and operational costs optimization. No major changes or impacts on the apparatus installed in existing power distribution system is expected.

Ensure **fast payback** and provide compliance with **energy efficiency standards**

Increase awareness and visibility on energy usage; **Remove energy wastes and inefficiency by up to 10%**

PROPERTY OWNER

INSTALLER

FACILITY MANAGER, MAINTENANCE PROVIDER

Increase **value of facility** and **sustainability score**

DESIGN CONSULTANT

Revamp and upgrade with **no existing component replacement**, through plug & play devices

ENERGY MANAGER, TENANT

Simplify access to needed information from **everywhere, any time** in 1 minute and **reduce maintenance cost by up to 40%**

**"Give your building a new dimension" ABB solution**
In this scenario, the Ekip UP collects data from field devices. The Ekip UP is connected to the breakers and, via an Ethernet switch, to the Ekip Signalling.

The breakers measure energy and power quality, while Ekip Signalling modules send information about status, alarms and the number of operations.

The CMS-700 in the panel is responsible for branch monitoring and is connected to the Ekip UP via Modbus TCP/IP collects. It is also possible to control and check status of MCBs through Ekip signalling, connected to the same switch of the CMS-700.
This data, together with information collected by the Ekip UP, then goes to the cloud and is made available on ABB Ability EDCS for further analysis.

Suggested connection diagram
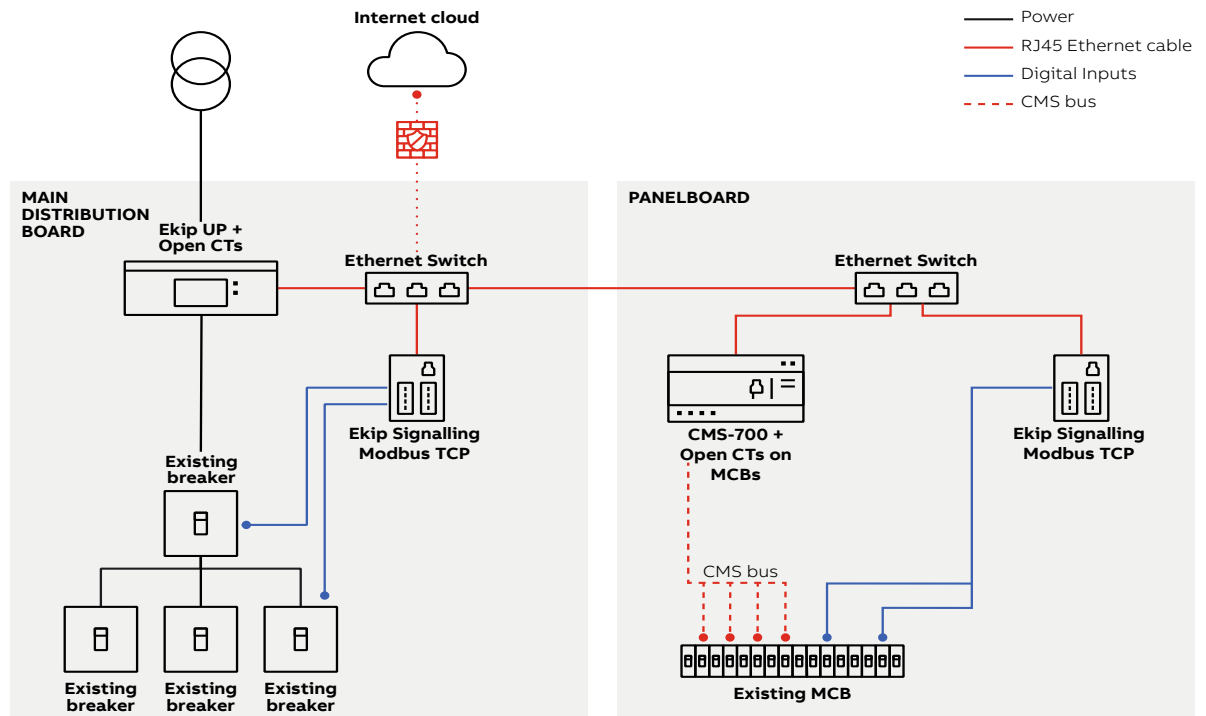
Shopping list

Components		What it does	Quantity	Additional information
Connection to the system	EKIP UP	Data collection from field devices and access point for communication to the cloud	According to number of lines to be monitored	Click here for more information
	CMS700	Control unit and sensors for branch circuit monitoring	According to number of lines to be monitored	Click here for more information
Connected devices	EKIP SIGNALLING	Collects states, alarms and number of operations from protection devices, performs control through digital outputs	According to number of protection devices to be monitored and controlled	Click here for more information

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