

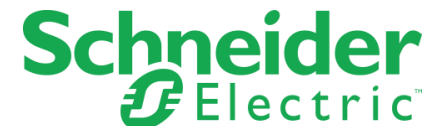
Sistemas de Supervisión Energética

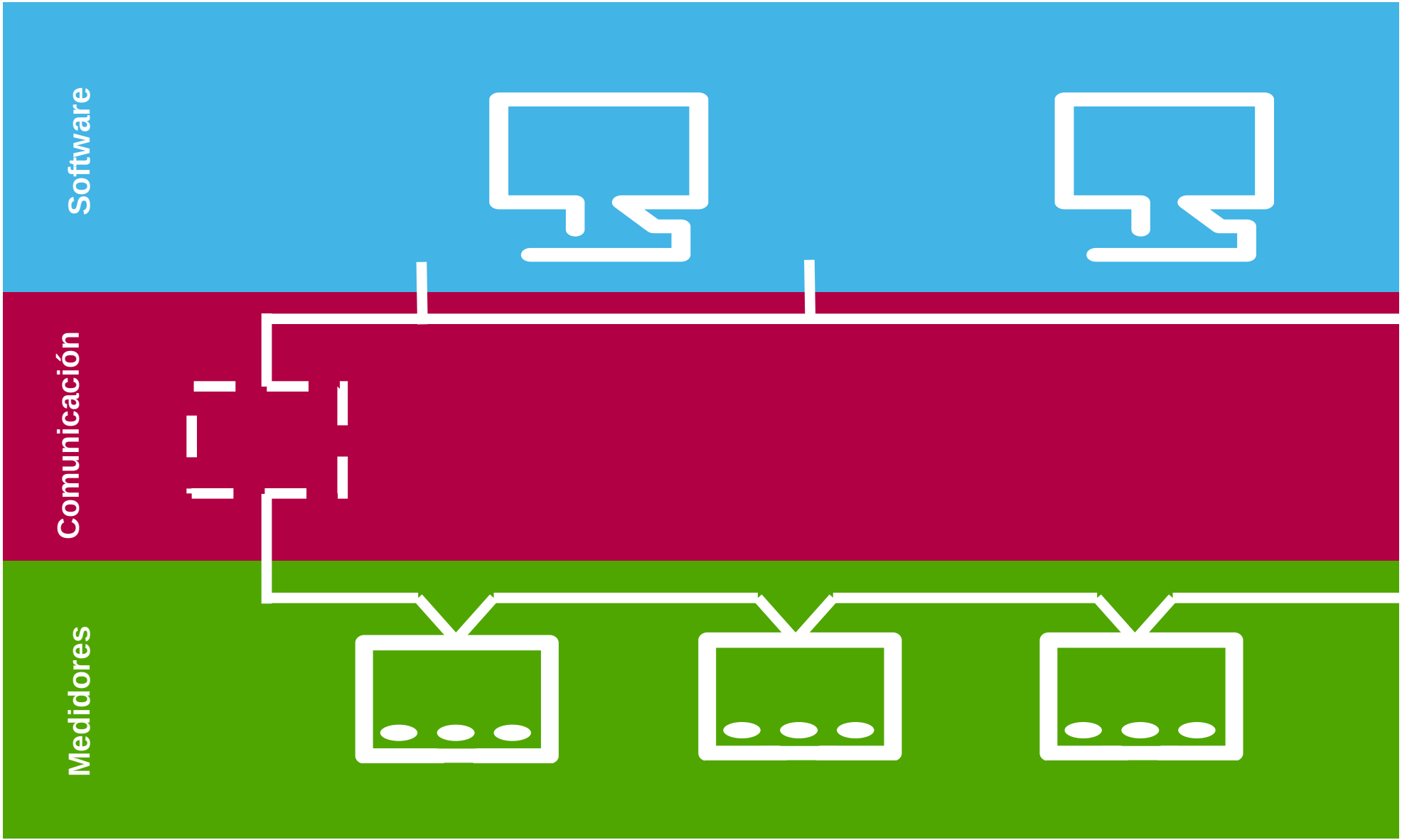
Equipos de medida y arquitecturas Tipo

Noviembre 2014

Adrià Casas Gimeno

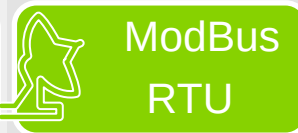
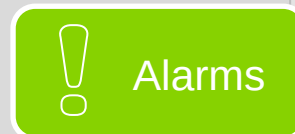
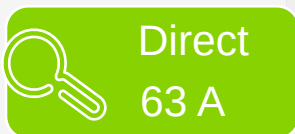
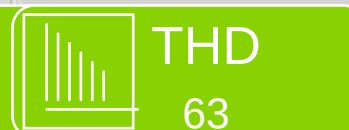
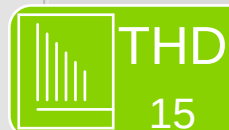
Energy & Sustainability Services, Schneider Electric





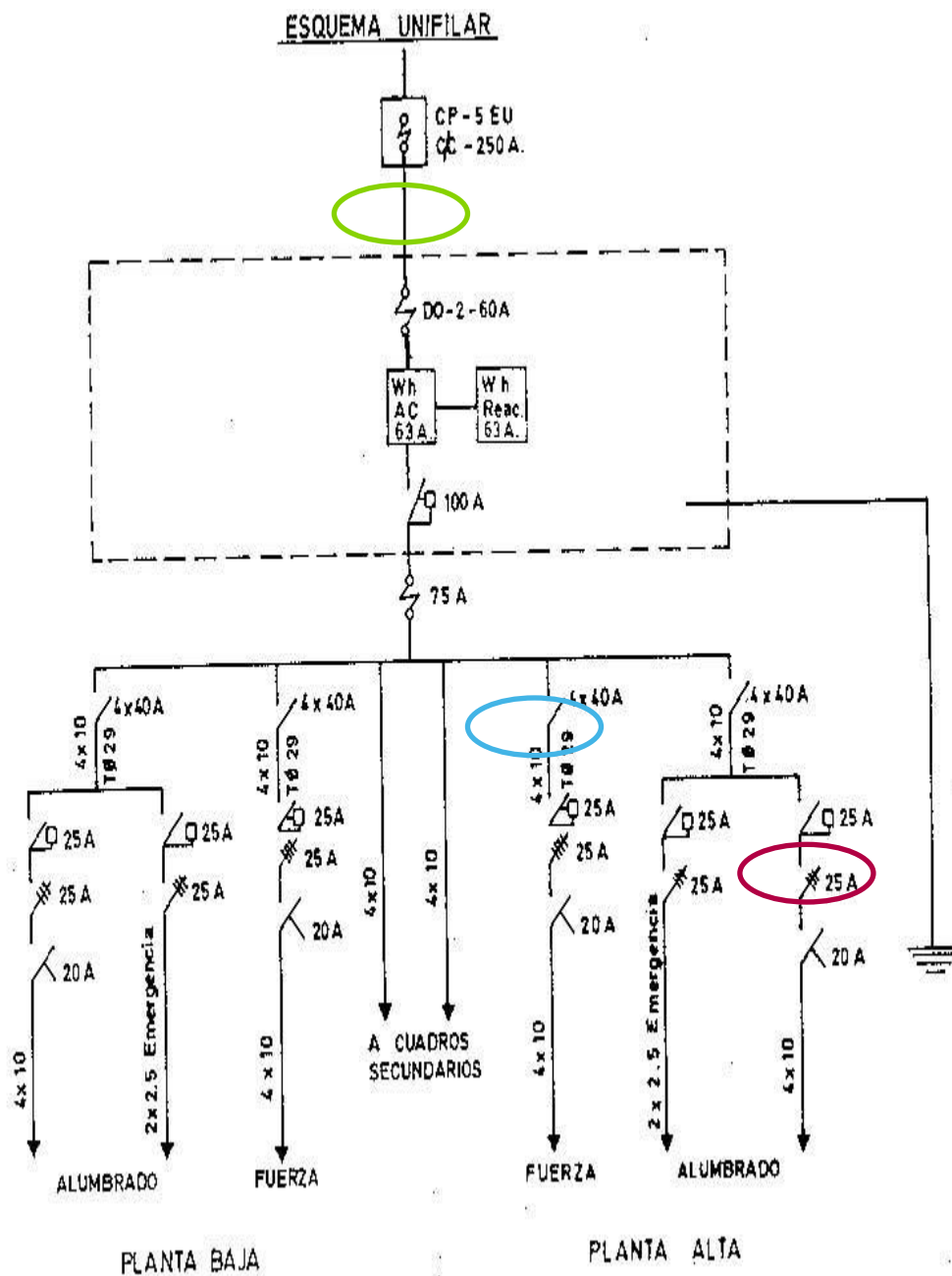
Medidores

Contador Energía		Central de medida						
Elemental		Básica		Media		Avanzada		
IEM2000	IEM2000	PM1000	PM3200	PM5100	PM5300	PM5500	PM850/70	ION 7650



WAGES

Agua	Aire	Gas	Vapor	Energía/Calor
				
 Pulse Out	 4..20mA  ModBus RTU	 Pulse Out  M-Bus	 Pulse Out  4..20mA  ModBus RTU	 ModBus RTU  LON



Metering & Submetering

•Acometida General:

Nos permite saber el consumo total de nuestro edificio, hacer aproximaciones de la factura, conocer las emisiones de ese edificio (ej: Mix emisiones eléctricas), comparar vs. Edificios similares (ej: retail)

•Procesos/Líneas:

Nos permite comparar procesos (ej: líneas de producción), asignar consumos y costes, definir prioridad de inversiones.

•Equipos:

Nos permite comprobar el rendimiento de equipos, hacer monitorización preventiva, verificar ahorros (ej: IPMVP opción A)

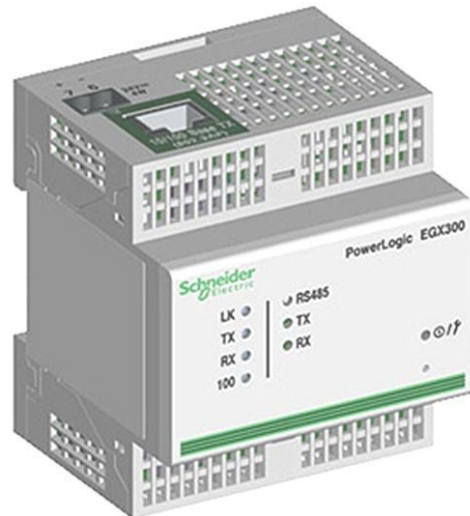
Comunicaciones

Equipos Comunicación

Concentradores y pasarelas

Nos permiten juntar las señales de varios equipos en uno, a través del cuál centralizamos las comunicaciones

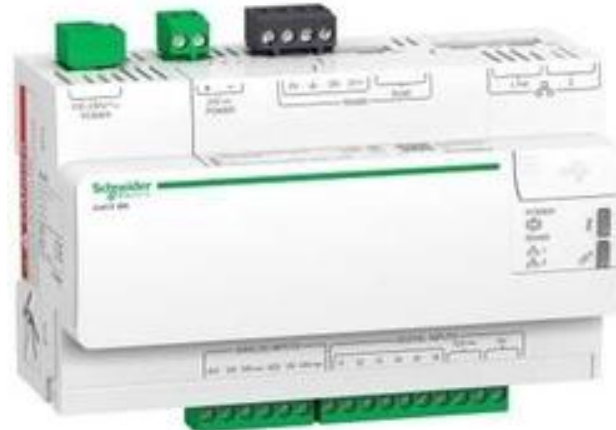
Nos permiten comunicar 2 redes o buses con protocolos distintos



Dataloggers

Nos permiten guardar los datos que se extraen de los equipos.

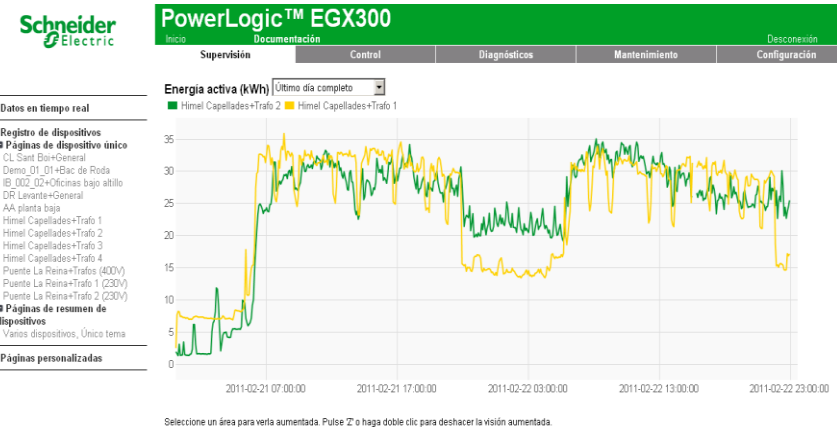
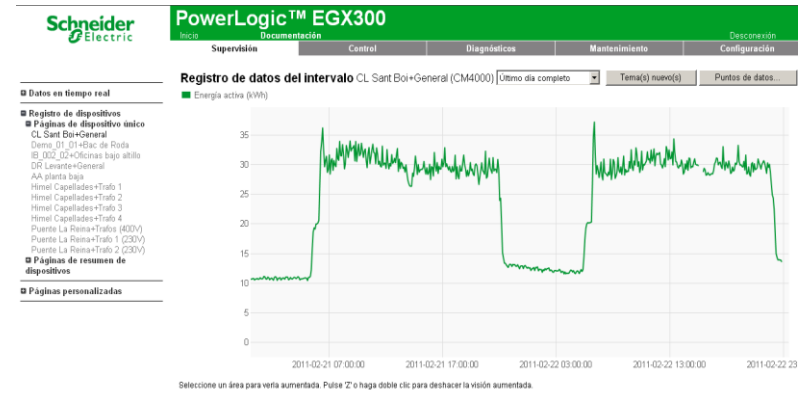
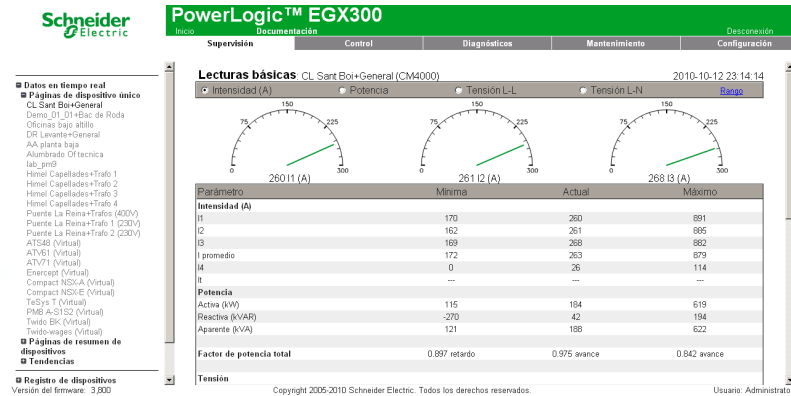
Son maestros en la cadena de comunicaciones



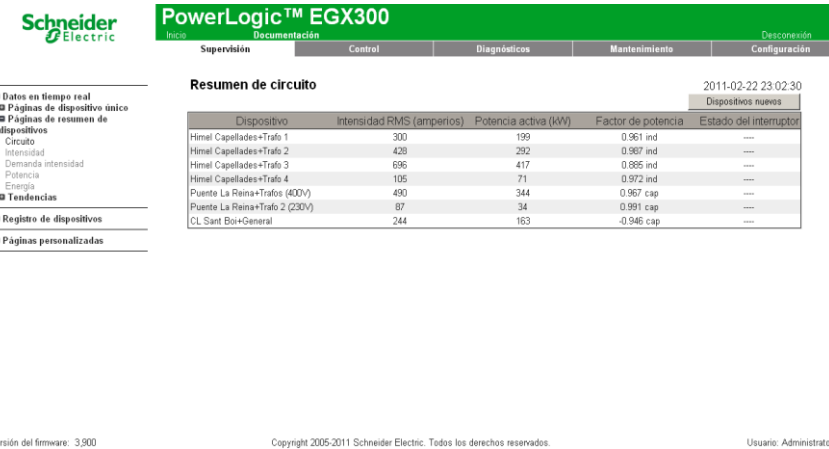
Software

Software

Embebido



Versión del firmware: 3.900

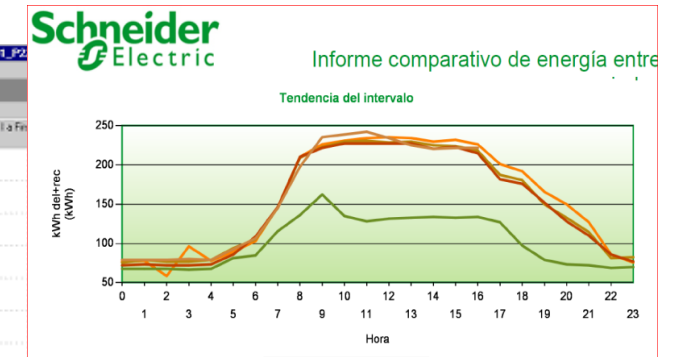
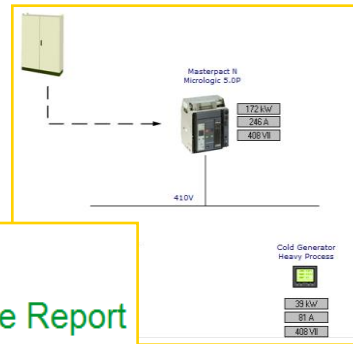
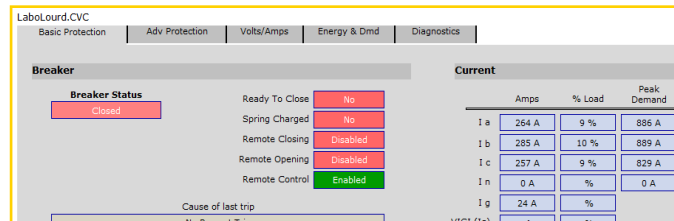


Software

Local



Power Monitoring Expert

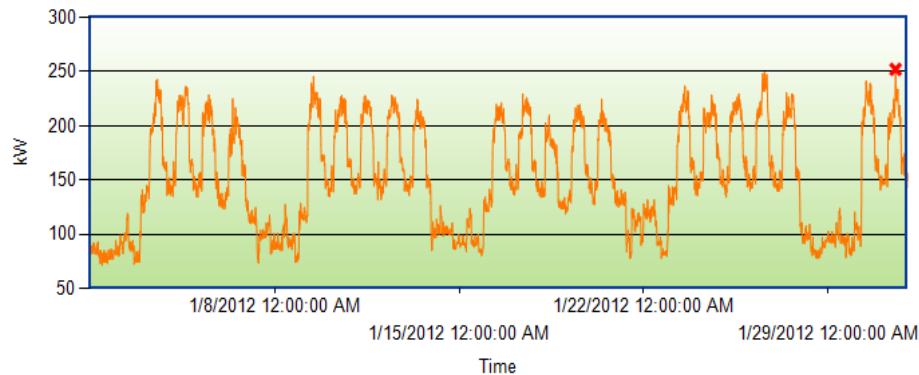


Load Profile Report

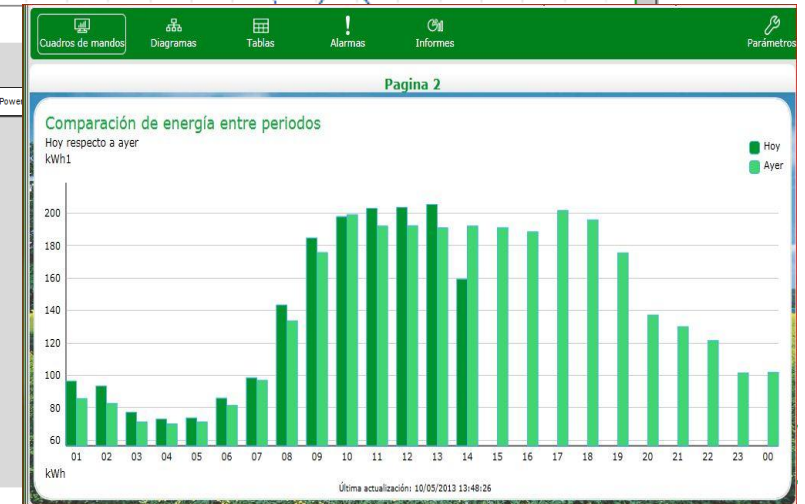
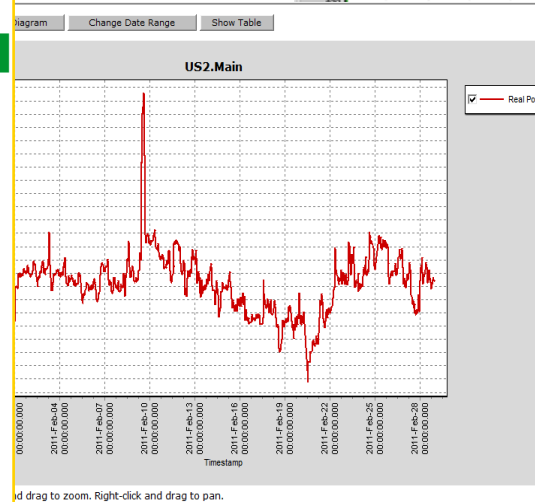
1/1/2012 12:00:00 AM - 2/1/2012 12:00:00 AM (Server Local)

Victoria_Keating.main_7650

Victoria_Keating.main_7650: kW Demand Load Profile



*Maximum Value : 252.2 on 1/31/2012 at 1:15:00 PM

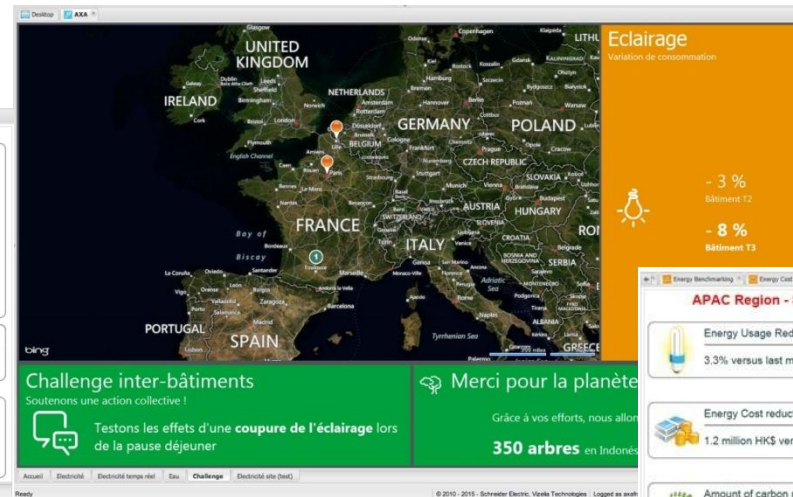


Software

Cloud

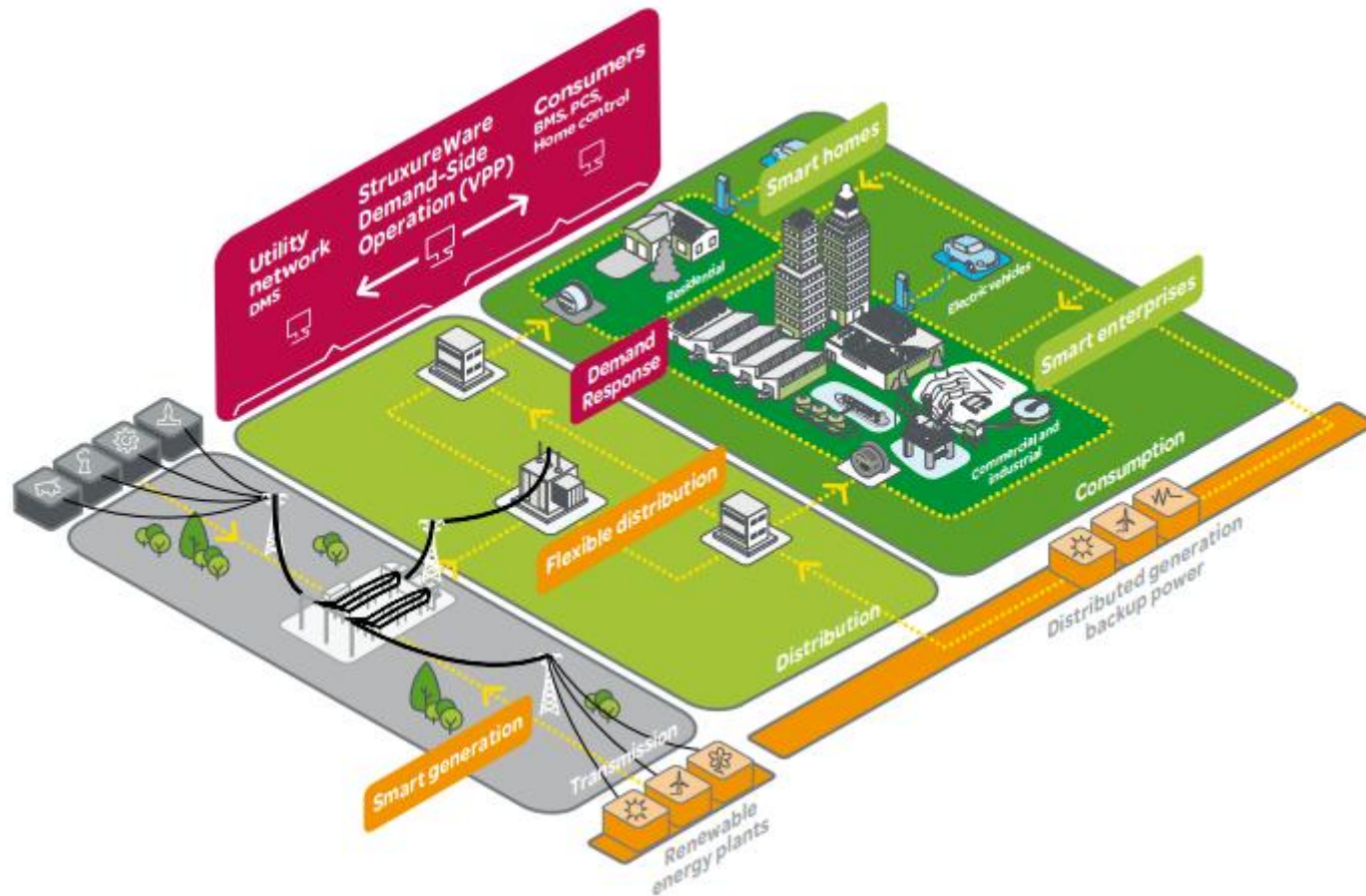


Energy Operation



Smart ...

Smart...



Electricidad



WAGES

Sistemas
cerrados



Sistemas
abiertos
multiprotocolo

Gestión
local



Gestión
multisite



Demanda



Consumo



Emisiones



Mantenimiento



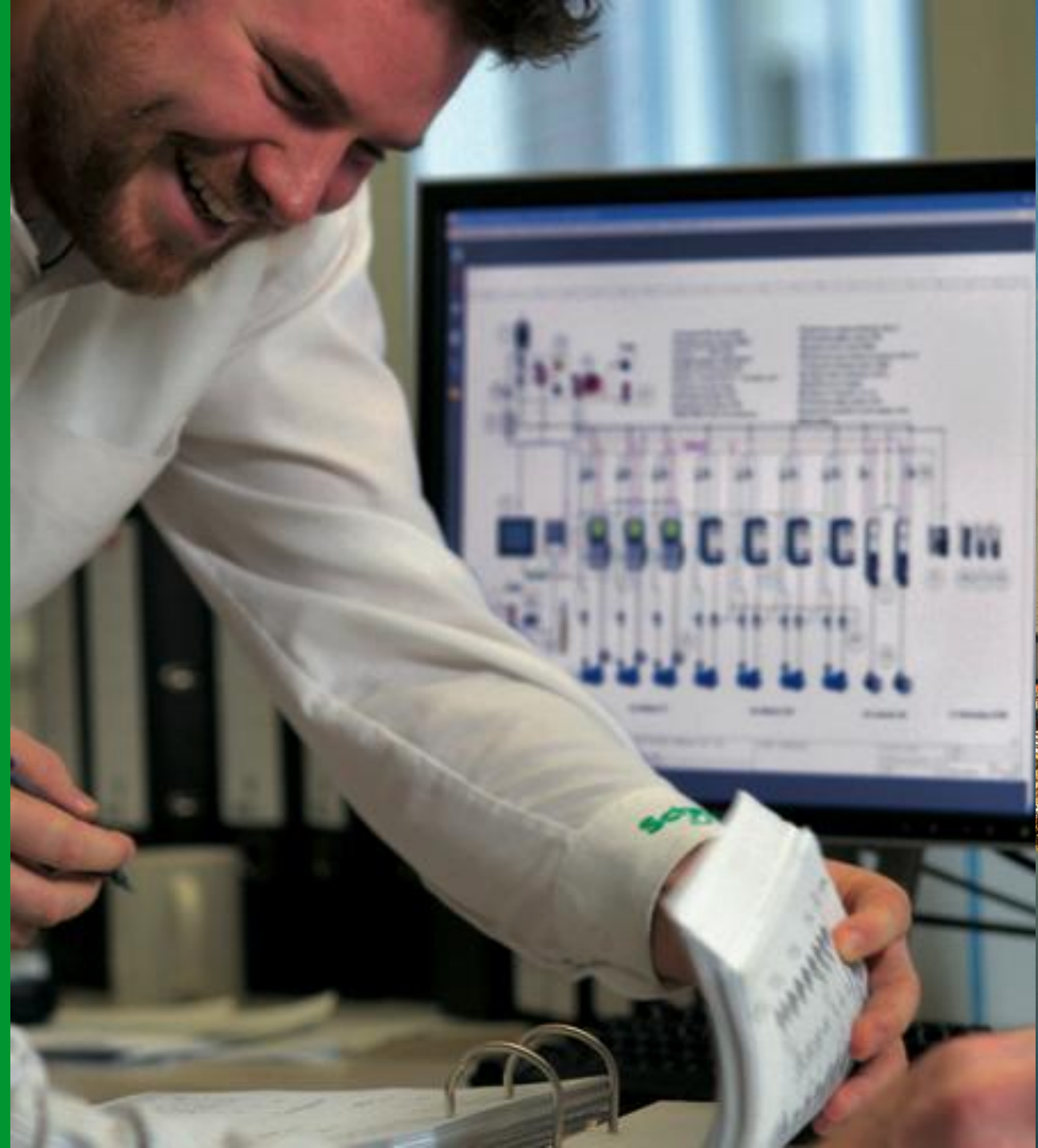
Gestor Energético



Empresa



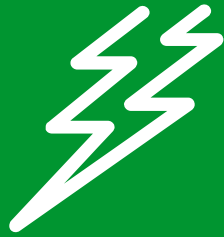
Social



From smart devices through to big data, we provide our customers with services, systems and technology to:



Reduce energy
consumed



Reduce cost
per kWh



Reduce CO2
footprints



Reduce
operating
expenditures



Realize
measurable
efficiency



Produce energy
locally across
the grid

How do we deliver on this promise?

We are:



Global



Innovative



A solution
provider



Green



Reliable

Make the most of your energySM