



# IT and facilities management share joint innovation agenda

University of St. Gallen couldn't see the big power usage picture. Now Cisco® Energy Management Suite helps break new ground in environmental excellence.

“It's like a fog has lifted. We have full visibility and can track every device and how it impacts power usage at different times of the day. And we can do that across all 30 of our buildings.”

Dr. Kurt Städler, Head of IT Infrastructure, University of St. Gallen

With the Cisco Energy Management Suite, University of St. Gallen staff can track, control, and reduce energy usage citywide across 42 institutes and 30 buildings.

## Challenges

- Sharpen energy reduction strategy
- Maximize carbon and cost savings

The facilities management team at the University of St. Gallen found innovative ways to reduce the institution's carbon footprint and raise its energy efficiency. The positive impact was instant but limited mainly to building management systems with visible dials and meters. The missing piece of the jigsaw was being able to remotely manage and monitor energy usage as a whole, rather than physically viewing each piece of equipment singularly.

Dr. Kurt Städler, Head of IT Infrastructure, says, “That would give us something we weren't able to do before—pursue an effective, long-term strategy for managing all energy-related systems and assets.”

## Case Study | University of St. Gallen

Size: 8400 students and 2750 employees

Location: Switzerland

Industry: Education



Cisco Energy Management Suite means University of St. Gallen staff can track, control, and reduce energy usage citywide across all its facilities.

**Solutions**

- Cisco Energy Management Suite
- Cisco Routers
- Cisco Catalyst switches
- Cisco Unified IP Phones
- Cisco Unified Wireless
- Cisco Unified Computing System (UCS)
- Cisco Nexus Switches

### Gaining energy management visibility

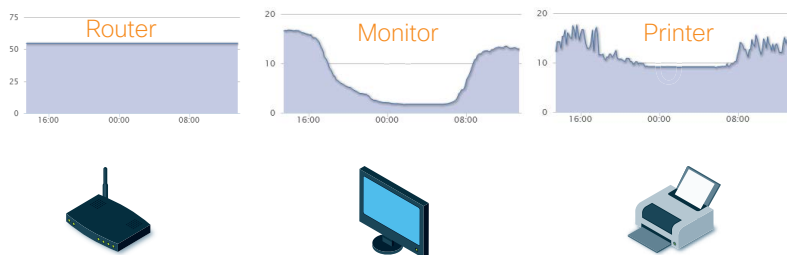
A joint IT and facilities management team was formed. Working toward a three-year horizon, the first stage was to set a baseline by improving knowledge of device usage and testing policy. As part of this phased approach, Cisco Energy Management (CEM) suite was introduced. This allowed the university to tap in to two pools of expertise.

One was Cisco itself. “Our networks and some of our servers are Cisco, so we already had a close relationship,” says Städler. The other was a Cisco partner company. “BORN Green Technologies implemented software that optimizes sustainable business outcomes. It also ensures we get vital updates and ongoing support,” Städler adds.

### Impact tracking brightens facilities

So far, the system has connected 6400 devices of 15 different types from various vendors, not only Cisco products. As shown in Figure 1 these include PC monitors, servers (physical and virtual), printers, IP phones, wireless access points, network routers and switches, and storage systems.

**Figure 1** - Graphic Display of Power Consumption by Device Type Throughout the Day



“It’s like a fog has lifted,” says Städler. “We have full visibility and can track every device and how it impacts power usage at different times of the day. And we can do that across all 30 of our buildings.”

The campus network is also designed for greener IT. Cisco Catalyst switches can power access points and other connected devices, enabling greater energy efficiency with Ethernet support and features such as hibernation mode.

Over the next two years, the aim is to set binding policies to automatically regulate energy consumption for still greater sustainability.

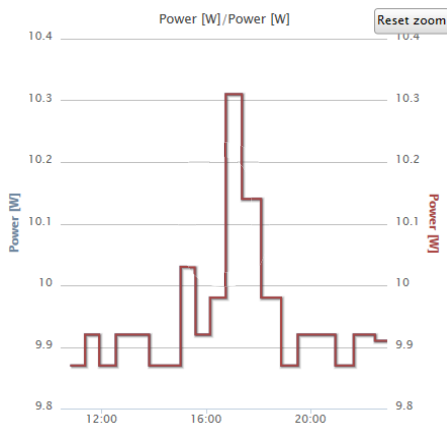
## Results

- Established long-term strategy for energy management
- Replaced siloed energy monitoring with consolidated usage management as a facility
- Proactive monitoring of energy usage to keep costs in line with budgets
- Reduced power costs and emissions
- Productivity savings

## Strategic intelligence along with quick wins

First, the Cisco Energy Management suite has given the University of St. Gallen improved intelligence for the development of its future-oriented energy management strategy. Now, it can see into the hidden depths of its campus infrastructure. It knows how much power each device consumes (see Figure 2) and can use the network to enforce policies, such as shutting down idle PCs. While it’s too soon to go into precise figures, the institution is on track to achieve sizeable reductions in emissions and operational expenditure.

**Figure 2** - WLAN Access Point Connected to an Energy-Efficient Cisco 2960-X Switch



The solution also provides a complete inventory with end-to-end asset management, which enables the University of St. Gallen to plan hardware purchases and take hardware lifecycle decisions based on actual data.

The identification of usage patterns helps implement sustainable policies that ensure energy is being consumed only when it's needed and in that way lower the costs. "We developed in-house software scripts to power down our PCs every night," says Städler. "Now we use CEM policies to automatically do the same job. We made a 50 percent productivity saving on top of the energy and carbon gains.

"The fact that this platform will support the future IOT with new connected devices assures us we have chosen the right solution not only for today but also tomorrow."

## Products & Services

### Products & Services

- Energy management
- Cisco Energy Management Suite

### Routing and Switching

- Cisco Routers
- Cisco Catalyst switches
- Cisco Unified Wireless

### Collaboration

- Cisco Unified IP Phones

### Data Center

- Cisco Unified Computing System (UCS)
- Cisco Nexus Switches
- NetApp storage
- VMware and Microsoft Hypervisors

## For More Information

For more information about the solutions featured in this case study, visit [www.cisco.com/go/energymanagement](http://www.cisco.com/go/energymanagement).

For more information about BORN Green technologies, visit [www.bgreen-technologies.com](http://www.bgreen-technologies.com).

For more information about the University of Gallen, visit [www.unisg.ch](http://www.unisg.ch)



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