

# Energie-Network-Lunch mit Schneider-Electric, 28.September

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Restaurant "Au Premier" im Hauptbahnhof



# Schneider Electric – the global specialist in energy management

**22.4**

billion € sales  
(last twelve months)

**39%**

of sales in new economies  
(last twelve months)

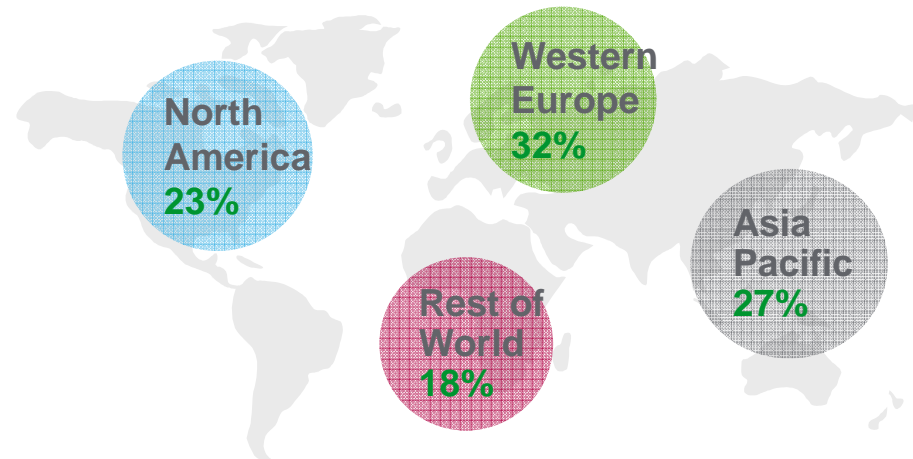
**130000+**

people in 100+ countries

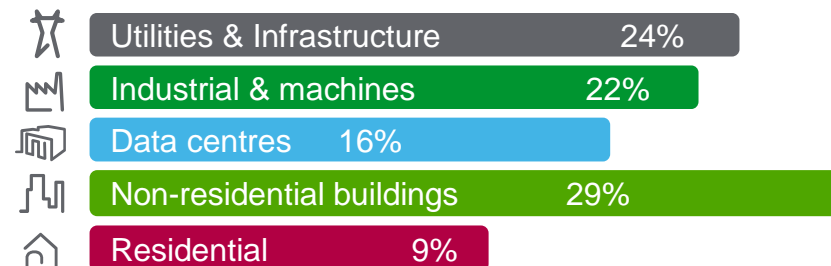
**4-5%**

of sales devoted to R&D

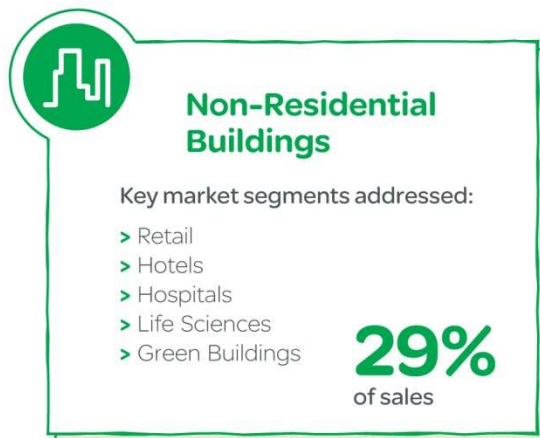
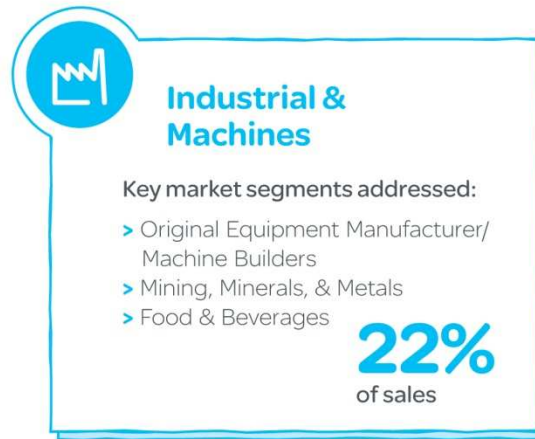
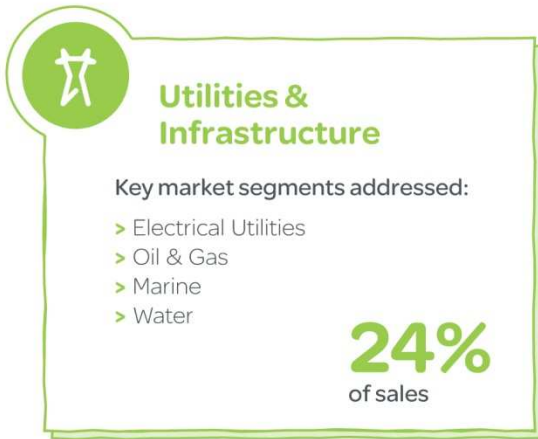
## Balanced geographies – FY 2011 sales



## Diversified end markets – FY 2011 sales



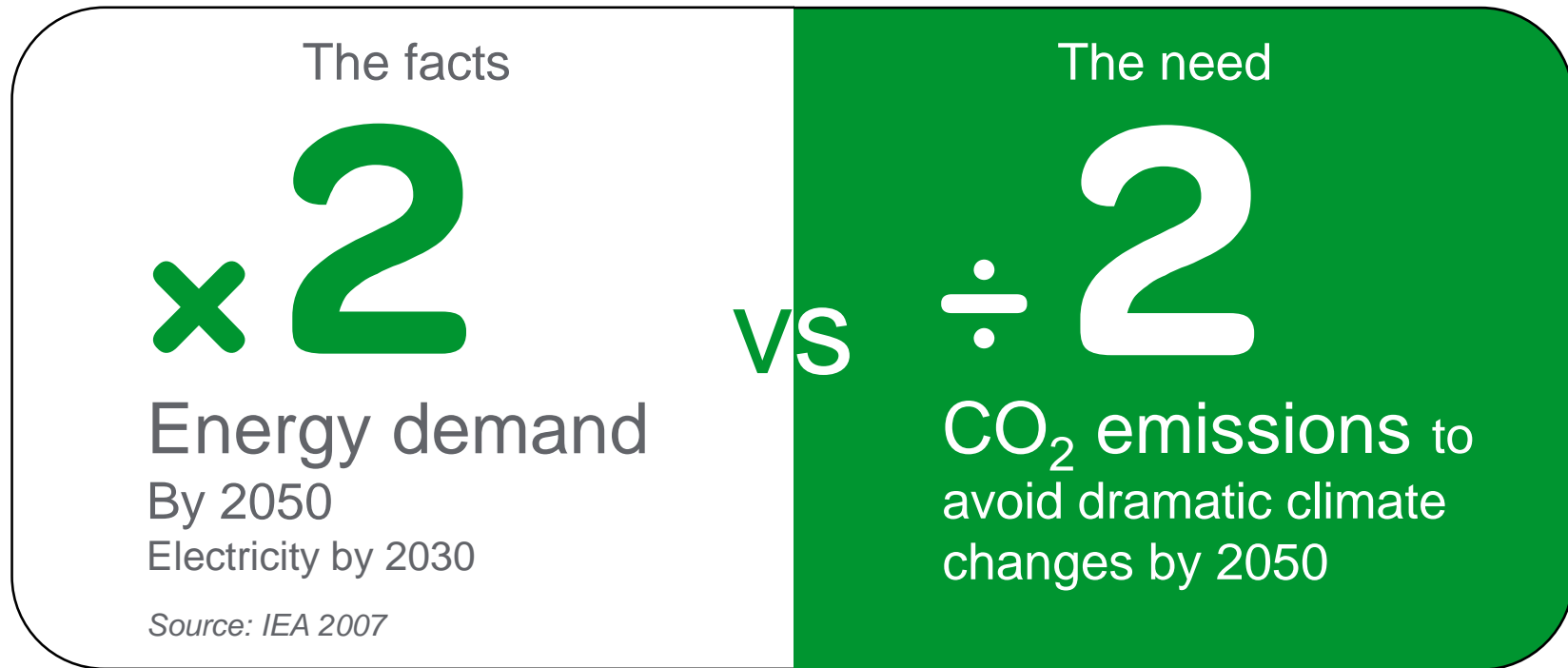
# Schneider Electric Markets



**€220**  
billion accessible market

**37%**  
revenue derived from solutions

# The energy dilemma is here to stay



**Frequent  
power outages**

**Rising  
energy prices**

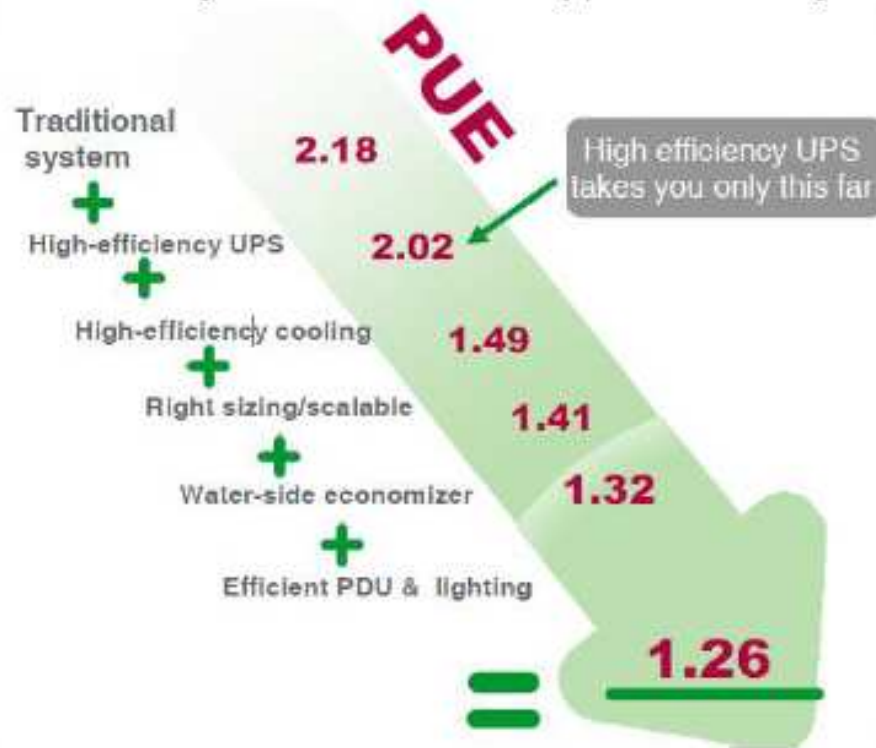
**Climate change**

**Conflicts for  
resource access  
& control**

# It is not enough to look at Efficient Components any more...

Figure 25: Optimization of Datacenter components and control can reduce energy consumption substantially

PUE= Power Usage Effectiveness -> electricity pulled down from grid divided by electricity fed into server



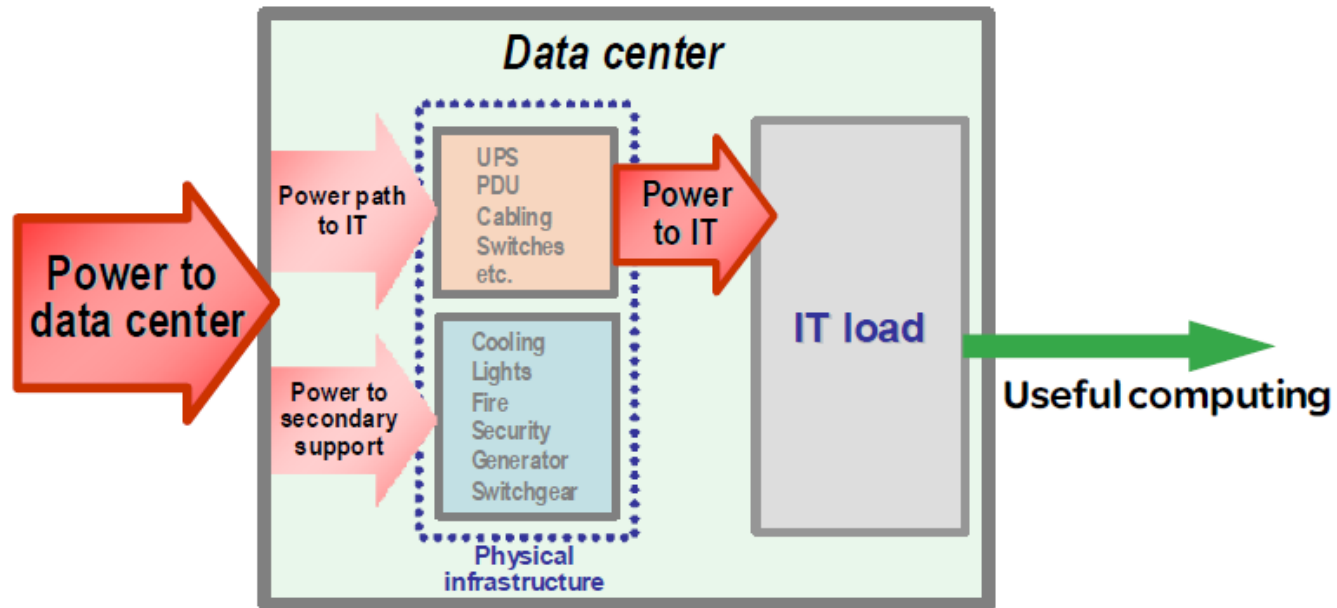
Purchasing Criteria went from just  
« buying the best UPS »

TO

Total DataCentre Performance,  
Cost Efficiency,  
Speed & Modularity of  
construction ,  
Total Cost of Ownership

Source: Schneider Electric.

# PUE what?



$$PUE = \frac{\text{Power to data center}}{\text{Power to IT}}$$

**PUE**  
Power  
Usage  
Effectiveness

*Smaller is better*  
**1** is perfect

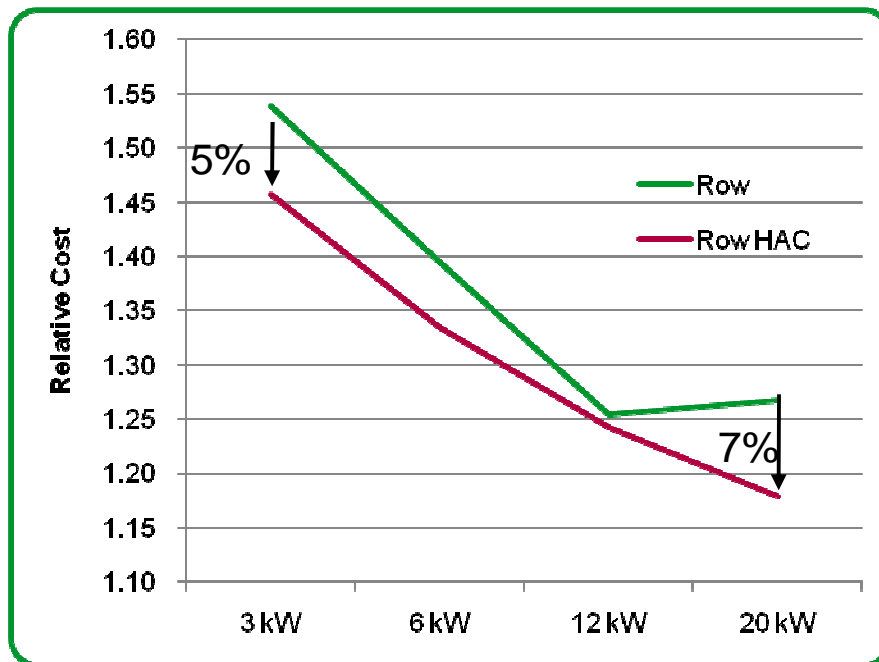
# Benefits of Containment – Row Cooling

## First Cost

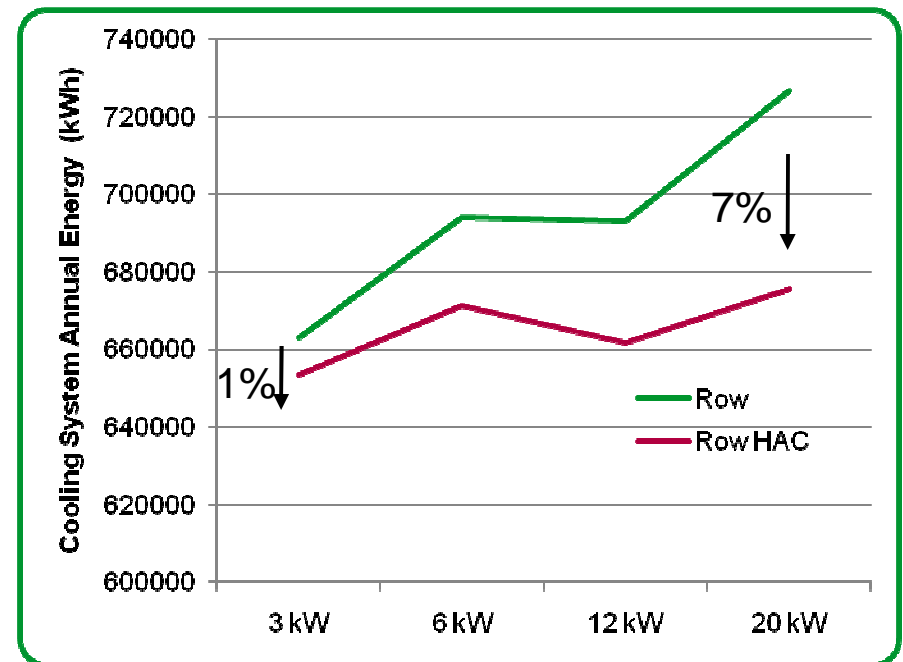
- Increased Capacity and Improved Capture Index
- Reduced Equipment and Installation costs

## Operating Cost

- Reduced number of units operating at elevated utilization (increased fan speed)
- Fixing the number of cooling units between open and HAC further increases efficiency



Includes cost of piping, chiller, containment, and installation of cooling units



Includes Unit fan power, chiller, and pumps

# Lifecycle solutions for Energy Efficiency (Schneider Electric Offering)

## Energy Audit & Measure

building, industrial  
process...

### Fix the basics

Low consumption  
devices,  
Insulation material  
Power factor  
correction...

Passive  
Energy Efficiency

### Optimize through Automation and regulation

HVAC control,  
lighting control,  
variable speed  
drives...

Active  
Energy Efficiency

### Monitor, maintain, improve

Meters installation  
Monitoring services  
EE analysis software...

Control  
Improve

up to  
**30%**  
energy saving



# Useful Links

[www.schneider-electric.com](http://www.schneider-electric.com)

[www.apc.com](http://www.apc.com)

<http://tv.schneider-electric.com>

[http://www.apcmedia.com/salestools/WTOL-85MM85\\_R0\\_EN.pdf](http://www.apcmedia.com/salestools/WTOL-85MM85_R0_EN.pdf)

[http://www.apc.com/prod\\_docs/results.cfm?DocType=White%20Paper&Query\\_Type=10](http://www.apc.com/prod_docs/results.cfm?DocType=White%20Paper&Query_Type=10)

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your energy™



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