Presenting the new efficient Data Center of G-Cloud

Presented by: Thanassis Tsikogias, Data Center Solutions Architect, Schneider Electric

Konstantinos Vasileiou, Head of Datacenter & Information Systems Support, Information Society SA

Life Is On | Schneider Electric

Schneider Electric, the Global Specialist in
Energy Management and Automation

€24.7 billion
FY 2016 revenues
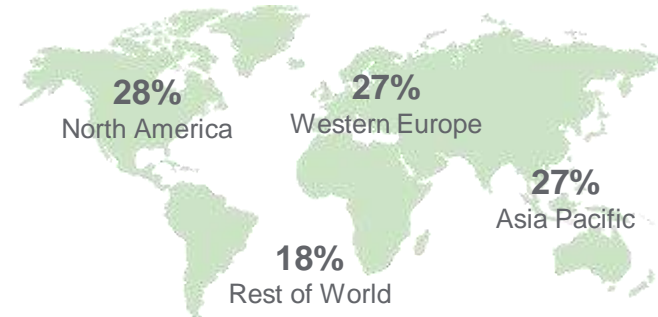
~5%
of FY revenues devoted to R&D

160,000+
people in 100+ countries

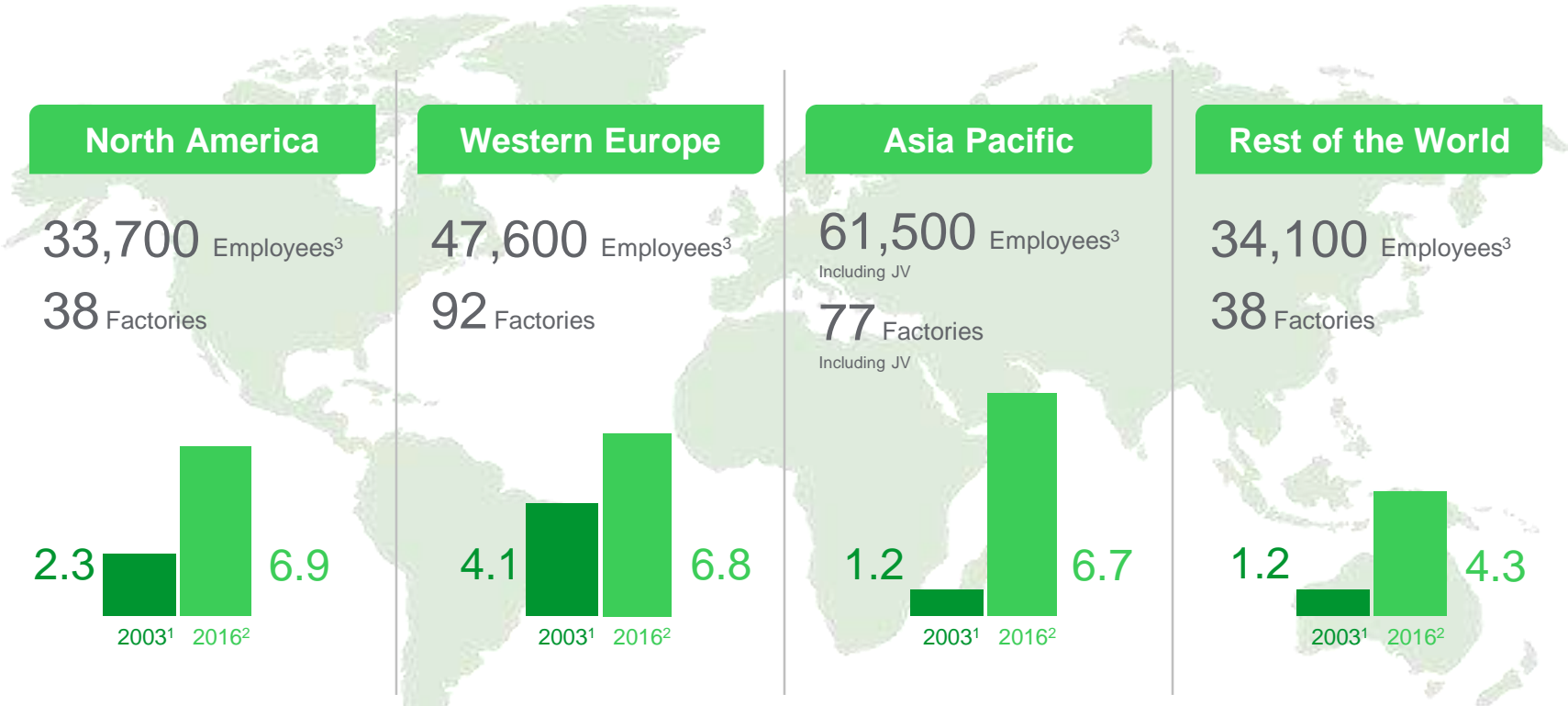## Four integrated and synergetic businesses
– FY 2016 revenues

Building	IT	Industry	Infrastructure
43%	15%	22%	20%

Balanced geographies – FY 2016 revenues

28%
North America

27%
Western Europe

27%
Asia Pacific

18%
Rest of World

Life Is On | Schneider Electric

Schneider Electric Global Business in **Over 100 Countries**

North America

33,700 Employees[3]

38 Factories

2.3   6.9

2003[1]   2016[2]

Western Europe

47,600 Employees[3]

92 Factories

4.1   6.8

2003[1]   2016[2]

Asia Pacific

61,500 Employees[3]
Including JV

77 Factories
Including JV

1.2   6.7

2003[1]   2016[2]

Rest of the World

34,100 Employees[3]

38 Factories

1.2   4.3

2003[1]   2016[2]

1: Published figures in billion € restated to reflect country-market view;
2: Billion € pro-forma basis including LTM Sep 2014 revenue for Invensys
3: Including Invensys, excluding Delixi and Fuji

Life Is On | Schneider Electric

Schneider Electric commitment to
a high investment in technology for innovation

A Technology Company

- c. 11,000 R&D engineers, c. 10,000 application and software engineers
- 20,000 patents active or in application worldwide, >500 filed in 2014
- With recognized innovations

Recognized highest ranking DCIM solution in Gartner Magic Quadrant (Oct 2014)

StruxureWare for Data Centers

CONTROL ENGINEERING

2015 ENGINEERS' CHOICE AWARDS

M580: World's first ePAC with built-in ethernet
&
Machine Solution – NEXT Controller Generation

R&D Investment

~5% of sales devoted to R&D

774 764 818 979 1,058 1,119 1,212 1272 **1235**

2008 2009 2010 2011 2012 2013 2014 2015 2016
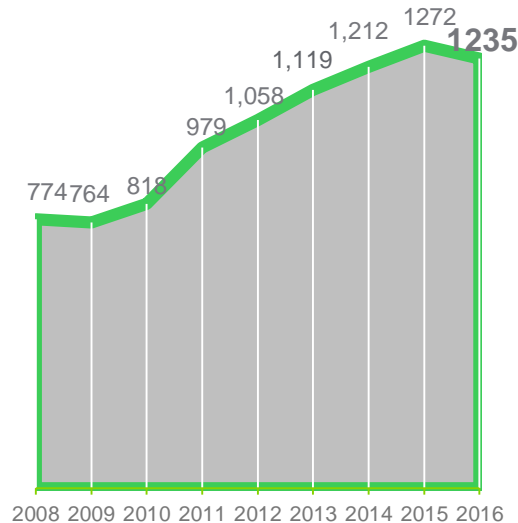
An Ecosystem for Open Innovation

Partnering with 50+ best-in-class public and private organisations

IBM
CISCO ParisTech
SAP MIT

Leading global projects for Intelligent buildings, renewables,

Homes, Minalogic, Smart Electricity

Boosting Standardisation
Zigbee, IEC, NEMA

Funding start-ups
Aster Capital fund

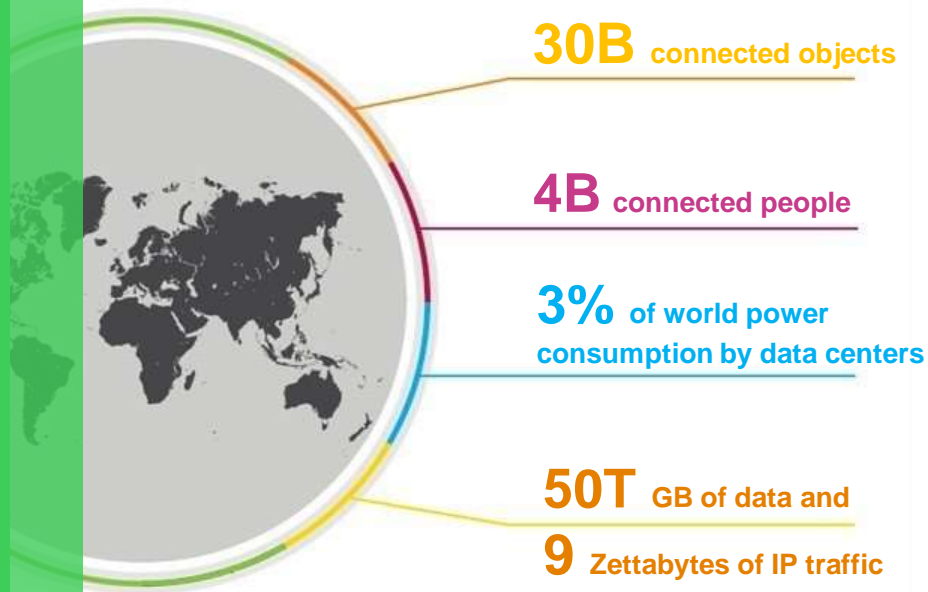Demand response, software breakthrough

Life Is On | Schneider Electric

By 2020, the world will be a different place…

…it is undergoing profound transformation to support the enormous data volumes and processing demands that are being generated by the Internet of Things (IoT).

The world in 2020…

30B **connected objects**

4B **connected people**

3% **of world power consumption by data centers**

50T **GB of data and**

9 **Zettabytes of IP traffic**

Sources: Gartner, IDC, Uptime Institute, Cisco

Life Is On | Schneider Electric

Latest evolving key trends in the market

Hybrid architectures of on-premise, off-premise, Public & Private cloud

Latency, bandwidth & regulatory demands driving Edge Computing

Simplification in data center Physical IT & infrastructure

Leveraging Data Center Infrastructure Management & Digital Services

Three key challenges to the market

Shift to cloud	Need to increase speed	Addressing the energy challenge
86%	÷2	€250 billion

of workloads by 2019 will be processed by cloud data centers; only **14%** will be processed by traditional data centers

Source: Cisco Global Cloud Index

time to design and deploy to keep up with the explosive pace of business and IT technology changes

spending on WW data center electricity in 2015 (600 TWhr in 2015 to 1,400 TWhr by 2020)

Source: McKinsey Report

Life Is On | Schneider Electric

Our solutions to address those challenges

Comprehensive Data Center Physical Infrastructure

Prefabricated Solutions including micro data centers

Life Cycle Services

Software & Digital Services

Life Is On | Schneider Electric

LV Switchgear

MV Switchgear

Data Center
Life Cycle Services

Rack Mount
PDUs

IT Racks

We hold market leading positions in all data center solution categories
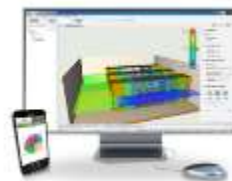
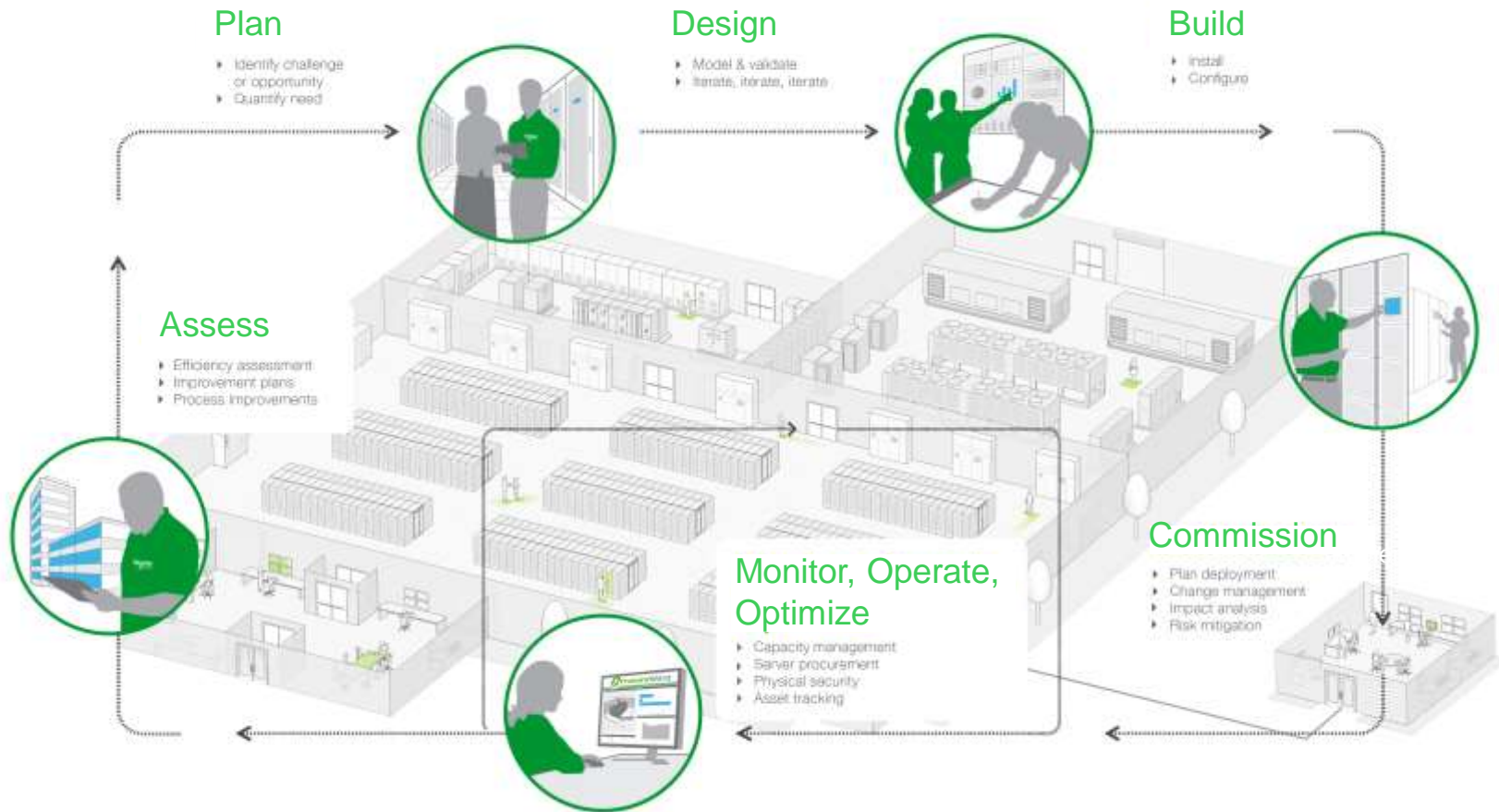3-Phase UPS

Cooling

DCIM

BMS

Data Center Infrastructure
Management

Building Management
System

Design and Build Services: Optimizing the data center lifecycle

Enables the business-driven data center

Plan
- Identify challenge or opportunity
- Quantify need

Design
- Model & validate
- Iterate, iterate, iterate

Build
- Install
- Configure

Assess
- Efficiency assessment
- Improvement plans
- Process improvements

Commission
- Plan deployment
- Change management
- Impact analysis
- Risk mitigation

Monitor, Operate, Optimize
- Capacity management
- Server procurement
- Physical security
- Asset tracking

eider
lectric

The greatest team of experts

Sharing experience in all phases of a Data Center project

Experts services offer:

> **Technicians**

> **Program managers**

> **Administrative support**

> **Solution Architects**

> **Certified partners**
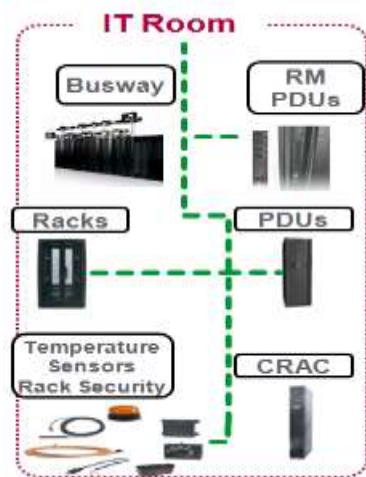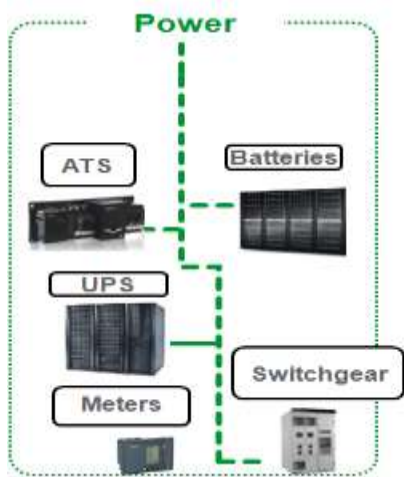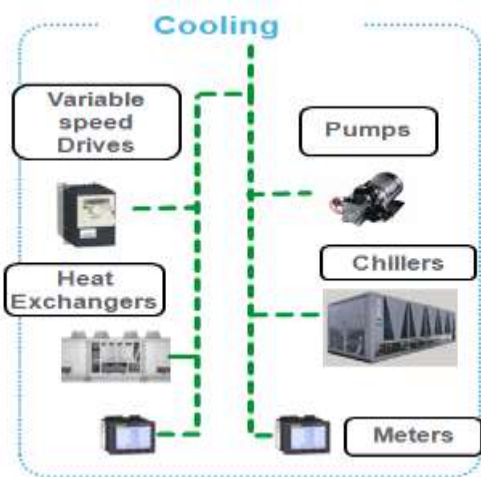

Life Is On | **Schneider Electric**

Data Center Infrastructure Management (DCIM)
StruxureWare DCIM

Cooling
- Variable speed Drives
- Pumps
- Heat Exchangers
- Chillers
- Meters

Power
- ATS
- Batteries
- UPS
- Switchgear
- Meters

IT Room
- Busway
- RM PDUs
- Racks
- PDUs
- Temperature Sensors Rack Security
- CRAC
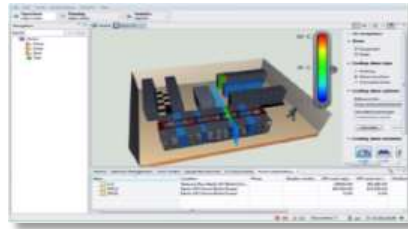
Life Is On | Schneider Electric

Eco Struxure Innovation At Every Level **Data Center**

EcoStruxure Architecture

End to End Cybersecurity

Apps, Analytics & Services (cloud-based)

Edge Control (on premise software)

Connected Products

Domains of Expertise

BUILDING   **IT**   **POWER**
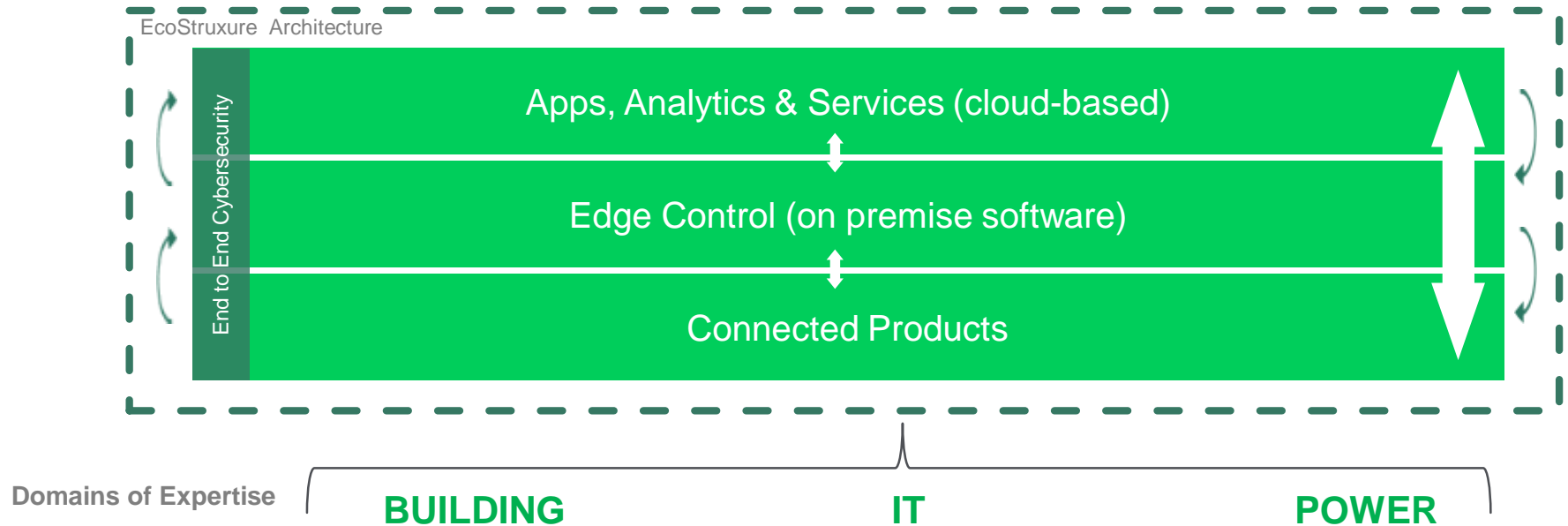
Life Is On | Schneider Electric

The greatest businesses employ globally
Schneider Electric Solutions

Life Is On | Schneider Electric

Life Is On | Schneider Electric