

Active energy efficiency in buildings – walking the talk with a 4 step approach to fitness

Isabelle Malinconi

VP Buildings and EE Marketing Campaign



Schneider Electric at a glance

18.3

Billion global sales in 2008 (in€)

32% of sales in new economies
x2 compared to 2004

110 000+

people in 100+ countries

5%

Sales devoted to R&D

170

Years of history through
innovation and leading brands

Schneider Electric - Division - Name – Date

The global specialist in
Energy management

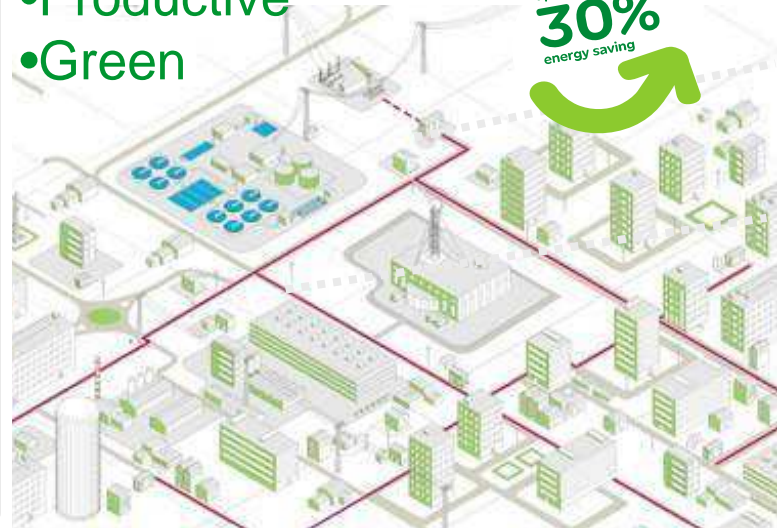
Making energy:

- Safe
- Reliable
- Efficient
- Productive
- Green

Covering
72%
World Energy
consumption

up to
30%
energy saving

Energy production
& transmission



Energy usage

A Recognised
Sustainable commitment



We are committed to solve the energy dilemma...

x2

The increase in energy consumption by 2050

÷2

The CO2 emissions reduction to avoid dramatic climate changes by 2050



We provide solutions for energy efficiency
energy audits
energy efficiency enabling products
energy management solutions

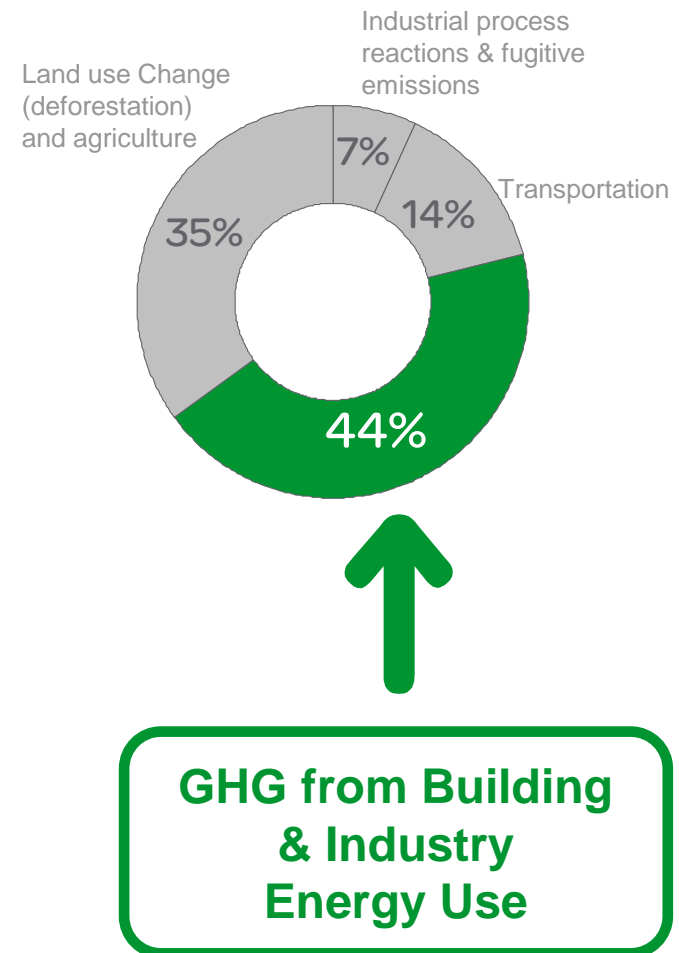
... for residential, commercial and industrial buildings

... for industrial processes



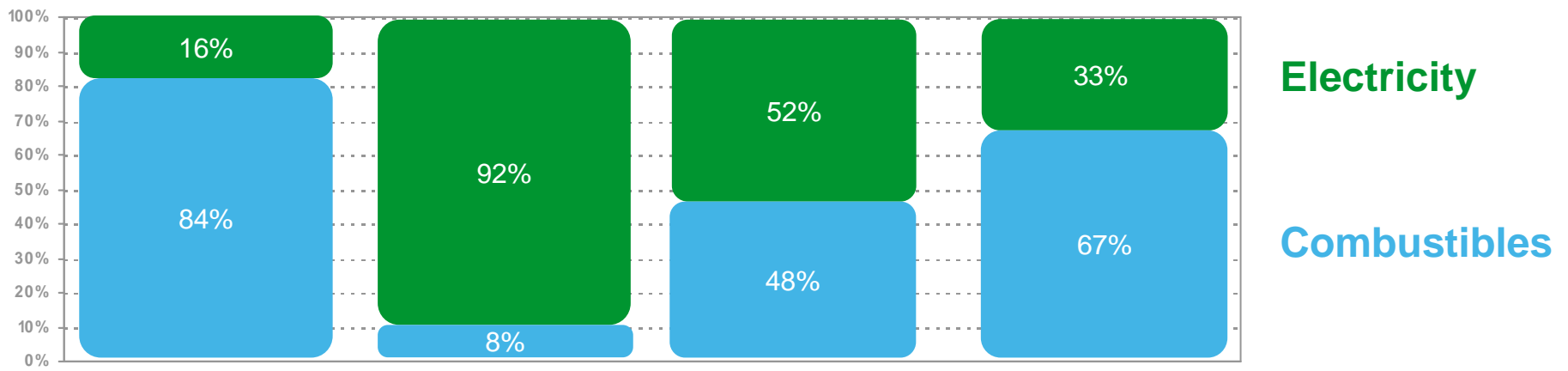
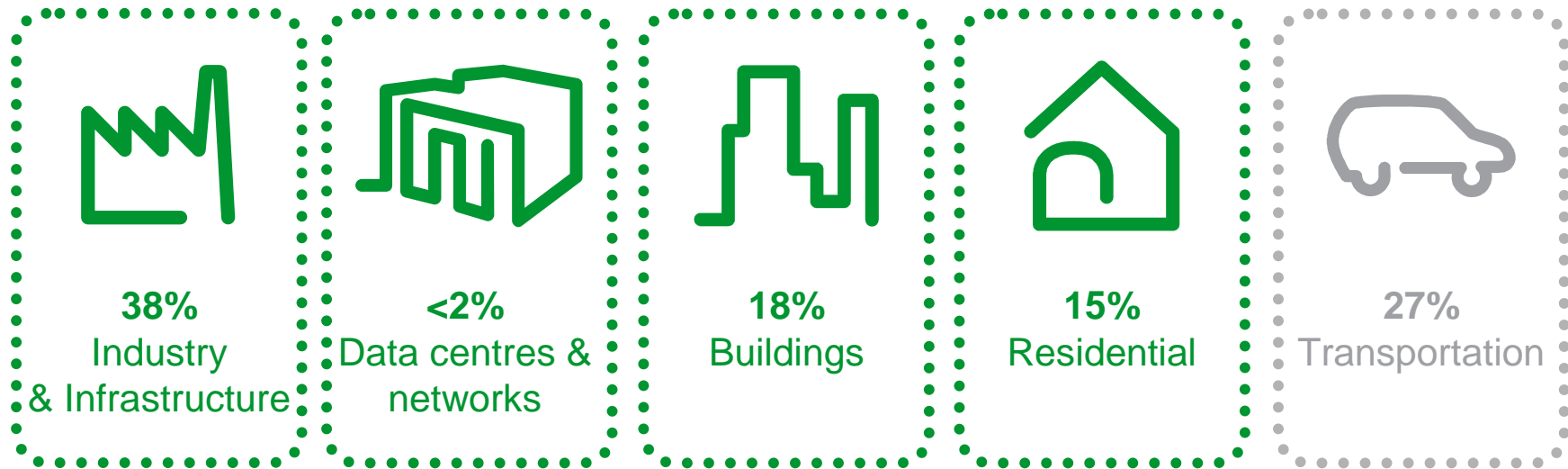
Buildings and Industry are the 1st GHG emission contributors...

- **≈ 44%** GHG contribution comes from buildings & Industry
 - 3x larger than GHG contribution from transportation
- **In industry & buildings:**
 - **70%** of electricity is generated via coal or hydrocarbons
 - **90%** of heat and process activities burn hydrocarbons



Data extracted from WRI: navigating the numbers 2005

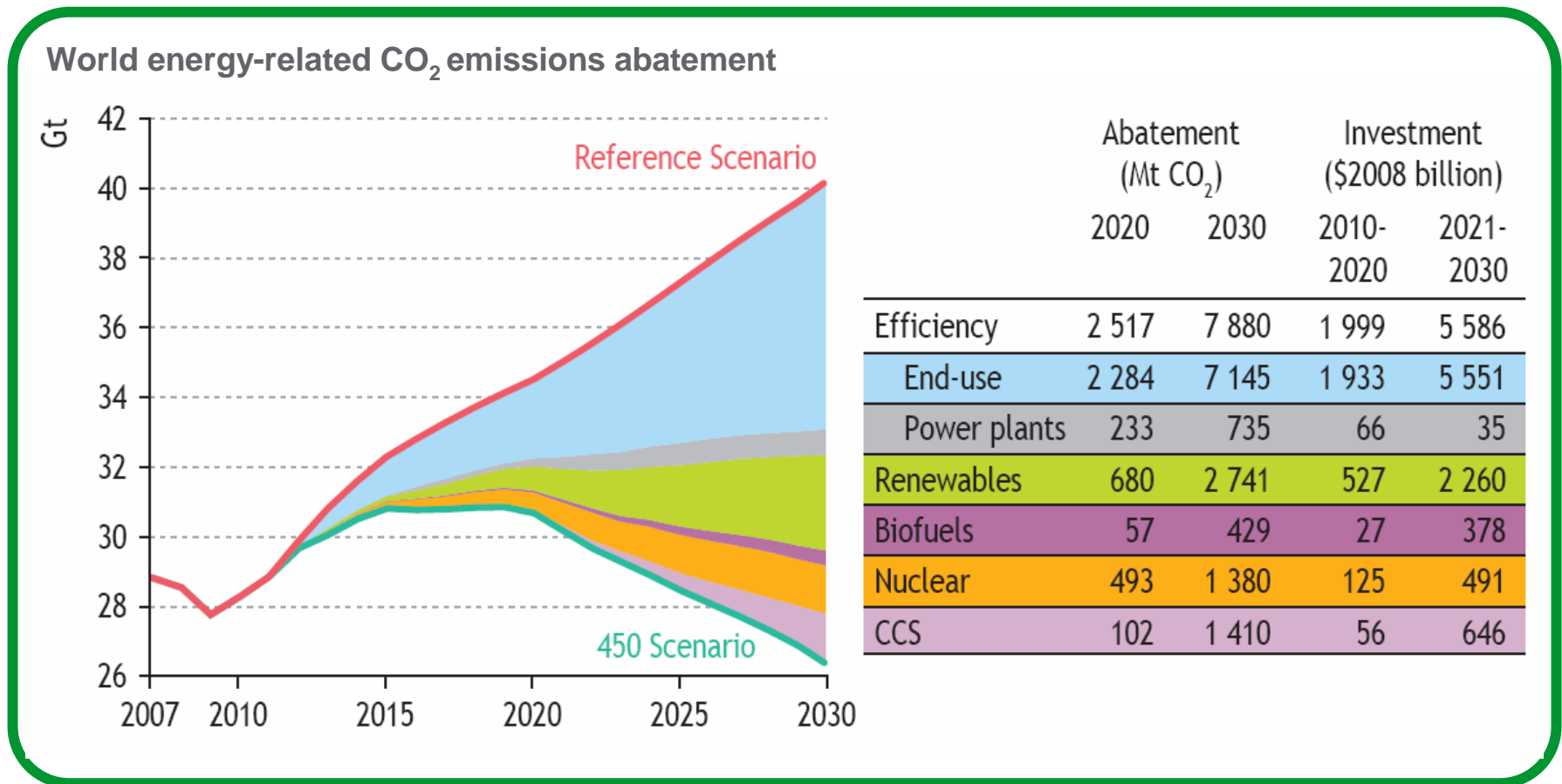
...and also consume most energy!



% are calculated on final energy

The simplest way to generate green energy is to save it

- Over 50% of CO₂ reduction will come from energy efficiency



Energy Efficiency is a **Must**

•Cheaper

- Each kWh saved avoids about 3x the generation production
- Demand response programs cost about half of typical electricity costs

•Quicker

- Technology is available today with short term results

•Cleaner

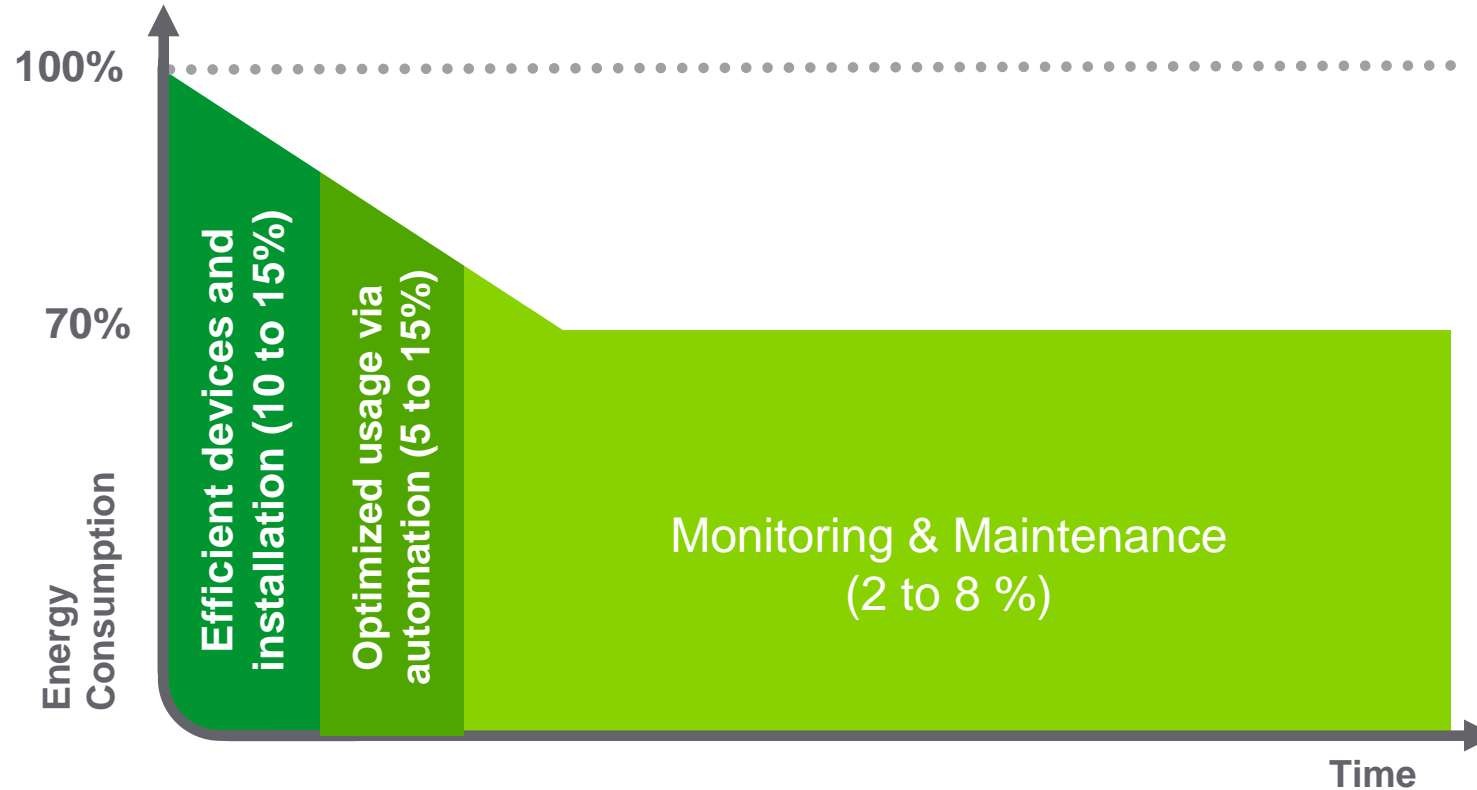
- “Negawatt” produces no environmental footprint

•Enhanced Security

- EE is homegrown, it reduces dependence on imports

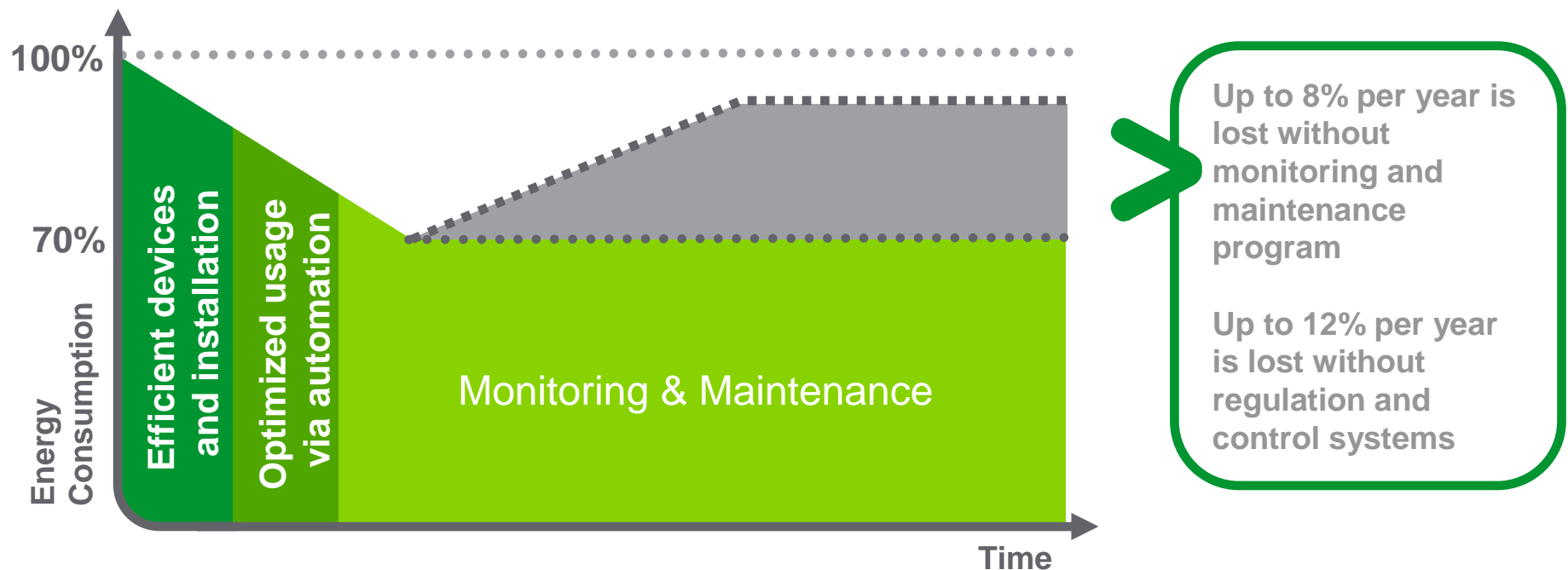
30% savings are available today...

... thanks to a combination of



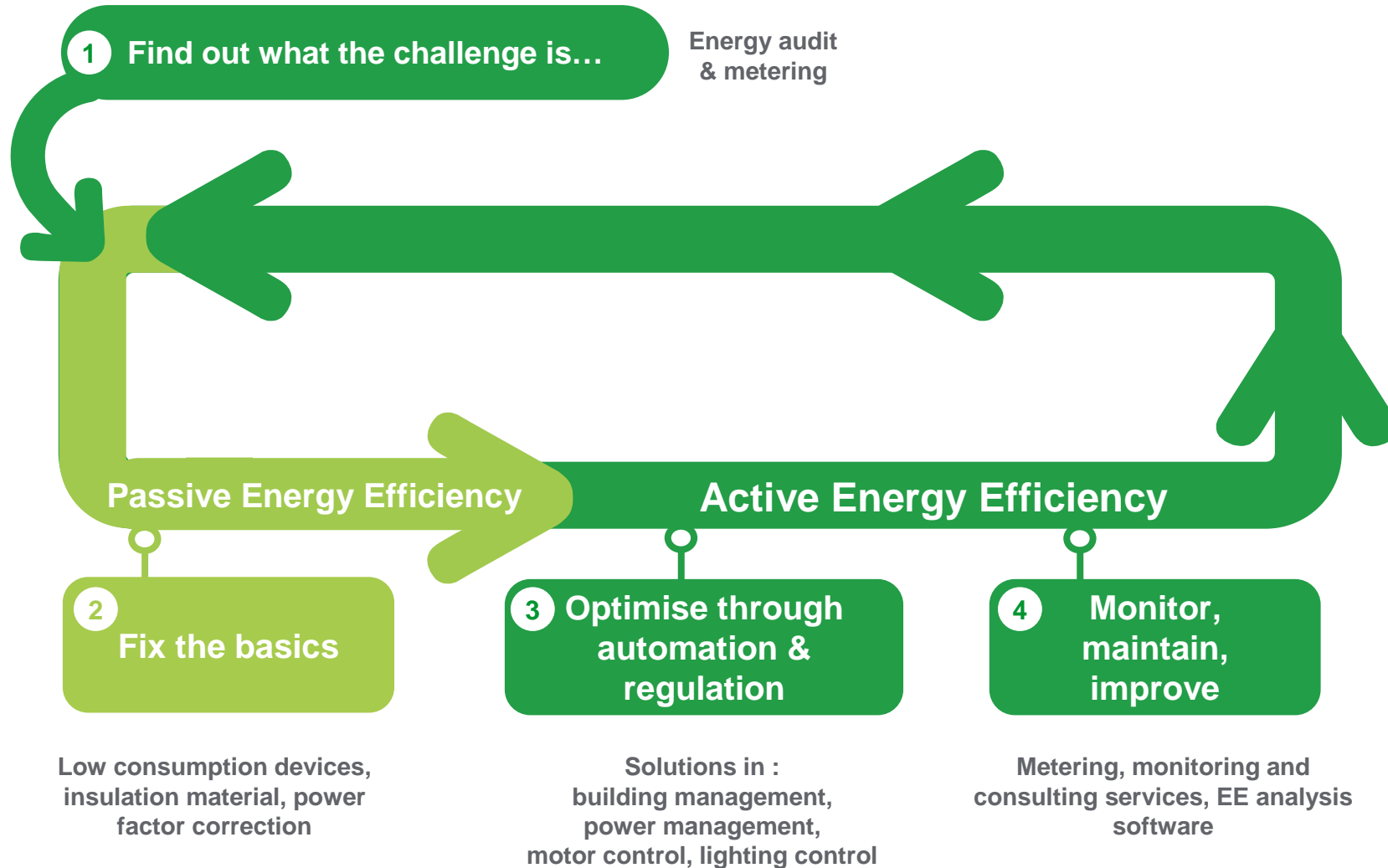
... but savings can be lost quickly...

- Unplanned, unmanaged shutdowns of equipment and processes
- Lack of automation and regulation (motors, heating)
- No continuity of behaviours



Active energy efficiency:

The fastest way to save energy and curb CO2 emissions



Sustaining Energy savings is easy, just follow the 4 Energy Efficiency steps

1 Measure

2 Fix the basics

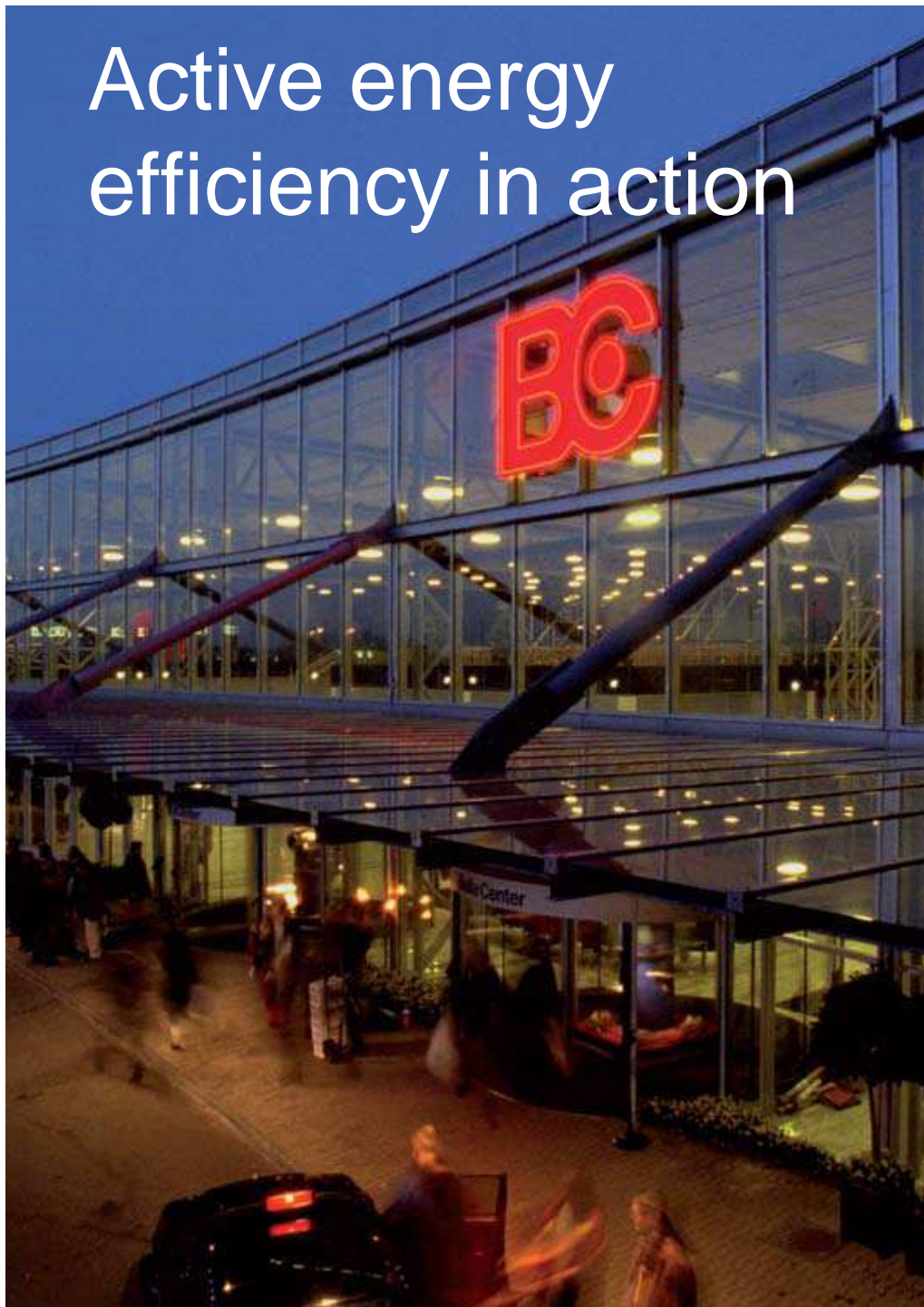
3 Automate

4 Monitor and Improve

Schneider Electric is involved in
**72% of end user energy
consumption**

> We can help you make savings!

Active energy efficiency in action



Reduce CO2 emissions by 20%

Bella Center on target to achieve its climate objective

Project at a glance

- **Project Type**
 - Energy, indoor climate and technical facility management
- **Location**
 - Copenhagen, Denmark
- **Size of building**
 - 122,000 m²
- **Applications**
 - Lighting
 - Ventilation
 - Cooling systems
 - Circulation pumps
 - Security & access control systems

Customer benefits

- Less temperature fluctuation
- Better air quality
- Permanent lighting regulated according to need and light penetration
- Secure and safe environment
- Energy optimisation pays for a better indoor climate
- Prepared for environmental certification
- Future-proof operational savings
- Enhances environmental and climate friendly company profile

The Bella Center bottom line

Financial results

- annual savings of approximately **€268,000**
- an expected cost-recovery period of **less than 8 years**
- a saving of **300,000 kWh** annually by installing new lighting
- energy savings of between **30-50%** with the new circulation pumps
- a reduction of **1,150 tonnes CO₂** by December 2009.

National Carwash, United states
33% energy savings

Ville d'Amiens, France
30% energy savings with lighting solutions

Eco-building **Technopolis, India**
30% energy savings with building management system

Sun Microsystems, India
17% energy saving in a new data centre

Ideapark, Finland
25% energy savings in all the mall facility

Station Princess Elisabeth
10Kwh/sqm/year thanks to renewables integration, remote monitoring and energy management systems in the Antarctica polar station

\$2,5 M
Savings for this US movie studio and theme park

Mississippi University, USA
30% on electricity bill, ie 750K€

Michelin, France
9% in energy consumption on one industrial site

An Jia Ling Coal Selecting Plant, China
RMB 2.4 M saved thanks to power factor correction and energy efficient systems

Veolia, France
25% energy savings

Bird Nest Olympic stadium, Beijing
>10% savings

Tatenergo, Tatarstan
20% energy savings

Pumping station, La Rochelle, France
25% energy savings

National Carwash, United states

The war on waste
has already started,
we are leading it

solutions with energy efficiency
features made up

30%

of our 2008 global revenue

Schneider
Electric



Visit us



Hall 4, booth 4405
(next to the BP Carbon Theater)

Tour the booth and be entered into our daily lottery

The lucky winner to receive a brand new
Amazon Kindle e-reading device right away!

