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ABB LTD., BANK OF AMERICA MERRILL LYNCH SMART BUILDINGS CONFERENCE, OCTOBER 4, 2018

# Driving innovative solutions for Smarter Buildings

Tarak Mehta, President, Electrification Products



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# Agenda

**Market drivers for Smart Buildings**

ABB and Smart Buildings

# Mega trends shape the future of buildings



## Urbanization

70% of the world's population will live in cities by 2050

UN study



## Digitalization

By 2020, 33bn+ internet-connected devices will be used worldwide

Strategy Analytics study



## Integration of renewables

The solar market will grow to 150 GW in 2025

Frost&Sullivan

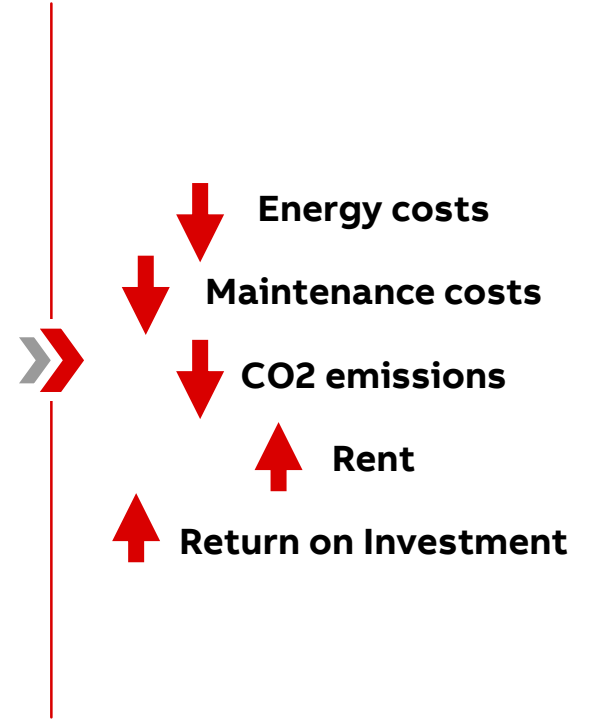


## New sources of consumption

EVs will represent over 55% of the market by 2040

Bloomberg

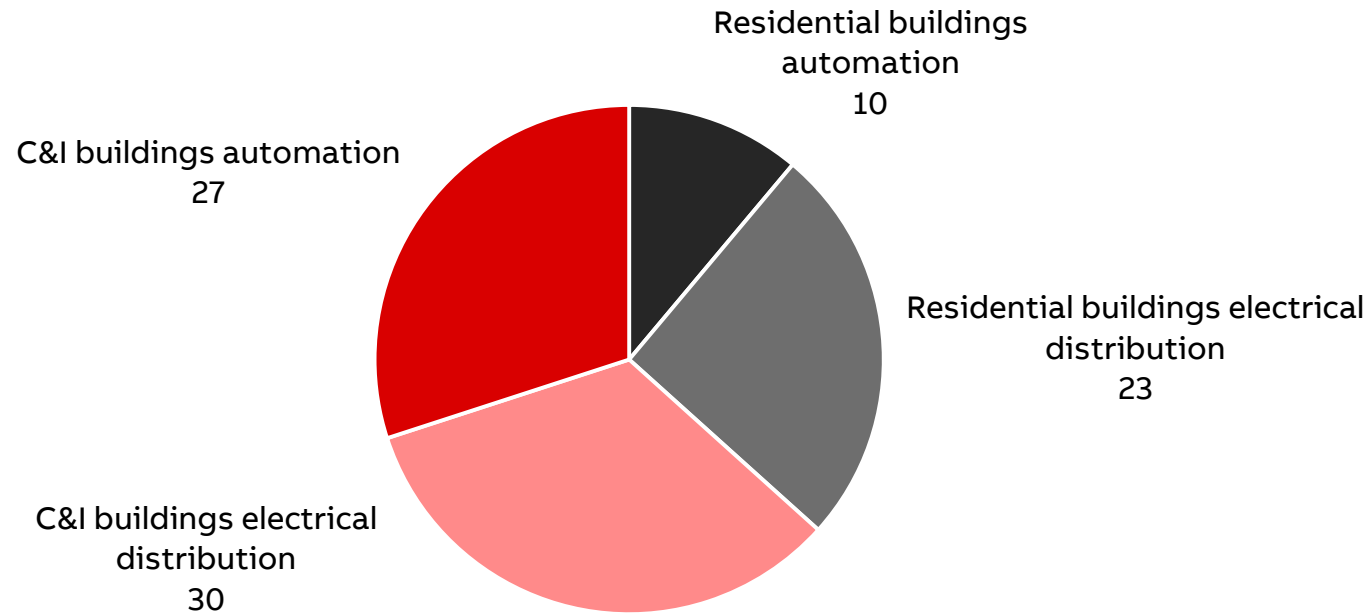
# Smart Buildings



Smarter Buildings deliver performance – both financially and in terms of quality of life

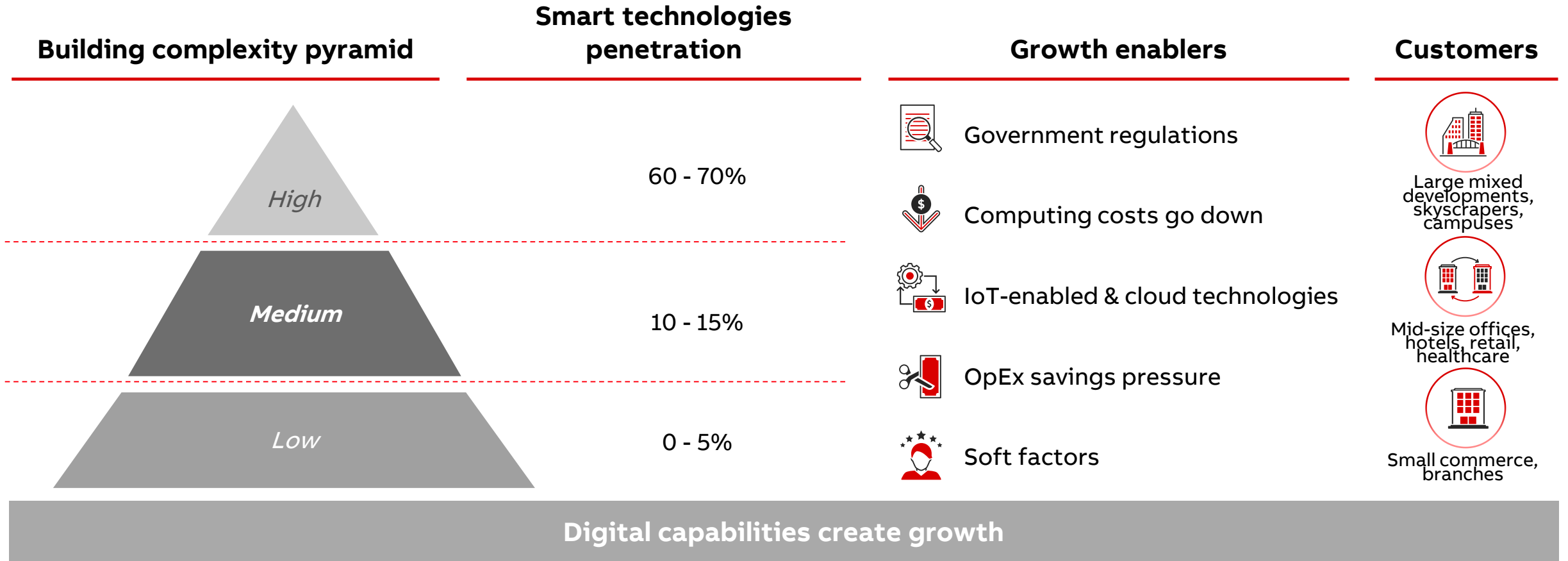
# Buildings are an attractive \$90+ billion market

## Market estimate 2017 (\$bn)



Opportunities in both electrical distribution and building automation

# Smart buildings opportunity



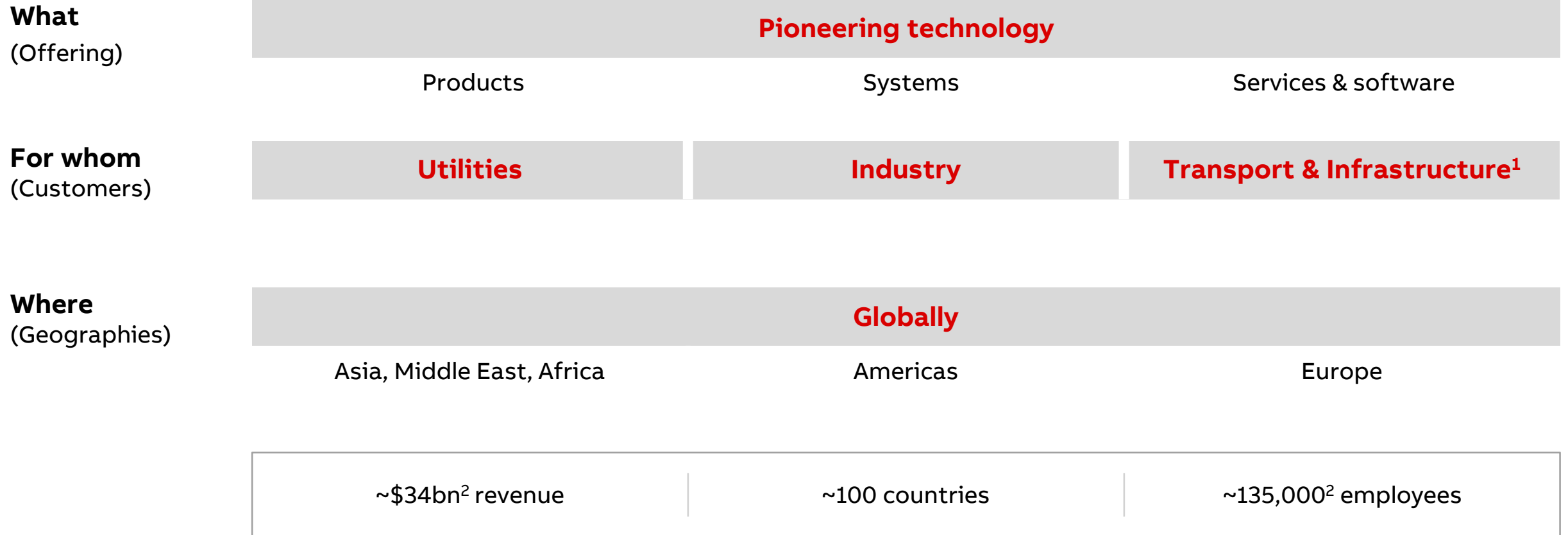
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# Agenda

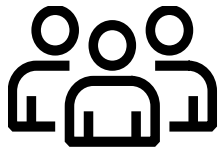
Market drivers for Smart Buildings

**ABB and Smart Buildings**

# ABB: a global pioneering technology leader with >130 years of history



# ABB Electrification Products at a glance



**~43,000** employees



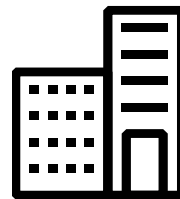
**\$10.1 bn<sup>1</sup>** in revenues  
**\$1.5 bn<sup>1</sup>** Op.EBITA

**GE Industrial  
Solutions**

**~14,000** employees  
**\$2.7 bn** in revenues



Present in **+100 countries**



Manufacturing sites **100+**  
Delivering **1.5+ million**  
products a day

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# Today, we are helping buildings across various segments

**Biological House, Denmark**



**Skalski Offices, Poland**



**Chateau de Ferrierès, Paris**



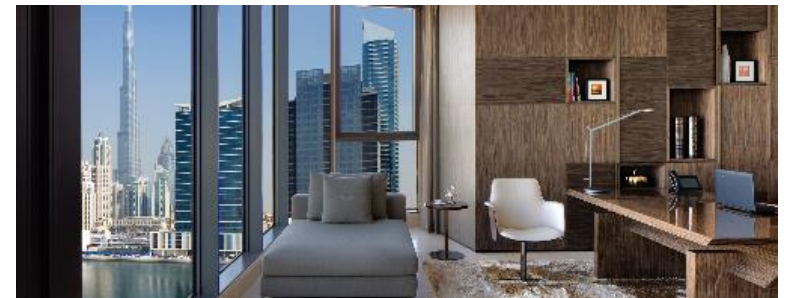
**Schauland office, Germany**



**Igloo Hotel, Finland**



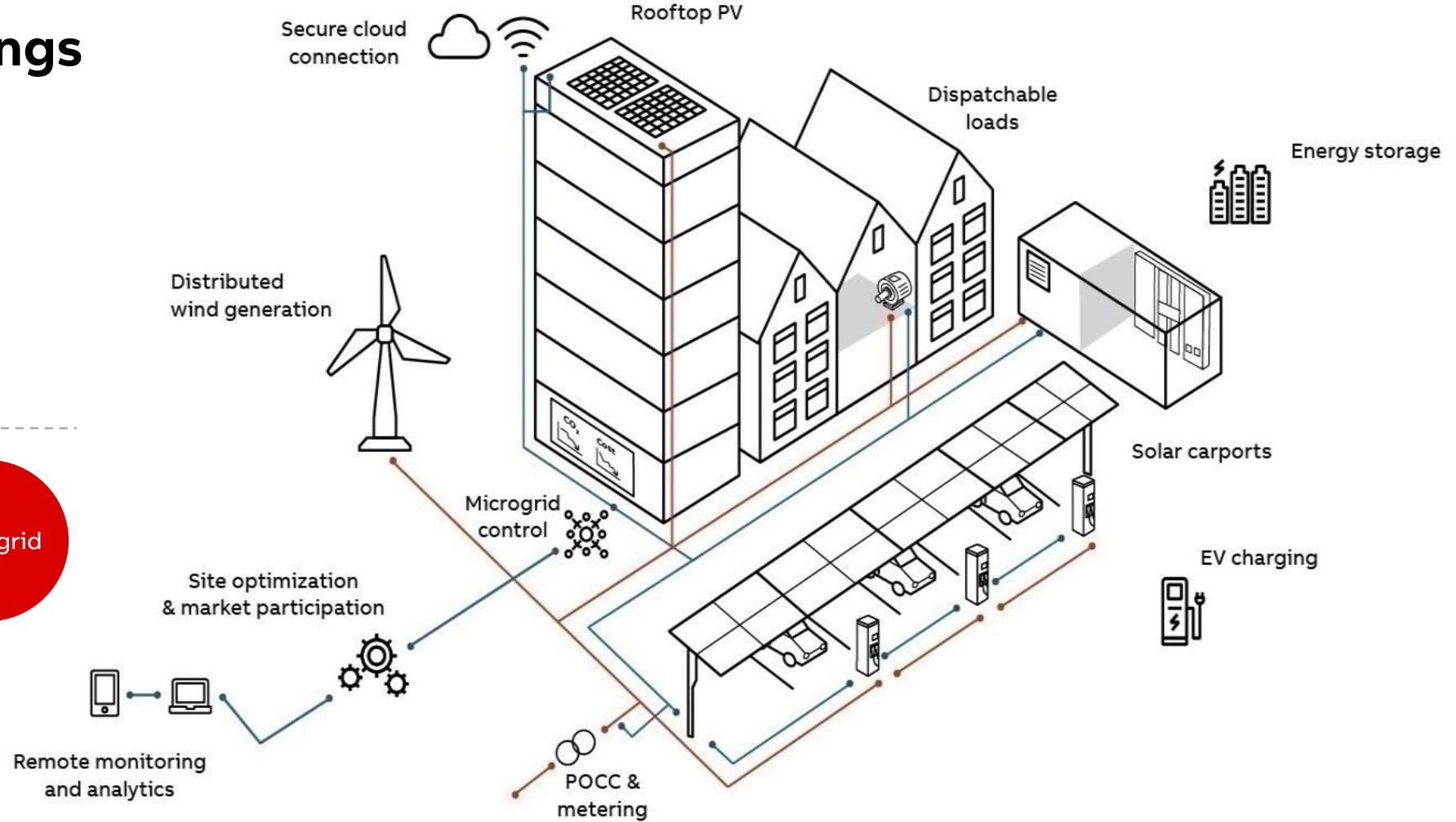
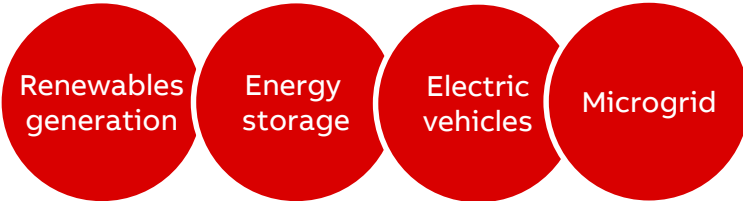
**Volante Tower, Dubai**



# Smart homes & buildings are a reality today

## Homes & buildings ecosystem

Integrated 3<sup>rd</sup> party products and services



End-to-end solution with solar, storage, home & buildings automation and e-mobility

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# Shaping a sustainable future for the capital of Sweden

Stockholm, Sweden

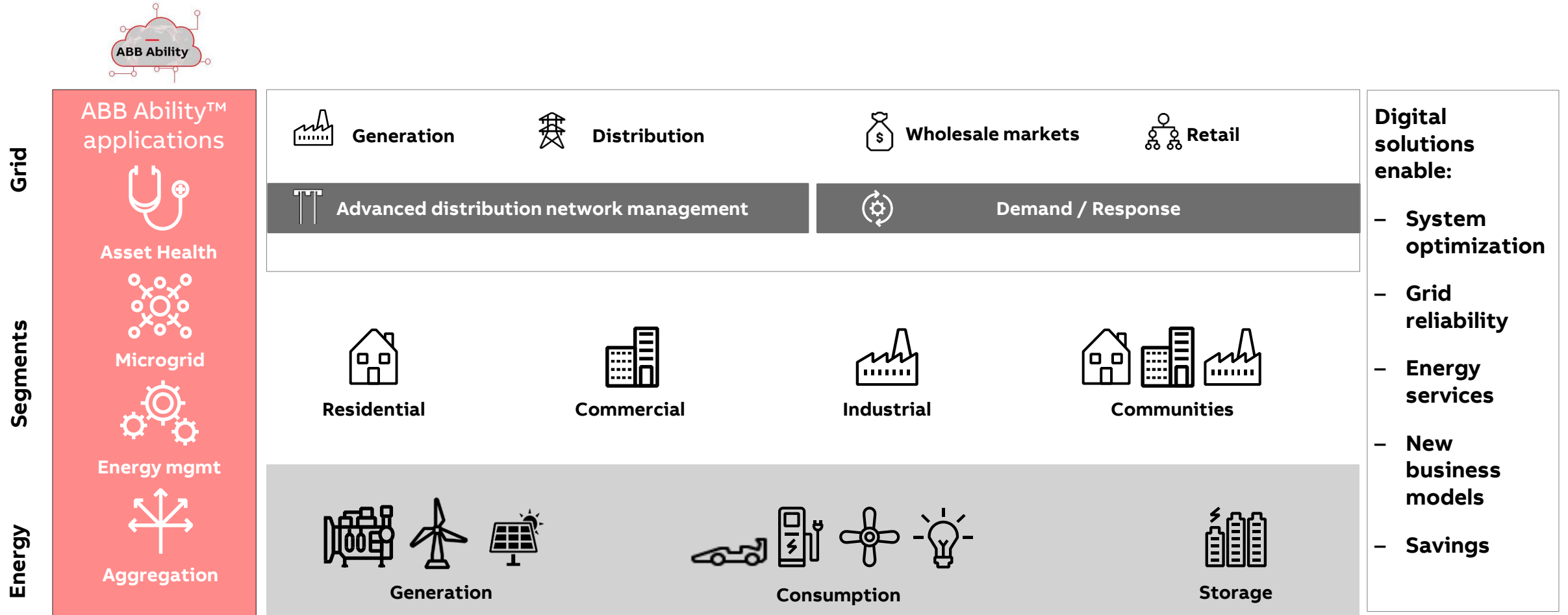
## Royal Seaport Project

- Grid management
- Smart metering and energy storage management
- Smart home/building integration
- Integration of EV charging network
- Demand-Response to align production and consumption

A comprehensive solution from one source

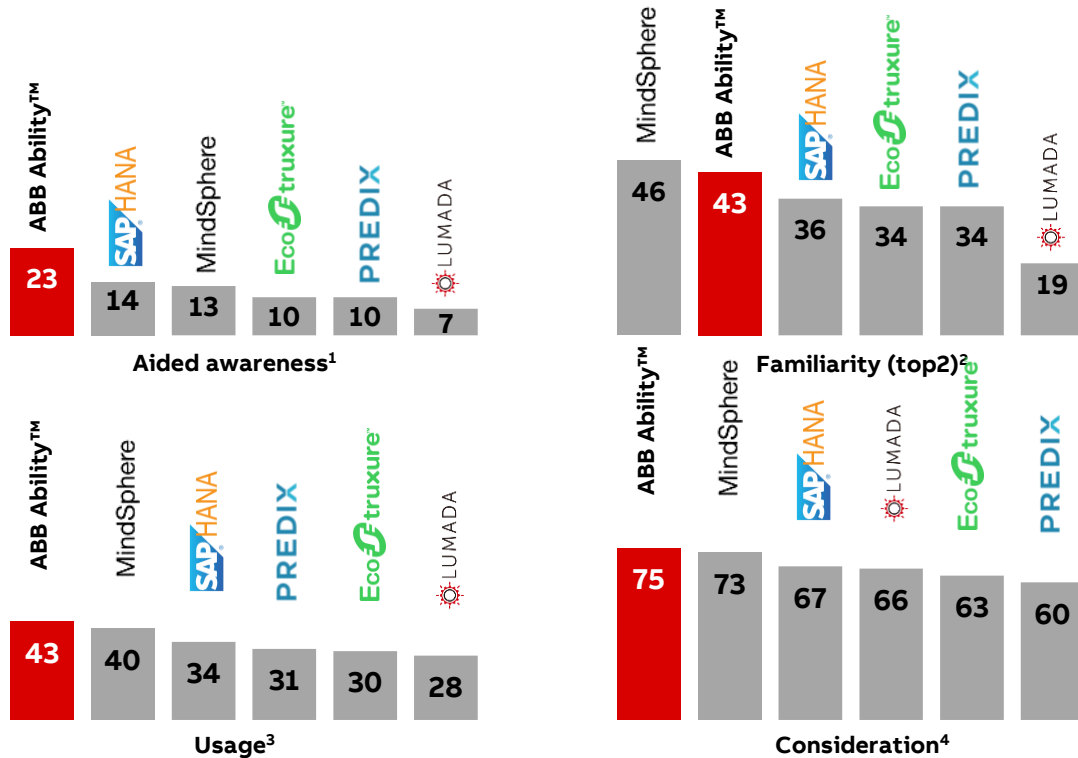


# ABB Ability™ enables buildings to unlock value



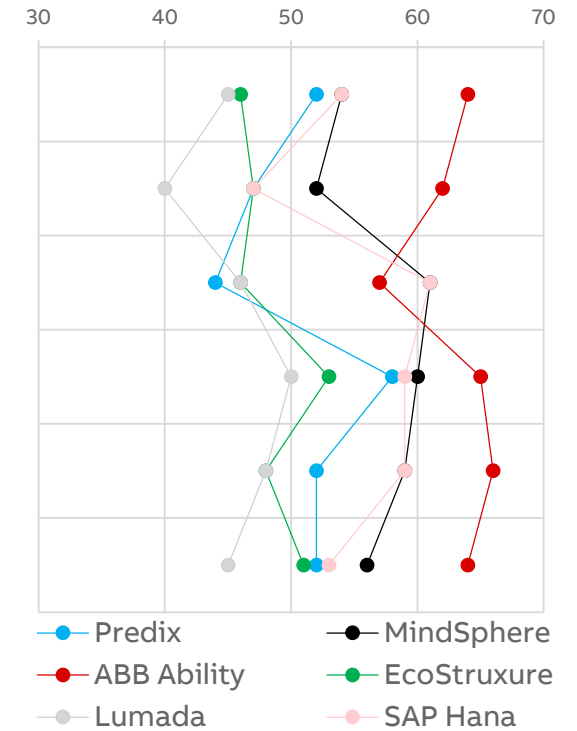
# ABB Ability™ in a strong position within first two years of brand

## Brand performance






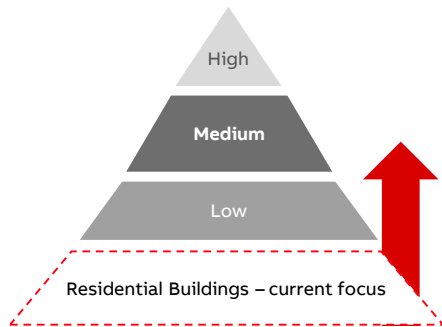
## Image profile<sup>5</sup>

- Stands for extensive industry expertise
- Provides unmatched digital competence
- Offers cloud connectivity
- Protects customer data
- Ensures cyber security
- Guarantees data ownership

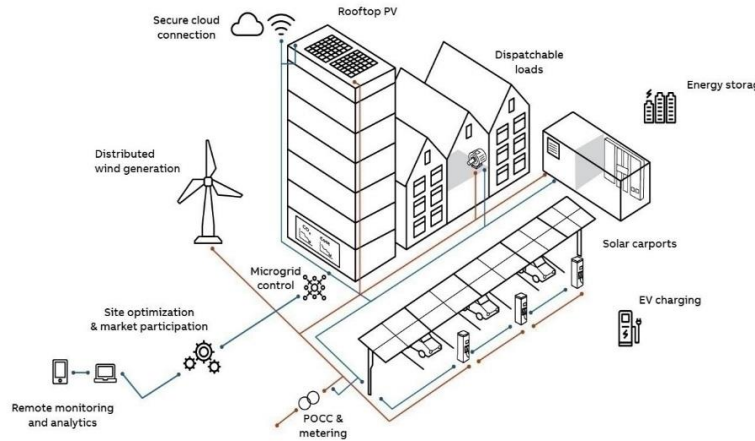


# Smart Buildings growth is based on digital innovation and channel partnerships

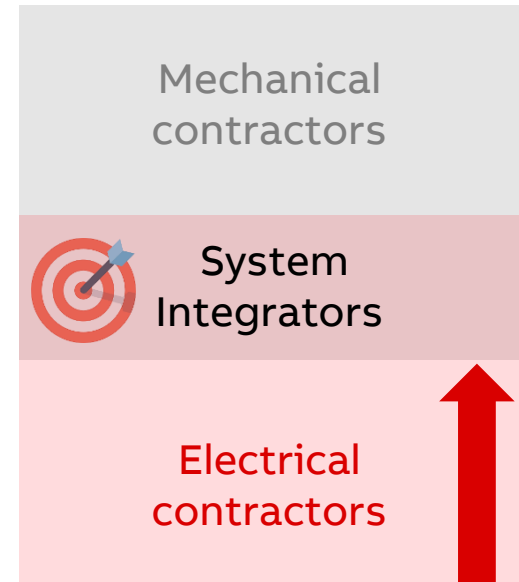
- I Intelligent functionality 
- II Reduced costs for technology 
- III Digital customer experience 



Residential to commercial



Ecosystem integration



Market access

**ABB**