

# High-rise elevators

## Enabling green buildings



**Schindler**

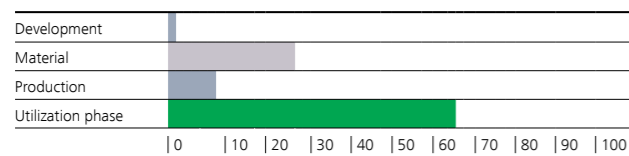
# Green Motion Technology. All over the world.

The world's population is growing rapidly. Urbanization – the demographic transition from rural to urban – is gathering speed. For the first time ever, the majority of the world's population live in cities, and this proportion continues to grow. The megacities of 10 million-plus people persistently expand at breakneck speed.

One key issue is the burden that growth is placing on urban infrastructures and environments. Urban residents all over the world want – and deserve – a good quality of life. Tomorrow's green building is a key contributor to avoiding foreseeable urban and environmental collapse.

They are increasingly becoming the growth engines of their respective domestic economies. But as these cities and populations grow, so do the challenges.

Especially in tall buildings, the power consumption of the vertical transportation system is significant for the building's total energy consumption.



Green Motion Technology impacts on the utilization phase

## Schindler Green Motion Technology.

### Schindler inverter technology

When the elevator is in generator mode, Schindler's own drive technology recuperates the clean energy and feeds it back in to the power grid of the building. The technology reduces or eliminates the need for machine-room cooling.

### High-efficiency drives

Industry-leading technology (e.g. permanent-magnet drive) minimizes the energy consumption of the drive at the highest mechanical and electrical efficiency factors possible.

### Transit management system

The Schindler 7000 control system paired with PORT Technology uses the most advanced algorithms to coordinate all of the elevators so that passengers reach their desired floor as efficiently as possible.

The optional ECO Mode (Energy Control Option) is the power management of the elevator system, which continually provides the adequate number of elevators based on the current and forecast traffic situation.

### Optimized standby mode

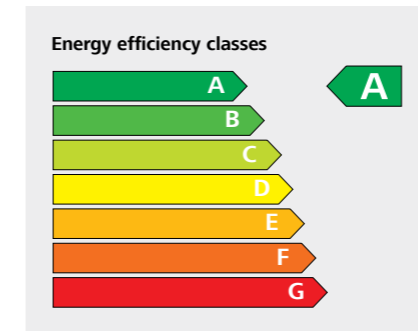
The elevator system detects components such as car lighting, fans etc. which are not in use and activates the sleep mode.

### Adaptable system acceleration

An additional feature of the systems is the variable acceleration at elevator start.



**Good to know:**  
VDI 'A'-rating applies to all Schindler high-rise elevators.



## Schindler high-rise products contribute to achieve all global building certificates, such as...



LEED comprises a suite of rating systems for the design, construction and operation of high perfor-



AQUA is a Brazilian certificate that guarantees the high environmental quality of construction projects.



BREEAM is the world's longest established and most widely used method of assessing, rating and certifying the sustainability of buildings.



DGNB, the German sustainable building council is a non-profit and a non-governmental organization, whose mission is to develop and support ways and solutions for sustainable planning,



BEAM Society Limited is a non-profit organization based in Hong Kong, which is committed to promote, and develop the BEAM assessment tools, assessing green buildings and training



GBCA is a national, not-for-profit organization that is committed to developing a sustainable property industry for Australia by encouraging the adoption of green building practices.



BCA Green Mark Singapore is a green building rating system to evaluate a building for its environmental impact and performance. It is endorsed and supported by the National Environment Agency. It provides a comprehensive framework for assessing the overall environmental performance of new and existing buildings.

Bank of America / One Bryant Park  
New York, USA  
LEED Platinum



Hearst Tower  
New York, USA  
LEED Gold



Torre Iberdrola  
Bilbao, Spain  
LEED Platinum



Heron Tower  
London, United Kingdom  
BREEAM Excellent



Deutsche Bank  
Frankfurt, Germany  
LEED Platinum  
DGNB Gold



Zhonghui Plaza Phase I & II  
Chengdu, China  
LEED Gold



AIA-Center-Aedas  
Foshan, China  
LEED Gold



Shanghai International Commerce Center  
Shanghai, China  
LEED Gold



Pacific Place Three  
Hong Kong, China  
BEAM Excellent



International Commerce Center  
Hong Kong, China  
BEAM Platinum



World Trade Center  
Tower 3  
Beijing, China  
LEED Gold



One Island East  
Hong Kong, China  
BEAM Platinum



Landmark East  
Hong Kong, China  
BEAM Platinum



Zuellig Building  
Manila, Philippines  
LEED Gold

Torre Titanium  
Santiago de Chile, Chile  
LEED Gold



Edificio São Paulo  
São Paulo, Brasil  
LEED Silver

Edifício EZ Towers  
São Paulo, Brasil  
LEED Gold



Cidade Jardim Corporate Center  
São Paulo, Brasil  
Processo AQUA



Torre Matarazzo e  
Shopping Cidade São Paulo  
São Paulo, Brasil  
LEED Gold



Asia Square Tower 1  
Singapore, Singapore  
BCA Green Mark Platinum  
LEED CS Gold



Marina Bay Financial  
Centre Tower  
Singapore, Singapore  
BCA Green Mark Gold Plus



Integra Tower  
Kuala Lumpur, Malaysia  
LEED Platinum



161 Castlereagh Street  
Sydney, Australia  
GBCA 6 star rating

# Transit Management System and its industry-leading ECO Mode.

Schindler's PORT Technology ensures highly optimized utilization of the elevator groups at all times even under heavy traffic conditions. With other systems, all of the elevators in a building remain in operation even when traffic is low.

The unique ECO Mode allows intelligent reduction of the elevators' energy consumption by an accepted lower service provided to users. If the current or forecast waiting times fall below a defined minimum value, ECO Mode switches the unrequired elevators into standby mode.

Thanks to the reduced number of elevator trips and increased efficiency of the elevators, energy is saved. The amount of energy saved in the course of a day is substantial, multiplied over the course of a year it becomes phenomenal. Since ECO Mode dynamically monitors the traffic situation in the building, a high level of service is assured at all times.

Schindler is dedicated to the continuous development of PORT Technology to achieve sustainable and intelligent minimization of energy consumption in buildings – a big step, which leaves a small footprint.

## Up to 40% energy savings with ECO Mode.

### HIGH TRAFFIC

4 elevators in use



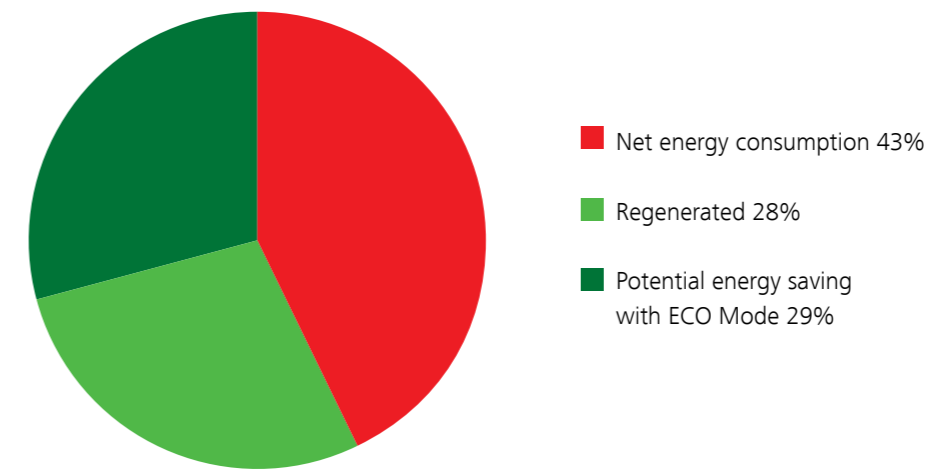
### LOW TRAFFIC

2 elevators in use



ECO Mode optimizes the energy consumption of the entire elevator system.

## Elevator system with Green Motion Technology.



The annual savings of 453 MWh for a typical 8-car high-rise elevator group with Green Motion Technology are equivalent to the annual electricity consumption of 130 average households.

# Schindler 7000.

## The next level of green power in your building.

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