Greener buildings for a future with less CO_2

How energy-efficient products can contribute to climate protection.

At the 25th UN Climate Change Conference in Madrid, everyone agreed: in order to protect the climate, global warming must be limited to well below two degrees Celsius. An ambitious goal, which also concerns planners, facility operators and architects, as the building sector is one of the biggest energy guzzlers in the world.

Smart Buildings improve energy efficiency and promise sustainability without compromising on other benefits. And that is necessary, because existing buildings alone use up one third of the world's energy supply. Without appropriate countermeasures, energy demand is expected to double by 2050 as a result of rising affluence and population growth.

This is why conversions, renovations and modernisations are crucial measures for making buildings not only more barrier-free, comfortable and safe, but above all more energy-efficient. This white paper explains how energy-saving products can help you do your bit and contribute to climate protection.

Buildings are real energy guzzlers

A key factor for climate protection is the energy efficiency of our buildings

According to the latest figures from the IEA (International Energy Agency), buildings consume up to 30% of the global energy demand. Taking into account emissions from upstream power generation, it is estimated that buildings account for 28% of global energy-related CO_2 emissions. To put it plainly: In terms of the share of primary energy consumption, the building sector is one of the largest energy guzzlers in the world.

Buildings are therefore the dominant consumers of global energy – their influence on climate change is enormous.

Increased efficiency is vital for the energy turnaround

A key factor for attaining climate targets is the energy efficiency of buildings. With the most potential for impact through renovation and thermal insulation. Depending on the climatic region, 20 to 60% of the total energy consumption in a building is determined by its design and the materials used in the envelope.

The amended EU Directive on the Energy Performance of Buildings also requires that passive buildings and nearly zero-energy buildings become the standard across the EU – in fact, all new buildings should be nearly zero-energy by 2020. The existing building stock should also be decarbonised by 2050.

Many technological solutions already exist. And, in addition to improved heat insulation, modern plant engineering and building automation can also ensure that buildings become more energy-efficient overall. In the area of access technology and control, energy-efficient system and building solutions are in demand that fully exploit the savings potential and at the same time meet all requirements for comfort, accessibility and security.

SafeRoute: Secure and energy efficient

Using energy-efficient access solutions is just as important as providing comfort, accessibility and security.

For example, when securing escape routes: SafeRoute from dormakaba is a solution that offers great potential for energy savings. The modular, intelligent escape route system is fit for purpose and consistently consumes up to 40%* less energy than functionally comparable systems, reducing associated CO_2 emissions by the same amount.

With over 30 years' experience of escape route security systems, SafeRoute offers greater sustainability. The lower power consumption results from a newly developed technology in combination with a system structure that requires less material. And with the new licence model, facility operators benefit from increased flexibility and reduced logistics costs if any subsequent functional adaptations are required.

* Example energy consumption of SafeRoute compared to escape route security systems without a uniform system bus.
This considers a normally locked single door which is not used very often, equipped with an emergency button, a control unit and a magnetic clamp (operating voltage of 24 V DC, holding force of 2 kN).

Buildings need to become more energy-efficient

In the face of rising affluence and population growth, energy demand is expected to double by 2050 if no appropriate countermeasures are undertaken.

To protect the environment, facility operators, planners and architects of buildings must fulfil their environmental responsibilities. It is also clear that they will not only profit from concrete, long-term cost benefits, but also gain more acceptance and visibility for their buildings within society.

That's also why dormakaba has anchored sustainability as a foundation of it's strategic pillars with four focus areas: Processes and Production, Products, People and Transparency. The aim is to minimise the environmental impact of products and therefore enable customers to make more sustainable choices to improve energy efficiency.

dormakaba is committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations.

GOLD 2019 ecovadis Sustainability Rating

dormakaba has recently been awarded a Gold Medal for its sustainability management by the assessment firm EcoVadis, placing the company in the top 5% of all assessed companies in its sector.

https://www.ecovadis.com/us/what-we-do/

Sources:

https://www.iea.org/tcep/buildings/
https://www.bp.com/en/global/corporate/energy-economics/energy-outlook/demand-by-sector/buildings.html
http://www3.weforum.org/docs/WEF_Global_Risks_Report_2019.pdf
https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/nearly-zero-energy-buildings
https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32018L0844&from=EN (6)

You want to make buildings more energy-efficient?

Or have further questions?
Contact us about anything to do with safe and sustainable building and room access, all from one provider. Our contact addresses are listed at the bottom of this page.

About dormakaba

dormakaba Deutschland GmbH offers a comprehensive portfolio of products, solutions and services for anything involving doors and secure access to buildings and rooms, all from one provider. This includes locking systems, fully networked electronic access solutions, physical access and automatic door systems, hinges, fittings, door closers and stoppers, attendance recording, operational data recording, hotel locking systems and high-security locks.

With more than 16,000 employees and numerous cooperation partners, we are at your service locally in more than 130 countries. Wherever you are in the world, you can benefit from sustainable products, solutions and services that give you a lasting feeling of safety.

Any questions? We would be happy to answer any questions you may have.

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