

# Sustainability is the best architect

## Conservation of resources and energy efficiency determine the future

### Sustainable architecture: energy and economic efficiency combined with comfort

Societies are constantly changing – and hence the requirements on industries, governments, and the habitat in general. Rising demands, for example regarding comfort, quality of life, and consumption, are often at the expense of the environment. The trend has been apparent for some years: more and more people are living and working in cities, there is a

**“The days of consumerism without a second thought are over. The climate change is showing us that the old model is more than outdated.”**

Ban Ki-moon, former UN Secretary General (2007 – 2016)

shortage of residential and commercial buildings, which are becoming more expensive. Hence, new buildings are often not as high-quality and are not conserving resources as they should. Healthy and near-natural living and working conditions

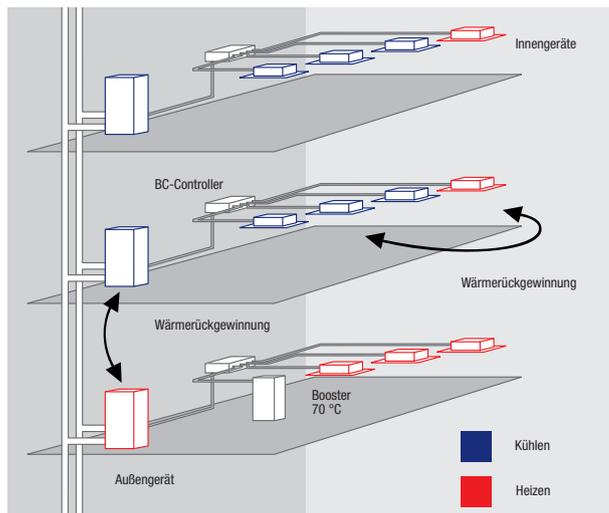
are important to humans' well-being. This also means that a correspondingly sparing use of resources regarding heating, cooling, lighting and water use should be taken into account.

### There are different ways to design a building in an energy efficient way

Even if energy efficient buildings have long been a topic of discussion: their potential have not been maximized yet. Hotels, stores, and office buildings should offer a high comfort, but fulfil the most current sustainability policies and should also be economically viable. To make buildings more energy efficient and thus greener, the technologies developed for heating and air conditioning can play an important role. This can, for example, include systems for simultaneously heating and cooling buildings. These are very efficient solutions, which heat or cool a building based on renewable energies. Regarding the cooling, the existing heat energy will actually be used twice: for heating the building or for the hot water production.

The goal of these solutions is to keep overall energy use and hence the operating costs of a building as low as possible. This applies all the more if one wants to have one's building certified based on the internationally recognized building certification system LEED. Mitsubishi Electric is living these resolutions itself: the new headquarter in Ratingen is LEED certified by integrating various equipment and technologies as a comprehensive electric manufacturer, at the highest level at that, it has achieved the platinum certification. It thus impressively underlines how energy efficient and sustainable its technologies are. These are actually used throughout the building – from the lifts to the heating and air conditioning technology. This is Mitsubishi Electric's aspiration, for itself as well as for its customers.

**If you would like to know more how Mitsubishi Electric can support you:**  
[www.MitsubishiElectric.de](http://www.MitsubishiElectric.de)



**Heat recovery:** The key to a sustainable building climate control.



LEED evaluation criteria

**35%**  
energy and air quality

**26%**  
sustainable location development

**15%**  
indoor climate

**14%**  
material and resources

**6%**  
design and innovation

**4%**  
regional priority



**Certified sustainability:** The Mitsubishi Electric building in Ratingen received the highest LEED level platinum – for cost efficiency and sustainability.



**Know-how is our foundation**

**Holger Thiesen,**  
General Manager, Living Environment at Mitsubishi Electric, on sustainable buildings and comfort

**Mr. Thiesen, the new Mitsubishi Electric building in Ratingen has received the highest-possible environmental certification. At which point in the new building's planning process has the company decided to certify your own company building according to the LEED standard?**

**Holger Thiesen:** We are very proud to be working in a sustainable building. An important part of our corporate philosophy is our commitment to the environment. Therefore, we decided even at the planning stage that the building would have to be sustainable. Together with the architects, we have transformed the idea into reality. We have taken care that our own energy efficient technologies are being used, for example our ventilating and heating as well as lift technologies. The low-voltages plants and all building management systems have been developed by Mitsubishi Electric and are being used in the building. Customers are always impressed when we are showing them our technologies during their everyday use.

**How do your technologies make buildings more sustainable and energy efficient?**

**Holger Thiesen:** We offer our customers not only a single piece of technology, but holistic solutions with precisely matched products, intelligent comprehensive solutions, and first-rate services. Thereby, we are giving the right answers to the technological challenges of modern building technology. We always focus on offering a comfortable environment to the people staying in the building. Sustainability can only work as part of a holistic package.

**Mitsubishi Electric supports architects and companies in building sustainably. What is your goal for the future?**

**Holger Thiesen:** We want cities to be cleaner and to use the energy available to be used more efficiently. Mitsubishi Electric would like to make its contribution to society and to offer people a better life.

**MITSUBISHI ELECTRIC**  
*Changes for the Better*