

Providing High Added Value for Buildings Around the World

Combining its own unique technology and know-how with the IoT and the latest technology enables Azbil to offer high value-added solutions that provide comfort, save energy, and respect the environment

Azbil's building automation (BA) business provides comfortable spaces in office buildings and other large-scale buildings using proprietary air-conditioning control technology. Backed by a solid business environment, and building upon a foundation of measurement and control technology and expertise acquired over many years, the BA business is looking to the future with renewed efforts to meet global standards for environmental performance and to incorporate IoT and the latest technology, such as AI, into its products and services.

Growth by expanding into overseas BA markets

The BA business, which is one of Azbil Corporation's core businesses, has an integrated system comprising product and software development, manufacturing, sales, instrumentation design, engineering, installation, and maintenance services for office buildings and other large-scale buildings.



Kazuyasu Hamada

Executive Director and Managing Executive Officer
President of the Building Systems Company
Azbil Corporation

By applying know-how gained from years of field experience in air conditioning control and in configuring systems with the latest communication specifications and IT, Azbil controls building temperature and humidity to provide comfortable spaces, improved energy efficiency, and less environmental impact through the reduction of CO₂ emissions. With our expertise in providing products and solutions tailored to the long-term life cycle of buildings, we help to keep our customers' buildings operating steadily and to raise their value over the long term. Our solutions range from maintenance services and retrofitting of existing buildings to energy-saving solutions.

In recent years, we have been working on business expansion, especially in Asia. In countries in this region there is a rising demand for BA systems and energy-saving solutions due to the increasing amount of office building, factory, shopping center, and airport construction.

In April 2018, to take advantage of this kind of business opportunity in Asia, the Strategic Planning & Development Office for Southeast Asia was established in Singapore. The Office is responsible for region-wide business promotion and strategic planning to strengthen cooperation

among our subsidiaries in Southeast Asia, in contrast to our conventional approach in which each individual subsidiary worked on developing its own business. To meet the needs of new construction, renovation, and energy efficiency in the Southeast Asian building market, Azbil provides technology and services to a wide range of customers.

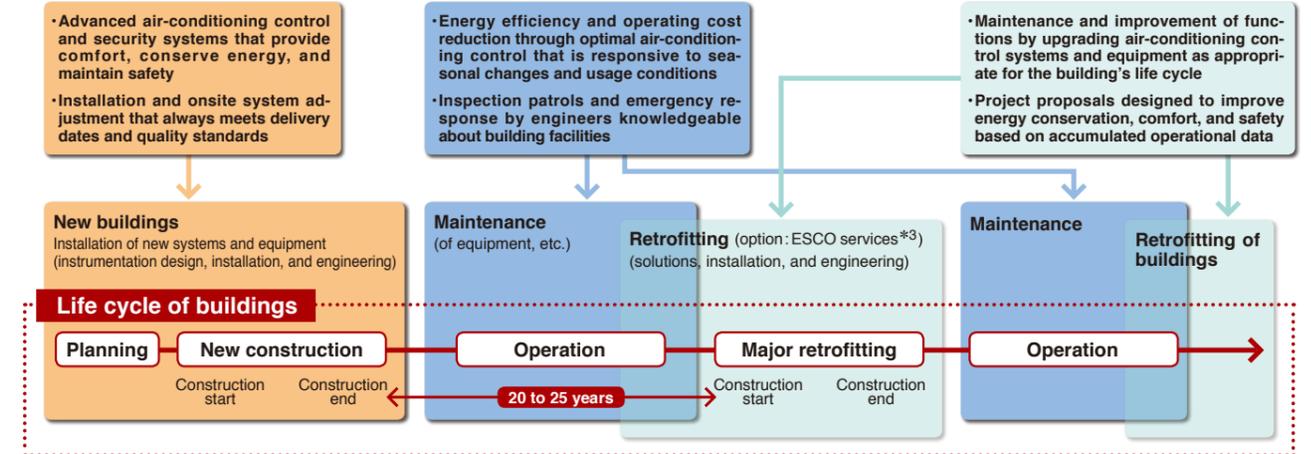
Environmental performance standards and technological innovations

We have seen growth in the orders for systems and equipment for new large-scale buildings in Japan, supported by growing demand for construction related to the Tokyo 2020 Olympic and Paralympic Games, and also as a result of urban redevelopment investment. Redevelopment projects are planned even after the Olympic Games, and the demand for new buildings is expected to continue.

Backed by this robust business environment, we will create new value for the BA business, and pass it on to customers, by focusing on four points.

The first is meeting global standards for environmental performance. The current building market, particularly in Europe and the United States, regards environmental

Value provided by the BA business throughout the life cycle of a building



friendliness—being a “green building”—as an important part of a building's value, and it is desirable for buildings to satisfy the requirements for LEED*¹ or a similar green building certification. With abundant experience in energy efficiency and CO₂ emission reduction for many years, Azbil aims to accelerate its solutions sales activity, which helps customers to make their buildings compliant with global standards for environmental performance.

In so doing, we will also be helping to implement the Sustainable Development Goals (SDGs) adopted at a United Nations summit in 2015.

Since these goals are related to health and environmental conservation, an increase in the number of countries and companies working on the SDGs is favorable for Azbil, a company focused on providing comfortable and healthy indoor spaces as well as energy efficiency. Needless to say, Azbil intends to continue providing healthy and comfortable spaces in offices on behalf of the workers who spend long hours there.

The second point is putting new products and services on the market that incorporate technology such as the IoT, AI, big data, and cloud services. Azbil has always manufactured products that meet the needs of the time, using advanced technology. Our savic-net™ series of building management systems is one of Azbil's main products. A newcomer to the lineup, savic-net G5, was released in 2018. The savic-net G5 system was a pioneering development of the IoT age, and features scalability as one of its strong points. In the past, each manufactur-

er used its own dedicated communication standard for its BA system, but savic-net G5 uses the BACnet*² global communication standard. This allows easy connection to and communication with devices made by different manufacturers. Our customers can select devices from a wide range of options, regardless of manufacturer, in order to implement the desired control outcome. Various landmark buildings in Asia and large-scale office-building redevelopment projects in Japan have already installed the savic-net G5 system.

Azbil's strengths: advanced technology and high value-added project proposals

The third focus point is enhancing our ability to offer high value-added solutions, such as maintenance or retrofitting of existing buildings in Japan.

Currently, buildings constructed in the period from around 1990 to the early 2000s are in need of renovation. Taking advantage of this business opportunity, we are focused on making high value-added retrofit proposals that include energy efficiency, energy management, performance improvements, reduced operating costs, and the provision of continuous equipment maintenance.

The fourth point is improving our capabilities in the area of specialized air conditioning, which is used in hospitals, laboratories, data centers, etc. This area, which requires advanced air conditioning technology, is where Azbil has demonstrated its strengths by leveraging its unique technology and know-how based on accumulated experi-

ence. We have reinforced our initiatives in this area by, for example, establishing a new department that is dedicated to special air conditioning technology, in order to increase our ability to make project proposals that take advantage of Azbil's technological capabilities.

Azbil's strengths are not limited to products and systems. They also include the ability to complete engineering, installation work, and maintenance at a high level of quality, which instills a sense of security and trust that leads customers to select Azbil. Our employees are a source of these strengths, so we will continue with human resource development aimed to raise each employee's level of skill and experience.

Based on our Group philosophy of “human-centered automation,” we strive to create comfortable and efficient office and production spaces and to reduce environmental impact while improving our products and technology day by day.

***1▶ Leadership in Energy and Environmental Design**
An environmental performance evaluation system based on how buildings and sites are used. The system was developed by the U.S. Green Building Council and is operated by Green Business Certification, Inc. In this system, energy-efficient and environmentally friendly buildings and sites are rated as being on one of four levels: Certified, Silver, Gold, and Platinum.

***2▶ Building Automation and Control networking protocol**
An open communication protocol to integrally monitor and control various pieces of building equipment for heating, ventilating, and air-conditioning (HVAC) control, lighting control, access control, fire detection systems, and other related equipment. The protocol was published by ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) in 1995 and issued as ISO 16484-5 by the International Organization for Standardization in 2003.

***3▶ Energy service company**
A provider of comprehensive services aimed at reducing the energy consumption of a factory or building. In an ESCO project, the energy service company guarantees a certain level of energy savings.

• savic-net is a trademark of Azbil Corporation.
• BACnet is a trademark of ASHRAE.