

Siemens sees potential in Vietnam market

Matthias Rebellius, Chief Executive Officer of Building Technologies Division, Siemens AG, told *The Saigon Times Daily* about what the Division has done to contribute to the construction of green buildings in the world in general, and Vietnam in particular, during his business trip to this growing market last week.



Matthias Rebellius (R) of Siemens Building Technologies Division, and Horst J. Geicke of Deutsches Haus Ho Chi Minh Stadt Ltd are seen at the HCMC office of Siemens Vietnam last week



Thai-Lai Pham (R), President and CEO of Siemens Vietnam, Matthias Rebellius of Siemens Building Technologies Division (2nd, R), Horst J. Geicke (2nd, L) of Deutsches Haus Ho Chi Minh Stadt Ltd and Bernd Dietel of Deutsches Haus Ho Chi Minh Stadt Ltd join a discussion after a tour of the Deutsches Haus last week Photos: KIM YEN

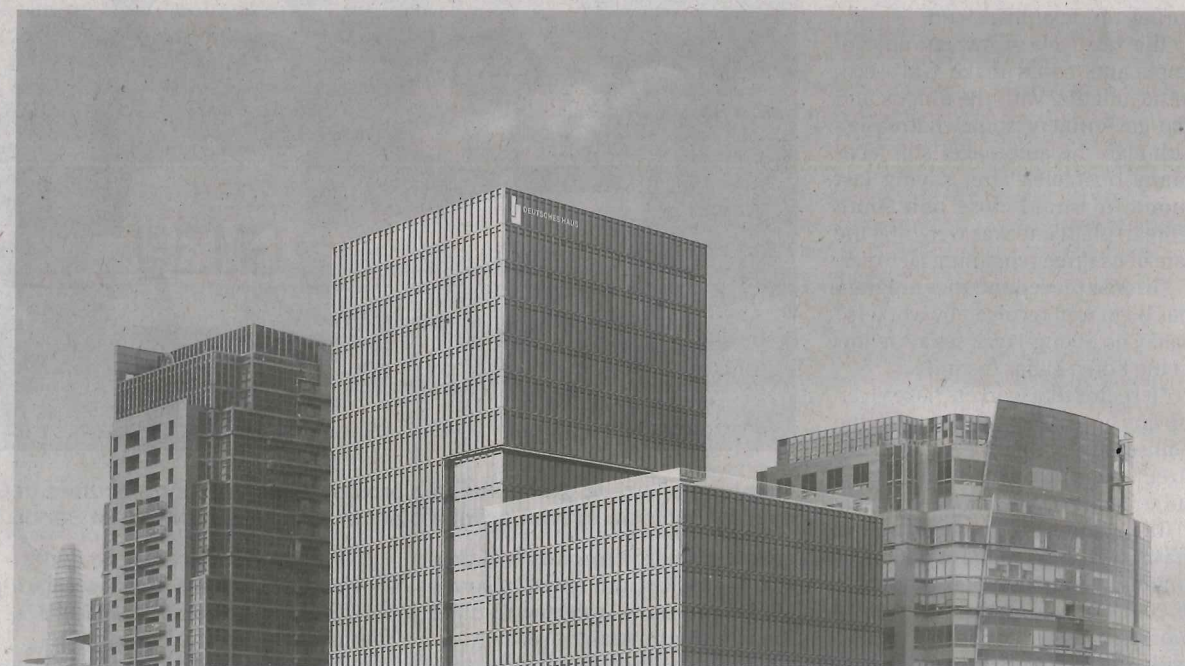
The Saigon Times Daily: Siemens' history in Vietnam can be traced back to 1979 when the company supplied and installed two industrial steam turbines at the Bai Bang Paper Mill, and the company has grown over the years. How has the Siemens Building Technologies Division performed and what is the business potential for the Division in this market?

- **Matthias Rebellius:** The Building Technologies Division provides solutions, products and services related to energy and energy efficiency around the world. We have a long history of around 160 years in the market and a very high focus on Asia as this is one of our big-growth regions, particularly in Vietnam where we started our presence as early as in 1979. In Vietnam, we have gained impressive double-digit growth over the years and have been involved in a number of key infrastructure projects, ranging from hospitals to airports. One such example of our projects is the Deutsches Haus in HCMC. I believe there is a lot more potential in this market. Our growth in Vietnam and globally proves

Another example is Singapore. In 2012, Singapore's Green Building Council launched its green services program, which aims to promote the ESCO sector by identifying ESCOs and other types of companies (for example architecture firms, mechanical and electric firms, and so on) that provide a high level of energy efficiency and energy management services. The council promotes best practices across the buildings sector under the Building and Construction Authority's Green Mark standards which provides an environmental rating of buildings based on a number of criteria, including energy efficiency.

There are many such examples of governments in Asia taking proactive steps to encourage energy efficiency in buildings.

Internet of Things (IoT) is a major trend that has redefined many business models and impacted the way business is conducted. How has IoT impacted Siemens Building Technologies Division?



that we have addressed the right topics regarding sustainability, energy efficiency, safety and security that are important to people, the environment and society.

In Vietnam the Building Technologies Division's market is served together with our value-added partners. We have about eight partners who provide our comprehensive portfolio of building automation systems, room controls, field devices and fire safety systems to help create energy efficient, safe and secure buildings and infrastructure facilities.

You just mentioned energy efficiency. Could you elaborate on Siemens projects related to energy efficiency, either here in Vietnam or Asia?

- The Deutsches Haus in HCMC is a perfect place with energy efficiency and one of the most recent examples of what we have done together with our partners and investors. Their collaboration is important because we would not have been able to create energy-efficient places around the world without the support of investors and governments who really want to make a difference

We have a wealth of experience in energy efficiency around the world. One such project is Taipei 101 - the tallest energy-efficient building in the world, which is LEED (Leadership in Energy and Environmental Design) Platinum certified. Siemens' solutions and equipments, including LEED green building consultancy, help the building achieve an annual reduction in nearly 3,000 tons of carbon dioxide emissions and 10% in water consumption, waste and power (120,000 kWh/year).

How important has energy efficiency/green operation been factored into new buildings, especially in Asia Pacific? What have governments around the globe done to support green buildings in their countries?

- The building energy efficiency technology market in Asia Pacific is driven by green building certificate programs, growing interest in net zero energy (ZNE) buildings, and the digital revolution of energy efficiency solutions. The building industry in this region is progressing toward increased levels of energy efficiency, both in new construction and existing building projects, leading to the uptake of commercial building energy efficiency products and services.

Notably, the Paris Climate Summit played an important role pushing for increased greenhouse gas (GHG) emissions reduction targets. Energy efficiency in buildings can play a critical role in the various governments' ability to meet their Nationally Determined Contributions (NDCs). For example, China's 13th Five-Year Plan continues previous energy efficiency goals, with targets of cutting energy consumption by 15% and decreasing carbon emissions by 18%. China also aims to tighten its energy efficiency building standards, and increase the share of energy efficient buildings and technologies. It is expected that by 2020, over 50% of new buildings are to comply with the standards, and the share of green construction materials is to exceed 40%. The stringency of energy efficiency standards is also set to increase by 20% in 2020, compared to the 2015 levels.

- We see changes in our customers' requirements and expectations. Today, our customers expect more transparency, quicker and more predictive services and additional value to be generated from their building data. For instance, 80% of customers want visualization of data (transparency), 69% of customers expect improved building operations process (service), 65% of customers want location-independent access to their data, and 50% of customers expect new digital services and business models.

The digital transformation within the industry means our customers also expect developments in technology to result in new opportunities and generate more value along their value chain. A key enabler for the creation of such value is building data. Buildings are able to communicate information about their structure and their behavior. This data has the potential to generate concrete actions which positively influence the building's performance in terms of energy efficiency, safety and security, user satisfaction and space occupancy.

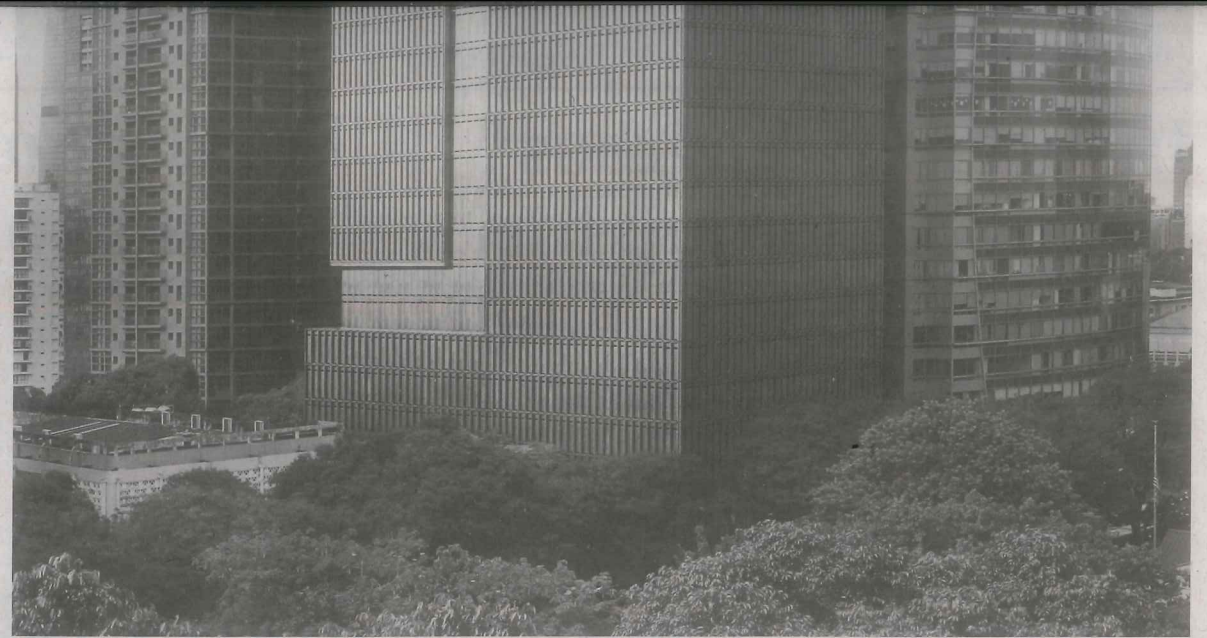
Taking advantage of the building data would require analytical expertise coupled with domain know-how and engineering finesse - that is our competitive edge. We are able to enhance the performance of a building through the power of data, and help our customers make well-informed decisions which will help them to fulfill their business goals. In a nutshell, Siemens Building Technologies Division's expertise would enable greater value to be generated across the building lifecycle, from design and construction to operation and maintenance.

How can building owners/facility managers benefit from IoT?

- A good way to answer this question is to share one of our reference projects, the Sello shopping center in Helsinki, Finland. Data-driven services from Siemens have helped enhance Sello's visitor experience, making it more than a shopping center. We made it a perfect place for people to come together, and feel comfortable. Sello is Finland's second largest shopping center and has 102,000 square meters of gross leasable area as well as over 170 shops and services. About 24 million people visit Sello per year, making it Finland's most visited one and air quality is key for the overall quality of the shopping environment offered to the public, because visitors want to feel comfortable. Sello was the first shopping center in Europe to become LEED EB Gold-certified in 2010. It was also the first shopping center - and one of only nine such buildings in Europe - to achieve the LEED EB Platinum certification in 2015. Sello aims to remain the greenest shopping center in Europe, providing its over 170 tenants with a sustainable business environment.

Leveraging data from energy efficiency and heating, ventilation, and air conditioning (HVAC) systems, air quality and temperature sensors, occupancy rates and weather data, Siemens identified areas for improvement and delivered a comprehensive optimization program for Sello's building systems that's focused on energy consumption and air quality.

Reported by **Kim Yen**



The Deutsches Haus is located in HCMC's District 1

Photo: SIEMENS VIETNAM

DEUTSCHES HAUS BUILT WITH BEST GREEN BUILDING TECHNOLOGY

Horst J. Geicke, chairman and CEO of Deutsches Haus Ho Chi Minh Stadt Ltd, explained why the Deutsches Haus in HCMC's District 1 is the most energy-efficient green premium office building in Vietnam

The Saigon Times Daily: Why the Deutsches Haus is said to be the most energy-efficient green premium office building in Vietnam?

- **Horst Geicke:** The Deutsches Haus was planned with the best energy efficiency and green building technologies in mind, and constructed with the most modern German construction technologies and machinery. We worked closely with Siemens to identify and implement the company's green buildings solutions which fulfilled our building's requirements. The main features of the Deutsches Haus comprise of the double-skin façade which costs four times as much as the façade system normally used for an office building. The façade, with a sun-shading louver in between, helps minimize any external noise and heating. The green feature about the special façade is that the heat does not come into the building due to the cavity which is outside ventilated in addition the louver blinds from wind and the louver blinds work at its best when they are outside. The energy-efficient façade is unique to Vietnam and even Asia and will create a milestone for future building developments under sustainability aspects. We do have over 30% to 40% in cost savings compared to a normal façade in terms of energy costs which justify our investment in the long term.

Another milestone in technology is our installed LED Lighting and Control System. Brighter and more energy-efficient lighting LED lights with a life expectancy of 40,000 hours, which is equal with approximately 10 years, are used throughout the building. The building has high performance in the air conditioning system as well as air filters which go beyond German standards.

How do Siemens technologies contribute to the overall green operation of the building?

- Not only did Siemens supply the Deutsches Haus with solutions that are environmentally-friendly, they also provided us with internal building control systems equipments, including light sensors.

Our building management features Siemens technologies that are in line with the integrated building management system (iBMS) concept, and based on Siemens' Desigo CC platform. This platform provides central control and management of air supply and ventilation, power consumption of all tenants, solar and video security systems, safety management in conjunction with fire alarm systems, lighting control and high efficiency power supply systems. The Deutsches Haus is the first commercial building in Vietnam equipped with a centralized fire extinguishing system using Siemens Sinorix systems supported with the natural gas nitrogen, automatic car park guidance with Siemens Ultrasonic sensors for cars and over 1,000 motorbikes.

The Deutsches Haus is the first building in Vietnam and one of the few in Southeast Asia awarded with two energy efficiency certificates: LEED Platinum and DGNB for green buildings. The Federal Ministry of Economic Affairs and Energy of Germany granted the building the EnEff distinction applying state-of-the-art sustainable energy-efficient building solutions and technologies "Made in Germany".

The Deutsches Haus has won a number of awards, including the Best Green Development of South East Asia Property Awards 2016 and the Best Office & Business Development in Asia of MIPIM Asia Awards 2017.