



COMMERZ REAL

The future of managing investments in real estate

How Commerz Real and Bosch Building Technologies are pioneering an ecosystem to increase efficiency, reduce costs, and improve the environmental impact of real estate portfolios.

Susteco
A Bosch Company

Whitepaper — 09.2023



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Editorial

COMMERZ REAL 

Dear Readers,

The digital transformation of the real estate industry continues to advance and is gaining new impetus against the backdrop of increasing requirements in the context of sustainability. Comprehensive networking, the sharing of information and, above all, the cooperation of all parties involved are key drivers in this, with increasing demands on data security and the reliability of the information collected.

Against this backdrop, we are delighted to have been able to join forces with Bosch Building Technologies in creating the Susteco platform to develop both an economic and ecological solution for the real estate sector. The use and machine processing of data offers immense opportunities to improve the cost-effectiveness of our properties, optimise workflows, reduce the impact on the environment, develop new products and visionary ideas using networked data and, especially, to leverage the industry's considerable potential for automation.

At the same time, however, there is a need for greater cooperation between all those involved and, most notably, a need to trust that a networked ecosystem is beneficial for all. This is because an open ecosystem enables a large number of stakeholders to network via a central platform, create innovative solutions and thus exploit the full potential of our properties.

Our biggest challenge, though, remains the inventory and utilisation of existing data and information about the properties. After all, the greatest potential arises when data can be used across the board, is available quickly and in a structured way, and all stakeholders can access the data relating to the assets and beyond.

I would therefore like to invite you to take inspiration from the approach presented in this whitepaper and to generate new ideas for your own company.

Jens Böhnlein
Global Head of Asset Management and Sustainability



Jens Böhnlein

Global Head of Asset Management
and Sustainability, Commerz Real



Dr. Henrik Siegle

CTO and Managing Director, Bosch
Building Technologies

Dear Readers,

As CTO of Bosch Building Technologies, I am delighted to present the results of the close collaboration between the new Bosch subsidiary Susteco Solutions GmbH and the visionary building owner Commerz Real AG. It gives you an insight into the pioneering collaboration between the real estate sector and technology companies, which is leading to technical innovations and greater sustainability.

The times we live in call for a reappraisal of the approach to our existing buildings. Great potential exists for the real estate sector to have a positive impact on the environment by using enhanced energy efficiency to help reduce CO₂ emissions. This whitepaper examines these issues and demonstrates how cooperation between building owners and technology companies can achieve sustainable change.

If the real estate sector and technology companies communicate closely, they will succeed in harnessing all the benefits of technical progress and leveraging this sector's full potential in terms of sustainable change. The technologies we have developed pave the way for networked buildings, data analysis, and the utilization of partner solutions for climate-friendly operations.

The whitepaper emphasizes that everyone involved must pull together to achieve shared success. Hand in hand with the real estate sector, technology providers are developing economic and ecological solutions that building owners can use for the sustainable transformation of their existing buildings. We are at a turning point, one at which our built environment can play a key role in achieving global sustainability targets.

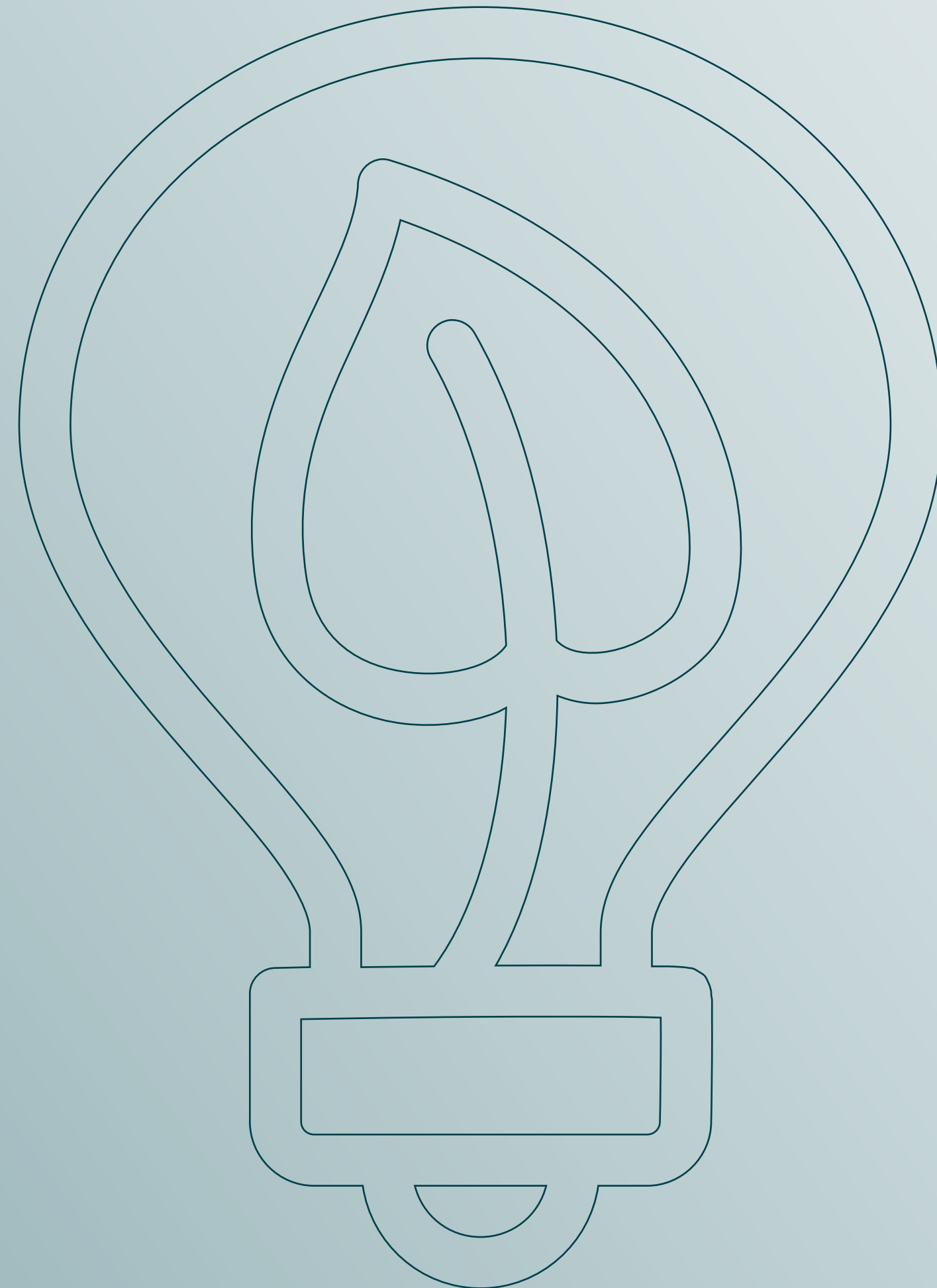
The opportunities identified in this whitepaper are real. We at Bosch Building Technologies are determined to create a sustainable future and to join you in being an active part of this significant change.

I hope you enjoy reading the whitepaper.

Kind regards,

Dr. Henrik Siegle
CTO Bosch Building Technologies

Status quo



The evolving status quo

The real estate industry has been facing an unprecedented combination of challenges in recent years. Inflation, interest rates, and energy costs have been at historic highs. Accelerating climate change has brought increased focus on Environmental, Social, and Governance (ESG) reporting. In June 2023, the International Financial Reporting Standards (IFRS) Foundation issued its inaugural Sustainability Disclosure Standards to inform investment decisions. Since the real estate and building industry accounts for around 40% of global CO₂ emissions per year, the whole industry has to work together to pivot towards sustainable practices. Efficiency and transparency are more important than ever, both in terms of reducing costs and the environmental impact of real estate, as well as meeting the growing demand for ESG-compliant buildings.

Cooperation and flagship property

This is why Commerz Real and Bosch Building Technologies have decided to start the cooperation journey to drive digital transformation in asset and building management. The Galaxy Tower in Vienna is our flagship property here. Both parties are aware that taking this initial step is crucial to transitioning

towards a broader ecosystem. After developing the solution of Susteco over the last few years, Bosch Building Technologies is launching Susteco, a corporate startup, to scale the digital platform for truly transparent real estate with fully integrated, real-time data. It is no longer enough to just view real estate as static buildings that are bought and rented. Instead, an era is beginning in which real estate is growing into a digital ecosystem to meet the needs of investment and building managers, their tenants, and the surrounding environment itself.

In order to make this possible, cooperation and smart technologies play a decisive role. Above all, the seamless integration of data streams and intelligent systems is becoming an essential success factor. From intelligent energy management to productivity-enhancing services, these technologies not only create efficient processes, but also a completely new type of space that fits harmoniously into everyday life. This will improve the overall experience for tenants and empower investment and building managers to make informed decisions to increase efficiency, reduce costs, and provide reliable, automated ESG reporting.

Flagship

Galaxy Tower – A first step in the digital transformation

Maintaining real estate already requires the collaboration of a diverse group: investors, builders, civic institutions, asset managers, property managers, facility managers, service providers, and of course the tenants themselves. Expert systems provided by technology and prop-tech companies naturally are focusing on specific aspects of asset or building management. Alas, this creates complexity and silos throughout the lifecycle of a property or investment. To truly benefit from digital transformation in real estate, there needs to be a unified but flexible platform that provides a complete picture of the whole data ecosystem related to a building. How else can the effected parties make quick, informed decisions –and if necessary, in real-time?

Most of the industry is lagging far behind, often relying on data manually entered by hand or sent via email. The different data systems often cannot even communicate with each other. Without a common interface, the data has to be manually transferred from system to system. This creates silos of information, turning a building or real estate portfolio into a veritable black box.

If investment managers at all levels are going to make informed decisions, they have to future proof

their investments. This starts by understanding how the internal data for these real estate investments works. Only then can real estate truly pivot towards a sustainable industry, while reducing costs at the same time. Over time, having a digital history of a building's data and structure also becomes a major asset during any future modification or business transaction.

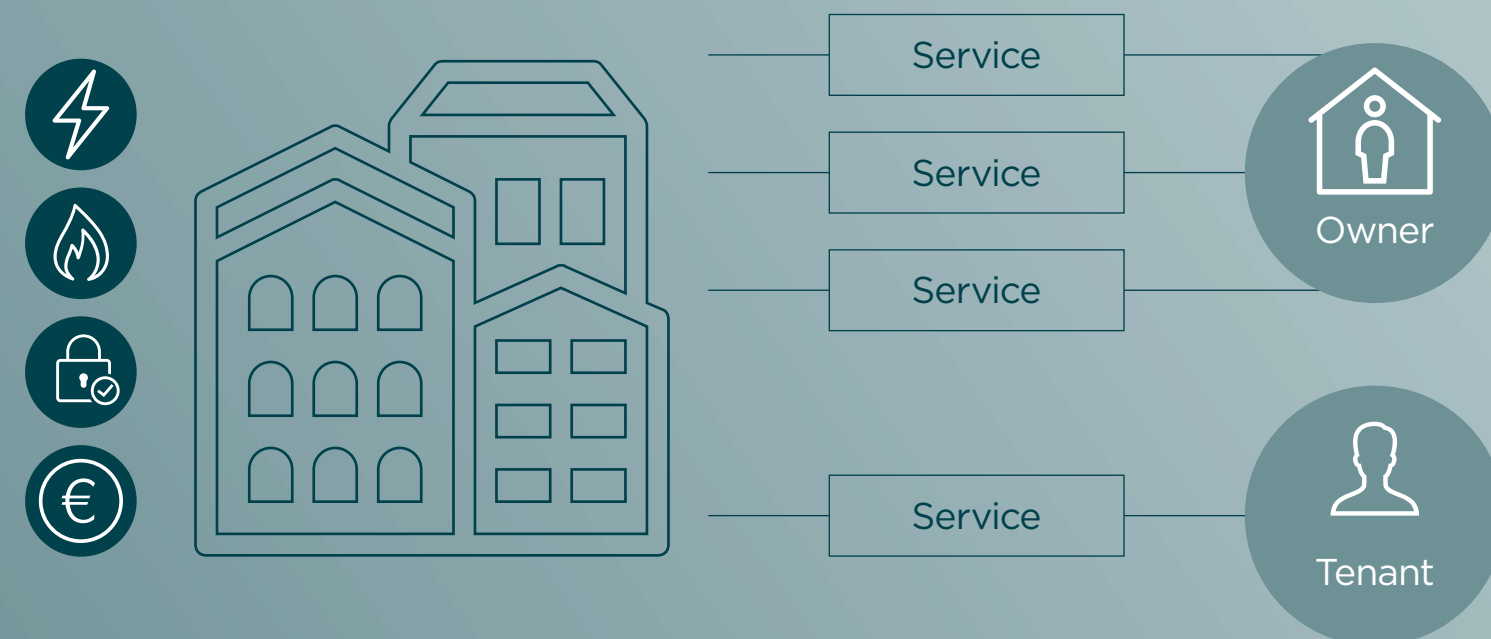
With this in mind, Commerz Real identified the Galaxy Tower as an ideal opportunity to venture down this path with Susteco. Originally built in Vienna, in 1978, the nearly 18,000 m² high-rise was expanded in 2002. In 2021, it possessed some of the technical infrastructure to begin planning how to best deploy the Susteco solution, but the building still needed the right preparations to establish a digital, data-driven ecosystem. In particular, the building management system had to be renewed, and basic smart building systems and reliable cloud-connection needed to be installed. Dynamic building layouts were necessary so changes to floors or sections of the building could be made with little cost. The data also needed to be securely accessed externally, and its security and HVAC offerings needed to be individualized based on tenant needs. This was no small task.



Susteco in a nutshell - Reducing complexity and increasing the service offering

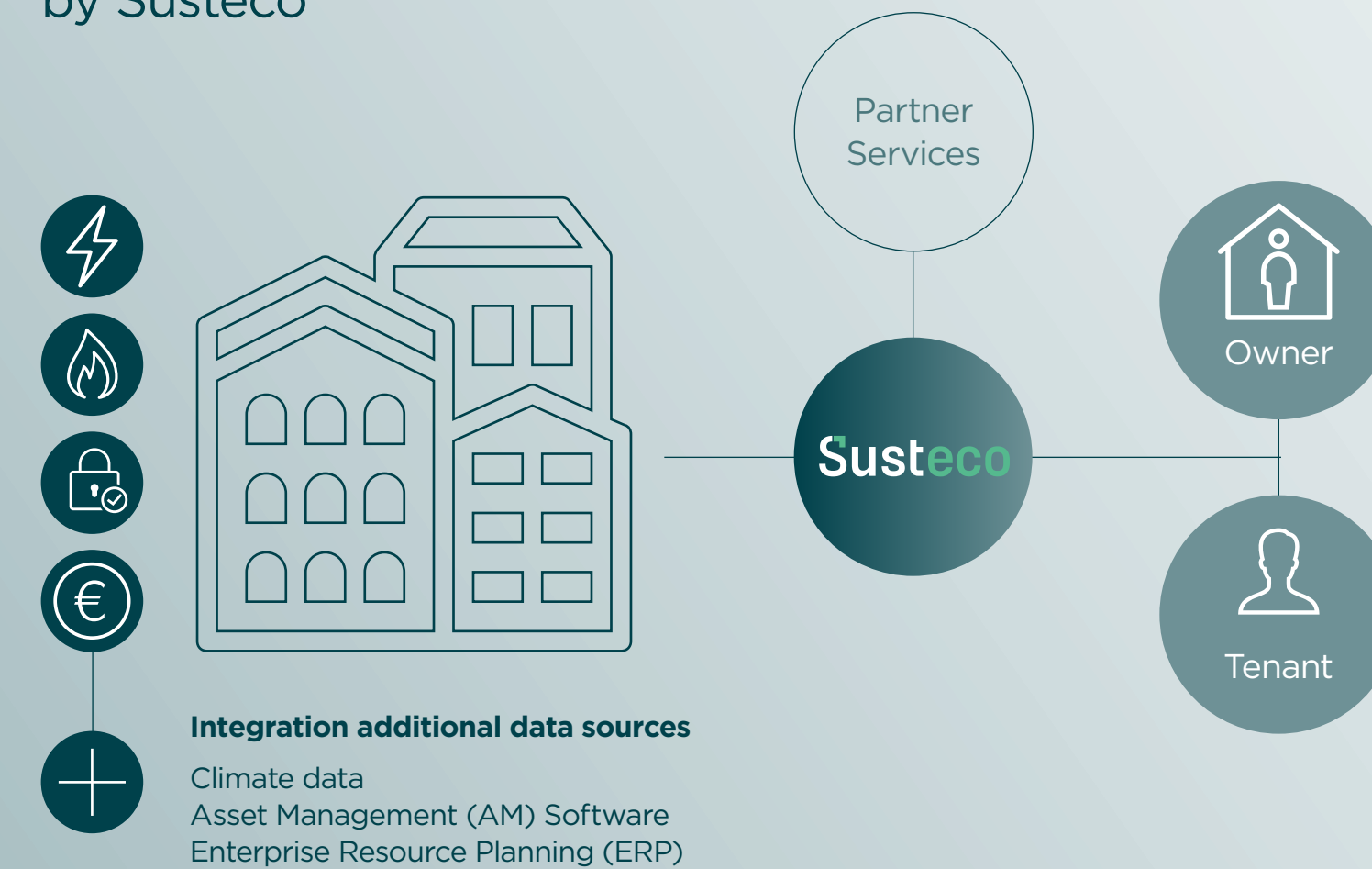
today

Traditional, individual and siloed solutions and services



tomorrow

Data transparency and accessibility provided by Susteco



Technology

Susteco as strong business partner and it's solution

The Susteco solution focuses on a transparent, up-to-date overview of the different systems in or related to a building, a collection of buildings, and eventually an entire real estate portfolio. By having all relevant data in one place (even in one visual interface), investment and building managers and their tenants can all save valuable time. Everyone can sign in to the same platform but receive individualized information based on their needs. This is only possible if there is a uniform standard for the data itself. With a network of over 45 companies specializing in nearly every aspect of digital and traditional building management and optimization, all parties have a great deal of flexibility to personalize real estate for their individual needs, which was particularly important for the Galaxy Tower.

Especially the introduction of hybrid-work policies means that building efficiency can literally change daily. Simplifying the process and reducing complexity for requests between tenant, building manager, and the owner or investor is increasingly more important. Susteco with its solution uniquely well suited to help streamline the process, from start to finish. An experienced organization like

Bosch Building Technologies provides the proven experience with a reliable network. Susteco, its corporate startup, offers a flexible, dynamic approach to make the perfect combination for a sustainable and digital transformation. Susteco could act as one expert partner guiding the entire process from conceptualization to the implementation of digitalizing processes within an open platform.

The experience and know-how from this type of project can then be applied to further buildings by using digital twin technology. A digital twin is essentially a virtual representation of all the data in the various services of a building like HVAC, safety & security, utilities, and waste management. In addition, a digital mapping of the building's typography and structural build shows how all these services and architecture interact, affect, and relate to one another. This was crucial for getting a complete picture of what is happening in the Galaxy Tower on a daily basis.

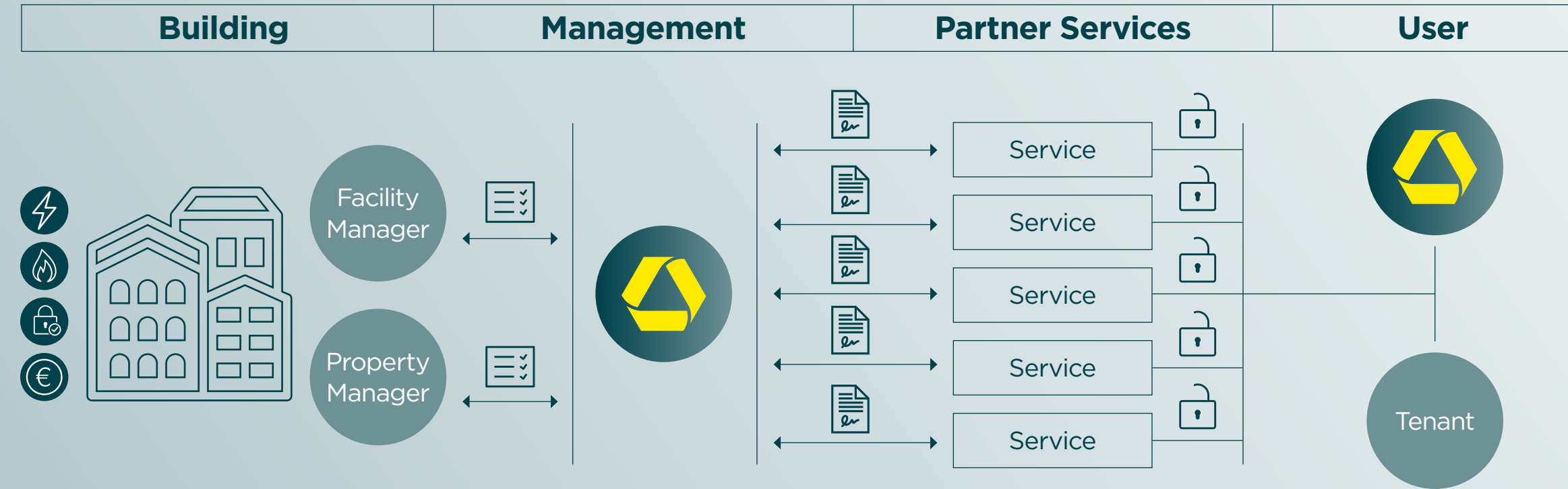
Single source of truth

Once created, a digital twin can provide data in realtime to partner services which then send

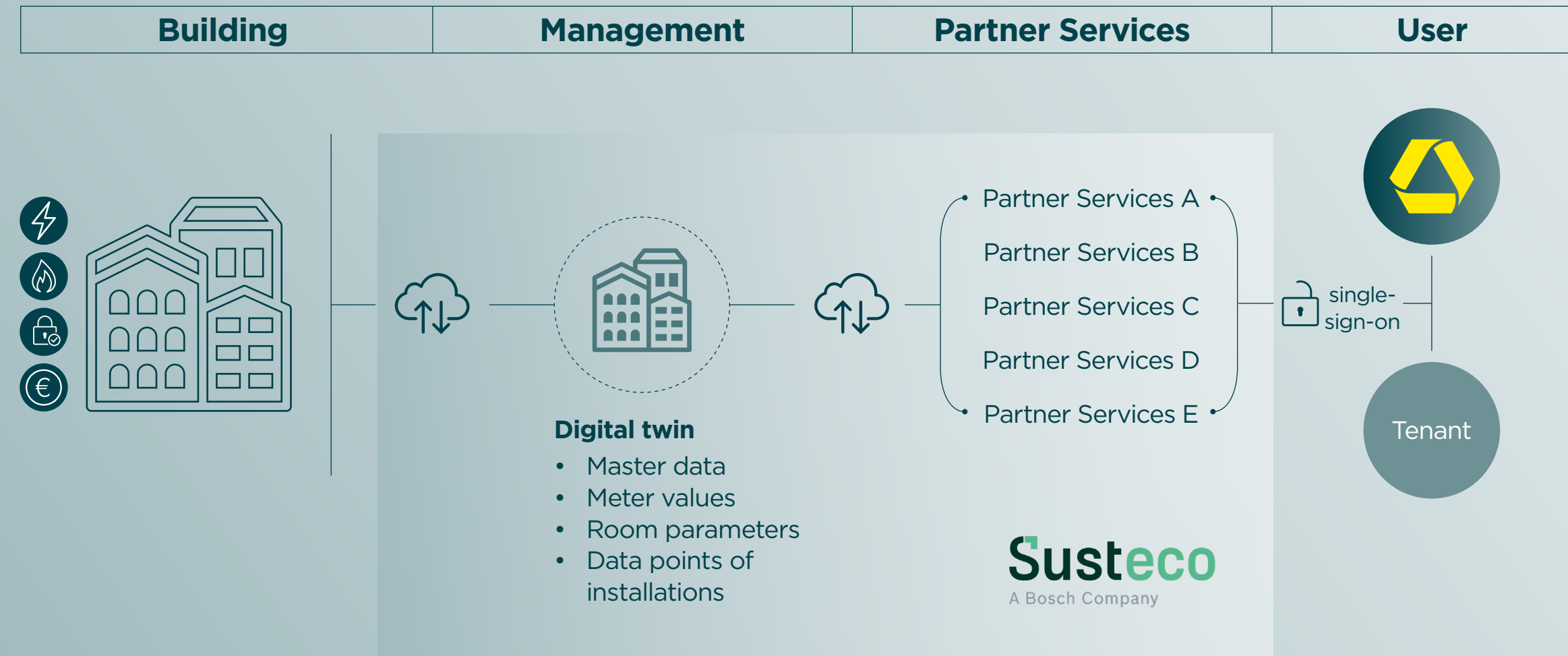
notifications for building managers and service providers to analyze the situation and make necessary recommendations. This makes the whole process easier for owners and investment managers by increasing efficiency and adding additional services with little implementation efforts. Having access to a digital twin in a single platform means service providers can quickly respond to requests and assess the data to make initial recommendations. Rather than having a constant back and forth between different layers of building manger, owner, service provider, or tenant – essentially every aspect of operation, management, planning and decision-making processes can happen in one unified interface.

Beyond the daily business of building management, having all of an investment's data at your fingertips streamlines ESG reporting, particularly in the event of an audit that can go back a number of years. But that is just a starting point for how the digital transformation of a real estate portfolio can future proof investments for years to come.

conventional



Susteco



The conventional way of obtaining information shows an enormous communication effort between all actors involved. Susteco enables a single source of truth, where a digital twin centrally enables information management.

Outlook



Where we are and where we are going

Digitally transforming the Galaxy Tower is happening in a number of phases and partner services. Phase 0 was essentially to establish how digitally prepared the building was to fully integrate the solution of Susteco and what type of modifications would be necessary. Phase 1 was to identify the current costs and environmental impact of the building through energy monitoring and automated ESG reporting. As of Summer 2023, phases 0 and 1 are complete. This is providing a solid basis to take comprehensive action and reduce CO₂ by optimizing the HVAC with data-driven AI technology in phase 2. Phase 3 will focus on consolidating additional data sources and systems, and phase 4 will focus on general comfort and wellbeing, particularly by monitoring the air and water quality of the building in real-time. The entire solution, including the integrated partner services, is designed to be prepared for roll-out and scaling future business approach.

Over the next few years, this building will gradually turn into a flagship for digital transformation of built environment and will provide countless knowledge and insight into how other

properties can do the same. This can form the foundation of the Commerz Real approach to using sustainable asset management to help establish a digital, data-driven ecosystem for its real estate investments. Uniform data standards will lead to automated and frictionless business processes for everyone involved. Standard datasets can then create reliable, transparent benchmarks to compare with other buildings over a longer period of time. This will also simplify and streamline the process for building managers and service providers on site. Even service providers outside of the network can benefit from having a history of building data to quickly and easily interpret, even if they have never been to the building before.

Along the entire value chain

Nearly all of this takes place within a 24/7 interactive portal for all active services. Datasets for specific building and real estate systems can be matched with KPIs of prop-tech solutions and then also be analyzed and presented to the community who maintains real estate and used as a proof of concept

for similar properties and eventually entire real estate portfolios. A modular and open approach will meet the needs of all parties involved and can easily be applied to the services of any vendor, regardless of the technology they use. The final goal is a truly transparent real estate ecosystem, driven by real-time data to reduce costs and CO₂ emissions, while increasing the overall value of an investment portfolio and providing accurate, actionable KPIs for sustainability.

Susteco is here to support all along the way, adding partners and service providers to the platform, refining for customer needs, and scaling the current platform into a international digital ecosystem of real estate for forward-thinking investment managers and business partners. Everyone involved with building or investment management will benefit from increased efficiency and transparency and decreased cost, not to mention the positive impact on the environment.

But first the whole industry has to make the choice to pivot toward digital transformation – together.



Partner

About us

Bosch Building Technologies

The Bosch division Building Technologies is a leading global supplier of security, safety, and communications products and systems. In selected countries Bosch Building Technologies offers solutions and services for building security, energy efficiency and building automation. About 10,900 associates generated sales of 2.5 billion euros in 2022. Protecting lives, buildings and assets is the major aim. The product portfolio includes video security, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communication of voice, sound and music complete the range. Building Technologies develops and manufactures in its own plants in Europe, Americas and Asia.

[boschbuildingtechnologies.com](https://www.boschbuildingtechnologies.com)

Commerz Real

Commerz Real is the asset manager for real asset investments of German Commerzbank Group and has over 50 years of international market experience. More than 800 employees manage assets of around 34 billion euros at the Wiesbaden headquarters and 17 other locations and branches in Germany and abroad. The company combines comprehensive know-how in asset management and a broad-based structuring expertise to deliver its signature range of services of fund products focused on tangibles and bespoke financing solutions. The fund spectrum includes the open-ended real estate fund hausInvest, Germany's first retail impact fund for real assets klimaVest, institutional investment products as well as entrepreneurial participations in real estate, aircraft, regenerative energy and ships. In its role as leasing company of Commerzbank Group, Commerz Real offers tailored equipment leasing concepts.

[commerzreal.com](https://www.commerzreal.com)

Susteco

A Bosch Company

With susteco solutions GmbH, a Bosch company, Bosch Building Technologies presents its new solution platform for the real estate industry. Building upon an innovative data-driven technology for the digital onboarding of buildings and ecosystem services, Susteco provides a reliable solution and long-term vision to operate and manage real estate portfolios more efficiently and address today's sustainability challenges focusing on environmental, social and governance (ESG) topics. Developed by Bosch Building Technologies, an experienced company within the building sector, we rely on decades of experience. Now, as a dedicated and even more dynamic company, we are combining a deep understanding of commercial, and business needs with technology expertise.

By enabling a data-driven ecosystem, we provide all stakeholders in the real estate industry with better conditions for data accessibility, data-driven insights and innovative tools that enhance decision-making, decrease costs, drive growth, and foster collaboration.

[sust.eco](https://www.sust.eco)

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