



Siemens Korea

August 2022

Technology to Transform the Everyday



Digitalization is transforming
the backbone of our economies:

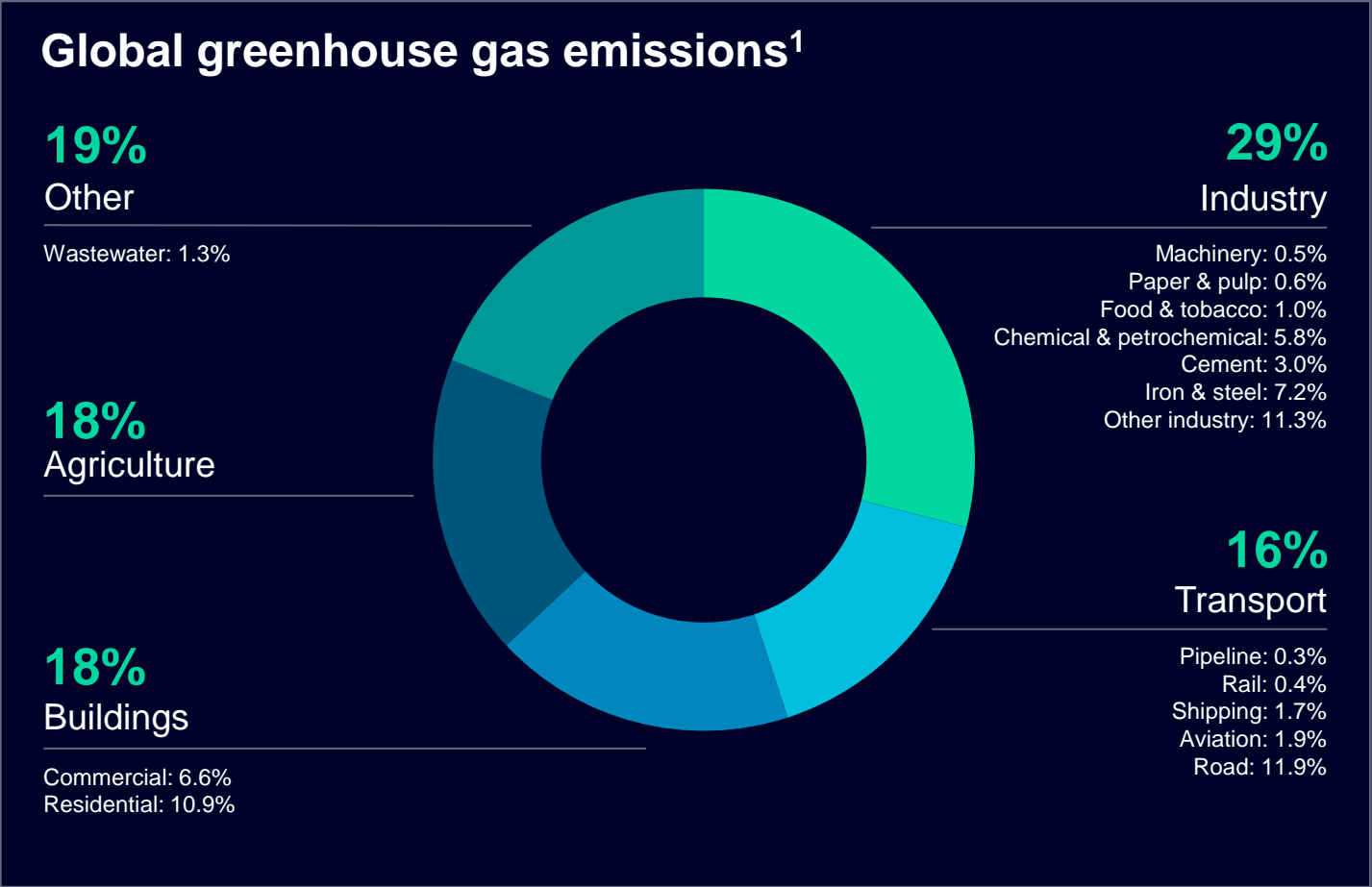
**Industry, infrastructure,
mobility, and healthcare.**

This transformation is key to business success
and for shaping a sustainable future.

With our technologies, we're helping our
customers to accelerate their own digital
transformation, to reinvent their companies and
industries, to become more sustainable.

Dr. Roland Busch,
President and CEO of Siemens AG

Siemens' technologies help decarbonize sectors that today account for nearly three-quarters of global greenhouse gas emissions



Siemens contribution to decarbonize customers' and its own operations

88 m

metric tons of greenhouse gas reduction are achieved by customers through the use of Siemens technology in fiscal 2021

36%

reduction of Scope 1 & 2 emissions since 2019 according to Siemens' SBTI²-based reduction path

78%

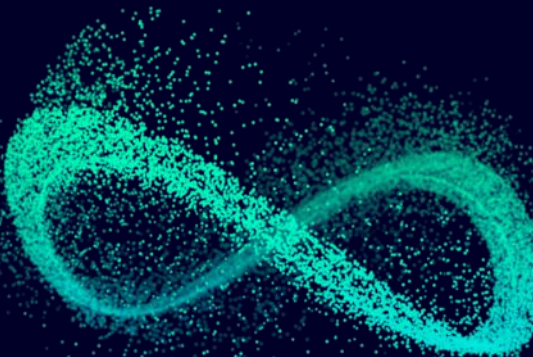
of Siemens' total energy consumption is green electricity

¹ Ritchie, H. (2020). Sector by sector: where do global greenhouse gas emissions come from? ourworldindata.org.
² Science Based Target Initiative; base year 2019.

By combining the real and the digital worlds, Siemens empowers customers to master their digital transformation and sustainability challenges

- Automotive Manufacturing
- Airports
- Electronics Industry
- Water and wastewater Industry
- Data Centers
- Machinery and Plant Production
- Food and Beverage
- Chemical Industry
- Municipalities and DSOs
- Cranes
- Intralogistics
- Aerospace
- Battery Manufacturing

Real world



Digital world

- Glass Production
- Pharmaceutical Industry
- Campus
- Tire Industry
- Mining Industry
- Cement
- Transportation and Logistics
- Panel Building
- Wind Energy
- Pulp and Paper
- Life Science
- Healthcare
- Oil and Gas Industry



Siemens Xcelerator will make it easier than ever before for companies **to navigate digital transformation – faster and at scale**. By combining the real and the digital worlds across operational and information technology, we empower customers and partners to boost productivity, competitiveness and scale up innovations.”

Dr. Roland Busch,
President and CEO of Siemens AG

Xcelerator – Siemens is the partner of choice in digital transformation



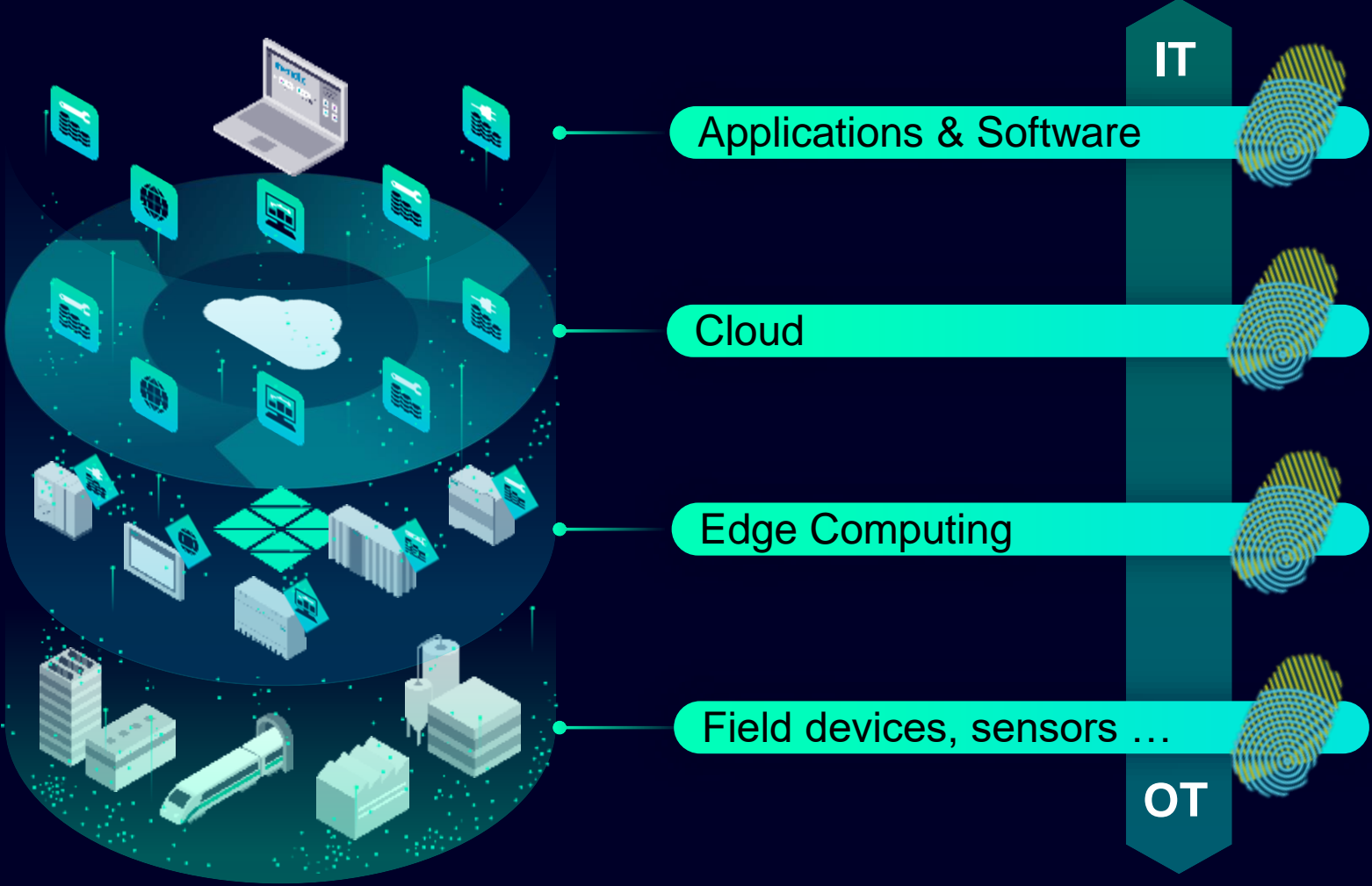
A comprehensive, curated **portfolio** that includes digital and IoT-enabled offerings from Siemens, and certified partners

A continuously growing, powerful **ecosystem** of partners

An evolving **marketplace** that enables education, exploration, exchange, and transaction within a community of customers, partners and experts

Portfolio design principles

- Interoperable
- Flexible
- Open
- As a service



Digital transformation has the potential to drive progress and growth in all countries and to reduce resource consumption in all industries

Industry



60%

of manufacturing tasks can be automated, improving productivity, quality and safety.

Infrastructure



80%

of lifecycle costs arise from operations. Digital technologies can unlock savings potential of up to 20%.

Mobility



20%

potential increase in transport capacity through digital signaling technology without building additional infrastructure.

Healthcare



50%

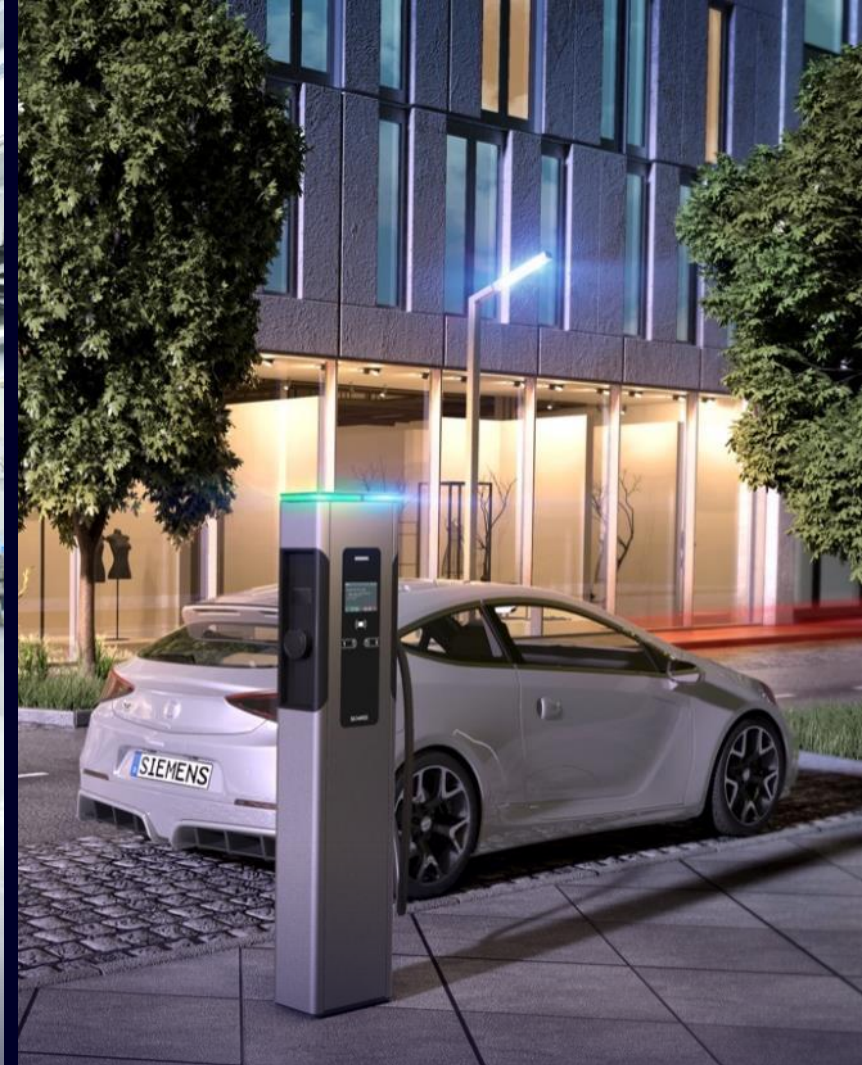
of stroke-related costs could be reduced by AI and digital-twin technologies.



We commute in cars designed with Siemens software...



... built in factories running on Siemens automation ...



... and charged by a Siemens smart grid.



We work in smart buildings that promote our health and safety...



... that use energy with maximum efficiency ...



... and connect the physical and the digital workplace.



We book our train tickets with Siemens software ...



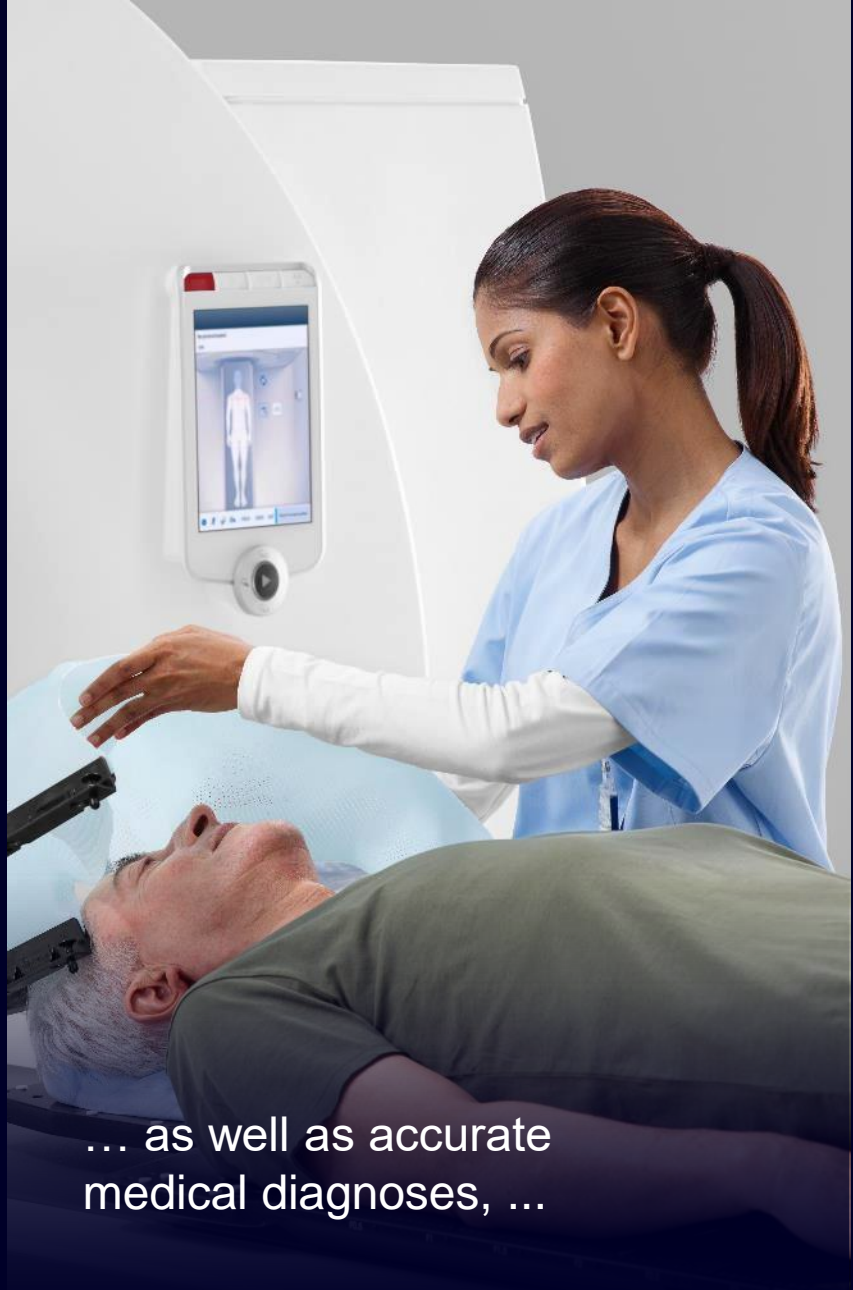
... to travel on trains made by Siemens ...



... operated with Siemens infrastructure technology.



We rely on life-saving drugs
and treatments...



... as well as accurate
medical diagnoses, ...



... all of which are made
possible by Siemens solutions.

A focused technology company

Our four strategic priorities

Customer impact

We anticipate what our customers need before they even know they need it.

Technology with purpose

Innovative technology has been at the core of Siemens for more than 170 years and it will remain at the core of the future we're building.



Empowered people

Driving progress by empowering our customers, partners and employees.

Growth mindset

Rather than make yesterday last, we are committed to building tomorrow – by learning and being open to change.

Businesses and Services of Siemens AG

Industrial Business

Digital Industries



Smart Infrastructure



Mobility



Siemens Healthineers¹



Portfolio Companies



Siemens Advanta



Services

Siemens Financial Services



Siemens Real Estate



Global Business Services



¹ Publicly listed subsidiary of Siemens; Siemens' share in Siemens Healthineers: 75%

We utilize our Company Core Technologies in all businesses



Simulation
and Digital Twin



Sustainable Energy
and Infrastructure



User Experience



Software Systems
and Processes



Connectivity
and Edge



Cybersecurity
and Trust



Data Analytics
and AI



Integrated Circuits
and Electronics



Power Electronics



Automation



Additive Manufacturing
and Materials

Company Core Technologies

Innovation examples



Industrial 5G

- Siemens is driving 5G in industry
- First 5G router launched
- Standalone private 5G networks in trial operation
- 5G is prerequisite for IoT



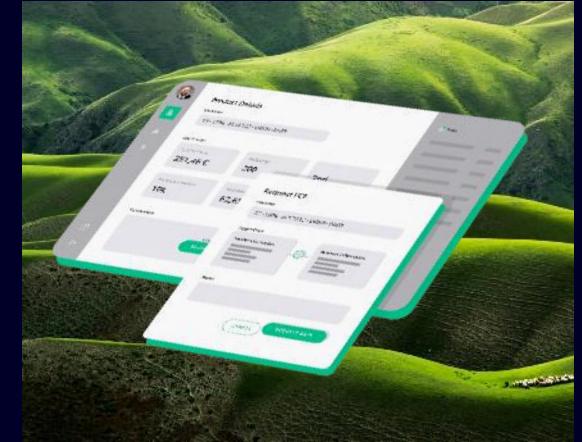
Industrial Edge

- Market-leading solutions for industrial edge
- Extending the industrial edge to the field offers customers substantial advantages



Product PKI

- Employing digital certificates and signatures for devices and software significantly improves cybersecurity
- More than one million certificates already in use



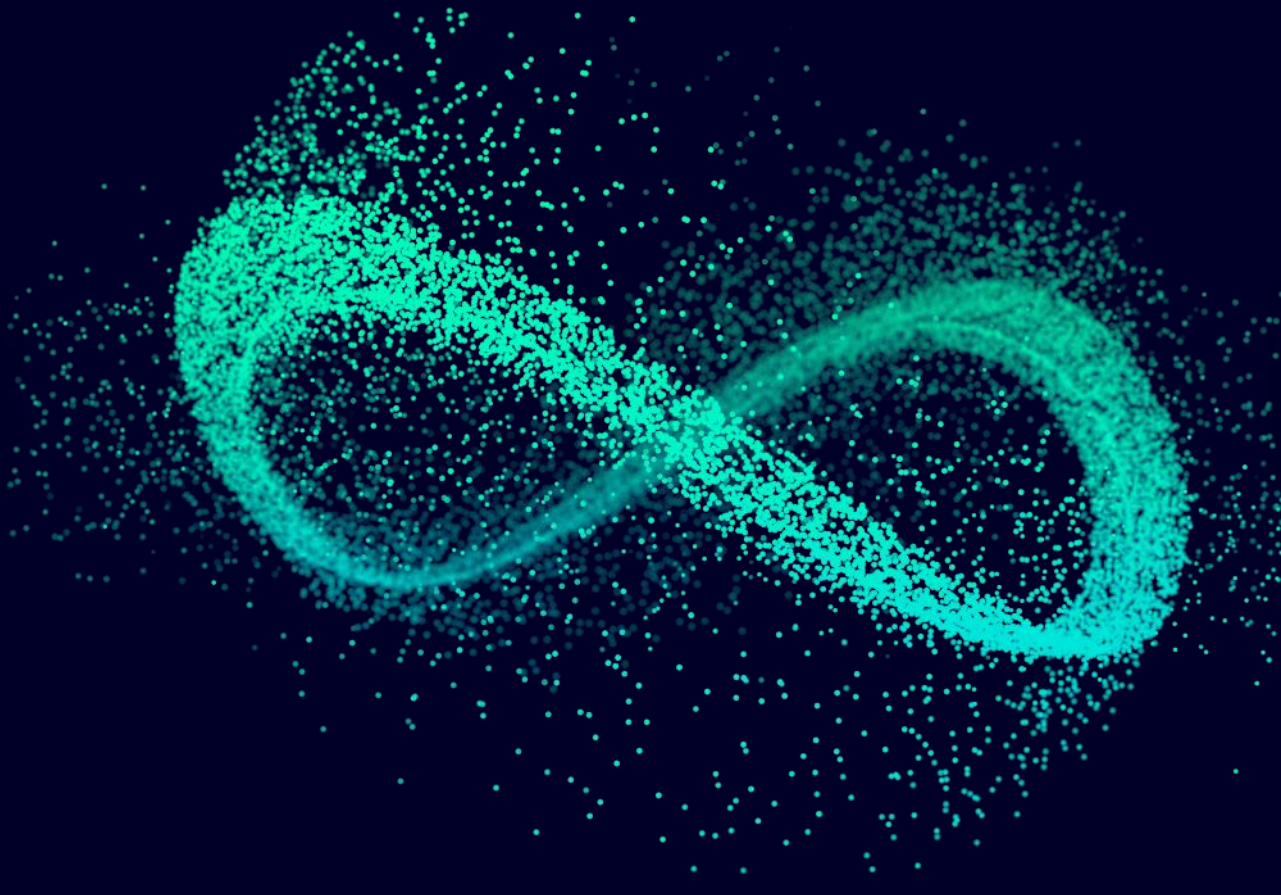
SiGREEN

- SiGREEN enables trustworthy exchange of actionable product carbon footprints throughout value chains
- Use of verifiable credentials to address transparency, confidentiality, and data control in supply chains

Our core business and our digital business reinforce each other in a virtuous cycle, accelerating high value growth

Core business

We grow our core business by leveraging our digital capabilities



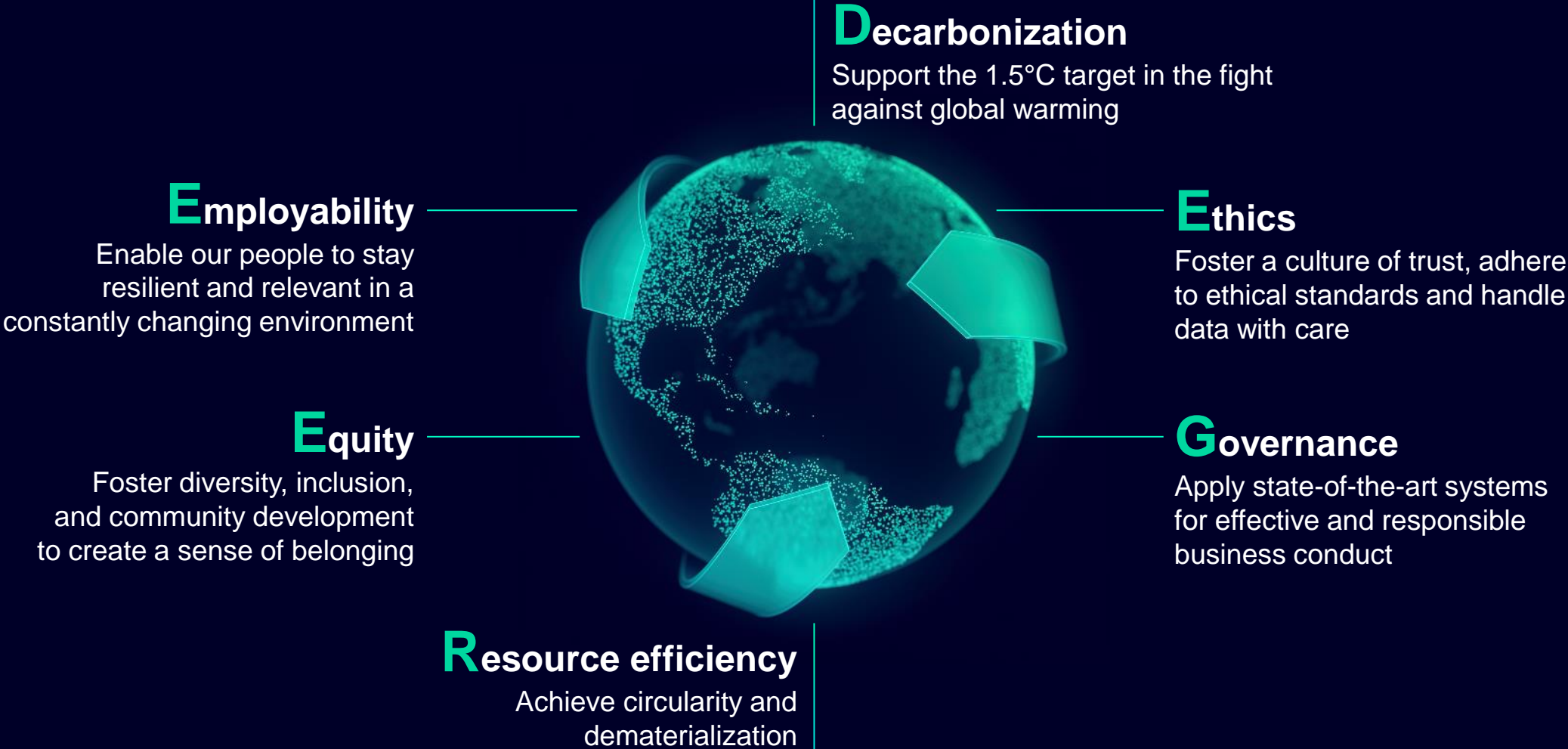
Digital business

We grow our digital business by leveraging our core business and domain know-how

**Transforming the
everyday to create a
better tomorrow**

Siemens' commitment to sustainability

Our DEGREE framework sets clear priorities



Our DEGREE framework sets clear goals

Decarbonization

- **Net zero operations by 2030** in line with SBTi pathway
- **Net zero supply chain by 2050, 20% emissions reduction by 2030**

Ethics

- **Business Conduct Guidelines** training for **100%** of the workforce every **three years**

Governance

- **ESG secured supply chain** based on supplier commitment to the **Supplier Code of Conduct**
- **Long-term incentives** based on **ESG criteria**¹

Resource efficiency

- Next-level **robust eco-design** for **100%** of relevant Siemens product families **by 2030**
- **Natural resource decoupling** through **increased purchase of secondary materials** for metals and resins
- **Circularity** through **waste-to-landfill reduction of 50% by 2025** and toward **zero landfill waste by 2030**

Equity

- **30% female** share in **top management** by FY25
- Access to **employee share plans**: maintain high level and **expand globally to 100%**²
- Global commitment to the **New Normal Working Model**

Employability

- **Double digital learning hours by 2025**
- Access to **employee assistance program**: maintain high level and **expand globally to 100%** by 2025
- **30% improvement** in Siemens' globally aggregated **LTIFR**³ **by 2025**

¹ Assessed on the basis of a Siemens internal ESG/Sustainability index, incl. Customer Net Promoter Score, CO₂ Reduction, Training Hours |

² Where legally possible and reasonable | ³ LTIFR: Lost time injury frequency rate (of Siemens employees and temp. workers) baseline FY2020

Siemens in figures

As a focused technology company, we empower our customers to transform their industries and markets, helping them to transform the everyday

303,000

employees¹

€62.3 bn

in revenue²

€6.7 bn

in net income³

15.0%

adjusted EBITA margin
for the Industrial
Businesses²

¹ As of September 30, 2021 | ² For fiscal 2021 | ³ Continuing and discontinued operations

Fiscal 2021 figures in detail

(Slide 1 of 2)

(Continuing operations; in millions of € except where otherwise stated)

	Fiscal 2021	Fiscal 2020	Change in %
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Volume

Orders	71,374	58,030	21% ¹
Revenue	62,265	55,254	11% ¹

Profitability and capital efficiency

Net income ²	6,697	4,200	59%
Return on capital employed (ROCE) ²	13.1%	7.8%	

	Fiscal 2021	Fiscal 2020
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Liquidity

Free Cash Flow ²	8,237	6,404
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Employees

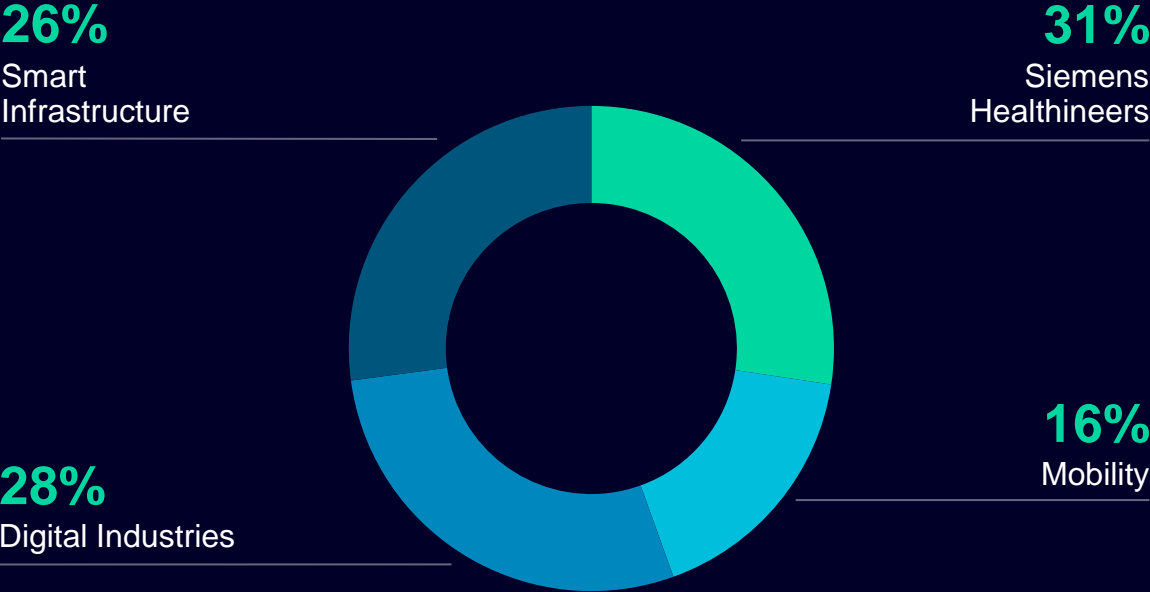
(in thousands)	Sept. 30, 2021 ²	Sept. 30, 2020 ²
Total	303	293
Germany	86	90
Outside Germany	217	203

¹ Excluding currency translation and portfolio effects | ² Continuing and discontinued operations

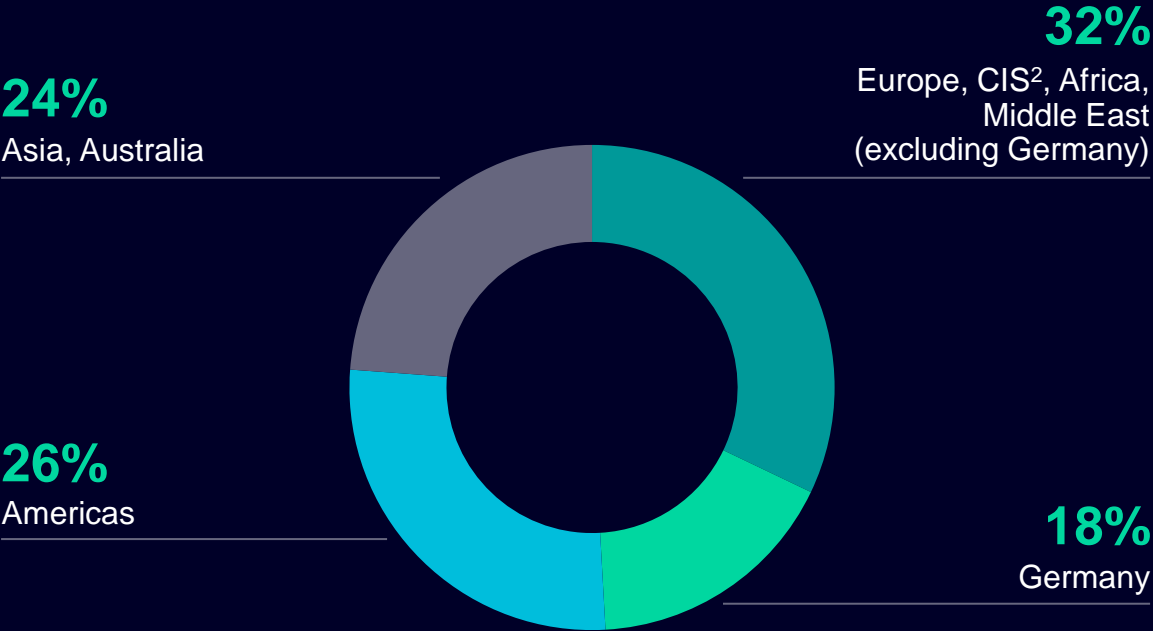
Fiscal 2021 figures in detail

(Slide 2 of 2)

Revenue by industrial business¹



Revenue by region¹



¹ All figures rounded | ² Commonwealth of Independent States

**Siemens is shaping
the future**



Innovation is the basis for our success

€4.9 bn
R&D expenditures¹

42,500
R&D employees²

4,480
inventions¹

2,520
patent
applications¹

Cooperation

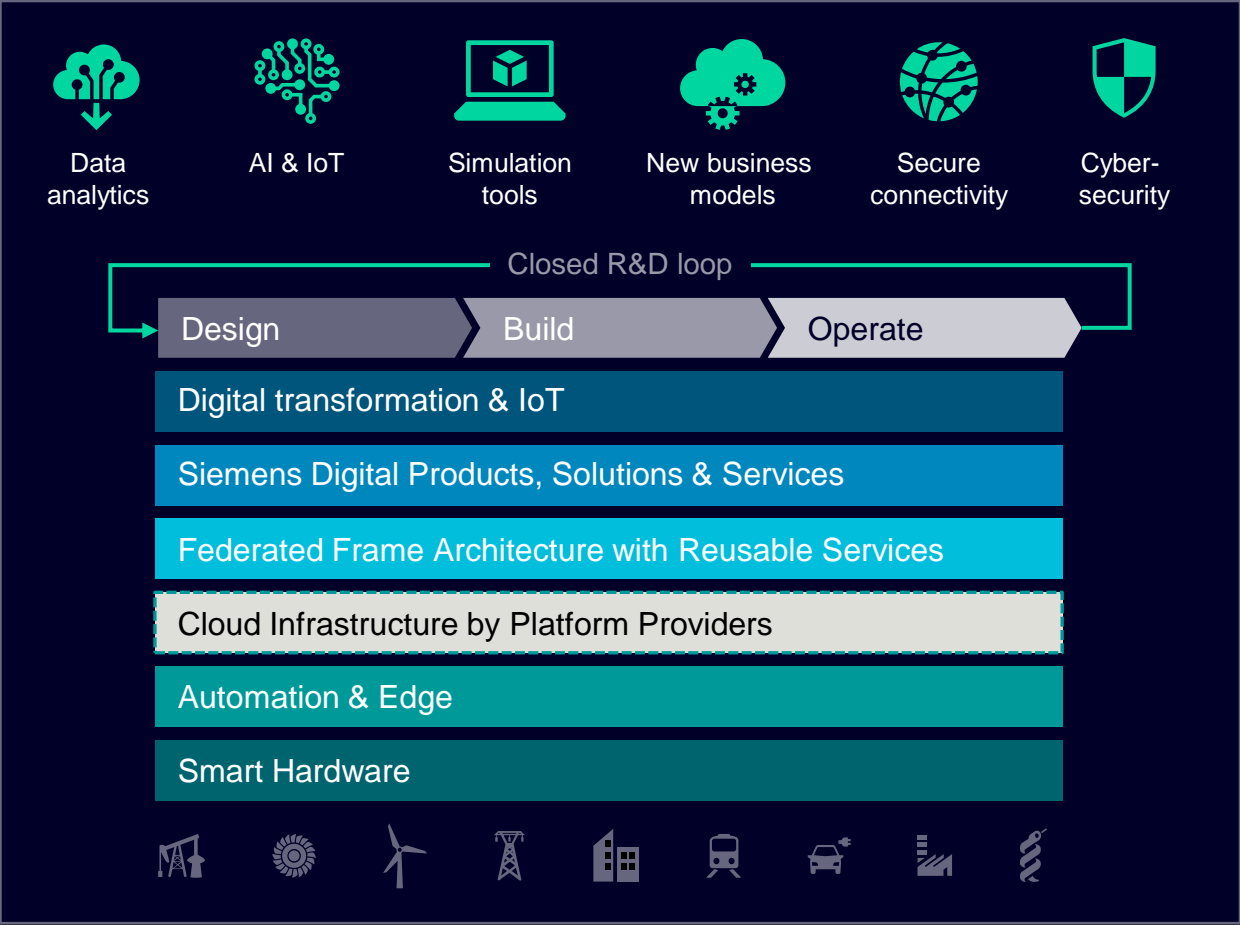
with universities, research institutes,
and start-ups

16

Siemens Research and Innovation Ecosystems

¹ In fiscal 2021 | ² On average during fiscal year 2021

Our digital portfolio



Top 10

Siemens is one of the top 10 software companies¹

€5.6 billion

digital revenue¹ to grow with 10% CAGR until FY25

~44,000

employees in digital jobs at Siemens²

~430

digital offerings¹

€10 billion

invested in digital companies in the past 10 years¹

¹ For fiscal 2021 | ² As of September 30, 2021

Next47 powered by Siemens

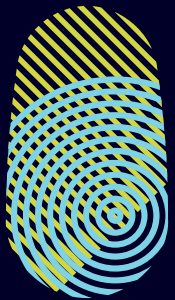
Next47 is an independent, global venture firm backed by Siemens AG that invests in the B2B technology leaders of tomorrow.

We combine capital with best-in-class go-to-market capabilities to help our portfolio companies grow revenue through the Siemens ecosystem. Through our partnerships, we ensure Siemens and its customers gain early access to the best emerging technology solutions to solve their most difficult and fundamental business challenges.

Next47 is also an enabler of entrepreneurialism within Siemens. The Next47 Accelerator, a program built in partnership with leading external accelerator programs, aims to identify and nurture big, breakthrough ideas within Siemens with the goal of empowering internal talent to create new business opportunities for the company.

Charter of Trust

A joint initiative for a secure digital world



Charter of Trust

charteroftrust.com



Associated Partner Forum



1

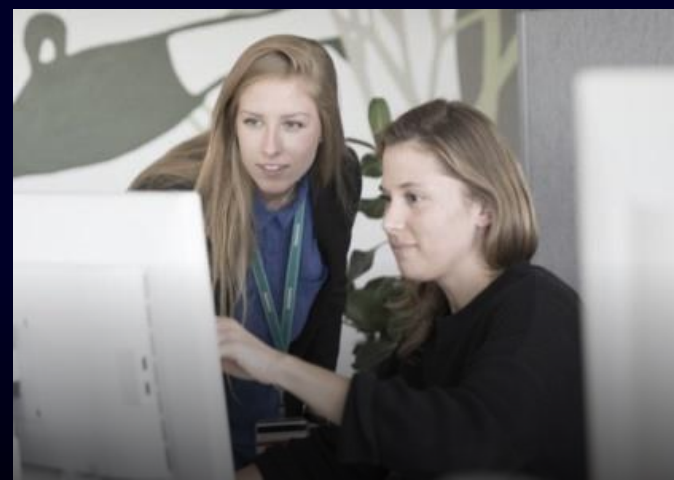
Protect the data of individuals and businesses

2

Prevent damage to people, businesses, and infrastructure

3

Build trust in the digital world



Employer with vision

303,000
people worldwide
work for Siemens¹

~34,400
new hires
worldwide²

~4,000
new hires in
Germany²

6,700
apprentices and
students in dual
study programs
worldwide¹

¹ As of September, 30 2021 | ² In fiscal 2021



Compliance

Zero tolerance for misconduct

High rankings

in Dow Jones Sustainability Index
in the category “Compliance” since 2009

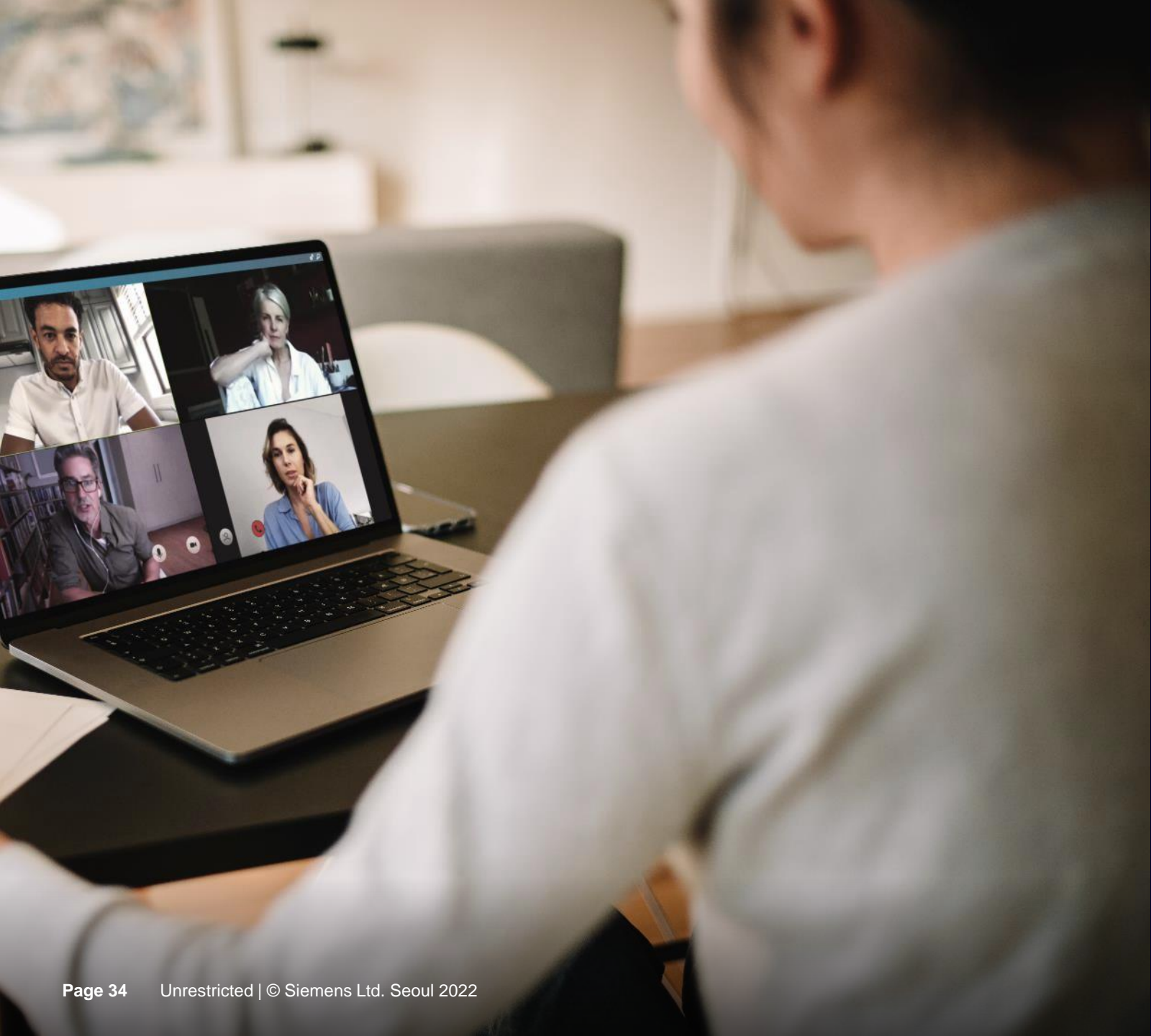
US\$120 m

since 2009 to support organizations
fighting corruption and fraud

>330,000

web-based compliance trainings
of employees each year, averaged¹

¹ Without Siemens Healthineers



Mobile working

as a key element of the “new normal”

Mobile working **two to three days a week** will be the worldwide standard – for about **140,000 employees¹** at more than **125 locations** in **43 countries**

The New Normal Working Model enables employees, following consultation, to work wherever they can be most productive. This accommodates employees’ desire for more flexibility and options when it comes to choosing where they work.

¹ Number of job profiles that are suitable for mobile working.

Siemens in Korea

Siemens Korea

Poised for sustainable growth



Overview for Siemens in Korea (FY2021)

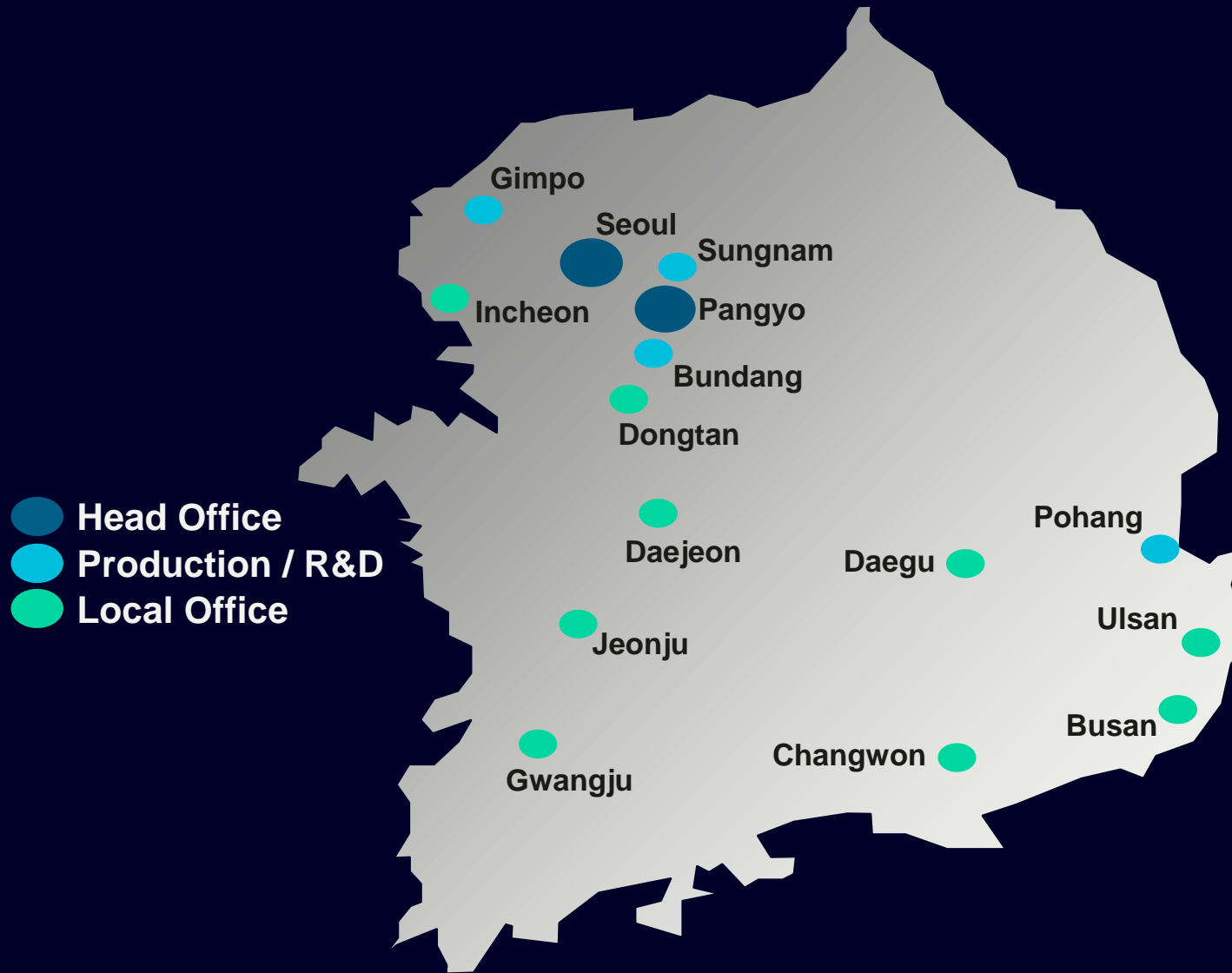
- # of Employees: 2,165
- Presence in all major cities
- Continuous search for new investment opportunities

* As of September 30, 2021

Major activities of Siemens Korea

- Hyundai Heavy Industries LPG 2 ships shaft generator drives project – Supplying 2MW S120 Cabinet Drive
- SoonChunHyang University Hospital –Building Automation System
- Seohae Line (Sosa-Wonsi): RF-CBTC / ETCS Lv. 1 Signaling System
- Three shuttle tankers construction by Samsung Heavy Industries in Asia: 24 MV Drive systems (Sinamics GM150) for Thruster propulsion
- Continuous R&D cooperation with local government and universities
- Conduct corporate citizenship activities - The NANUM Volunteer Corps

Siemens is continuously increasing its presence in Korea



Sales and Head offices

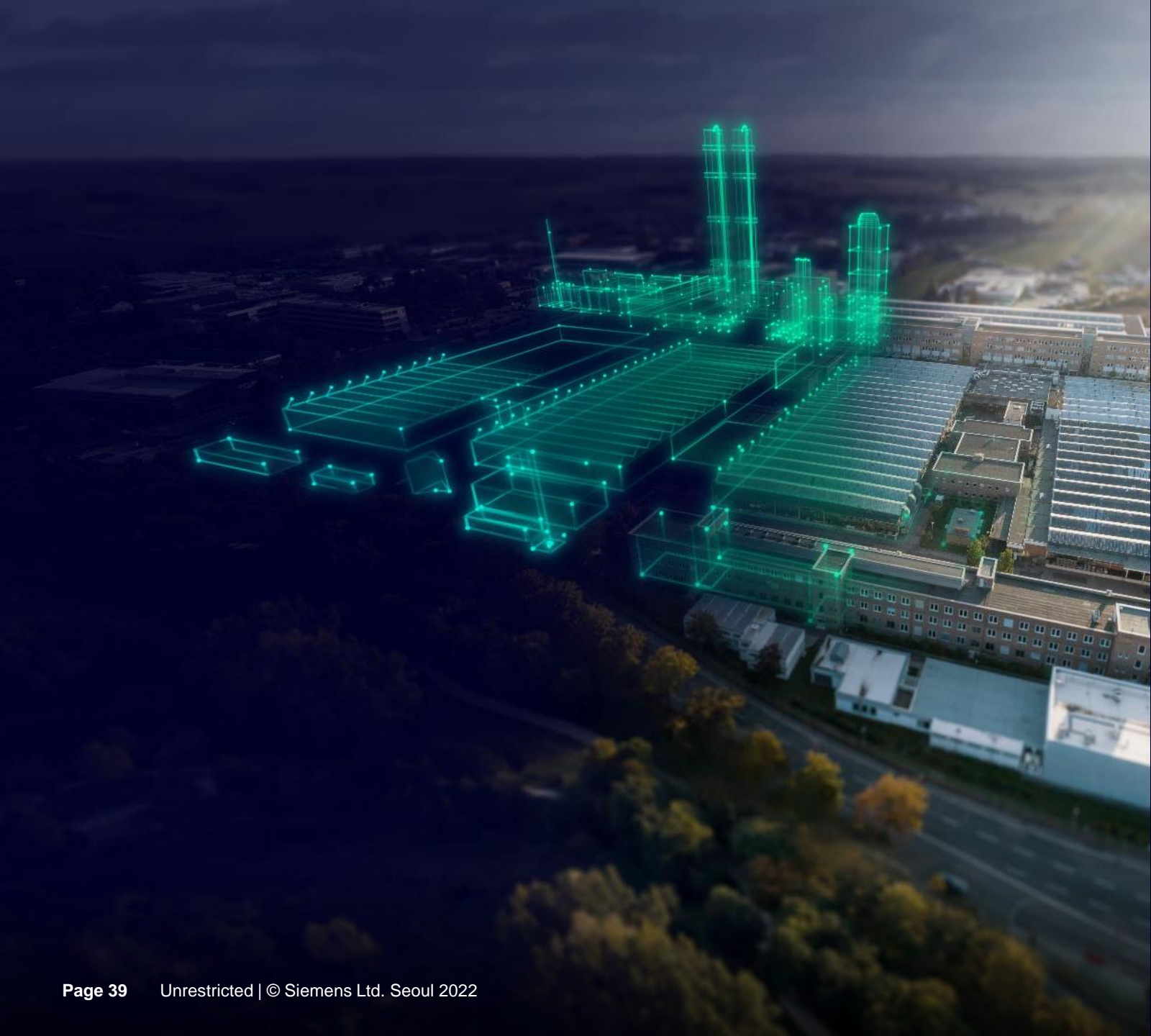
- Siemens Ltd. Seoul (Seoul)
- Siemens Mobility (Seoul)
- Siemens Industry Software Ltd. (Seoul)
- Siemens EDA (Pangyo)
- Siemens Healthineers (Seoul)

Production

- Smart Infrastructure (Gimpo)
- Siemens Healthineers (Bundang, Sungnam, Pohang)

Research & Development

- Smart Infrastructure (Gimpo)
- Siemens Healthineers (Bundang, Sungnam, Pohang)



Digital Industries

Industry faces a major challenge: Because our planet's resources are finite, we must produce more with less. Siemens' Digital Enterprise helps meet this challenge by merging the real and the digital worlds in a continuous flow of data. A key part of that is the comprehensive Digital Twin. It collects data on products throughout their entire lifecycle, from the initial concept to their production and deployment. Our cutting-edge technologies make it possible for industry to understand this data and to use finite resources much more efficiently. That is how we are making industry more sustainable.

industry.siemens.co.kr

Major References

- Hyundai Heavy Industries LPG 2 ships shaft generator drives project – Supplying 2MW S120 Cabinet Drive
- Khan Work Holding Digital Twin for Worm Gear Machine Retrofit project - Supplying virtual commissioning solutions



Smart Infrastructure

Smart infrastructure is sustainable infrastructure.

Siemens Smart Infrastructure combines the real and digital worlds across energy systems, buildings and industries, enhancing the way people live and work and significantly improving efficiency and sustainability. We work together with customers and partners to create an ecosystem that both intuitively responds to the needs of people and helps customers achieve their business goals. It helps our customers to thrive, communities to progress, and it supports sustainable development to protect our planet for the next generation.

[siemens.co.kr/si](https://www.siemens.co.kr/si)

Major References

- SoonChunHyang University Hospital – Building Automation System
- Korea National Railway – SCADA System



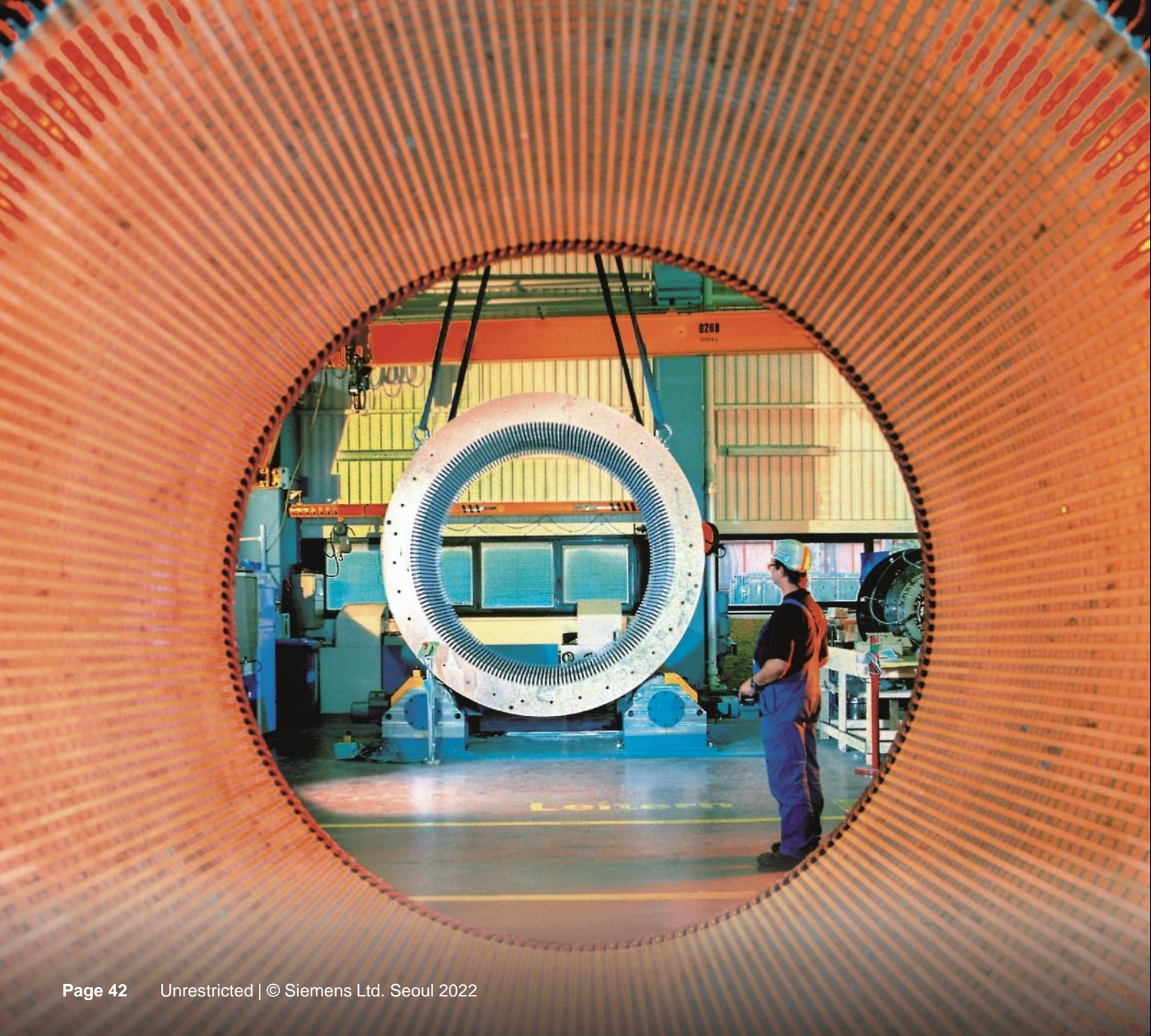
Mobility

With digitalization, we enable mobility operators worldwide to make trains and infrastructure intelligent, increase value sustainably over the entire lifecycle, enhance the passenger experience and guarantee availability.

mobility.siemens.com/kr/en.html

Major References

- Seohae Line (Sosa-Wonsi): RF-CBTC / ETCS Lv. 1 Signaling System
- Uijeongbu LRT U-Line: Turnkey (Rolling Stocks / Signaling System / OCC / Workshop / System Engineering)

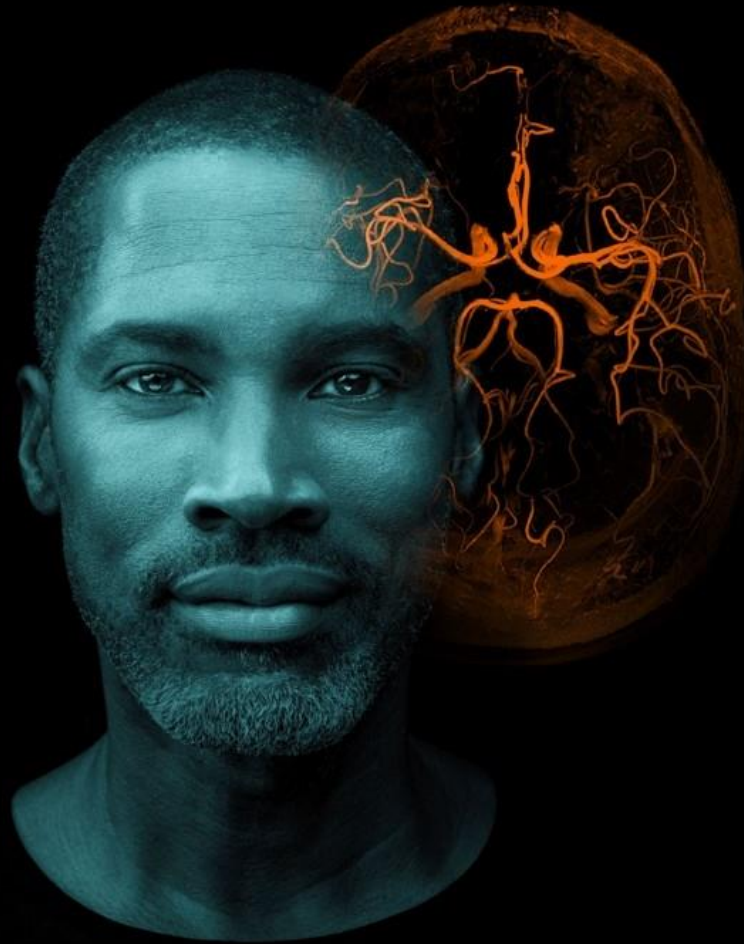


Portfolio Companies

Under the umbrella of Portfolio Companies, Siemens operates the units Large Drives Applications, Siemens Logistics, Commercial Vehicles, and Mechanical Systems and Components. The Portfolio Companies employ about 15,100 people and generated approximately €3.1 billion in revenue in fiscal 2021. With a decentralized setup, fast decision-making processes and quick reaction times, these units are agile and flexible, which makes them more competitive in their specific markets and enables them to focus more sharply on their customers.

Major References

- Three shuttle tankers construction by Samsung Heavy Industries in Asia: 24 MV Drive systems (Sinamics GM150) for Thruster propulsion
- 11 meter electric bus(APOLO1100): Woojin Industrial Systems - 90units consisting of propulsion motor, propulsion inverter ELFA 2 and DICO for traction control



Siemens Healthineers

Siemens Healthineers AG is a listed, leading medical technology company that aspires to shape the healthcare system of the future. It helps healthcare providers around the world expand precision medicine, transform care delivery, improve the patient experience, and digitalize healthcare. The company is continuously developing its product and service portfolio with AI-supported applications and digital technologies that will play an important role in the next generation of medical technology.

[siemens-healthineers.com/kr/](https://www.siemens-healthineers.com/kr/)

Major References

- The Catholic UNIV of Korea. Medical Center (CMC Seoul, Bucheon, Daejeon, ST. Vincent): Package of Medical Imaging products
- Pohang SM Christianity Hospital : Atellica solution for Lab automation
- Asan Medical Center (Seoul, GangNeung) : Remote scanning supporting solution – Syngo Virtual Cockpit



Global Business Services

Siemens Global Business Services (GBS) designs, innovates, and efficiently operates business services for Siemens AG units worldwide as well as external customers. Its portfolio comprises transactional and expertise-driven services – with a strong focus on digitalization in areas like business administration, human resources, supply chain management, sales, marketing, and engineering.

With unique expertise and more than 20 years of business services experience, GBS creates value tailored to the specific needs of customers. Its global delivery network enables it to achieve economies of scale and provide flexibility by bundling services and balancing efficiency and customer proximity requirements.

Siemens GBS serves customers from eleven major locations around the globe. It employs 10,000 people worldwide and is headquartered in Munich, Germany.



Siemens Real Estate Services

Siemens Real Estate (SRE) specializes in solutions for the operation of office, industrial and specialized buildings.

As a trusted partner, SRE creates value and increases the efficiency of real estate for Siemens and external customers.

With 25 years of experience in corporate real estate management, SRE is driving digitization in corporate real estate by providing smart and sustainable solutions that increase the flexibility of its customers.

SRE is significantly contributing to the Group's goal of being carbon neutral by 2030 and implementing innovative workplace concepts that support future-oriented hybrid working.