

Sustainable Private Public Partnerships (PPP)

6th Istanbul PPP Week

Natalia Korchakova-Heeb
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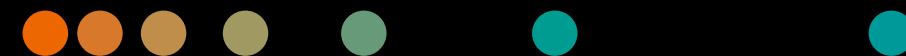
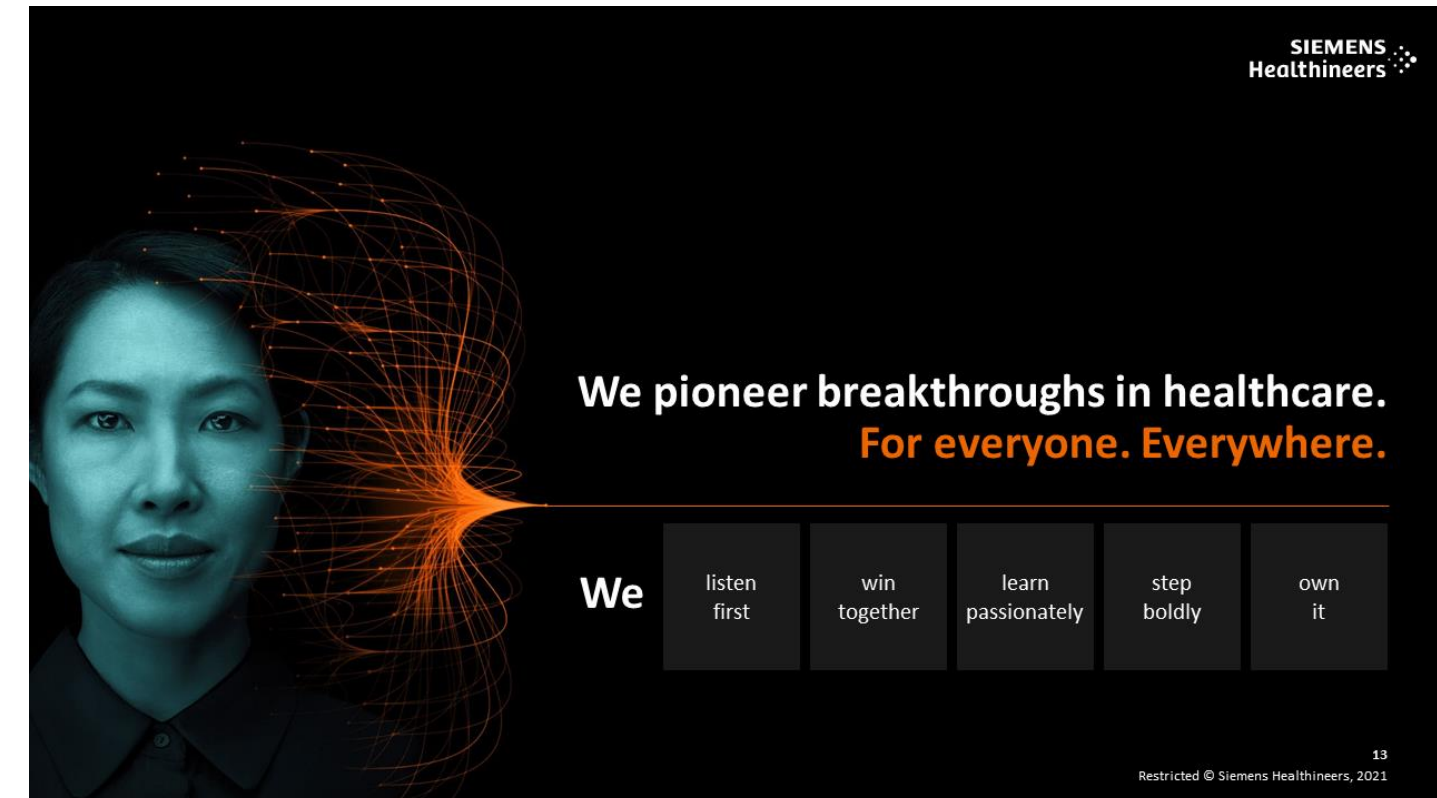


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Eng. Natalia Korchakova-Heeb

- PPP-Speaker of German Health Alliance
- Chair of the PPP Health Chapter, Member of the Steering Committee, World Association of PPP Units and PPP professionals (Switzerland)
- Coordinator of Working Groups on Global Partnerships, Global Health Hub-Germany
- Certified Expert for Green Buildings



Global Lead for PPPs and Greenfield Hospitals

- Global PPP / Greenfield Domain expert to increase SHS business in PPP / Greenfield projects
- Drive networking with relevant partner groups and internal stakeholders
- Create active global community of PPP/Greenfield champions in focus countries, incl BA's, BH's and Corporate Units

Who we are

€18bn

revenue FY2021¹

>70

countries with direct presence

~66,000

highly skilled employees

22,000+ technical IPRs, thereof
14,000 granted patents

Market leader

in majority of businesses



>90%

of leading hospitals collaborate with us²

>60

AI-supported product offerings

>35%

of revenues based on
innovations introduced in last three years³

>70%

of critical clinical
decisions are influenced by the
type of technology we provide⁴

>600,000

installed base

UN Sustainable Development Agenda 2030 sees PPPs as an instrument to closing infrastructure/services gap by 2030

SUSTAINABLE DEVELOPMENT GOALS



17 PARTNERSHIPS FOR THE GOALS



Governments have to report on Target 17.17: Encourage and promote effective public, public-private and civil society partnerships

17 PARTNERSHIPS
FOR THE GOALS



Indicator 17.17.1

Amount in United States dollars committed to public-private partnerships for infrastructure

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ESG Frameworks

ESG – various risk management frameworks, adopted by financial institutions, for determining, assessing and managing environmental and social risk in project investments (Equator Principles, UN Principles for Responsible Investment (PRI)), SFDR (EU)

Environmental Responsibility, which includes energy use, waste management, and climate change.

Social Responsibility, including labor relations, human rights, diversity and inclusion, and product liability.

Governance, which includes compliance, business ethics, controls, and procedures.

- No harm approach
- Compliance (no indicators/targets)
- Not time bounded
- Not universal

Sustainable Development Goals (17 Goals)



- Voluntary and Pro-active
- Integrated/Indivisible/Complementary
- Measurable
- Time-bounded
- Universal
- Moral imperative and call for actions

What Makes Healthcare PPPs Sustainable?

Sustainable Procurement

- Green Procurement
- Value based procurement
- Gender-smart procurement
- Sustainable procurement

Sustainable Design

- Architectural design
- Healing Environment
- Orientation
- Shading
- Interior green spaces
- Colors
- Energy reduction strategies
- Biodiversity

Sustainable Construction

- Sustainable Materials
- Waste Management
- Reduction of carbon-footprint of construction works and the building
- Management of the site
- Biodiversity
- Sustainable Decommissioning

Sustainable Finance

- Green Finance
- Impact Finance
- SDG Investors
- Social Investors
- Climate Finance
- ESG frameworks

Sustainable Medtech

- Medtech planning, procurement, project management, health & safety, installation, & commissioning
- Medtech lifecycle management including operations, maintenance, & technology refresh
- Energy efficiency
- Packaging
- Waste Management

Sustainable Operation

- Leadership staffing
- Diversity and Inclusion
- Gender Equality
- Access to Care
- Clinical services project management
- Clinical staffing & associated services

Sustainable FM

- Building works & maintenance
- Energy-efficient, water-efficient solutions
- Smart solutions
- Reduction of carbon-footprint of FM



Patient-focused design

- Set new standards w/ bigger wards, more single rooms, technology innovations
- Flooded w/ natural light and surrounded by 46 courtyards and terraces
- Multidisciplinary collaboration w/ cancer center bringing together oncology, radiotherapy and specialist clinics
- Helipad to get life-critical care faster
- 80 mental health beds located within hospital to destigmatizing mental illness
- Victoria's first regional 24/7 mother and baby unit



Environment

- First **energy-efficient, sustainable and future-ready facility** in Victoria w/ uninterrupted power supply (UPS) and tri-generation plant (electricity, cooling, heating)
- **770 solar panel** array as clean energy for hospital's main power boards providing **CO2 reductions of 300,000 kg / p.a.**
- **1,000sqm green roof** to reduce glare and improve acoustic and thermal performance
- Roof area **harvests and recycles 95% of its rainwater collection**

Bendigo PPP Hospital: Bringing in technology, sustainability and innovations to shape significant benefits



Technology



- Connected to 96 interfaces to ensure a **future-readiness and reliability 24/7**
- **Patient entertainment system** w/ health information, food ordering system, etc.
- **Digital medical records** stored in one unified, safe and secure data bank
- 16 different **telehealth services** providing specialist consultations to patients
- **Real time location technology** for medical equipment
- **Automated guided vehicles (AGVs)** to for efficient standard processes

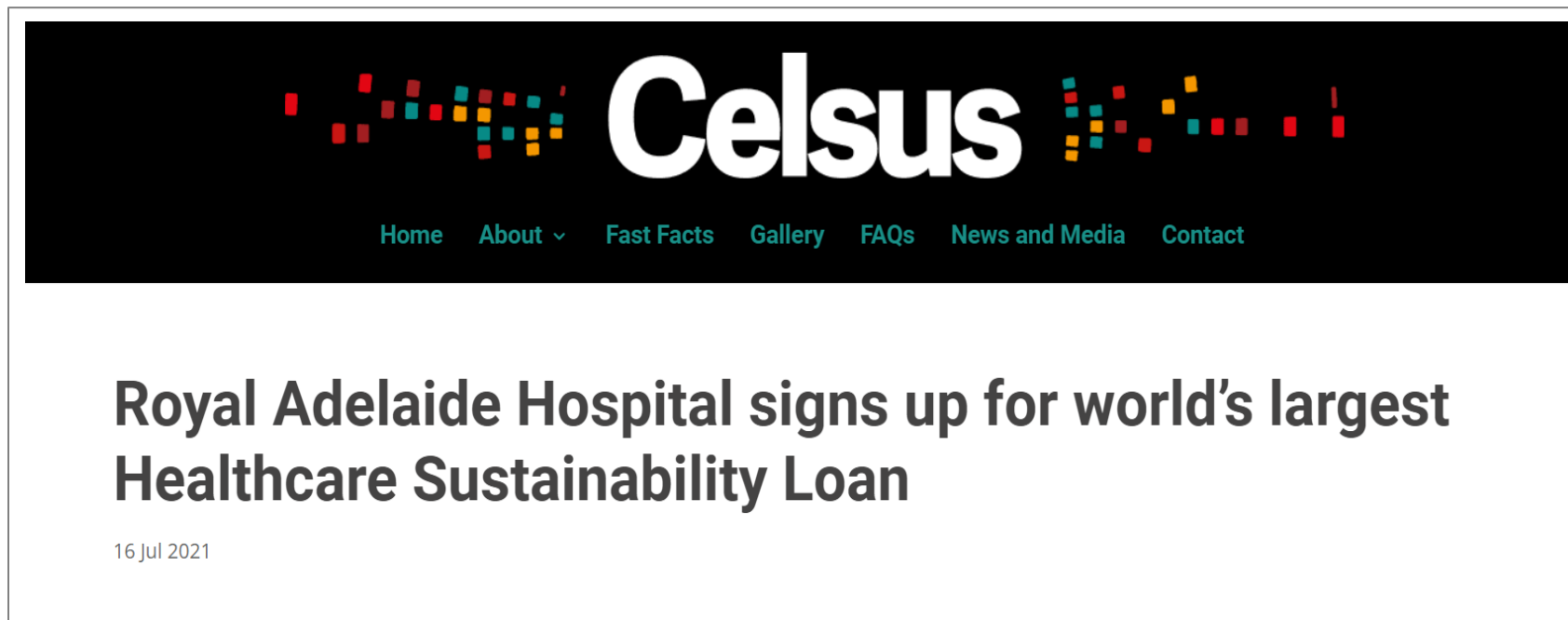
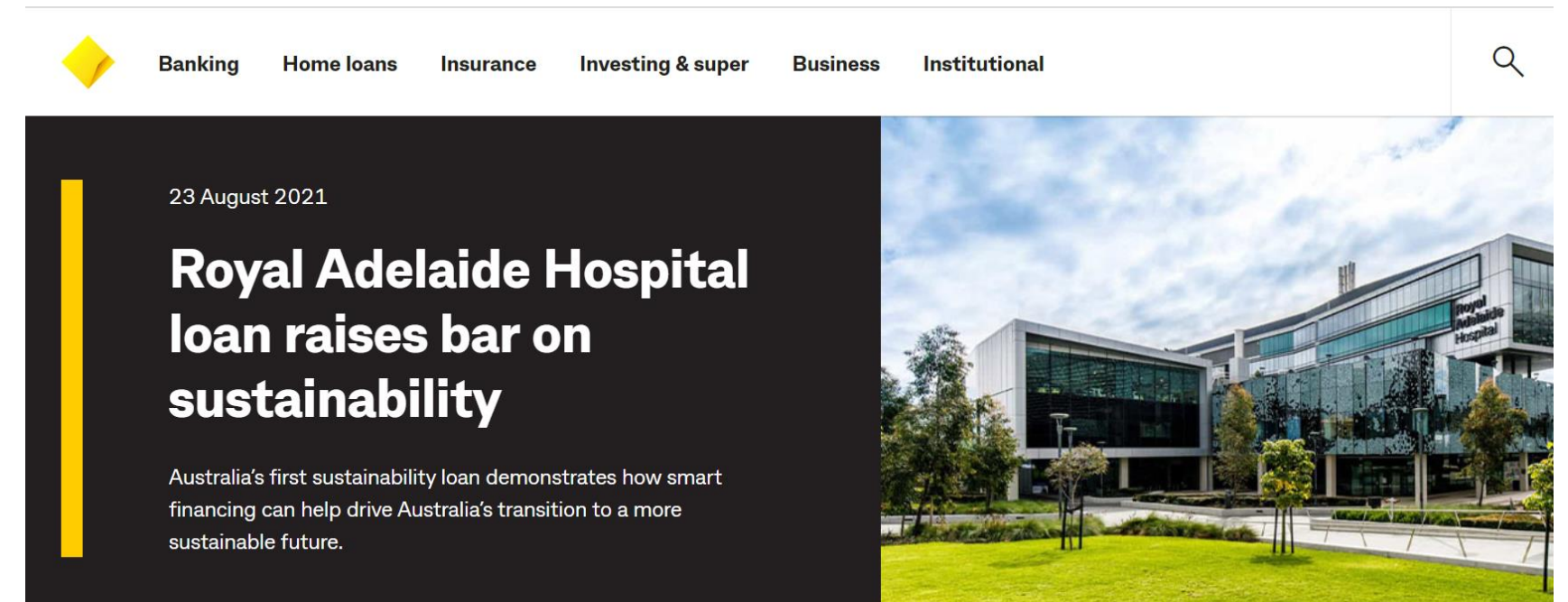


Economic Benefit

- **Biggest regional development** in Victoria's history
- **Boost for regional healthcare services** and local Bendigo economy
- Project **created ~140 jobs** and maintained a further 542
- Right foundation and information architecture w/ **technological capabilities** to continue **to innovate for the next 20 year**
- PPP setup provided Victoria a **value-for-money of >\$200 million**

Sustainable Finance

- Green Finance
- Social Investors
- Climate Finance
- ESG frameworks
- Impact Finance
- SDG Investors



Every product and service has a huge range of environmental impacts,
across the product life-cycle of PPP projects

Supply Chain

- Consumption of raw materials
- Energy/water use, emissions and (toxic) waste from industrial processing and transportation

Usage

- Energy/water consumption
- Generation of waste and emissions
- Use of consumables

Disposal

- Generation of waste
- Toxic emissions
- Potential new raw material

Green Public Procurement in the EU (GPP)



Climate change/CO2 emissions

- Require **high energy efficiency standards** for buildings and products
- Purchase **green electricity**
- Shift to **zero emission vehicles** (and encourage suppliers to do the same)



Air and water quality

- Shift to **zero emission vehicles** (and encourage suppliers to do the same)
- Require cleaning services to be carried out with **ecolabel compliant products**
- Specifying **organic** in food and catering contracts



Waste and resource use

- Promote **circular economy** solutions
- Require **extended product lifetimes**, and **guarantee of spare parts**
- Demand **reduced or reusable packaging**
- Encourage the use of **recycled materials** in construction

How sustainable is private sector?

We set ourselves ambitious targets for FY25 and beyond



Improve quality of life through access to healthcare and innovation

220'

patient touchpoints in underserved countries¹
(FY20: 147'; FY30: 260')

≥ 35%

revenue from innovations brought to market in last 3 years
(FY20: ~40%, regularly ≥35 %)

110

AI supported products on the market
(FY20: 63; FY30: 160)



Contribute to a regenerative and healthy environment

130 kt

net CO₂e emissions from scope 1 and 2
(FY19: 197; FY30: 0)



Advance diversity and inclusion and drive employee engagement

26%

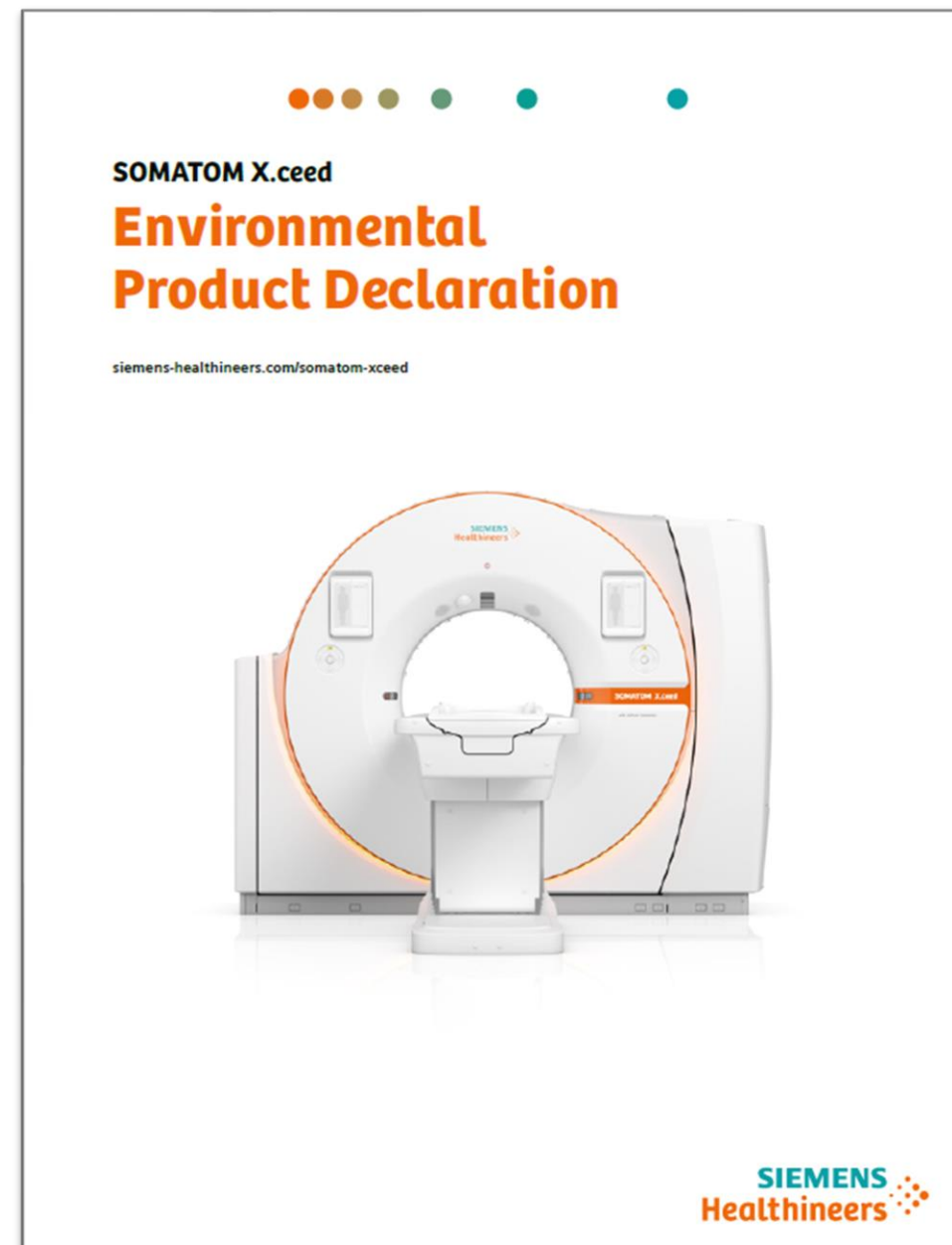
women in Senior Management²
(FY20: 17%; FY30: 30%)

8.5

employee engagement index, maintaining top 25% industry benchmark
(FY20: 8.2, top 25%; FY30: 8.7, top 10%)

¹ Based on 90 countries in scope: Defined by World Bank as low-income and lower-middle income economies and SHS specific additions |

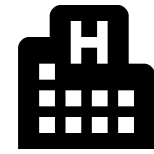
² In addition: adherence to country specific legal requirements



An Environmental Product Declaration (EPD) is an independently verified and registered document that communicates transparent and comparable data and other relevant environmental information about the life-cycle environmental impact of a product.

Innovating to sustainably enable healthcare for everyone, everywhere

Increasing Access to Care is a core strategy



Stroke Care in Mekong Delta, Vietnam



Covid-19 Screening in Ethiopia

All future buildings will be carbon-neutral



Healthineers Campus Bangalore, India

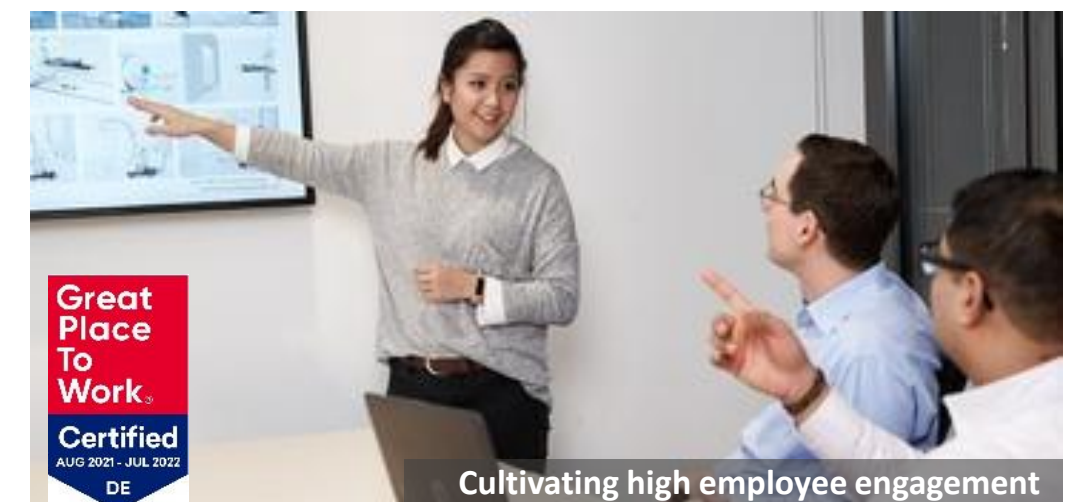


HEP Factory Forchheim, Germany

DE&I is integral part of our company culture



Fostering diversity in all forms



Cultivating high employee engagement

Our Sustainability Reports 2021 - Technology with Purpose



**Thank you
for your enthusiasm!**

Siemens Healthineers
Siemens Healthcare GmbH
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