



5G

Manufacturing a Sustainable Future by Breaking the Energy Curve

Joe Wilke
VP and Head of Center of Excellence
5G Industry 4.0
Ericsson



Environmental Sustainability

Leading climate action towards Net Zero

Own activities
Reducing emissions
to ultimately
net-zero emissions
by 2030



5G in Operation

Develop and innovate our
portfolio to halve emissions
by 2030 and support climate
action in society



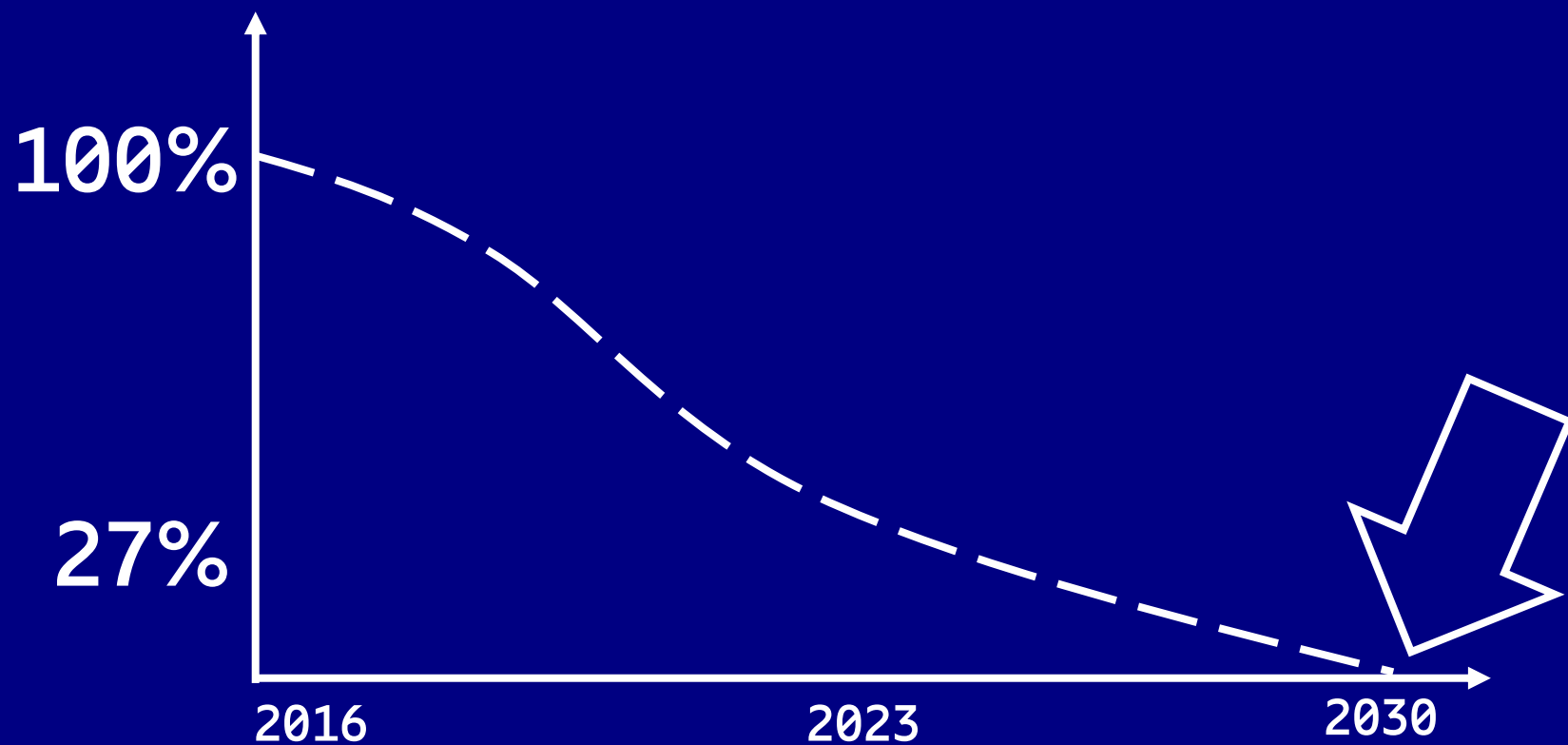
Digitalization

Increase climate action
globally through ICT
solutions. Digitalization
can enable a 15%
reduction in global
emissions by 2030



Environmental Sustainability

Leading climate action towards our Net Zero



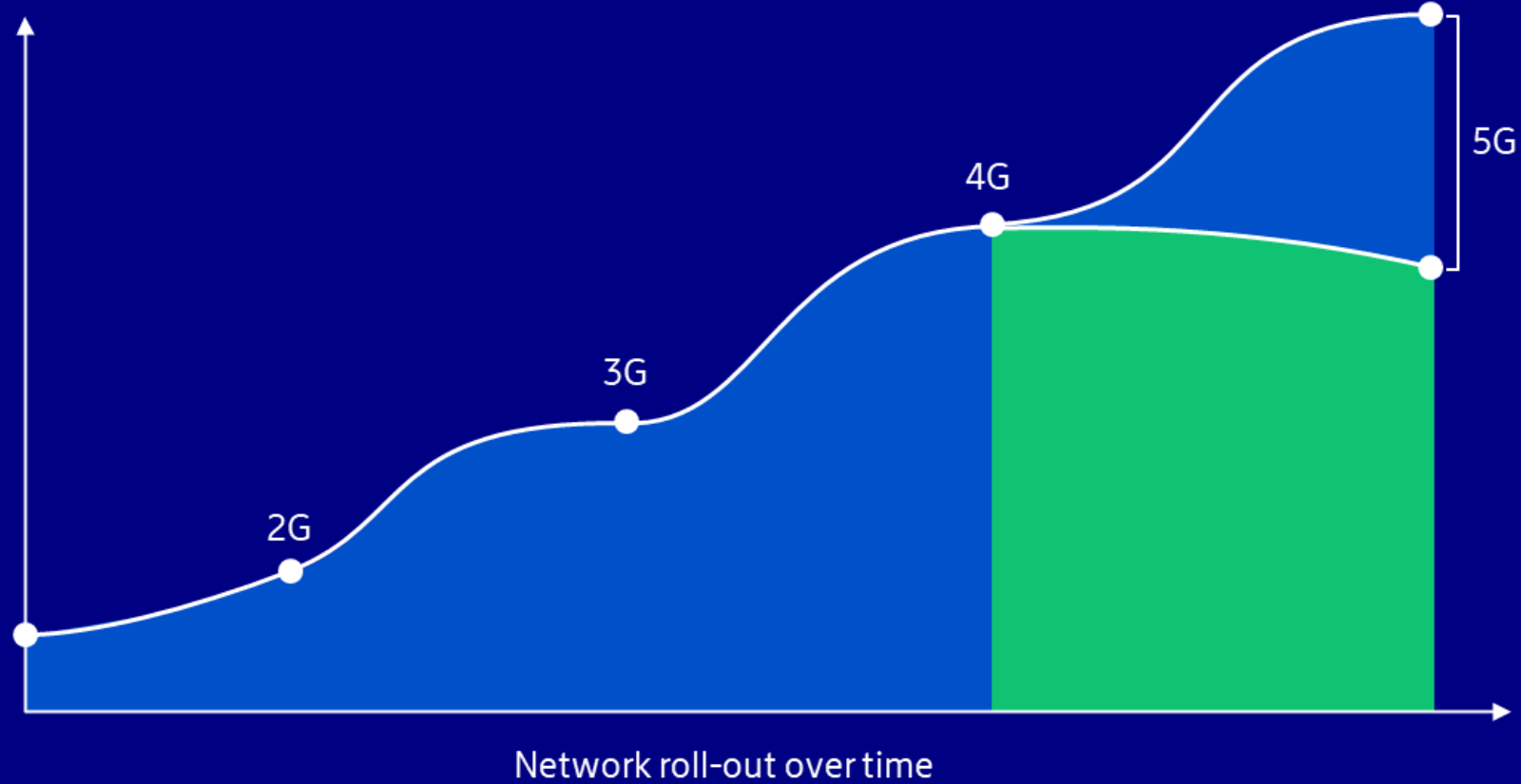
Breaking the Energy Curve



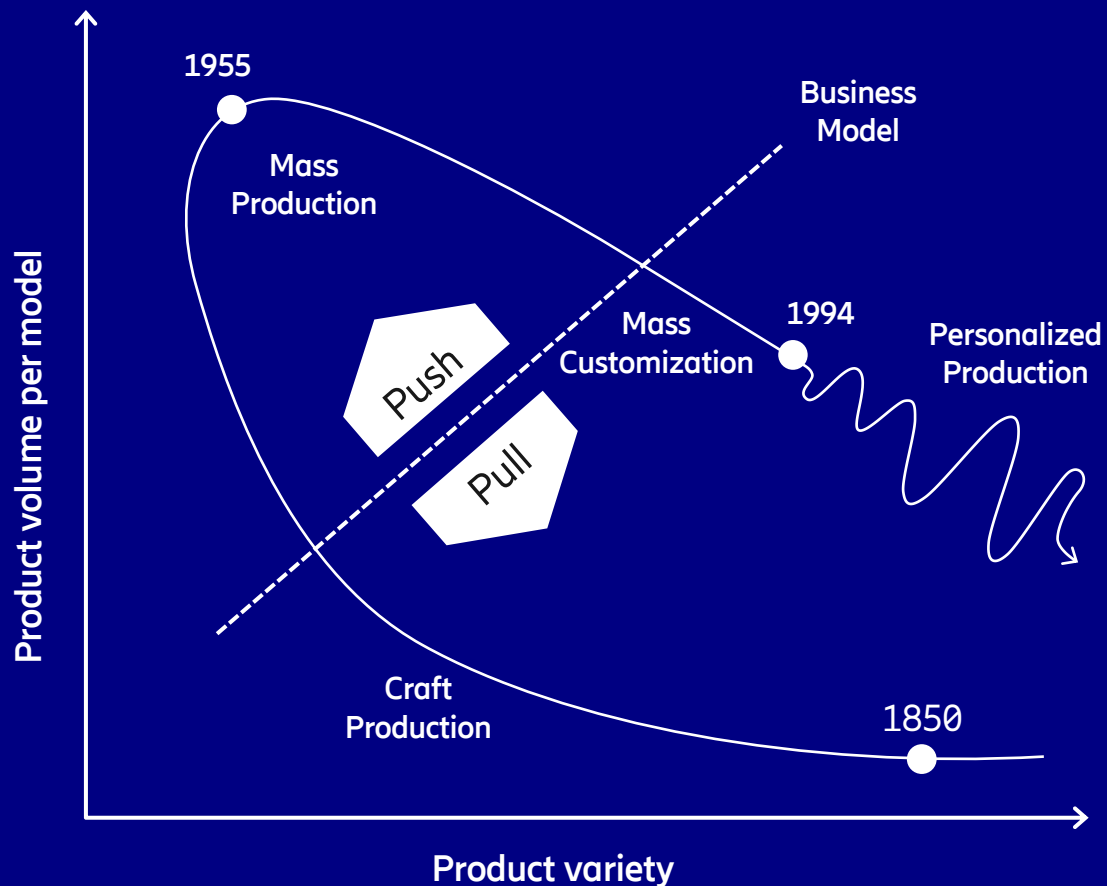
Total network
energy consumption

■ Traditional roll-out

■ Breaking the energy curve approach



New Digitalization Possibilities through Ubiquitous Connectivity



The main challenges:

- Mass customization
- Environmental impact
- Worker shortage

→ Mitigation through **automation** and **ubiquitous connectivity**



New applications:

- Data collection of fixed and mobile assets
- Flexible orchestration of fixed and mobile robots
- Connecting the human in the loop

→ Reduced emissions

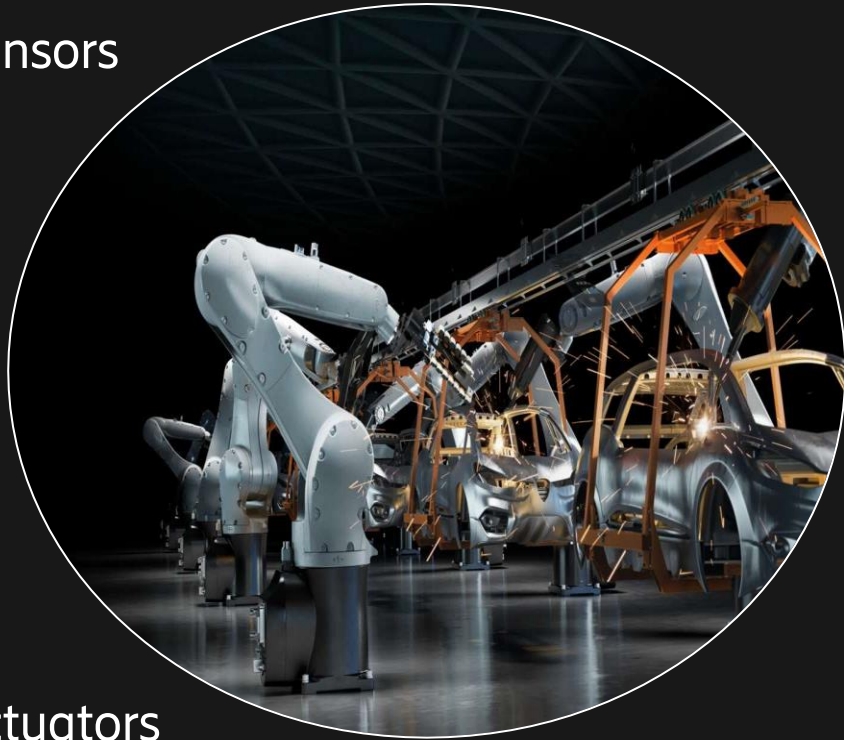
→ Waste reduction

→ Reduced need for physical presence of experts

Industrial Metaverse

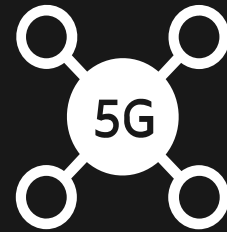


Sensors



Actuators

Physical World



Data



Deploy

Virtual World

Train

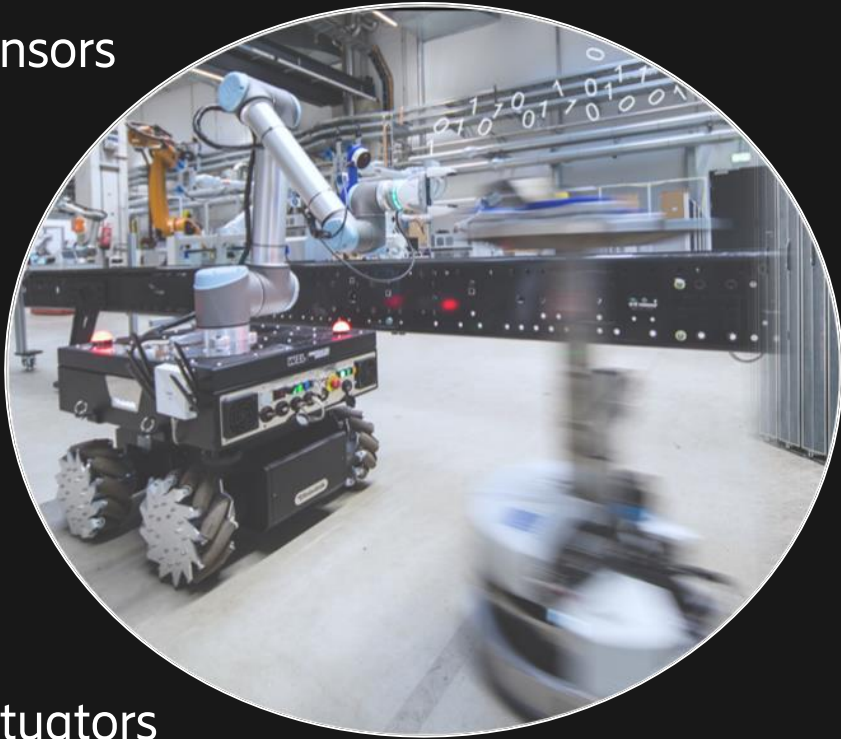
Simulate

Insights

Industrial Metaverse – Edge Robotics

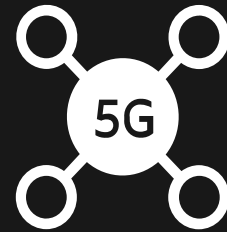


Sensors



Actuators

Physical World



Data



Deploy

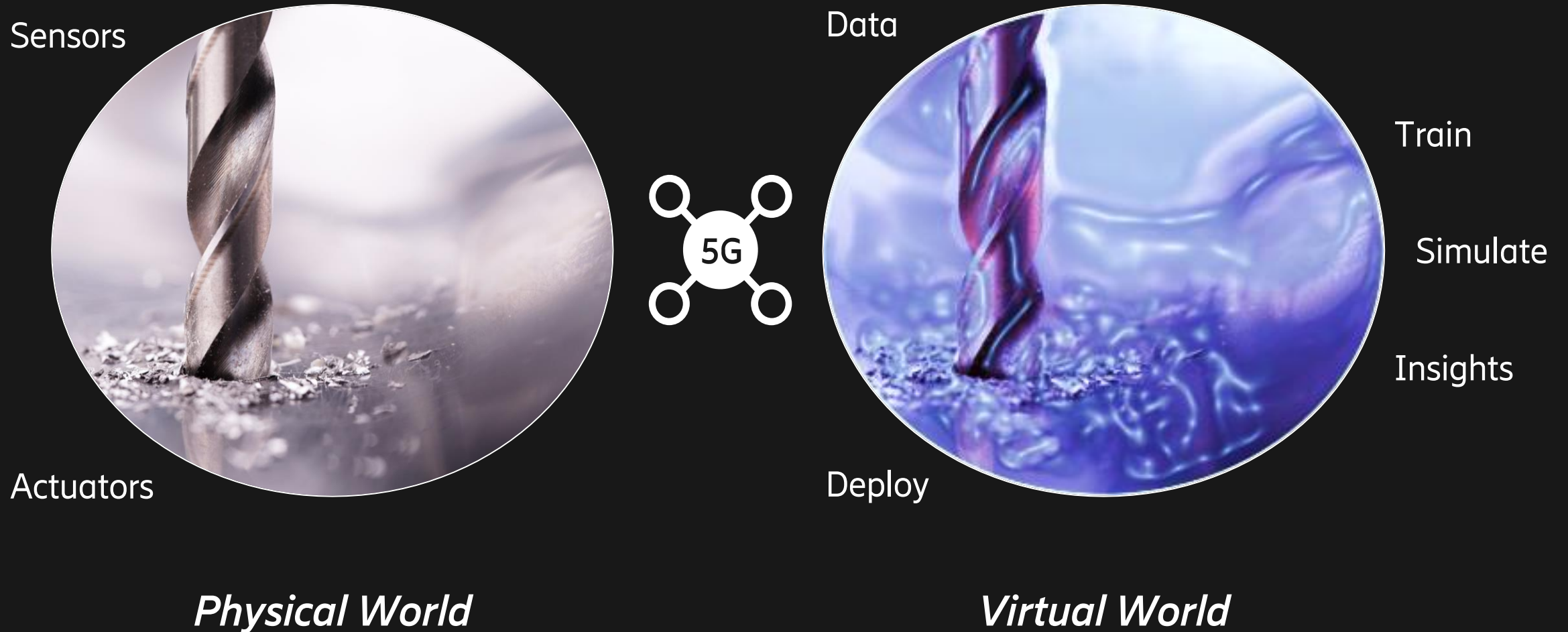
Virtual World

Train

Simulate

Insights

Industrial Metaverse – Zero Waste Production



Summary



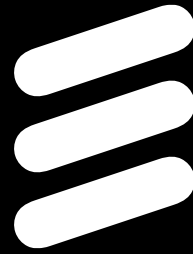
5G is the generation during which Ericsson will reach net zero (by 2030)

5G has unprecedented capabilities for wireless communication and breaks the energy curve

5G can accelerate the industry transformation „Industry 4.0“

→ Invitation to collaboration and co-creation amongst industry leaders to increase sustainability

→ AWK displays 5G cut-the-cable use cases ... this is real!



<https://www.ericsson.com/en/industry4-0>