

Green and digital deep tech innovation and industrial ecosystems: What's at stake ?

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SOLUTIONS TO TRANSFORM EU INDUSTRIAL ECOSYSTEMS”

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At Nokia, we create technology that helps the world act together

When the world's people, machines and devices are in sync with each other, we can realize the full potential of digital:

- Sustainable business growth
- Productivity in industry
- Inclusive digital access

Who we are today

A B2B technology
innovation leader,
realizing the potential of
digital in every industry

Our brand promises

Future-ready
performance

Impact at
scale

Collaborative
advantage



Creating new opportunity with customers

Service providers

Going beyond
telecommunications

7bn+

Subscriptions supported by
our mobile networks

500m+

Fixed broadband lines
and ports shipped

Enterprise and government

Accelerating digital
transformation

2.2k

Mission-critical customers

560+

Private wireless customers

Webscalers

Delivering the next
generation of cloud

135%

YoY growth of our
webscaler business

7

Partnerships and engagement
with 7 critical hyperscalers

Technology licensees

Adopting cutting-
edge technology

20k+

Patent families

4.5k+

Patent families declared
essential to 5G

The technology we lead in: Networks that sense, think and act

Making high performance connectivity more consumable and sustainable

A transformation in how networks are deployed



Opening up networks for innovation and collaboration, securely

A transformation in how networks are applied

Our technology innovation is pioneering the future where networks meet cloud

Game-changing research

Researching the future of networks and industrial automation to fuel our future portfolio through Nokia Bell Labs, our industrial research arm.

Industry ecosystems and partnerships

Building rich global ecosystems with our customers and partners and sharing expertise to drive development of future technology.

Transformative impact for Nokia business groups and customers that creates sustainable growth

Standards and patents

Defining global standards on cellular, cloud, edge, video, automotive and devices, and leading in IP development with over 20,000 patent families.

Incubation and ventures

Driving non-linear growth by incubating Nokia internal ventures and investing in innovative growth-stage companies through NGP Capital, our venture capital fund.

Realizing the potential of digital to create a more sustainable, productive and accessible world

Environment

Minimizing our industry's footprint

Security and privacy

Protecting the world's critical assets

Industrial digitalization

Enabling sustainable growth

Responsible business

Driving systemic change

Bridging the digital divide

Providing inclusive access and digital skills



Leading the digital green transformation – making it real

Industrial digitalization

Enabling sustainable growth



- Connect wind turbine sensors data for monitoring the health of wind turbine pitch mechanisms and assembly
- Early warnings give a chance to perform predictive maintenance and save up to 90% of turbine pitch assembly repair
- High frequency PMU control data over Nokia Digital Automation platform



- AI/ML, computer vision, wireless networking and drone orchestration are helping AeroFarms revolutionize vertical farming
- mini drones flying between the vertical shelving to take pictures and videos for storage

Environment

Minimizing our industry's footprint

5G

We continued to invest in innovation to drive down energy consumption of our products. Our product portfolio innovations included our next-generation **AirScale 5G** portfolio with new **ReefShark** powered plug-in cards and FP5, our fifth generation of high-performance IP routing silicon.

46%

less energy was used on average by the customer networks we modernized in 2021 compared to those not modernized.

Delivering collaborative advantage:

We bring together customer and partner ecosystems to create the digital services and applications of the future

NokiaPartners

Enabling opportunities to discover, build and go-to-market together to realize the potential of digital.

Network as Code

Opening up networks for innovation and collaboration.

Interoperability standards

Driving standards that turn technology innovation into business growth.



NOKIA