

Adtran

# A leap towards sustainable, intelligent networks

Infocom 2024

November 2024, Christoph Glingener

# ADTRAN – Who are we?



**\$950M**

Q2'24 LTM Revenue



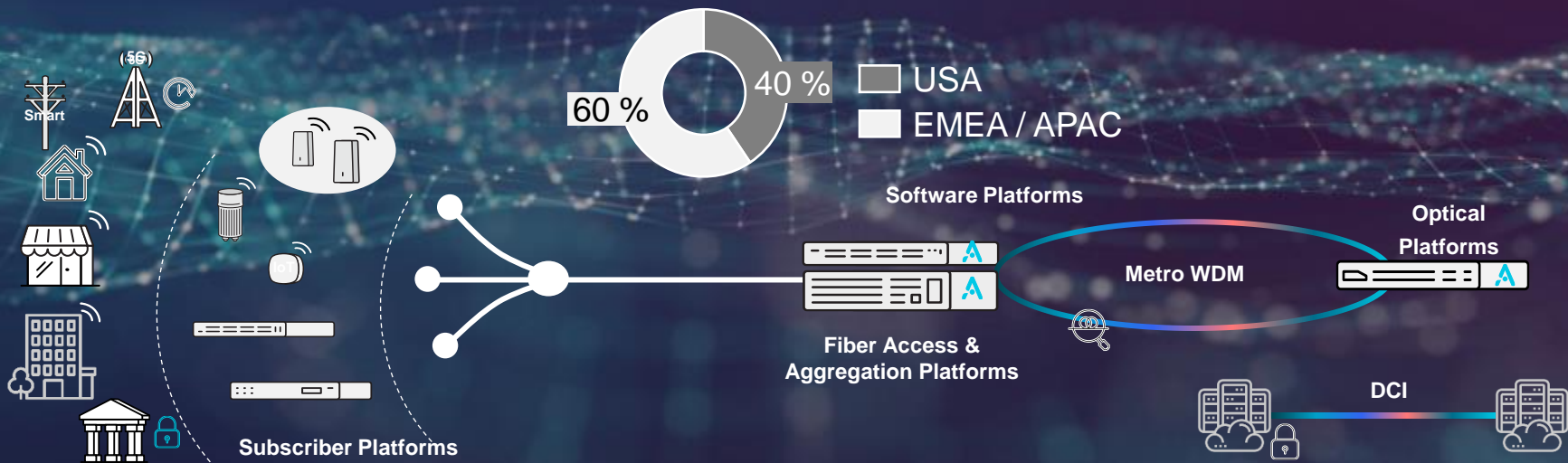
**~\$220M**

Annual R&D Spend



**3,000+**

Employees



# The Market

## Situation

- |                      | EU27  | GR                                     |
|----------------------|-------|--|
| • FTTH               |       |  |
| • Coverage rate      | 64,5% | <b>30.8%</b><br><small>now 36%</small> |
| • Take up rate       | 53.7% | <b>20.4%</b>                           |
| • Penetration rate   | 34.0% | <b>6.3%</b><br><small>now 7.7%</small> |
| • Homes left to pass |       | <b>3M</b>                              |

FTTH Council, Sep 2023

## • ARPUs Europe

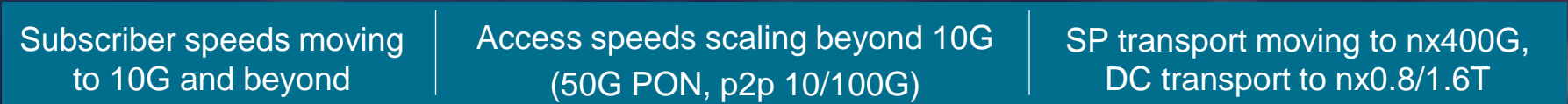
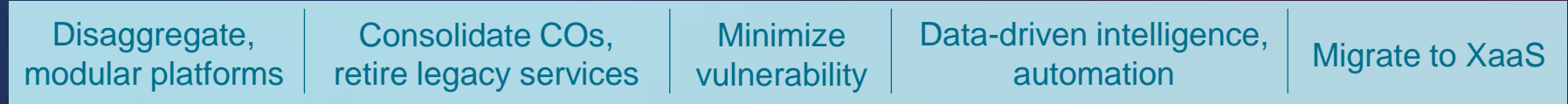
- |          |              |
|----------|--------------|
| • Mobile | <b>€14.7</b> |
| • Fixed  | <b>€22.3</b> |

Statistica, Sep 2024

## Tasks and challenges

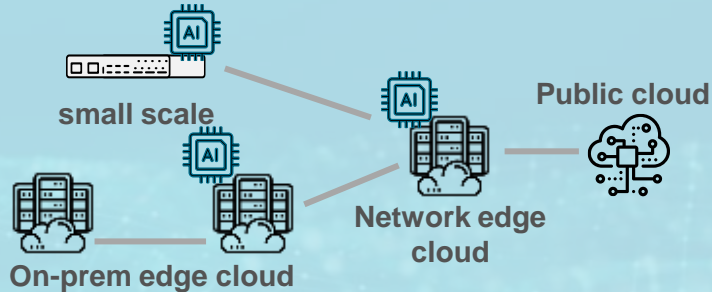
- TCO reduction (!)
- Network/Services modernization
- Transformative trends (AI?)
- Energy costs and sustainability
- Security and vulnerability
- Regulatory changes

# Network/Services Modernization



# The transformative potential of AI

## Transforming networks



- Cloud transformation
  - Public (SMEs), private/hybrid (LEs)
- Edge compute (bandwidth, latency)
- Significant bandwidth growths
- Infrastructure (GPUs) aaS

## Network deployment & operations

- AI-driven planning, predictive maintenance, customer interaction

**20-30% efficiency improvement**

Deutsche Telekom, Oct 2024

## Network solution engineering

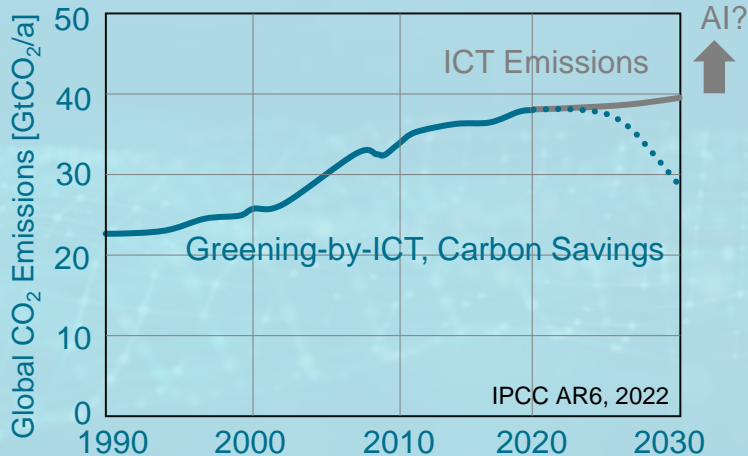
- AI-driven HW & SW development and solution testing

**10-20% efficiency improvement**

Adtran expectation

# Can we do this in a sustainable way?

## ICT footprint



- Power consumption increasing
- Carbon emissions increasing

## Network deployment & operations

- Max use of renewable energy
- Max energy efficiency of network components

**Appr. 5-fold improvement / 10 years**  
**Bandwidth growth higher**

- Use of circular economy processes (recycle, ...)

# Protect yourself against vulnerabilities



## PNT / GPS

- GPS intrusion detection / FW
- Sync via Network/LEOs
- Synchronization assurance

## Infrastructure & Data

- Monitor integrity
- Quantum-safe encryption
- Certified solutions



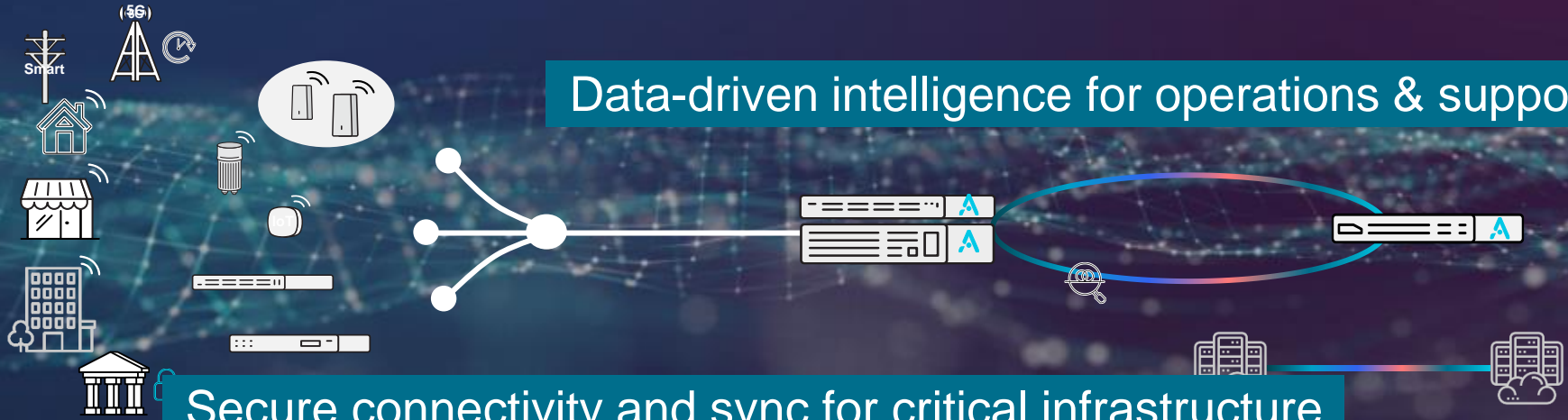
# How can we help?

Collaborative, trusted partner with local (EU) engineering & manufacturing

Data-driven intelligence for operations & support

Secure connectivity and sync for critical infrastructure

Innovative, open & disaggregated connectivity solutions from core-to-door





**Thank you**

