INTRACOM TELECOM

Technology Shaping the Future

Delivering Sustainable, Environment-friendly operations, *today!*

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Telco & Enterprise Software Marketing Director

Intracom Telecom at a glance

KEY FACTS

- **70%** international activities
- **16** countries with local presence
- **1,700** employees worldwide
- **3** R&D centers

CORE OFFERINGS

- Wireless Network Systems
- ICT Services -Smart City & Surveillance Solutions
- Telco & Enterprise Software Solutions
- Energy Solutions

CORE MARKETS

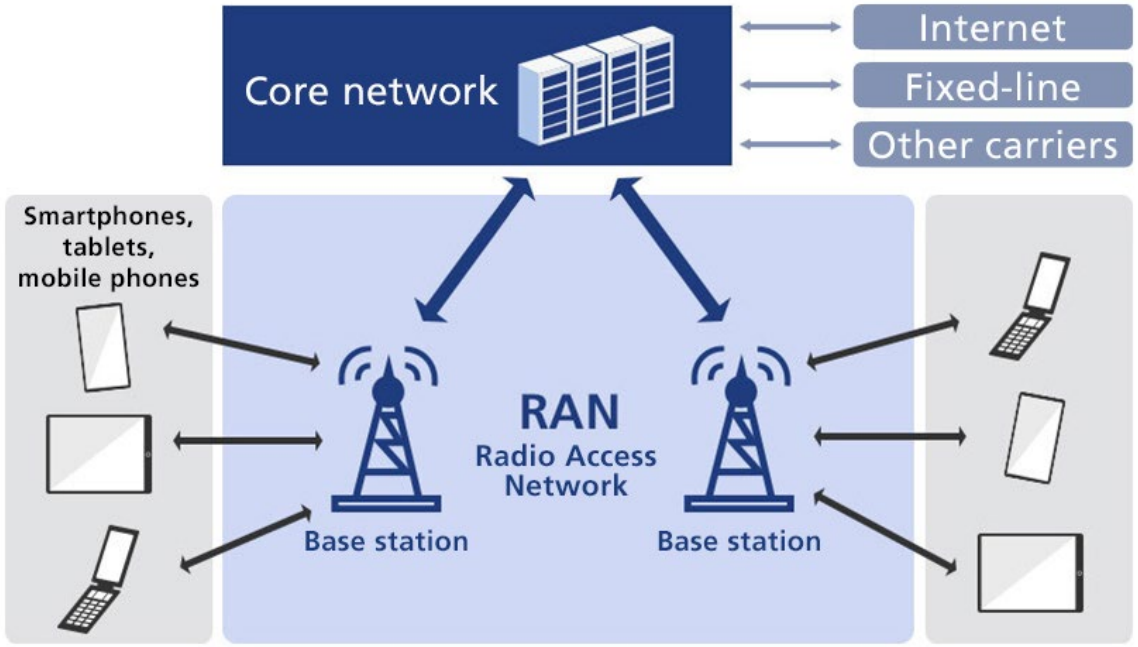
- Telecom
- Public Sector
- Healthcare
- Financial Sector
- Transport & Transit
- Smart Cities
- Utility Companies
- Surveillance & Security

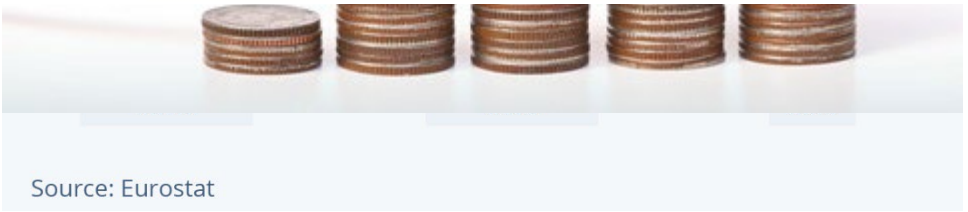
A global telecommunication systems and solutions vendor with 45 years of experience

Breaking down the energy bill…

- **Telecom**: **2-3%** of Global energy consumption
- **RAN**: **50-60%** of total CSP energy consumption
  - *Radio unit*
  - *Baseband unit*
  - *Control*

  } **~50%** *of RAN*
- **Core/Data Canter**: **~20%** of energy consumption
- Energy costs: **20-40%** of annual CSP OPEX
- **Unprecedented** energy cost inflation!



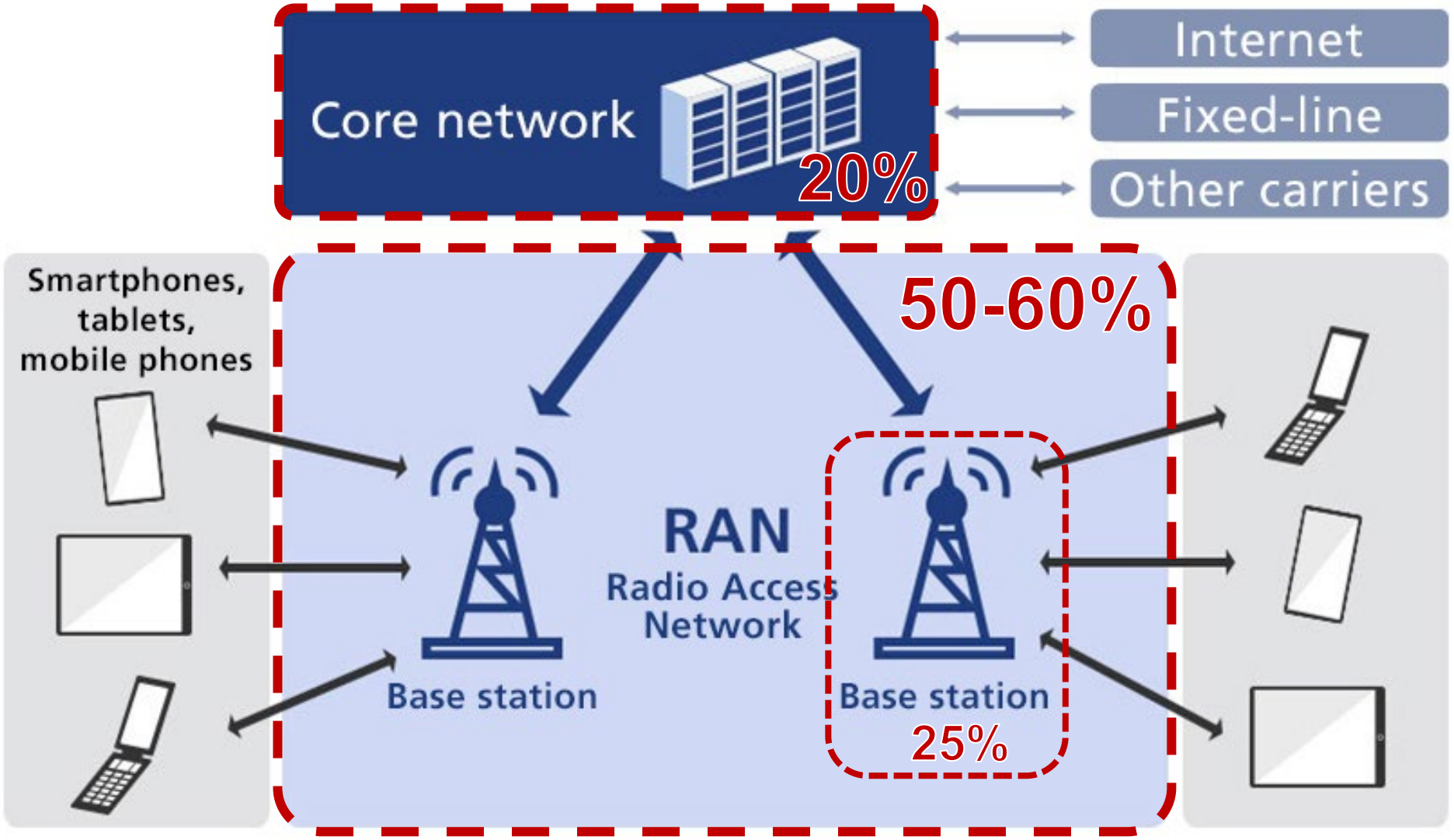


Source: Eurostat

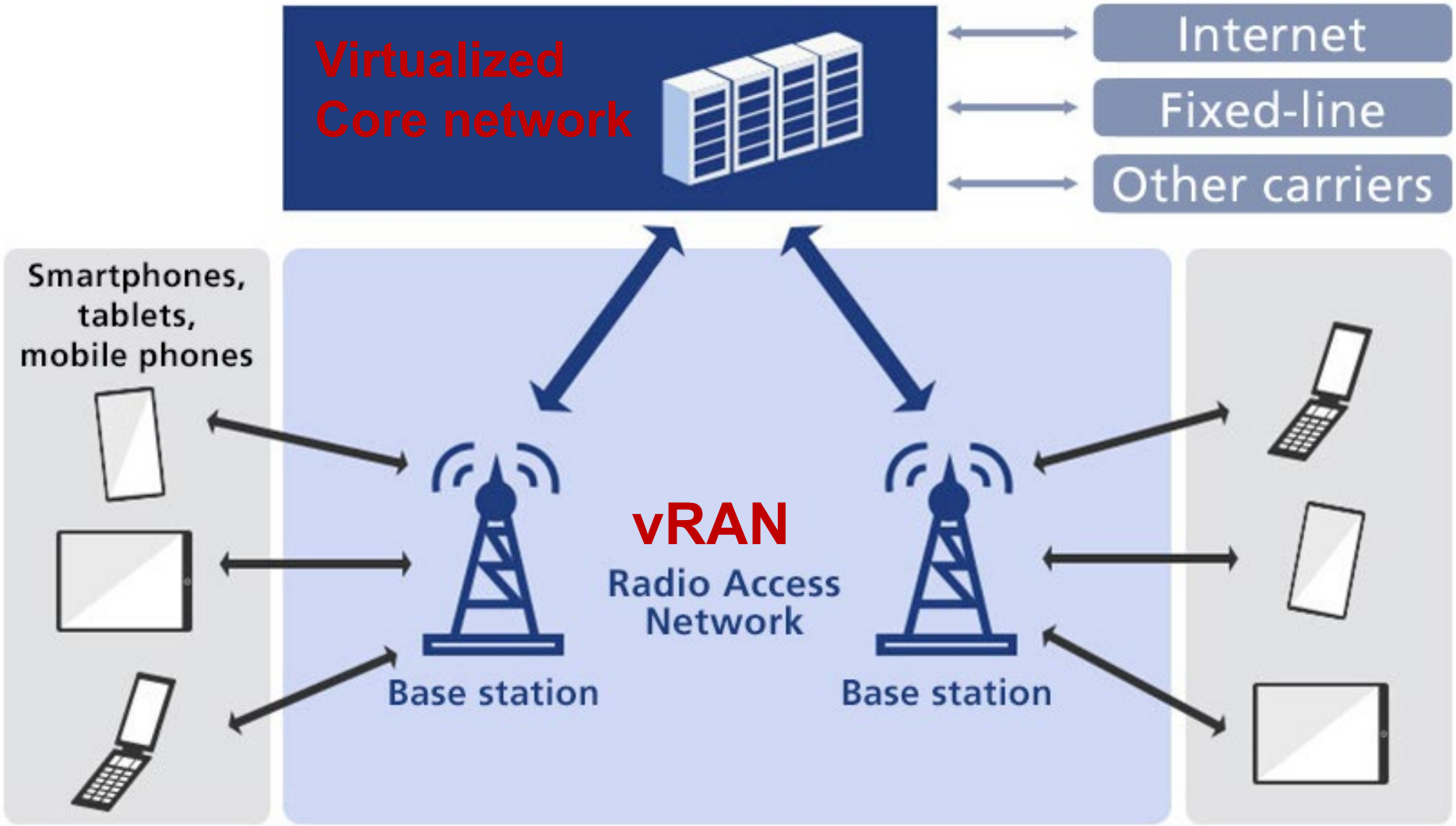
…along with the environmental mandate!

- The Paris Agreement & the EU **Green Deal**
  - *Net emissions of greenhouse gases by 2050*
  - *50% gas emission reduction by 2030*
  - *Economic growth decoupled from resource use*
  - *No person and no place left behind*
- Corporate **ESG** policies!

Targeted energy efficiency

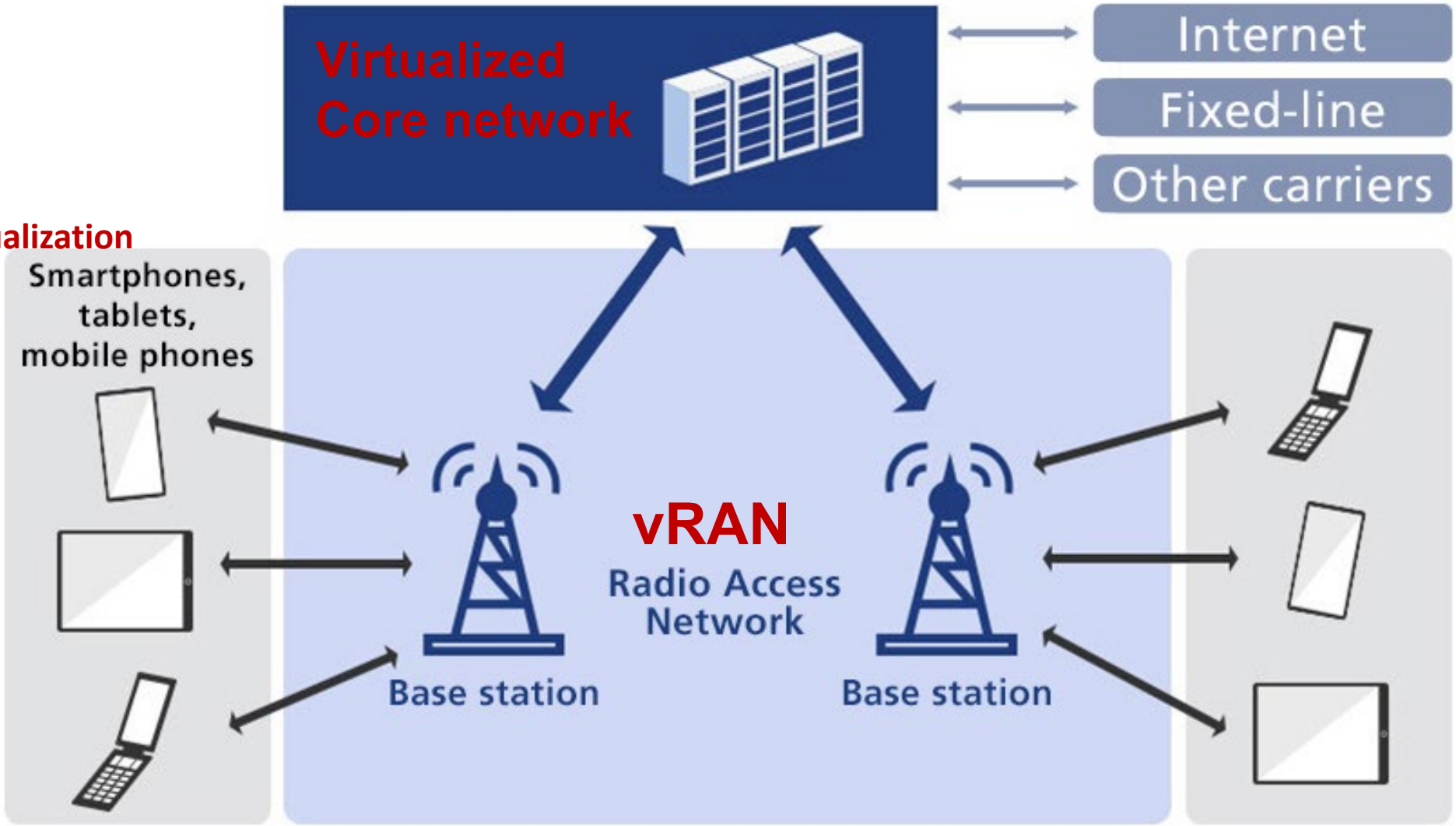


Targeted energy efficiency



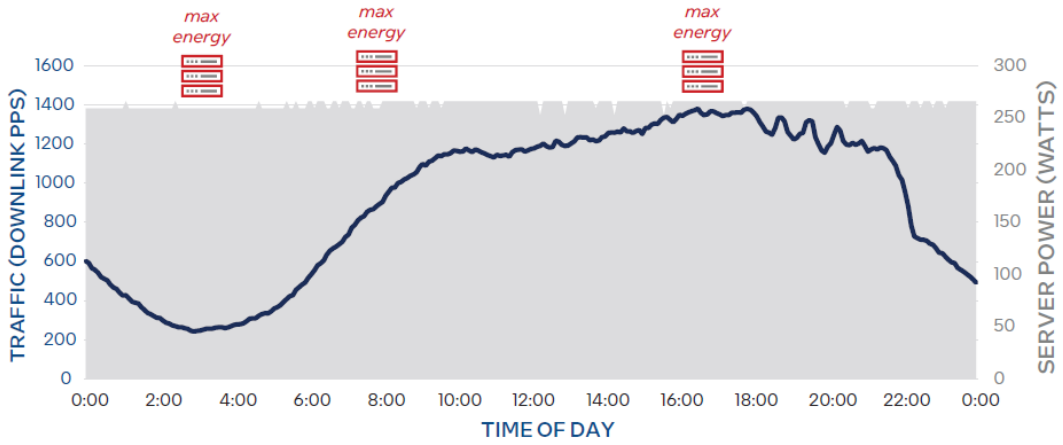
Targeted energy efficiency

Exploit
Network Virtualization
benefits
to the **fullest!**



The REAL challenge

- Polling due to **stringent** Network Service KPIs
- **High** CPU utilization - even during off-peak periods!
- OS **unaware** of the actual VNF load



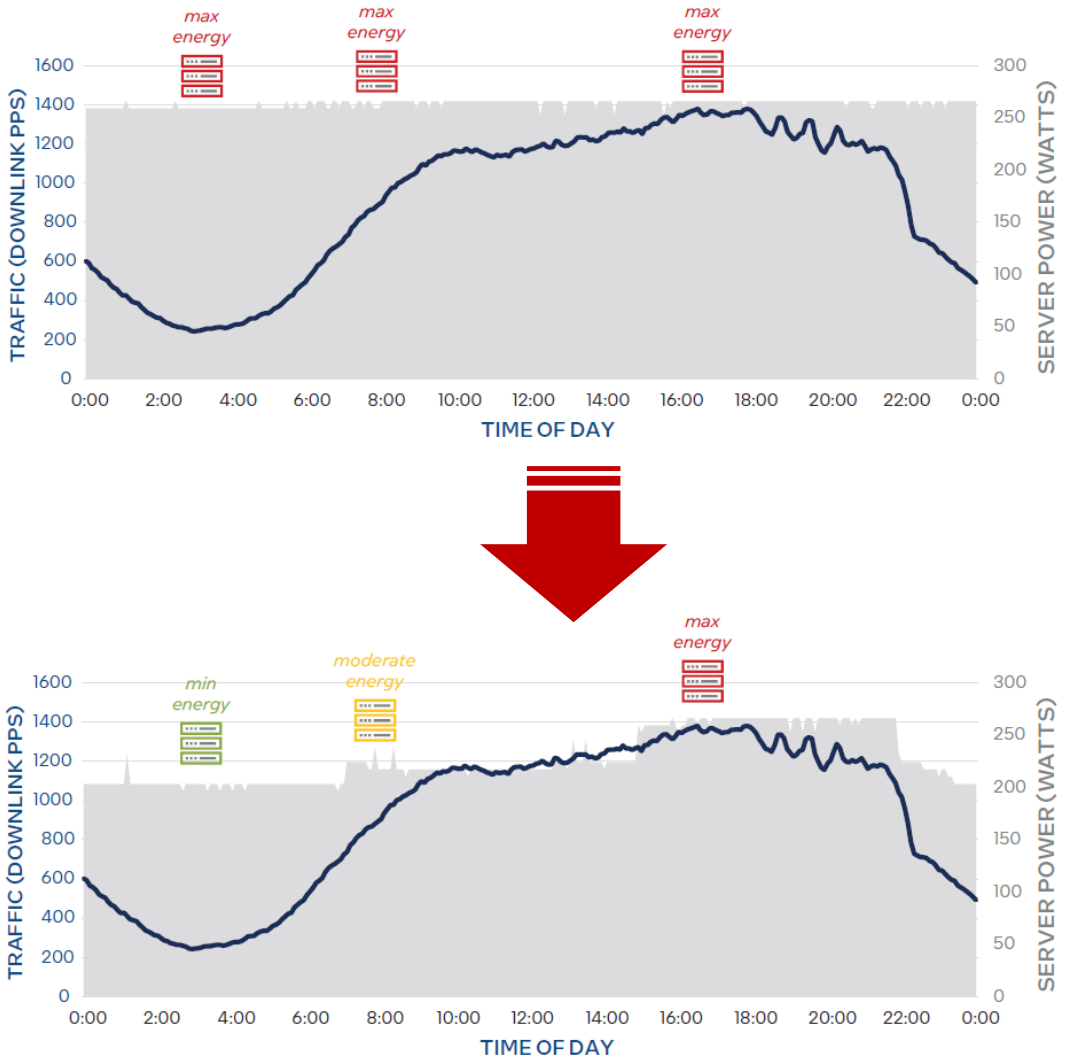
The REAL challenge & the UNIQUE solution

- Polling due to **stringent** Network Service KPIs
- **High** CPU utilization - even during off-peak periods!
- OS **unaware** of the actual VNF load

AI-driven, closed-loop optimization **dynamically** adapting CPU frequency to match **actual traffic** load, while guaranteeing **zero packet** drops

- Servers operated at **lower power** when under moderate/light traffic!
- **No modification** on deployed VNFs!

NFV-RI
RESOURCE INTELLIGENCE

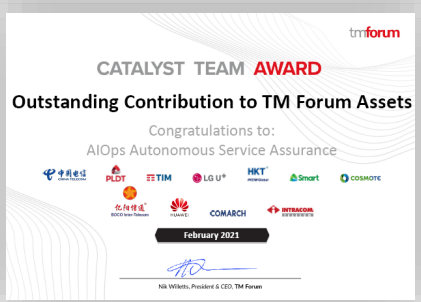


Let the facts speak for themselves…

2020

First-ever PoC in collaboration with major Greek CSP, member of intern. telco group, in the context of an award-winning TM Forum Catalyst project

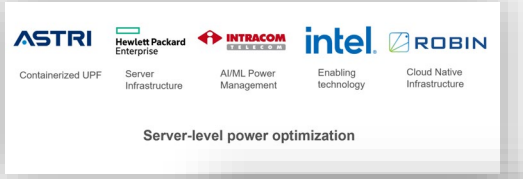
Showcased **14%** average energy savings (24h) for **SPGW-U** prototype



2022

MWC'22 demo with Intel and leading industry vendors

Showcased **29-31%** average energy savings (24h) for commercial **5G UPF** deployment



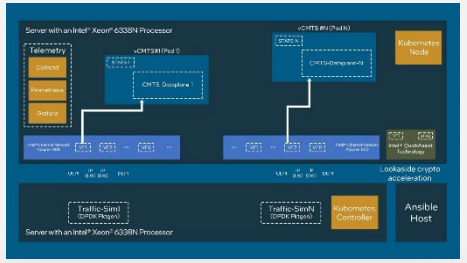
GSMA MWC Barcelona

2022

ANGACOM'22 demo with Intel

Showcased **30%** average energy savings (24h) in **vCMTS** server

intel.

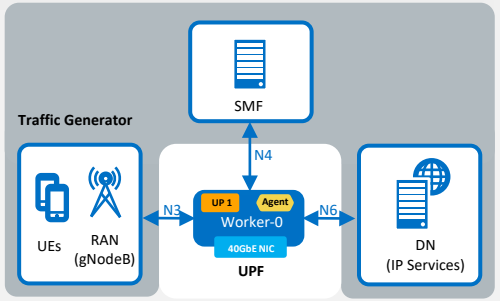


ANGACOM
WHERE BROADBAND MEETS CONTENT

2021-present

Multi-phase PoC with Tier-1 APAC CSP (ongoing)

Up to **37%** average energy savings (24h) on **5G UPFs**



Let the facts speak for themselves…

Net zero CO_2 emissions **for entire Group** by **fiscal 2050**

Net zero CO_2 emissions from **Telecom business activities** by **fiscal 2030**

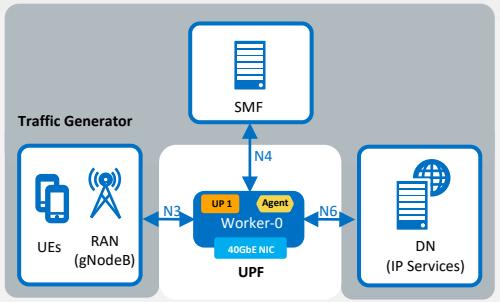
Net zero CO_2 emissions **at data centers** around the world by **fiscal 2026**

- Serving 60M+ subs
- ~1M tons of CO_2 emissions annually

2021-present

Multi-phase PoC with Tier-1 APAC CSP (ongoing)

Up to **37%** average energy savings (24h) on **5G UPFs**



Targeted energy efficiency – continued!

Exploit
Network Virtualization
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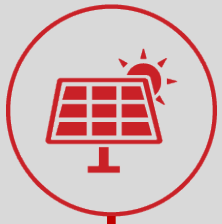
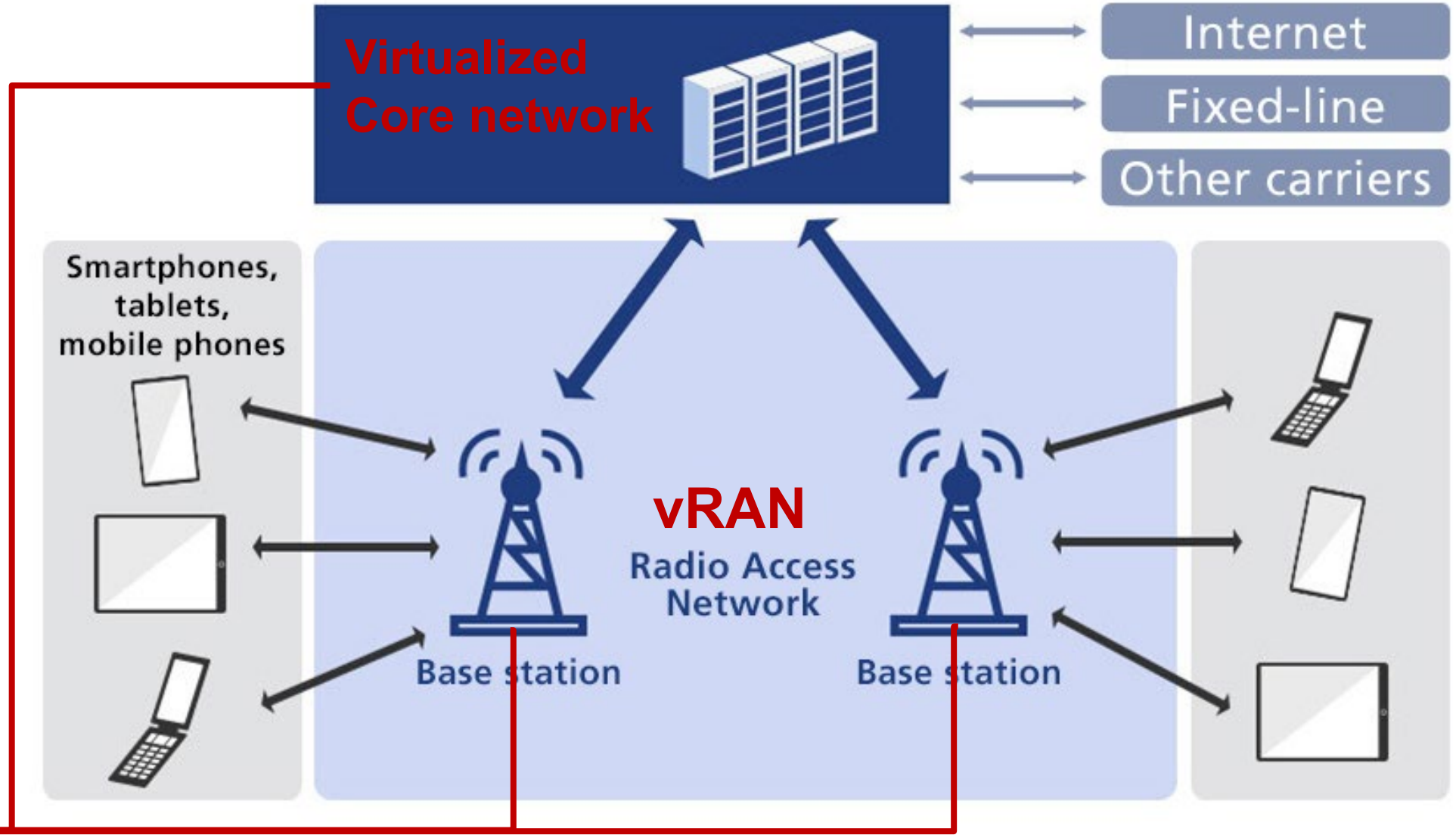
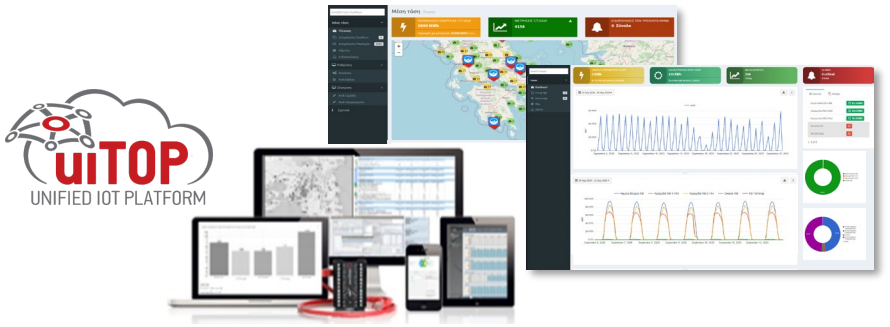
Leverage
Green Energy production
everywhere!





Solar systems for BTS & net-metering



Unified Energy Management & Monitoring platform

- Permitting Process Services
- Design Services
- Procurement Services
- Construction Services
- Commissioning & Installation Services
- Telemetry & Surveillance System
- After Sales Support & Maintenance

Actions speak louder than words…

tmforum

Author in "**GB1031 Digital Organizational Transformation Culture & Skills Guidebook**": how to implement corporate digital transformation based on ESG principles

Contributor in "**IG1301 Whitepaper – Measuring and Managing Autonomy v1.0.0**": the business value of sustainable operations autonomy for corporations)

Delivering Sustainable, Environment-friendly Operations, today!

thank you

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