

# Hardware Innovation for 5G Starts on Chip

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## Today's Telco Challenges



IDC calculates global telco revenues have increased at a CAGR of 0.2% across 2016–2021.

Source: IDC Telecoms Tracker



While we forecast global data will continue to grow at a CAGR of 22% to 2026.

Source: IDC Global Datasphere. April 2022



And basic network operating costs face high inflationary pressures, including a 300% rise in energy costs in 2022 for some telcos.



Telcos need to transform their network costs, their network technology, and their business models if they are to thrive in the next decade of disruption...















With the rise of 5G, Communications Service Providers (COSPs) need powerful, scalable platforms that don't compromise on energy efficiency or costs.





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## How do Telcos Improve Energy Efficiency?



# No.1 Network Priority 2022–2023 = Reduce Energy Consumption

Source: IDC Europe, European Telco Networking and Operations Survey, May 2022

# Telcos' top factors for improving energy efficiency and sustainability in IT infrastructure:





Accelerated renewal of ageing hardware with low performance per watt



Having a dedicated role/ team focused on improving IT sustainability





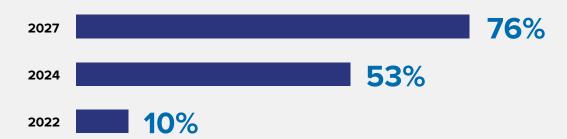


## Where Are Telcos on Software Evolution?



Telco adoption of software-driven network solutions accelerates as they deploy 5G standalone networks that are made up predominantly of cloud-native network functions (CNFs)

Percentage of European operators with a majority of network functions delivered as virtual or cloud-native network functions (VNFs and CNFs)









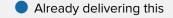


## Where Can Telcos Find New Revenues?

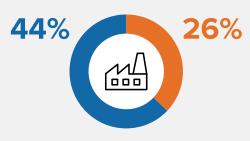


By the end of 2024 the majority of Tier 1 telcos in NA and Western Europe will try to grow new revenue streams by launching several complex services that rely on optimized general compute infrastructure

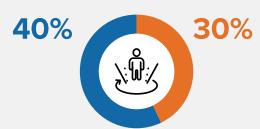
#### **Outlook for New Tier 1 Telco Services 2022–2024**



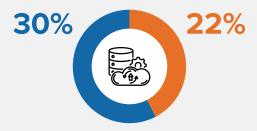
Already delivering this
Planning to launch within the next 24 months



Industrial IoT/ Industry 4.0



Virtual and Augmented Reality (VR/AR)



**Multi-access Edge Compute** based services



Read success stories to see how to achieve better performance at a reduced price per watt.



