



The bridge to possible

Your Kick-Start for the Sustainability Journey

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Cisco Webex App

Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated until February 24, 2023.



Abstract

Today we are dealing with a complex and unprecedented brew of social, environmental, market, and technological trends.

Join us to learn how you can start and elevate your sustainability journey, based on:

- Environmental impact when a product is used, that includes power consumed, thermal cooling, and interconnect speed efficiency.
- Solution Impact as the offset that the solution provides and it can be translated to "CO2e emissions" saved, or eco-efficiency optimization; i.e., travel saved, power consumption reduction.

Product Lifecycle provides information on manufacturing process efficiency, carbon impact, transport, waste management, and Circularity.

This session will benefit Service Provider and Enterprise customers.

What this Session ...

...is About?

- Key metrics during the use of your solution
- Practical ways to achieve sustainability outcomes that will help you meet your sustainability goals
- How Cisco can help to achieve your sustainability goals

...is NOT About?

- It is not about Tools
- Convincing you that Sustainability is important

“Which KEY actions will you perform for a more sustainable future”



Esther Roure Vila
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“Actionable Insights!!”



Marisol Palmero
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“We’re all part of it!!”



Agenda

- Introduction
- NetZero Goal
- Achieving Sustainability Outcomes
- Conclusion

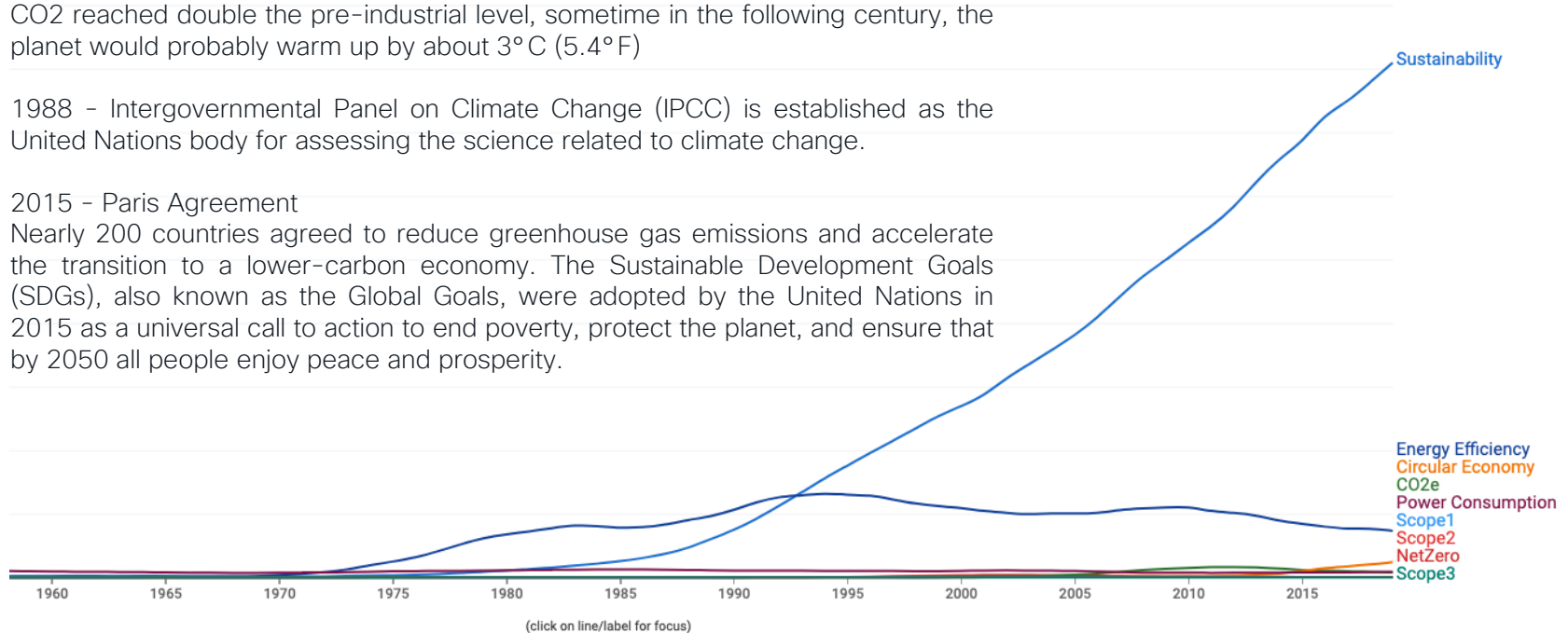
Sustainability, new buzzword? or business driver?

1979 - U.S. National Academy of Sciences reached a consensus that when CO₂ reached double the pre-industrial level, sometime in the following century, the planet would probably warm up by about 3°C (5.4°F)

1988 - Intergovernmental Panel on Climate Change (IPCC) is established as the United Nations body for assessing the science related to climate change.

2015 - Paris Agreement

Nearly 200 countries agreed to reduce greenhouse gas emissions and accelerate the transition to a lower-carbon economy. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2050 all people enjoy peace and prosperity.



Reference: <https://books.google.com/ngrams>

What do people mean when they talk about “sustainability”?

“Sustainability meets the needs of the present generation without compromising the ability of future generations to meet their needs”

(Brundtland, 1987)



Source: <https://www.globalgoals.org/goals/>

Carbon and greenhouse gas (GHG) emission reduction strategies are at heart of sustainability efforts

You will hear them classified as “Scope 1, 2 or 3” emissions, along with efforts to become “net zero”



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What is “Net Zero”?

A state where we add no incremental greenhouse gases to the atmosphere



REMORA

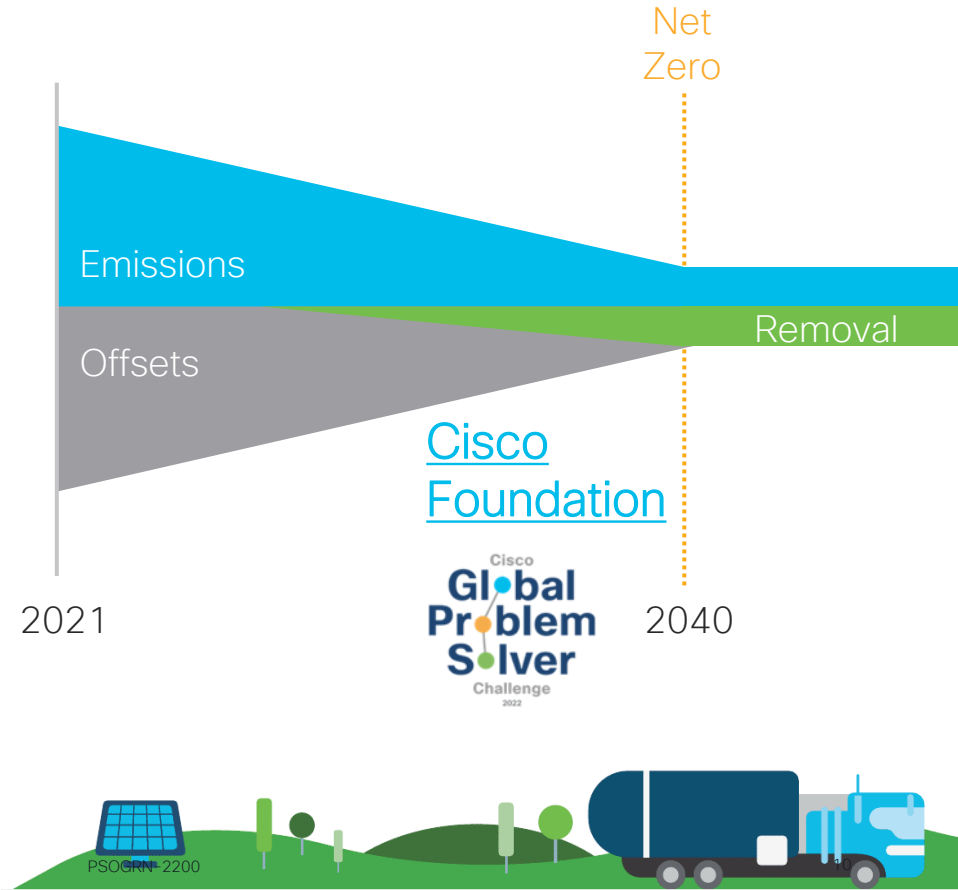
Cisco Global Problem Solver Challenge 2021 winner Carbon Capture for semi trucks
<https://remoracarbon.com>



Cisco Global Problem Solver Challenge 2022 winner [A2P Energy Solution](#) identifies biomass burning points across India so crop residues can be collected, converted into biofuel, and sold to buyers



Cisco Foundation <https://www.vesta.earth/> is a hybrid nonprofit/public-benefit enterprise whose solution is to capture carbon from the atmosphere and support coastal resilience by using the mineral olivine.



Net Zero: How?

Personal reflexion

Trip to Cisco Live	Emissions lbs	Emissions kg
Flight Barcelona to Amsterdam	420 lbs CO ₂ e	191 kg CO ₂ e
Flight Brussels to Barcelona	366 lbs CO ₂ e	166 kg CO ₂ e
Total round trip	786 lbs CO ₂ e	357 kg CO ₂ e

Source: SAP Concur Travel Solutions

Absolute zero

Carbon credits

Carbon Removal

Net Zero: How?

Personal reflexion

Beef (beef herd)
- 26.5 kg CO₂e per
100g of protein ³

VS

Pulses (legumes, chickpeas,
lentils, beans, etc.) - 0.4 kg
CO₂e per 100g of protein ³



10 kg CO₂e¹

357 kg CO₂e / 295 g CO₂e/kWh²
= 1,210.2 kWh



Netherlands

January 16, 2023 at 8:00 AM

estimated

295g

Carbon Intensity
(gCO₂e/kWh)

62%

Low-carbon

58%

Renewable

Trip to Cisco Live	Emissions lbs	Emissions kg
Flight Barcelona to Amsterdam	420 lbs CO ₂ e	191 kg CO ₂ e
Flight Brussels to Barcelona	366 lbs CO ₂ e	166 kg CO ₂ e
Total round trip	786 lbs CO ₂ e	357 kg CO ₂ e

Source: SAP Concur Travel Solutions

12 Solar Panels



Esther's house SEMS Portal

Source:

¹ <https://onetreepanted.org/pages/tree-facts>

² <https://app.electricitymap.org/zone/US-NW-NEVP>

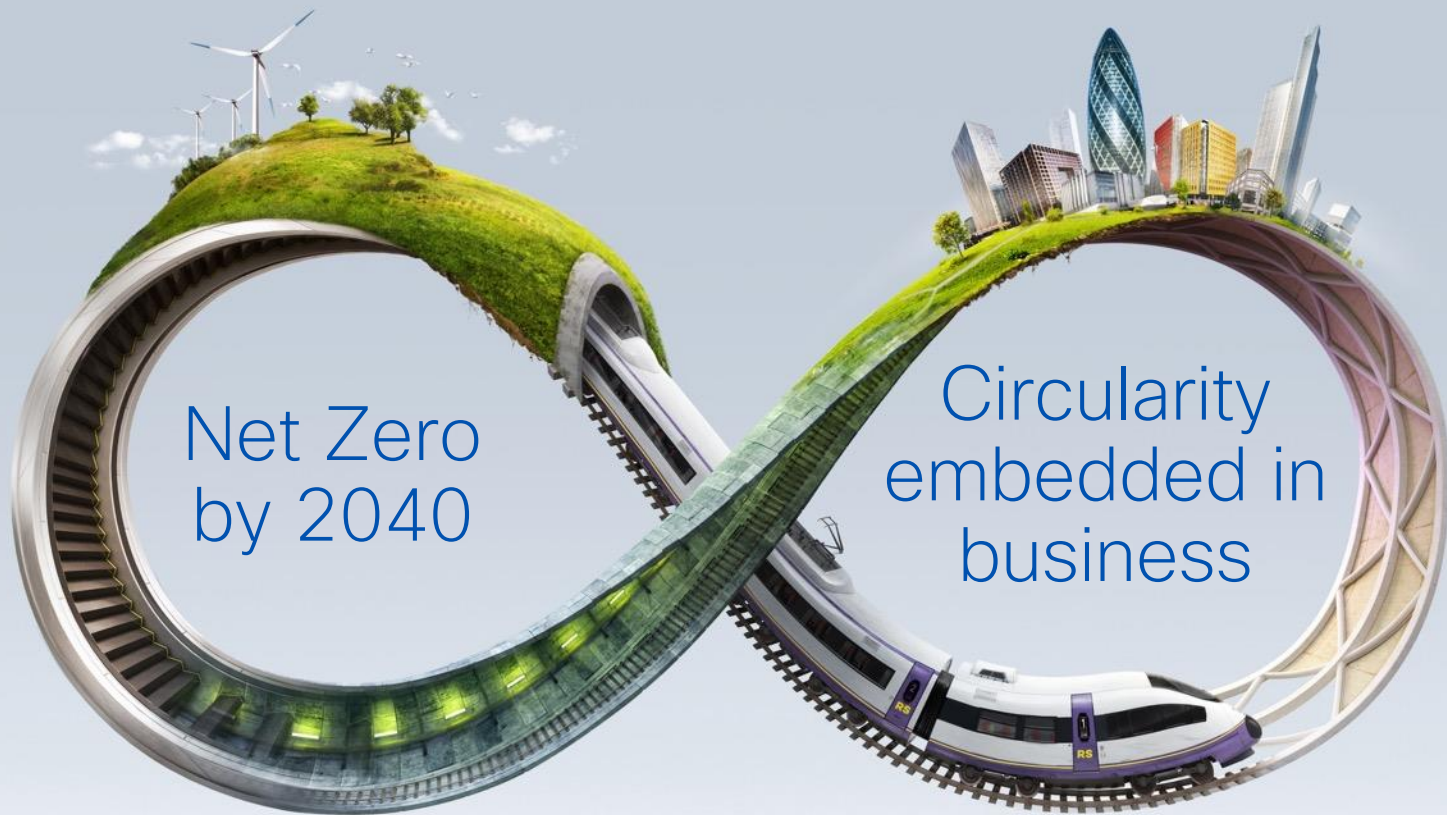
³ <https://breakingboundaries.count-us-in.com/methodology>

PSOGRN-2200

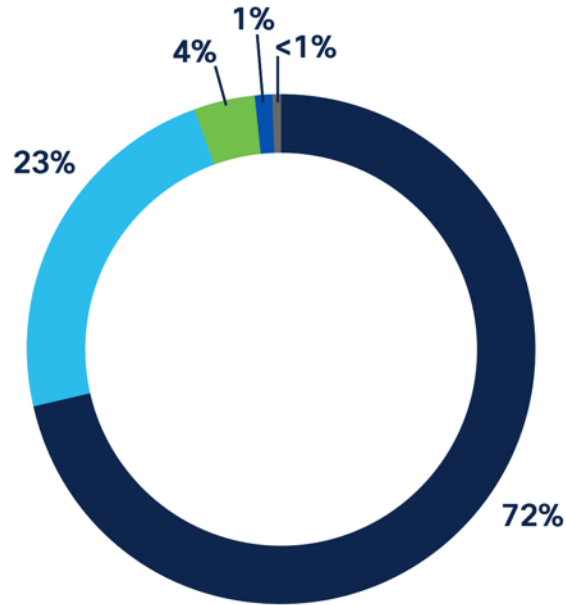
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Do you have a
Net Zero Goal?



Cisco FY22 Scope 1, 2 and 3 emissions



● **Scope 3:** Use of sold products

● **Scope 3:** Purchased goods and services

● **Scope 3:** Upstream transportation and distribution

● **Scope 1 and 2:** Cisco operations

● **Scope 3:** All other categories

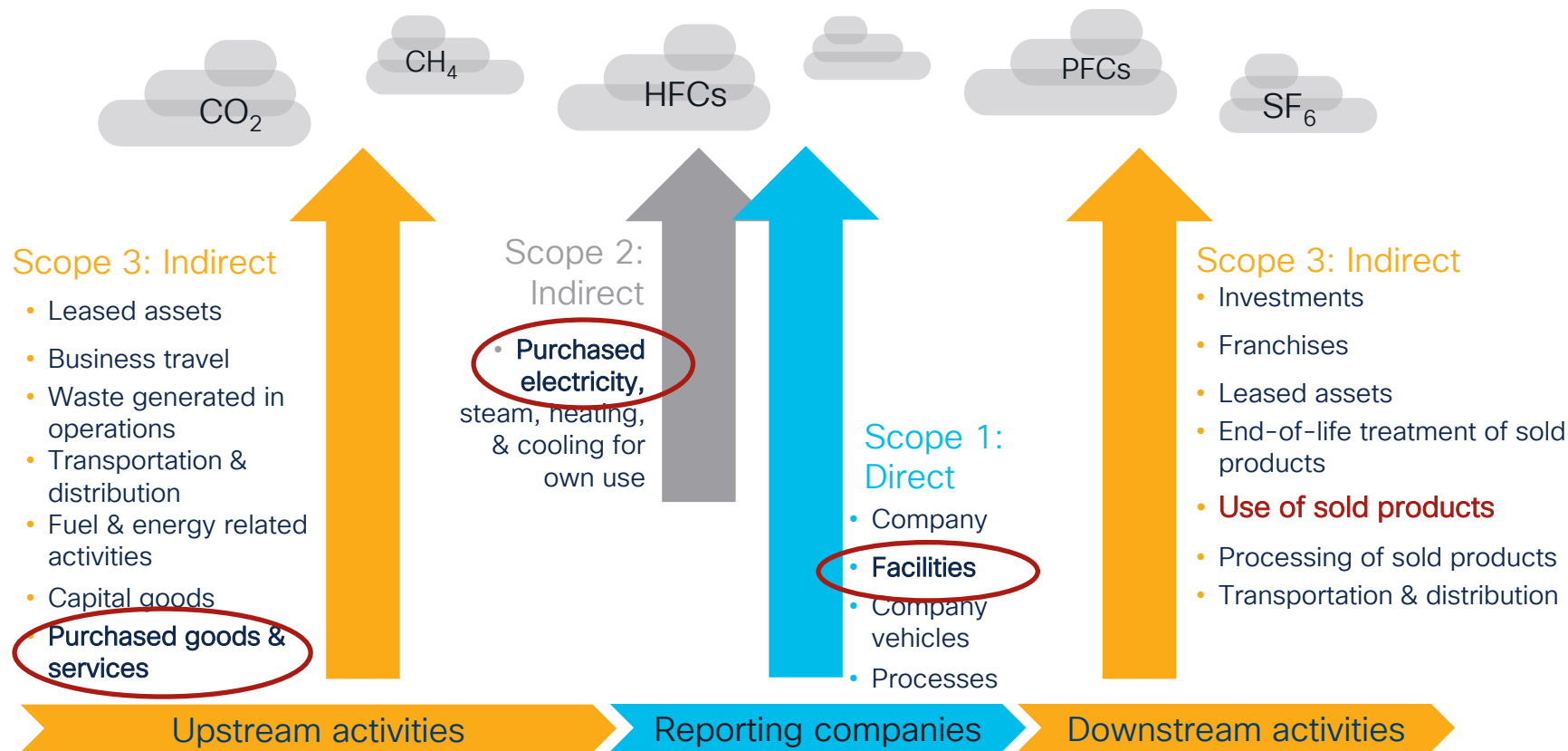
Note: Numbers may not add up to 100 percent due to rounding.

Avoided emissions are emission reductions that occur outside of a product's life cycle or value chain, but as a result of the use of that product. Other terms used to describe avoided emissions include climate positive, net-positive accounting, and **Scope 4**.⁽¹⁾

Visit Cisco's [ESG Reporting Hub](#) for a detailed breakdown of our Scope 1-3 emissions.

⁽¹⁾[Do We Need a Standard to Calculate "Avoided Emissions"?](#)

What Is Scope 1, 2 & 3 for Me?





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IT Sustainability Journey Framework

Baseline

- Business Outcomes and Priorities
- Governance
- Asset Management
- Visibility
- Efficiency via Upgrades
- Circular Lifecycle Management
- Data Security & Privacy

Enabler

- Digital transformation
- Technology as an Enabler
- Innovative & Clean Product Portfolio

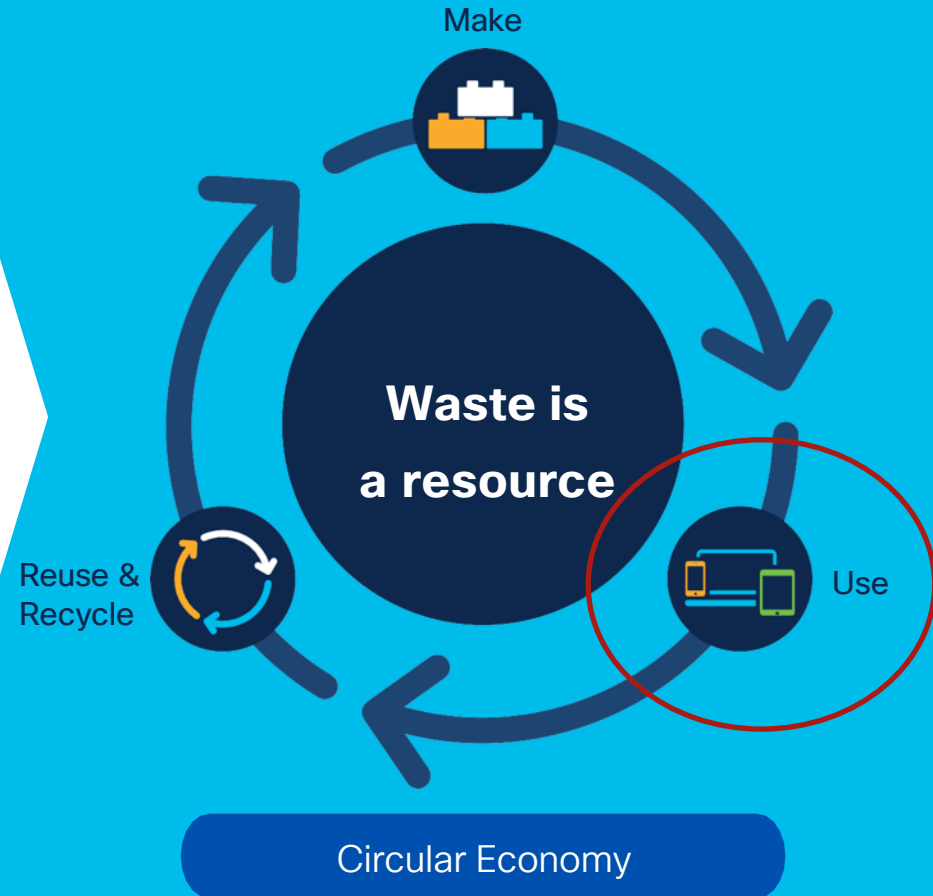
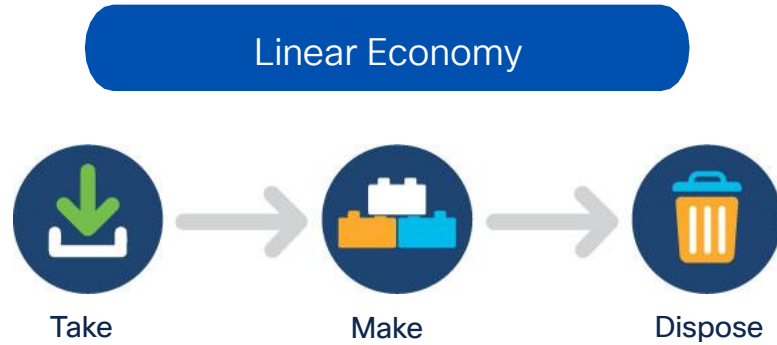
Eco-design

- Sustainable by Design
 - Resource Optimization
 - Capacity Management
 - Adoption
- Automation
Hybrid Cloud

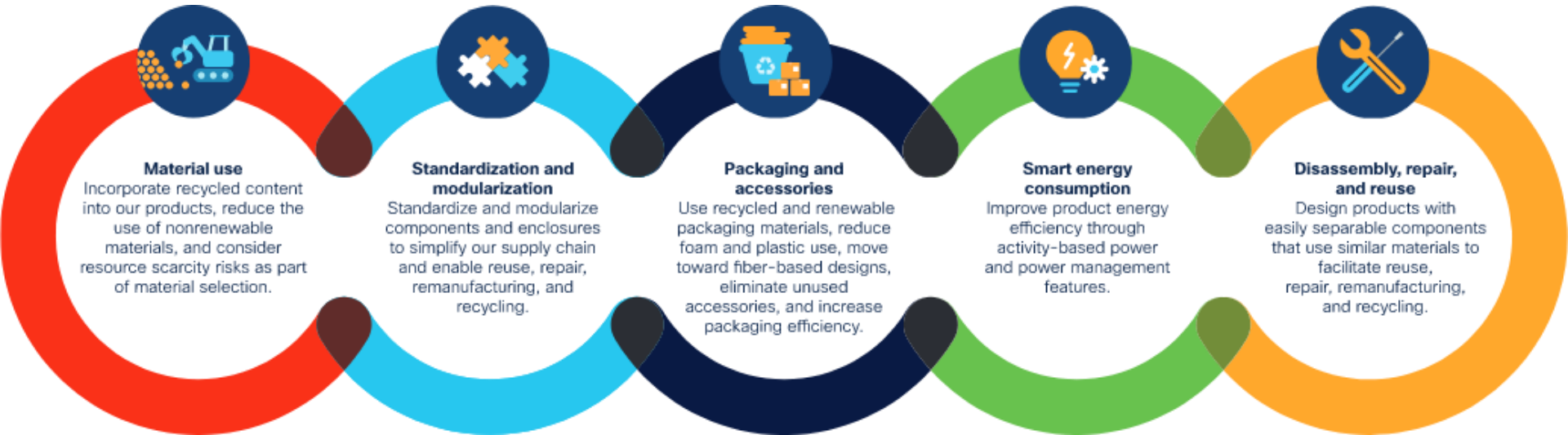
Example of IT Sustainability Priorities

IT Sustainability Journey	Strategic Imperative	Objective	Success Metric/Outcomes
Baseline	Circular Consumption	Reuse Recycling	50% product recycling FY23 90% product recycling FY24 10% product reuse
Baseline	Visibility into Green House Gas (GHG)	Real-time data on Green House Gas (GHG)	40% reduction FY23 60% reduction FY24 80% reduction FY25 90% reduction FY26 10% GHG capture FY26
Baseline Eco-design	Green IT Infrastructure	Reduce Power Consumption	30% reduction FY23 40% reduction FY24 No increase in power consumption FY25
Eco-design	Green IT Infrastructure	Resource Optimization Capacity Management	Exactness of Capacity Forecast Capacity Adjustments
Enabler	Environmental protection	Tech as an Enabler	Optimize office utilization Business continuity Travel reduction

How we define Circular Economy



Cisco's Circular Design Principles



Source: [ESG Hub Product sustainability](#)

Circular Economy

Reuse & Recycling

100%
product
return
pledge



E-waste contain various components and pieces, some valuable, some toxic, and some both.

- Asset management system
- Work with your suppliers to identify reuse and recycling programs
- Make it part of your process, do not leave it to chance!
- Check Circular Business models

01

Leverage Asset Management Services or CX Cloud

02

[Product Takeback & Reuse](#)

03

Send IT Back Mobile App

04

[Cisco Green Pay](#) offers a 5% incentive on Cisco hardware, predictable payments for five years, and free product returns.

Telemetry Specifications

Recommendations & Certifications



ITU-T
TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

L.1310
(09/2020)

Parameters	Loading	80 Plus	Bronze	Silver	Gold
Efficiency	20%	80%	82%	85%	87%
	50%	80%	85%	88%	90%
	100%	80%	82%	85%	87%
Power Factor	50%	90% (@100% load)	90% (across the full range)		



COMMISSION RECOMMENDATION

of 16.12.2021

on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations



SERIES L: ENVIRONMENT AND ICTS, CLIMATE CHANGE, E-WASTE, ENERGY EFFICIENCY; CONSTRUCTION, INSTALLATION AND PROTECTION OF CABLES AND OTHER ELEMENTS OF OUTSIDE PLANT

Energy efficiency metrics and measurement methods for telecommunication equipment

ATIS-0600015.03.2016

Energy Efficiency For Telecommunication Equipment: Methodology For Measurement And Reporting For Router And Ethernet Switch Products

Sources:

<https://www.clearesult.com/80plus/>
<https://www.itu.int/rec/T-REC-L.1310/en>
<https://environment.ec.europa.eu/>
<https://bregroup.com/products/breeam/>
<https://webstore.ansi.org/standards/atis/atis0600015032016>

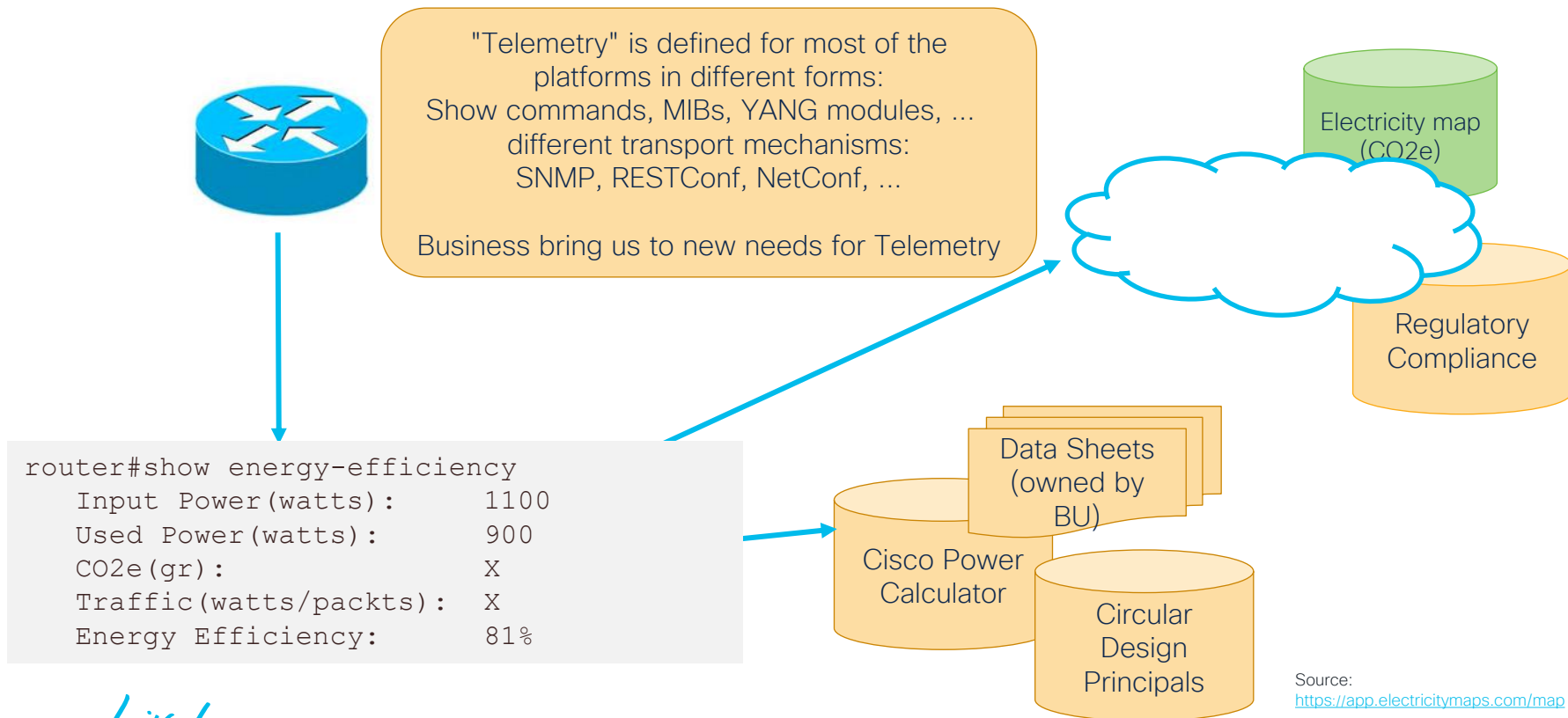
Product Sustainability in Data Sheets

Sustainability Topic	Reference	
General	Information on product-material-content laws and regulations	Materials
	Information on electronic waste laws and regulations, including our products, batteries and packaging	WEEE Compliance
	Information on product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability Inquiries	Contact: csr_inquiries@cisco.com
Material	Product packaging weight and materials	Contact: environment@cisco.com

Information about Cisco's environmental, social and governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability reporting. ⁽¹⁾

⁽¹⁾ [Cisco 8000 Series Routers Data Sheet](#)

Telemetry Specifications



Telemetry Specification

Real-time Data

"Telemetry" is defined for most of the platforms/systems in:

- different forms: show commands, MIBs, YANG modules, ...
- different transport mechanisms: SNMP, RESTConf, NetConf, ...
- different data storage systems: datasheets, internal and external databases.
- different certifications and regulatory compliances

Implementing any Sustainability Solution at scale with a broad range of Cisco equipment requires consistently available covering Power Consumption/Energy Efficiency Telemetry.

Telemetry specification will benefit internal Business Entities, including Corporate Social Responsibility, also customers and partners and even other vendors facilitating consistency and integration.

01

Cisco CX Telemetry Specification covering Power Consumption and Energy Efficiency

02

Work towards hardware and software applications, providing CO₂e equivalent

03

Enable API access for different data storage systems

04

Work to be extended to Circular Design Principals & Sustainability

Revolutionary Power Efficiency

Reduce Power Consumption and Resource Optimization

Globally, data transmission networks consumed 260–340 TWh in 2021, or 1.1–1.4% of global electricity use;⁴ data center energy use (excluding crypto) grew between 10 and 60% from 2015 to 2021 (200 TWh in 2015 to between 220–320 TWh in 2021)

Cisco 8000 Series routers utilize **Silicon One** to achieve a 163x increase in power efficiency over previous generations. The power required for memory is reduced by 98%.

This also allows for a substantial reduction in transportation footprint: a 2,000-pound system that required 16 cubic meters now ships in one 32-pound box and takes up just 0.07 cubic meters—a 202x reduction.

01

Cisco 8201 routers consume 96% less energy per year than the NCS 6008, while supplying 35 percent more bandwidth. ⁽³⁾

02

NPU Power Modes

Based on network traffic and power consumption requirements

03

Dynamic Power Management

Optics power allocation will not be added at card level allocation.

04

Cisco UCS X9508 Chassis

- Modularity
- Size
- Power
- Cooling ⁽²⁾

⁽¹⁾ <https://www.iea.org/reports/data-centres-and-data-transmission-networks>

⁽²⁾ [The power of innovation](#)

⁽³⁾ Cisco 2021 Purpose Report, page 80

Seamless Migration

Reduce Energy Consumption and Space

- Seamless migration and zero impact on the customer services operation.
- Architectural convergence, evolution, and modernization.
- End of Live equipment.
- High energy consumption as well as space limitation.
- HW limitations on higher speed and features on the back of increasing IP traffic.

- Network conversion and consolidation
- Power and Rackspace reduction moving upgrading to newer platform.
- Network Modernization longevity and capacity increase
- Automate configuration migration
- Migration cost savings and time reduction
- Carbon footprint reduction

01

[Cisco Network Services Orchestrator](#) accelerate the configuration migration of the Core and Edge nodes in an automated methodology

02

[Cisco Business Critical Services](#) Support through LAB testing, MOP documents and SW validations ensured mitigation of risk.

03

8000 and NCS 5500 Series have a five-year TCO savings of 87% over the first-gen routers and 66% savings over the second-gen routers*

04

[Automation Services](#)



Routed Optical Networking (RON)

Independent research by ACG Research found that RON can reduce operational costs and initial capital costs compared to traditional architectures, leading to an overall total cost of ownership that can be 46% lower ⁽¹⁾

Provides for

- Network Simplification

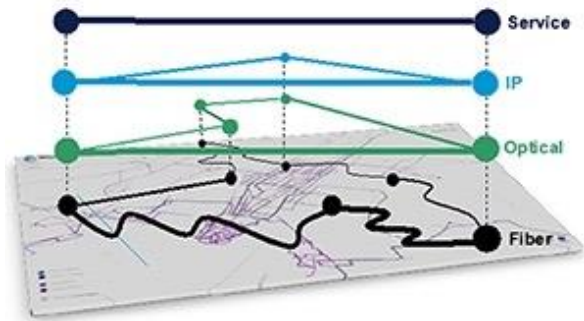
- Increased Network Longevity

- Meets and exceeds existing Network Service Level Agreements

Built on Standards

- Enables a Win, Win, Win at any layer of the network

- Third party interop at the SW (Management/Automation) Layer, Network Layer and DWDM Layer

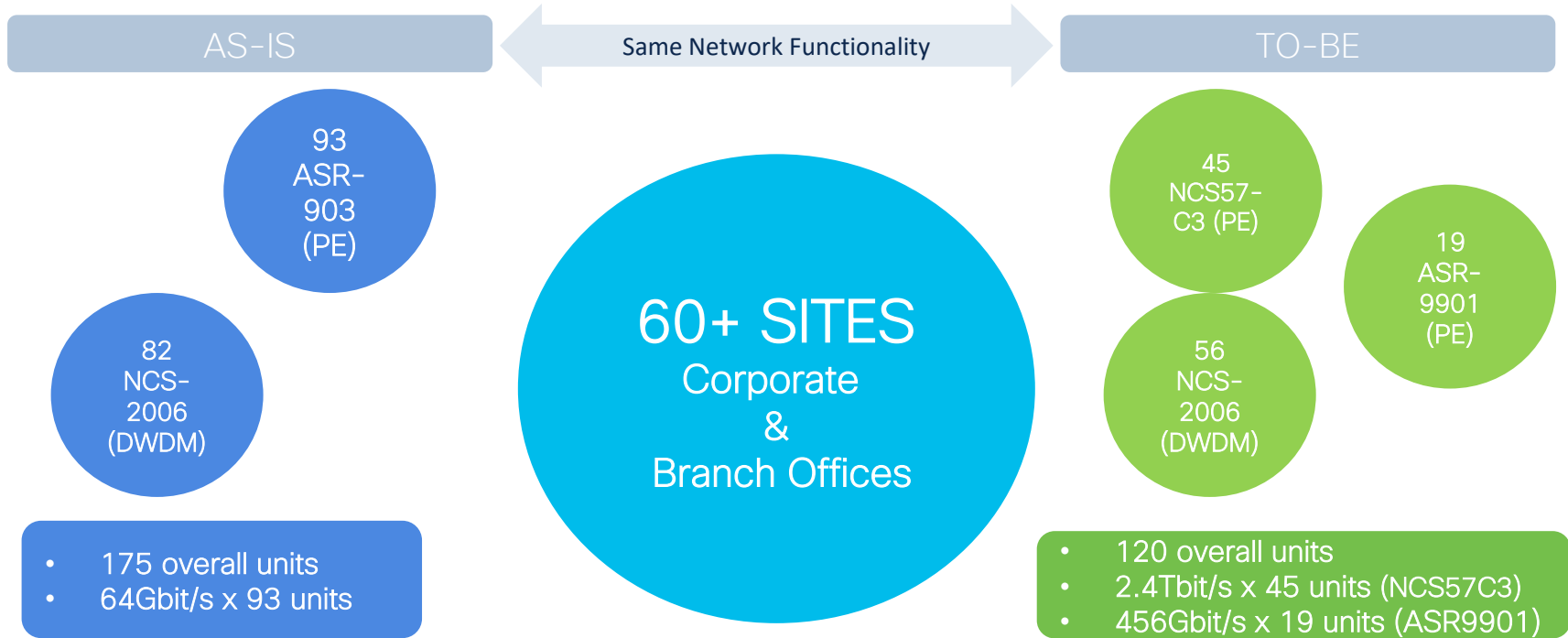


Single Control Plane

Converged IP + Optical architecture
Integrate & Automate E2E

(1) [5G Transport Whitepaper, Cisco Routed Optical Networking, ACG Research – The Economic Benefits of IP Transport at 400G](#), page 1

Boost network performances and simplify operations by adopting new architecture designed for the identified sites.



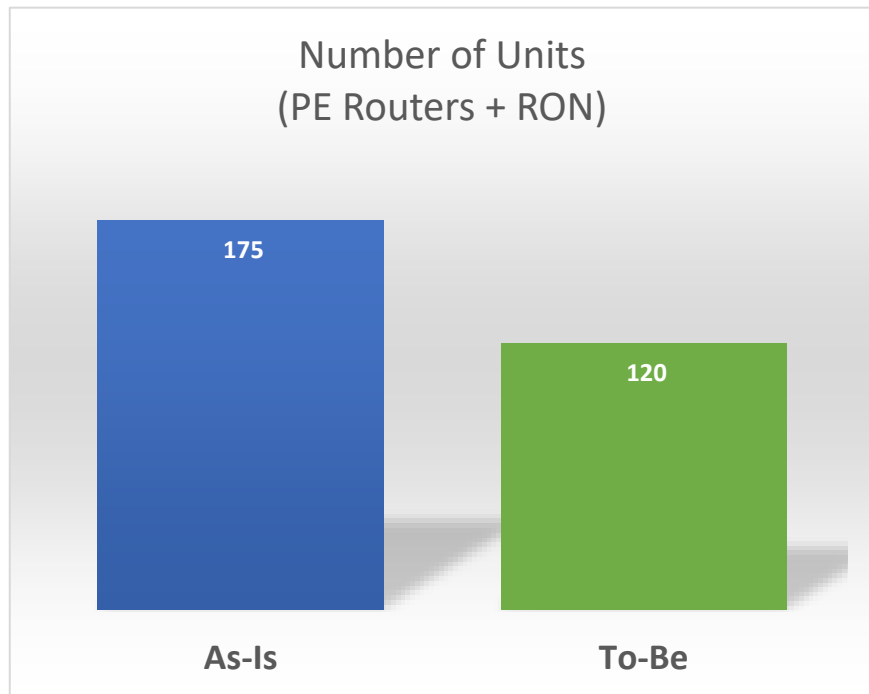
Reference:

https://www.cisco.com/c/en/us/products/collateral/routers/asr-903-series-aggregation-services-routers/data_sheet_c78-685686.html
<https://www.cisco.com/c/en/us/products/collateral/routers/asr-9000-series-aggregation-services-routers/datasheet-c78-740540.html>
<https://www.cisco.com/c/en/us/products/collateral/routers/network-convergence-system-5500-series/ncs-57C3-fixed-chassis-ds.html>

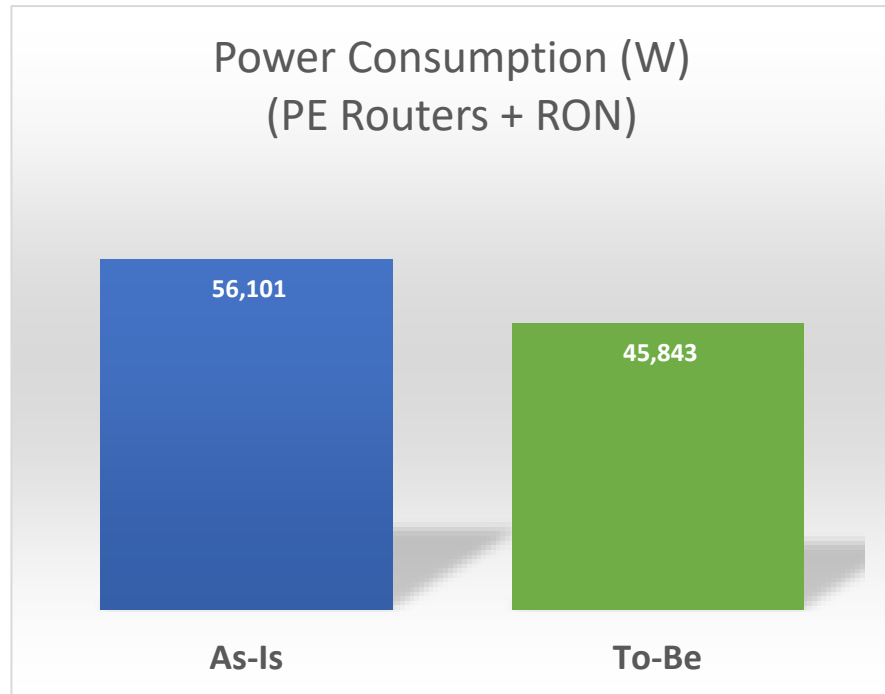
Sustainability Metrics Improvement

Data obtained from lab setup by Product team

Power reported is measured on idle state and all ports in shutdown mode

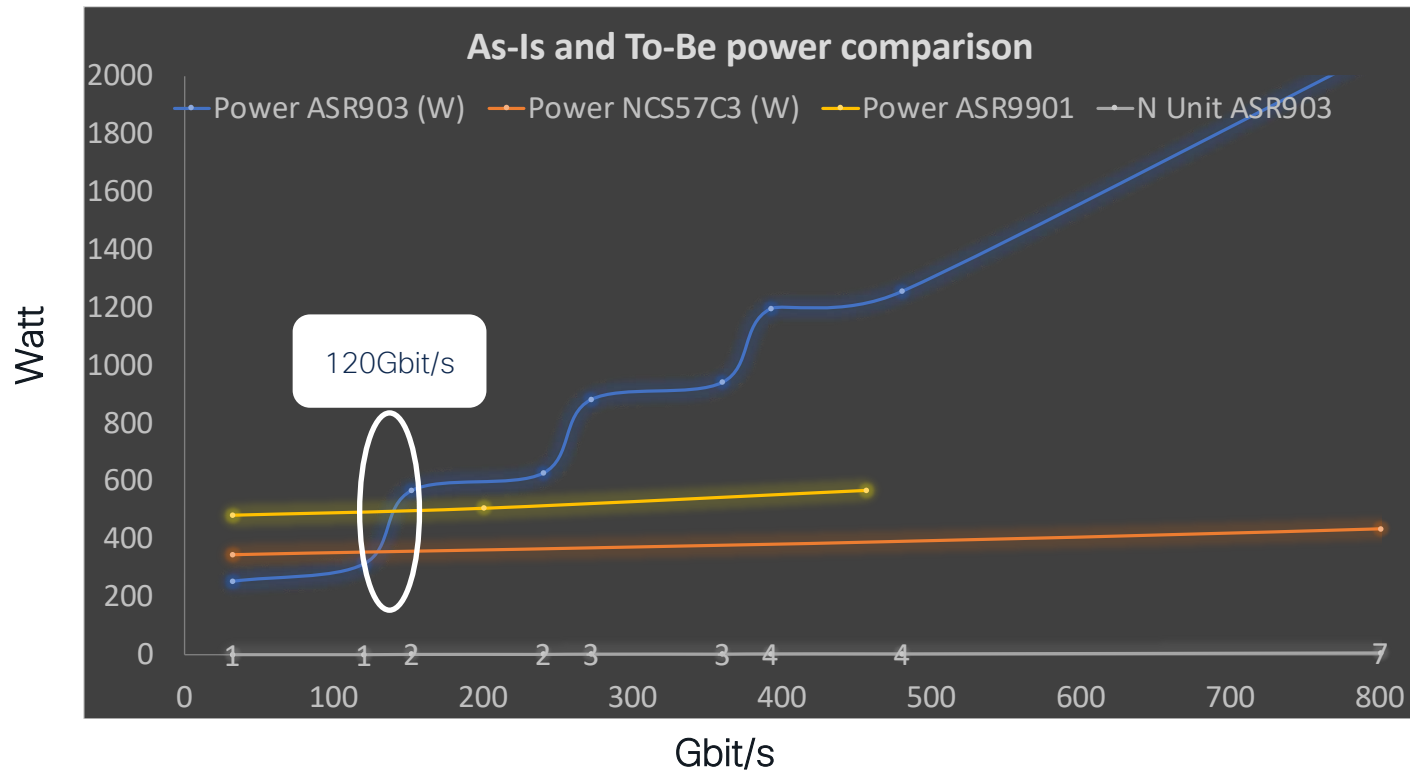


-31%



-18%

Power Efficiency



- Max throughput ASR903 adopted for testing in lab is 120Gbit/s
- As-Is ASR903 in production has lower performances (64Gbit/s)
- Throughput higher than 120Gbit/s requires additional ASR903 platform to scale, generating higher power consumption beside implementing only 1 new generation router

RON “Dynamic” Inventory

Resource Optimization and Real-time Data

A tradition of using separate networks with multi-layered architectures is now unproductively redundant, complex, and expensive to operate.

Business-grade Time-Division Multiplexing (TDM) services were established before IP. IP networks emerged as a separate layer over existing high-margin optical (TDM) networks and continue to operate in silos with separate staff.

In the worst of cases, problems are resolved with manual trouble tickets between IP and optical organizations. With today’s higher speeds, larger scale, and need for agility, this disjointed model challenges any hope for economic viability into the future.

Cisco’s Routed Optical Networking (RON) solution, new approach that unifies IP and optical domains to simplify network design, operations, engineering, planning, and management. ⁽¹⁾

01

Understand how layers/domains are connected to each other

02

Improve agility for new services: Understand inventory hierarchy

03

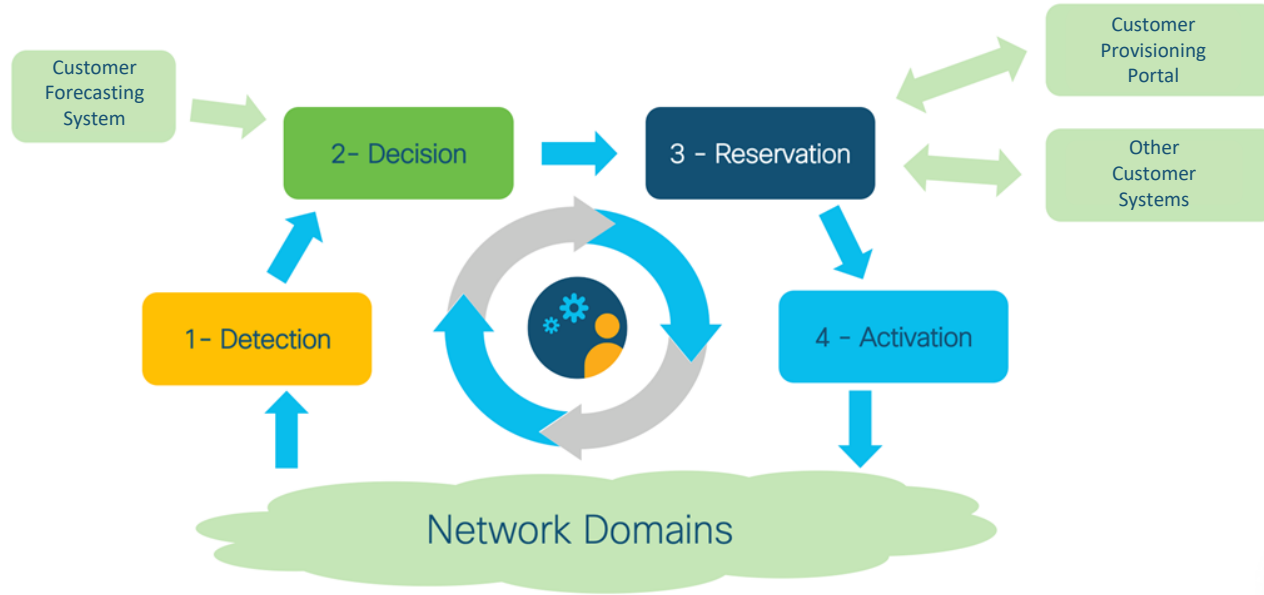
Correlate network faults to customer impact: Reduce the MTTR

04

Lower Operational cost: Optimized based on the current state and even prediction

Auto Capacity Management

Business Process



Integrated Components

Cisco:

- NSO (Network Services Orchestrator)
- UOP (Unified Operation Portal)
- BPA (Business Process Automation)
- WAE (WAN Automation Engine)

Customer:

- PP (Provisioning Portal)
- FS (Forecasting System)

Auto Capacity Management

Resource Optimization & Capacity Management

Network managers face increasing challenges in providing higher availability, including unscheduled downtime, lack of expertise, insufficient tools, complex technologies, business consolidation, and competing markets.

Capacity and performance management helps network managers achieve new business objectives and consistent network availability and performance.

01

Detection of the need of capacity expansion

02

Decision logic to decide what action should be taken on detected elements requiring capacity expansion

03

Reserving and provision the network elements selected for expansion

04

Activation of the elements previously selected, completes the process of adding capacity to the network.

05

[Automation Services](#)

Zero Touch Provisioning (ZTP)

Travel Reduction and Time to Market

Manual configuration takes time and is prone to human error, especially if many devices must be configured at scale.

ZTP helps IT teams quickly deploy network devices in a large-scale environment, eliminating most of the manual labor involved with adding them to a network.

ZTP covers Day0, Day1 and Day2 Services.

01 Reduced time to get network devices operational

02 Multiples Sites can be deployed in same time

03 Multivendor support Service Change

04 [Automation Services](#)

Intersight Workload Optimization

DC Cost Optimization

On a global scale, 0.9 – 1.3% of the total electricity used in the world goes to data centres, and it is projected to grow. For example in Denmark, data centre energy use is projected to triple by 2025 to account for around 7% of the country's electricity use¹.

Reducing your data centre compute energy consumption can reduce costs and support your country's power grid.

Software such as Cisco Intersight Workload Optimizer (IWO) can analyse your Virtual Machine estate and deliver actionable recommendations to reduce compute resource allocation.

- Onboarding Cisco® IWO
- Health Check Report (including recommended actions)
- Configure and modify dashboards to provide cost breakdown and projections
- Continuous policy automation
- Ongoing consulting services
- Configure and modify dashboards

01

[Cisco Intersight Workload Optimizer](#)

study indicated that we are reducing resource utilization (CPU and memory) by 20% whilst maintaining performance. ⁽²⁾

02

[Cisco Services for Cisco Intersight Workload Optimizer](#)

03

[Data Center Ask the Experts \(ATXs\) Sessions](#)

GHG Monitoring and Assurance

Real-time Data on Greenhouse Gas (GHG)

Gases that trap heat in the atmosphere are called greenhouse gases. Greenhouse gas emissions from human activities strengthen the greenhouse effect, causing climate change.

- Scope 2 includes emissions from all purchased/acquired and consumed electricity, heat, steam, or cooling. Companies can identify these energy uses based on utility bills or metered energy consumption at facilities within the inventory boundary. Based on <https://ghgprotocol.org/>
- Real time data: telemetry + energy provider (or similar ex <https://app.electricitymap.org/>)
- Monitor device utilization and power
- Review energy efficiencies
- Upgrade devices to more efficient if available
- Remove/power down under-utilized devices

01

Migrating ASR1001-HX to C8500-12X provides 60% power reduction per Gb/s ⁽¹⁾

02

C8500 Intelligent thermal management schemes based on module complexity and installation altitude

03

Powering smart buildings. 90W Power over Ethernet enables a reduction in energy waste

04

[Business Critical Services Cisco Migration Support Services](#)

⁽¹⁾ [Cisco ASR 1001-X Router White Paper](#)

Smart Building

Optimize Office Utilization

Penn1 VR
Experience



60% of European office space is unused during working hours and in India, 15% of the office space is reported vacant.

By 2025, 1 billion houses are needed worldwide, of which 75% will be residential and 25% will be commercial. It requires an investment of around USD 9–11 trillion. ⁽¹⁾

Housing is estimated to Generate 40% of the GHG emissions.

Better use of the spaces using smart building solutions: ⁽²⁾

- Real-time space utilization and office occupancy analytics
- Room scheduling with wayfinding
- End-to-end visitor management
- Spaces, zone and IoT automation with BMS
- Smart parking
- Social distance monitoring
- Integrated room environment controls
- A reference architecture
- Reusable templates
- “How to” instructions for the construction industry

01 PoE-powered lighting with Catalyst switches

02 DNA Spaces for location analytics, ISE, DUO security

03 Meraki MV and Webex end device sensors

04 [Explore use cases](#)
Smart Buildings Advisory Design Services

Hybrid Work

Business Continuity and Travel Reduction

Congestion costs 2–5% of global GDP annually in lost time, wasted fuel, and increase the cost of doing business⁽¹⁾

100% business continuity.

Travel reduction and business continuity via hybrid work: ⁽²⁾

- Maintain seamless communication between external suppliers and internal design and production teams.
- Make design adjustments in real-time to reduce material waste (heel molds) and speed delivery.
- Meet exacting standards for shoe design partners and clientele for big fashion brands
- Maintain 100 percent business continuity in the midst of Italy's lockdown

01 Internal teams, external suppliers, and fashion partners meet via Cisco Webex to review designs

02 Cisco Webex Board facilitates real-time design adjustments

03 Transitioned operations to fully remote in a single day

04 One independent study⁽³⁾ showed that total emissions from the few hours of a single long-haul flight are equal to the whole lifecycle of the Desk Pro – its production and five years of cloud collaboration for your business.

⁽¹⁾ [Ellen Macarthur Foundation Fact Sheets](#)

⁽²⁾ [Case Study: Del Brenta](#)

⁽³⁾ NORSUS Norwegian Institute for Sustainability Research, Nov 2021

Hybrid Work

Social Inclusion

Hybrid Work is a flexible work model that supports a blend of in-office, remote, and on-the-go workers. It offers employees the autonomy to choose to work wherever and however they are most productive.

Carbon Handprint vs Carbon Footprint.

Goal is to grow our handprint larger than the energy, transport, technology and waste footprint.

Hybrid Work has positively impacted Business Continuity and Travel Reduction, but there is an open question still on how Hybrid Work helps to achieve NetZero Goals, when many times we are duplicating resources and many times energy consumption without any control.

01

Tools and Video
Conferencing Resource
Utilization

02

Organization Work-life &
Culture

03

Employees Career Growth,
Well Being & Satisfaction

04

Hybrid Work-Sustainability
Culture

Conclusion and Key Takeaways

“What you do makes a difference, and you have to decide what kind of difference you want to make.”

Dr Jane Goodall, Scientist & Activist

- ✓ NetZero and Scopes
- ✓ Practical ways to achieve Sustainability Outcomes
- ❑ Translate your goals to actions

Reference

Sustainability Sessions

Social, Environmental, Market, and Technological Trends:

Cisco is embedding sustainability into everything we do. Cisco has sustainable technology offers and solutions that are available today. We're on the journey to net zero with you and we have new sustainable technologies on the roadmap.

We also are featuring our Sustainability Solutions, Technologies, Programs and Resources in this eBook – Scan QR Code to access.



CISCO *Live!*



Read our eBook to
Learn More

START

Feb 6 | 2:00 p.m.

TECGRN-2760

Design Thinking Working Session
on Journey to Sustainability

Feb 6 | 3:00 p.m.

Fireside Chat - WoS

Accelerating Today's Sustainability
Efforts With An Eye To The Future

Feb. 7 | 11:30 a.m.

CCP-1301

Building The Bridge To A More
Sustainable Future

Feb 7 | 3:00 p.m.

PSOGRN-1650

Sustainability As A Business
Driver

Feb 7 | 3:00 p.m.

BRKIOT-1203

Connecting And Securing
Renewable Energy

Feb 8 | 10:30 a.m.

PSOGRN-1009

The Road to Net Zero:
Advancing Sustainable IT

Feb 8 | 3:00 p.m.

BRKETI-1001

The Road to Net Zero: How
Emerging Technologies
Accelerate Cracking the
Use Case of the Century

PSOGRN-2200

Feb 8 | 3:30 p.m.

PSOGRN-2200

Your Kick-Start for the
Sustainability Journey

Feb 8 | 4:30 p.m.

BRKMER-1662

Sustainability by Cisco Meraki
IOT: Small Actions, Big Impact

Feb 8 | 5:00 p.m.

BRKGRN-1886

It's Getting Cold, But the heat
is On

Feb 9 | 9:00 a.m.

BRKGRN-2137

Lessening the Impact – How
Cisco Networking Products
Support Sustainability

Feb 9 | 10:15 a.m.

ITalk-1200

Accelerate your Journey to
Net Zero with Cisco Solutions
and the Power of Data

Feb 9 | 12:00 p.m.

BRKAPP-1028

Sustainable Digital
Transformation Leveraging
Full-Stack Observability

Feb 9 | 12:20 p.m.

PSOSPG-1408

Achieving Automation,
Sustainability and Performance
Yes! You Can Have It All

Feb 9 | 12:30 p.m.

BRKDCN-2625

Considerations on Data Center
Sustainability

If you are unable to attend
a live session, you can
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Session Catalog](#)

FINISH

Sustainability Demos

IT Ops Area

NETWORKING IT Ops Area

Building Smarter Spaces ●●●

Create a workplace that is smarter, safer, and enables seamless experiences with Cisco Spaces. In this demo we'll showcase the entire Cisco Spaces solution, including the dashboard and integrations. We'll also discuss hybrid work and how location analytics, applications, IoT services, and more can enhance your health and safety plan.

MIG IT Ops Area

Green Routed Optical Networks ●●●

Learn how to build and operate a cost effective and sustainable converged IP and Optical network that can be managed through a single pane of glass with Crosswork Automation. This provides a consolidated platform to monitor and manage all transport services reducing OPEX and reducing environmental impacts.

CLOUD IT Ops Area

Nexus Cloud-Simple Managed Networks ●●●

Nexus Cloud gives customers a new way of deploying, managing, and operating Nexus networks from the cloud, providing an option to run network operations with simplicity, visibility, and sustainability. Nexus Cloud supports both our flagship Cisco Application Centric Infrastructure (ACI) architecture as well as NX-OS based Nexus deployments.

UCS X-Series Powers any App ●●●

Modernize compute infrastructure with the UCS X-Series Modular System by combining density and efficiency of blade servers with the expandability of rack servers. With 100G unified fabric and UCS X-Fabric Technology for GPU acceleration, X-Series is a future-ready platform for any application.

Showcase

NETWORKING Networking Area

Cloud Managed Networking ●●●

Start your journey to cloud management and see how you can simplify, scale, and extend your network operations. Learn about the new cloud monitoring and cloud management capabilities connecting Catalyst access technology and the Meraki cloud networking platform.

Smart Sustainable Buildings ●●●

Concerned about energy cost and your employee wellness? Learn how Cisco smart building solutions can help you take control of your building to create a healthy and sustainable workplace that provides employee safety, well-being, collaboration, and productivity.

API Powered Assurance ●●●

See how Cisco DNA Center and Meraki dashboard can help you automate operations and gain network visibility, observability and insights using AI and Machine Learning. Discover innovations such as like AI-Enhanced RRM and AP Performance Advisories that improve wireless performance, all resulting in a better IT and user experience.

NETWORKING SD-WAN / SASE Area

Provider Managed SD-WAN ●●●

Learn how Cisco SD-WAN Multitenancy enables management of multiple customers with a single vManage, vBond, and vSmart set. Experience the workflows of tenant creation, onboarding devices, and monitoring. Learn capabilities of co-management, SDCI, Multi-Region Fabric and Lawful Intercept

- Energy Efficient Infrastructure
- Energy Management
- Sustainable Design

Sustainability Demo Zone

There will be 6 key areas within the sustainability zone demo area:

1. A **central welcome desk** showing the full Cisco approach to IT
2. **Cisco Refresh and Cisco Green Pay demo**
3. **Energy saving dashboards:**
 1. Meraki dashboard for AP programming
 2. IWO Dashboard: Data center optimizing
 3. Meraki MT sensors
4. **Sustainability Simulator** – Based on IB data, Demonstrating a refresh impact
5. **Cisco Returns Portal** demonstrating returns, send it back and take back and reuse programs
6. **Receiving and processing demo** – a live demo with a technician showing what happens when a product is received back to Cisco.



Learn more: ESG Reporting Hub & Purpose Report



Visit: cisco.com/go/esg-hub



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Attend any of the related sessions at the DevNet, Capture the Flag, and Walk-in Labs zones.



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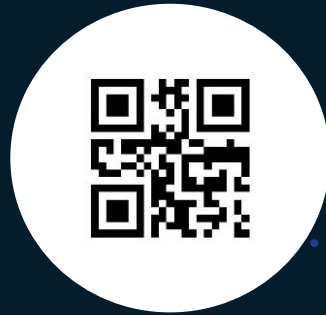
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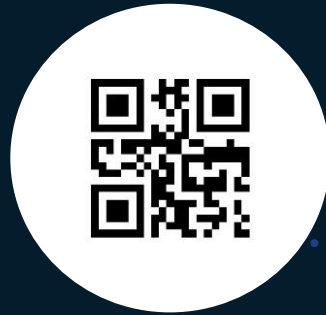


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