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
by the speaker until June 17, 2022.

https://ciscolive.ciscoevents.com/ciscolivebot/#BRKGEN-1009

Agenda

- Committing to Net Zero

- The Circular Economy mindset

- Building our Sustainability Strategy for Cisco IT

- The role of remanufactured equipment

- Leveraging the Takeback and Reuse program

- Key Takeaways

Committing to Net Zero

Why now?

⚠️ Urgent global problem How can IT help?	
👥 Customer, investor & employee pressure	*"Transitioning to a net-zero world is one of the greatest challenges humankind has faced"* United Nations
🔍 Legislation, reporting standards, scrutiny	
💲 Business efficiencies & new opportunities	

80%
Companies now reporting on sustainability

131 countries with a Net Zero target

NEWS

Important purchasing factor for consumers
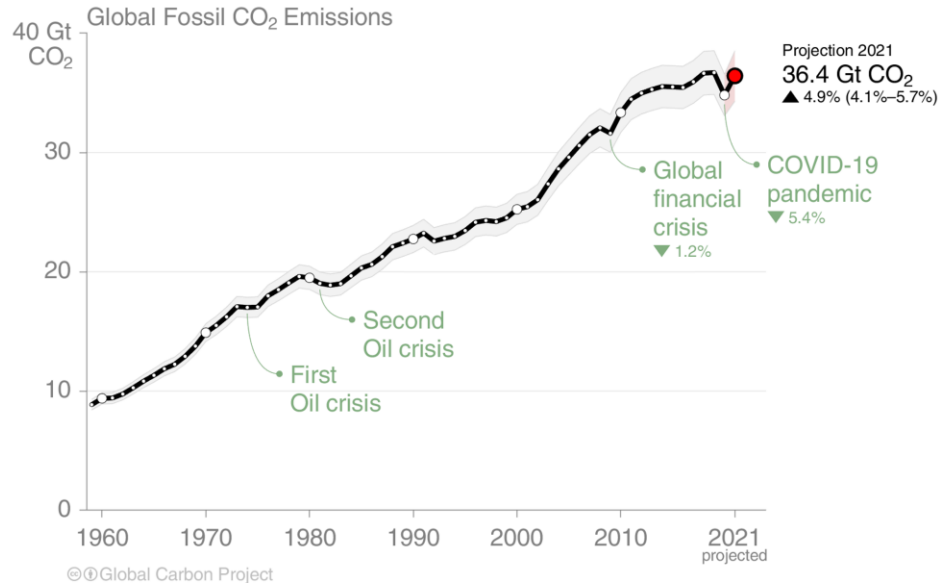
67%

Hiring criteria for 40% of millennials

Putting IT in perspective

Global GHG emissions
60 Billion tonnes CO2e

Global Fossil CO_2 Emissions

Projection 2021
36.4 Gt CO_2
▲ 4.9% (4.1%–5.7%)

COVID-19 pandemic ▼ 5.4%

Global financial crisis ▼ 1.2%

Second Oil crisis

First Oil crisis

©①Global Carbon Project

Digital = ICT + Entertainment & Media
1.4 Billion tonnes CO2e (~2.5% Total)

TVs & Consumer Electronics 34%

User Devices 37%

Cryptocurrencies 5%

Data Centres 10%

Networks 14%
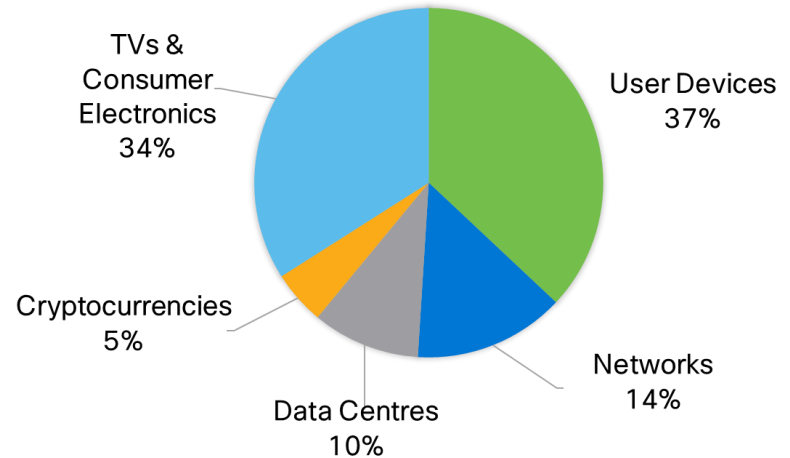
Source: Berners-Lee (2020), Malmodin (2018), Andrae (2019)

Dual Responsibility

Reduce emissions from digital

GHG emissions vs Year

Science Based Targets

Near-term goals

Long-term goal
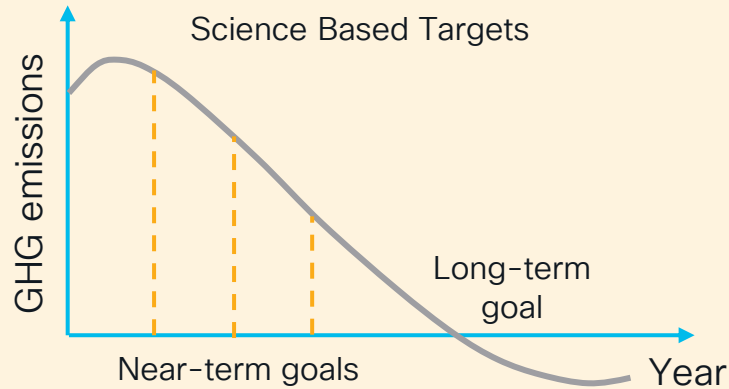
Sources Net Zero Std (SBTi, 2021), ITU-T L.1470 (2020)

2.5%

15%

Reduce emissions in other verticals by using digital e.g.

Hybrid Work   Smart Grid

Smart Buildings   Connected Transport

Based on Exponential Roadmap 1.5.1 (2020)
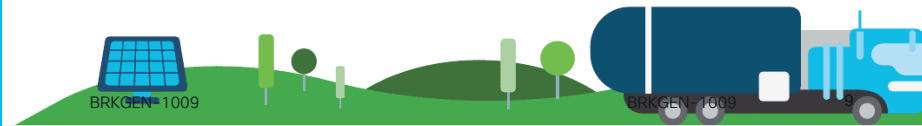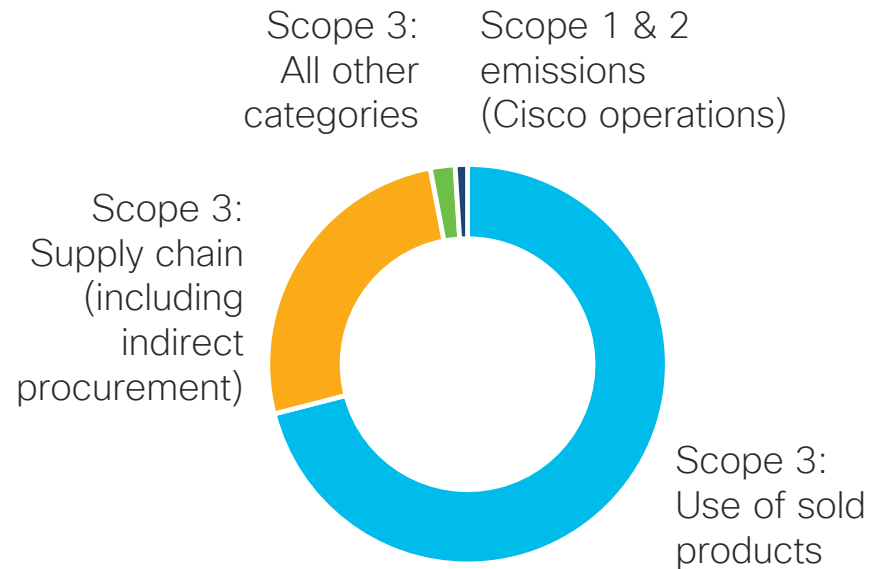Smarter 2030 (GeSI 2015), Malmodin (2015)

Impact of New Technologies
e.g. AI, IoT, 5G, Big Data, Digitalization

Based on Frontier Technologies (ITU, 2020)

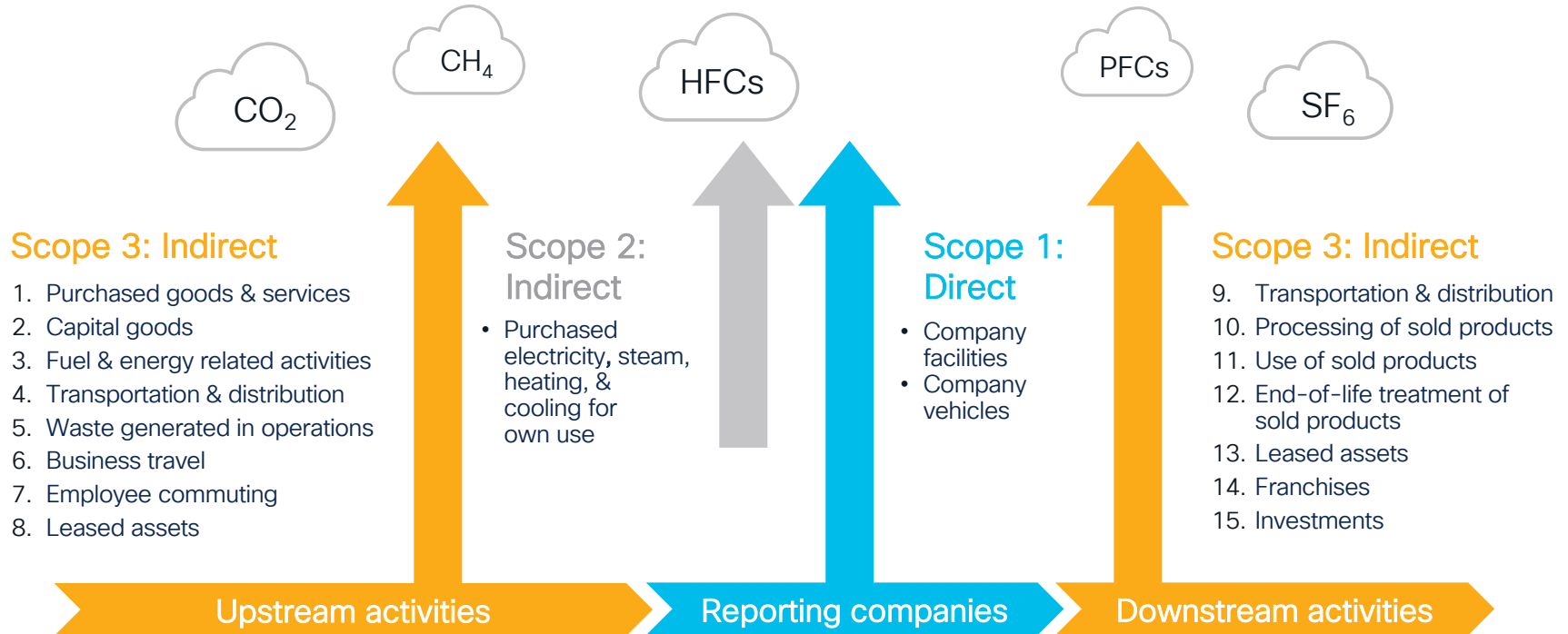# Cisco's commitment
Net zero across all scopes of emissions by 2040

Scope 3: All other categories

Scope 1 & 2 emissions (Cisco operations)

Scope 3: Supply chain (including indirect procurement)

Scope 3: Use of sold products

CISCO *Live!*

What Are Scope 1, 2, & 3

CO_2 CH_4 $HFCs$ $PFCs$ SF_6

Scope 3: Indirect

1. Purchased goods & services
2. Capital goods
3. Fuel & energy related activities
4. Transportation & distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Leased assets

Scope 2: Indirect

- Purchased electricity, steam, heating, & cooling for own use

Scope 1: Direct

- Company facilities
- Company vehicles

Scope 3: Indirect

9. Transportation & distribution
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Leased assets
14. Franchises
15. Investments

Upstream activities   **Reporting companies**   **Downstream activities**
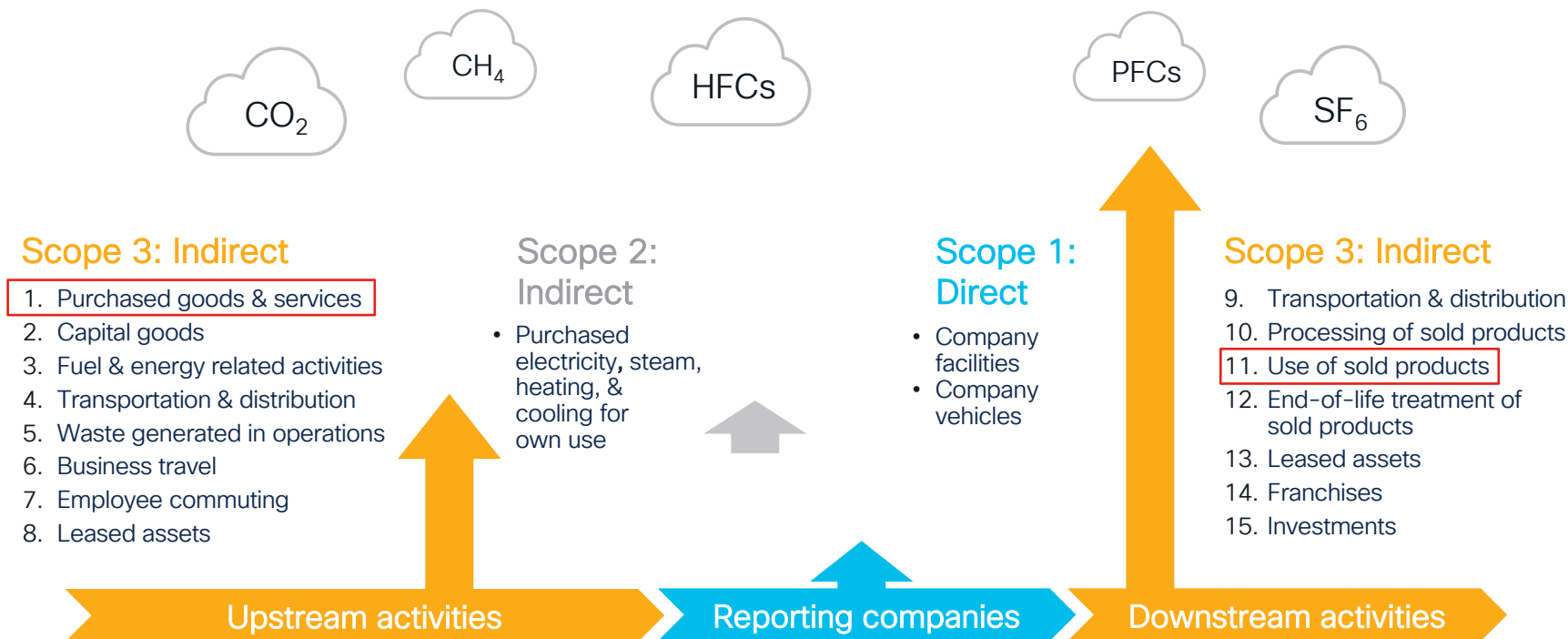
Based on: Greenhouse Gas Protocol, Technical Guidance for Calculating Scope 3 Emissions

What Are Scope 1, 2, & 3 | Cisco

CO_2 CH_4 HFCs   PFCs SF_6

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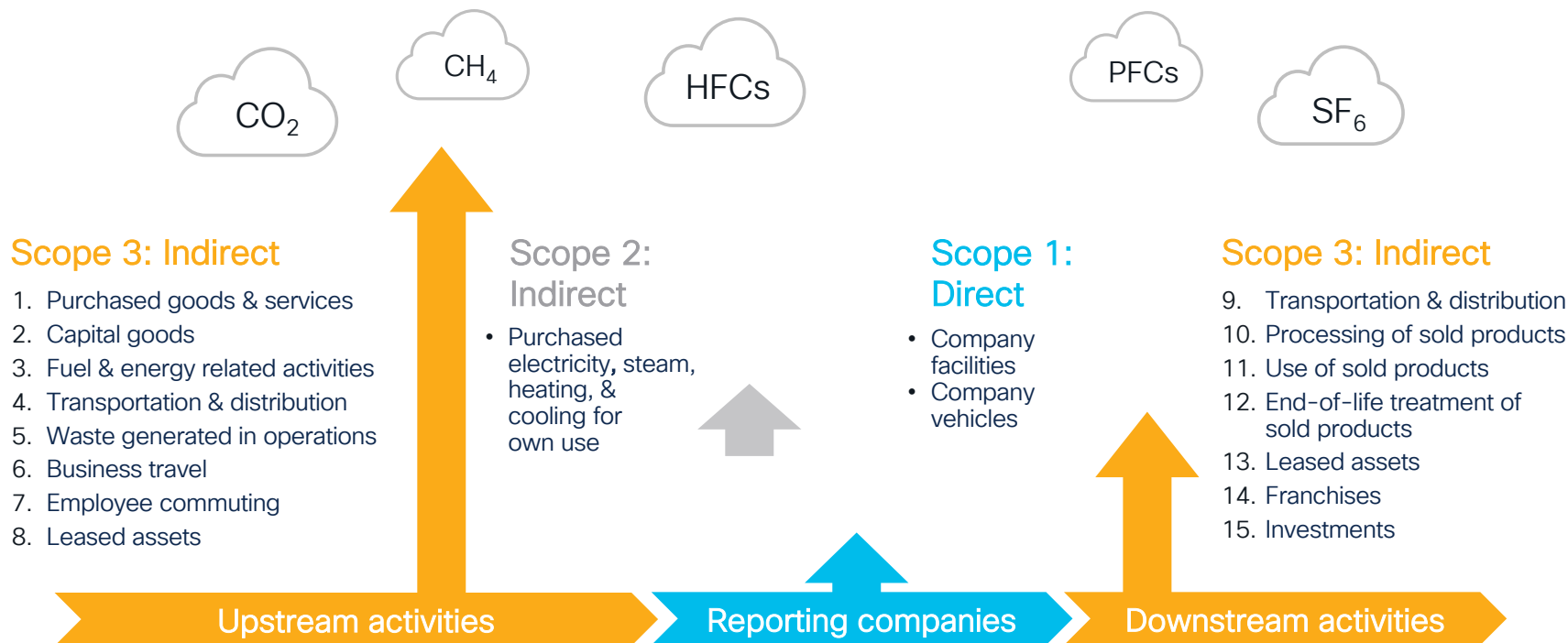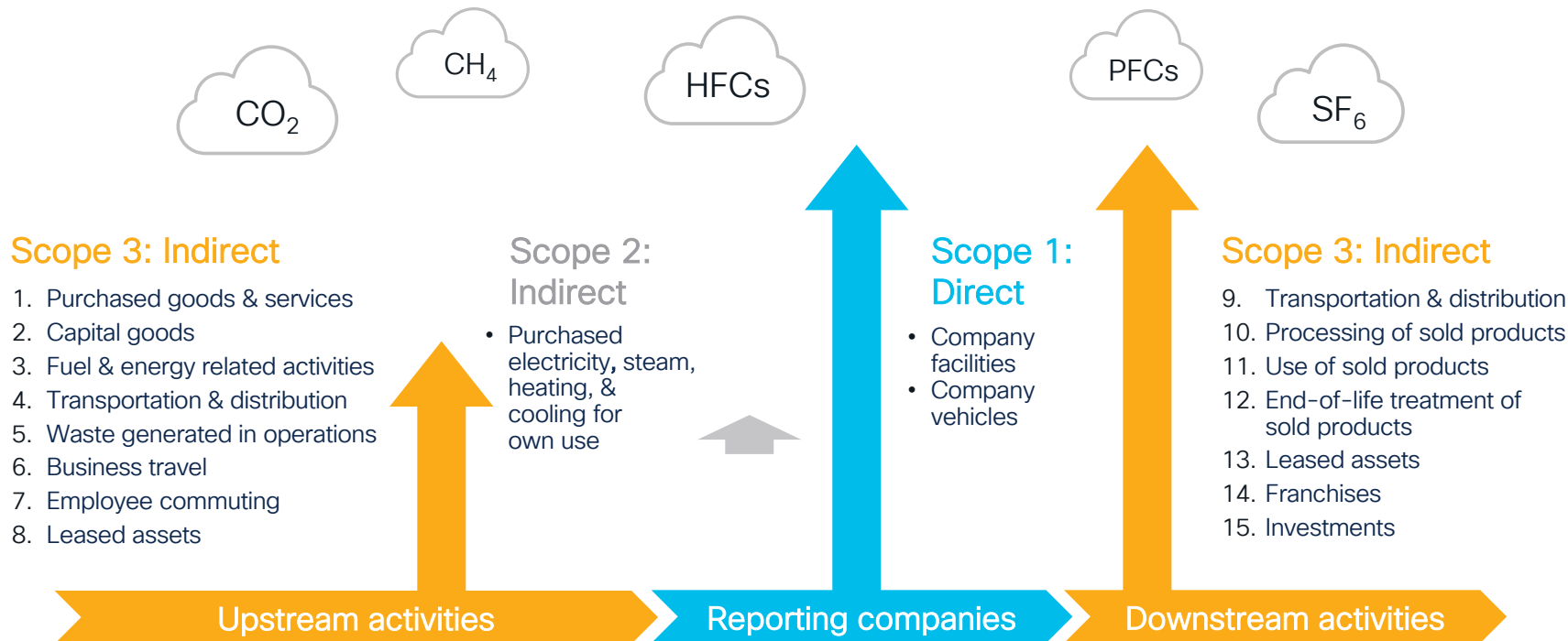
Based on: Greenhouse Gas Protocol, Technical Guidance for Calculating Scope 3 Emissions

What Are Scope 1, 2, & 3 | Healthcare

CO_2

CH_4

HFCs

PFCs

SF_6

Scope 3: Indirect

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Upstream activities

Reporting companies

Downstream activities

Based on: Greenhouse Gas Protocol, Technical Guidance for Calculating Scope 3 Emissions

What Are Scope 1, 2, & 3 | Utilities

CO_2

CH_4

HFCs

PFCs

SF_6

Scope 3: Indirect

1. Purchased goods & services
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Upstream activities

Reporting companies

Downstream activities

Based on: Greenhouse Gas Protocol, Technical Guidance for Calculating Scope 3 Emissions

What Are Scope 1, 2, & 3 | Energy

Clouds: CO_2, CH_4, HFCs, P__s, SF_6

Scope 3: Indirect

1. Purchased goods & services
2. Capital goods
3. Fuel & energy related activities
4. Transportation & distribution
5. Waste generated in operations
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Scope 2: Indirect

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Upstream activities → **Reporting companies** → **Downstream activities**

Based on: Greenhouse Gas Protocol, Technical Guidance for Calculating Scope 3 Emissions

How we define circular economy

Linear Economy

Take → Make → Dispose

Circular Economy

Make

Waste is a resource.
Unwanted products are repaired, remanufactured, and reused.

Use

Reuse & Recycle

Circular economy strategy: five focus areas

Circular Design: Design products and packaging with circularity in mind (e.g., design for reuse, repair, recycling, and resource efficiency)

Circular Operations: Reduce consumption and use renewable sources across our value chain

Circular Consumption: Manage our equipment for multiple lifecycles and deploy new business models to facilitate this approach

Circular Solutions: Shape and pioneer technology solutions and services to enable circular economy value creation for customers

Ecosystem Leadership: Advance circular economy through industry innovation, collaboration, and public policy

Make: Circularity in our products and packaging

No Paint Project

Eliminating oil-based wet paint on Catalyst 9K will save approximately 300 tons of CO2e and 200 tons of hazardous VOCs (Volatile Organic Compounds) over 5 years.

Fiber-Based Packaging

New Webex Share packaging eliminates plastics, using molded pulp trays and paper to wrap cords and accessories.
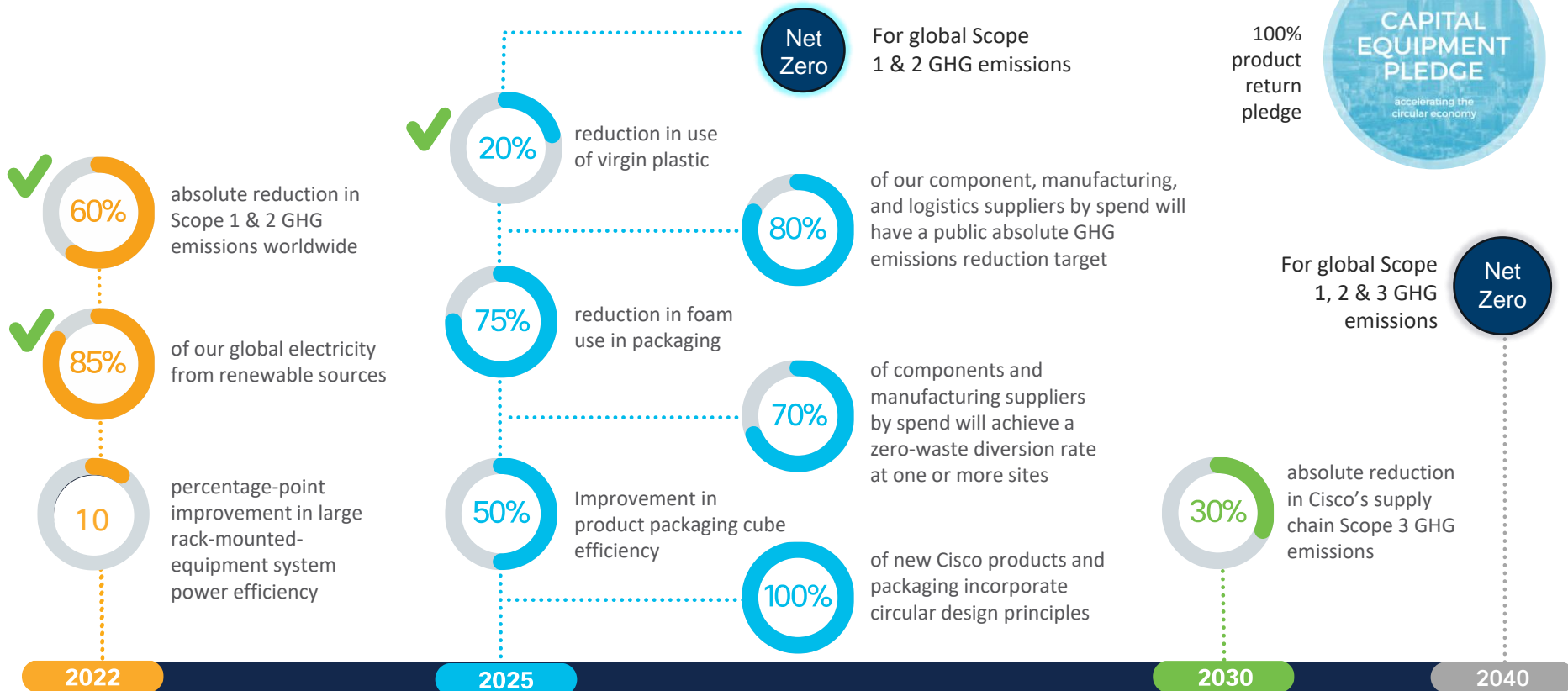

Design for Reuse, Repair, & Recycling

UCS-X servers are engineered to be quickly assembled and disassembled. The latest generation uses recycled plastic parts, recycled foam packaging, no wet paint, and has a 62% reduction in powder coat compared to the prior generation.

Product Modularity

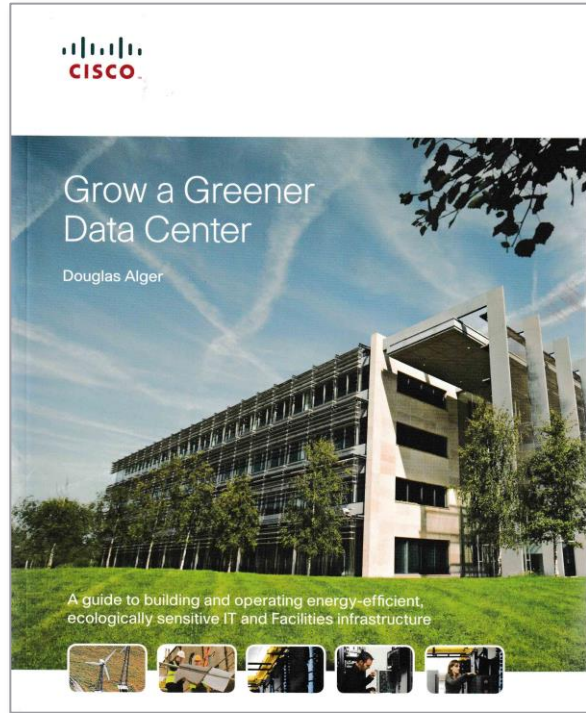This "futureproof" IR1101 router can adapt to 5G by switching out a small module.

Cisco's public sustainability commitments

2022

✔ **60%** absolute reduction in Scope 1 & 2 GHG emissions worldwide

✔ **85%** of our global electricity from renewable sources

10 percentage-point improvement in large rack-mounted-equipment system power efficiency

2025

✔ **20%** reduction in use of virgin plastic

Net Zero For global Scope 1 & 2 GHG emissions

80% of our component, manufacturing, and logistics suppliers by spend will have a public absolute GHG emissions reduction target

75% reduction in foam use in packaging

70% of components and manufacturing suppliers by spend will achieve a zero-waste diversion rate at one or more sites

50% Improvement in product packaging cube efficiency

100% of new Cisco products and packaging incorporate circular design principles

100% product return pledge

CAPITAL EQUIPMENT PLEDGE accelerating the circular economy

2030

30% absolute reduction in Cisco's supply chain Scope 3 GHG emissions

For global Scope 1, 2 & 3 GHG emissions **Net Zero**

2040

CISCO Live!

So, what about IT? Where do you start?

.... haven't we all been doing this for years?

"Grow a Greener Data Center"

by Doug Alger, Cisco Press, 2009

- Explores how to green each phase of your DC project
- Offers green strategies for all DC technologies
- Presents IT and facilities design strategies that can save $'s
- Reveals financial incentive programs to help pay for green Data Center initiatives
- Outlines Data Center efficiency metrics
- Highlights the lessons of dozens of case studies
- Addresses broader green business practices

Building an IT Sustainability Strategy

Research Industry, viewpoints and standards

- ✓ Books, videos, scientific papers, specialist training & certification
- ✓ Supplier briefings, peer discussions, analyst reviews
- ✓ UN SDG, IPCC, ITU, GeSI, SBTi, GSMA, CDP, GRI, SASB, TCFD

Understand your company emissions

- ✓ What commitments do you have? Where do you report?
- ✓ Who completes the report? How do they do calculations?
- ✓ What best practices exist? Who can you partner with?

Build your IT Strategy & agree goals

- ✓ What does your IT dept own? Establish frames of reference
- ✓ Engage IT service owners Define objectives & strategy
- ✓ Calculate baseline, set goals, measure progress

Carbon Footprint

What it is?

Blade Server, IP Phone, Laptop, Smartphone
(scale 0 to 100)

Legend: ■ Manufacturing ■ Transport ■ Use ■ End-of-Life

How many are there?

Data centres, Network, User devices
(scale 0 to 400)

Legend: ■ Manufacturing & EOL ■ Use

Where it is?

Oslo, London, San Francisco, Sydney
(scale 0 to 1200)

Webex Desk Pro

Legend: ■ Manufacturing & EOL ■ Use

Systems thinking

Data centre — WAN — Wired / Cellular — User device

Data Sources: Malmodin (2018), Cisco (2021), Carbon Trust (2021)
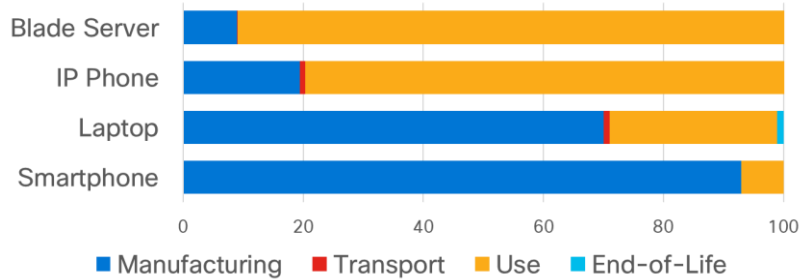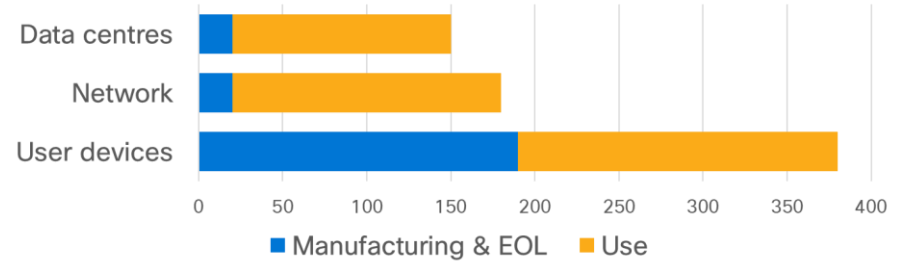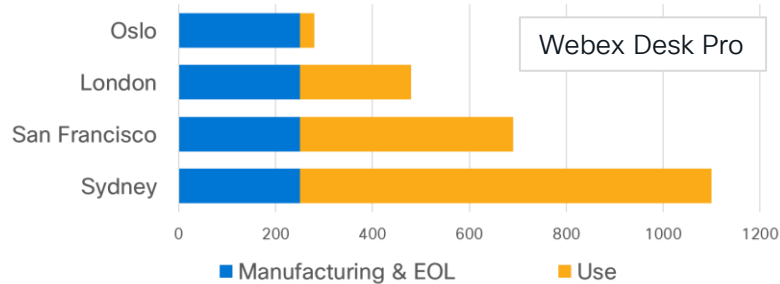
What did we include in our sustainability framework?

Circularity Principles

Focus on key stages of our IT Service Lifecycle

Supported by Culture

Unleash employee passion, innovation & creativity

Company Alignment

Aligned with corporate strategies and initiatives

Special Areas of Focus

Provide focus on short term company goals

Cisco IT Sustainability Framework

Align & Support Company Sustainability Goals & Initiatives

- Net Zero Targets
- Energy efficient products
- Renewable Energy
- Hybrid Work
- Carbon Removal
- Circular Economy
- Reporting

Sustainable by Design	Responsible Procurement	Optimization of Operations	Increase Asset Recovery & Reuse	Energy Management
Design principles / Best practices	Preferred Suppliers	Holistic view / Service reviews	Consider during design	Source renewables
Life Cycle & System Thinking	Supplier Code of Conduct	Maintenance / Extend Life	Leverage Cisco best practices	Maximize efficiency
Review impact with clients	Supplier scorecard	Asset utilization/ Remove excess	Asset traceability	Monitor use

Employee Culture

- Events & Education
- Site Green Teams
- Innovation Challenge
- Cisco Greenhouse
- External Speakers

Cisco IT Sustainability Framework

Align & Support Company Sustainability Goals & Initiatives

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Responsible Procurement

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Optimization of Operations

- Holistic view / Service reviews
- Maintenance / Extend Life
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Increase Asset Recovery & Reuse

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- Asset traceability

Energy Management

- Source renewables
- Maximize efficiency
- Monitor use

Employee Culture

- Events & Education
- Site Green Teams
- Innovation Challenge
- Cisco Greenhouse
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The Role of Remanufactured Equipment

What is Cisco Refresh?

- Genuine pre-owned Cisco equipment

- 7,000+ SKUs

- Remanufactured to like-new condition

- Fully warrantied

- Deeply discounted

- Smart Net eligible

- Keeps millions of pounds of equipment out of landfills annually

- Requires significantly less raw material, power, and water to manufacture

Benefits

- The only brand of pre-owned Cisco equipment authorized and certified by Cisco

- You gain peace of mind, knowing you are buying genuine products

- No compromise in quality, performance, support, or value

Price	Help maximize limited budgets
Availability	Meet timelines with immediately available equipment
Certification	100% Cisco compliant
Fully Warrantied	Same Cisco warranty as new equipment
Fully Licensed	Licensed Cisco IOS
Extend Life	Supported products for older installations
Support	Eligible for Cisco support including SMARTnet
Optimum Performance	Latest proprietary hardware and software upgrades
Sustainability	Compliance with corporate green initiatives

Sold through Cisco Authorized Resellers. Financing available through Cisco Capital.

Case study: Global SP Customer

- Has its own CO2 footprint under control

- Targeting Net Zero in 2040 with its ecosystem and customers

- Cost savings ambition defined through energy efficiency, renewable energy, circular economy approach, and eco-design

- Employees understand how they contribute to operational targets

- Refurbished customer equipment is a key component of revenue ambition

Goals for 2025

30%
decrease in GHG emissions (compared to 2015)

50%
renewable energy in their mix

30%
of mobile phones sold will be collected for reuse or recycle

20%
of network and IT purchases will be refurbished equipment

Leveraging Takeback and Reuse

Product Takeback: simple, secure, sustainable

Product Takeback & Reuse

Free removal and transport of equipment at customer end-of-use. All returned equipment is stored in a secure location and data is cleared from returned hard drives to protect data security. And we reuse and recycle 99.9% of what is returned to us.

Cisco Returns Program
Available in U.S.

Send IT Back Mobile App
Available in EU, UK, and U.S.

Customer Recycling Solutions
Available globally

https://cisco.com/go/producttakeback

Key Takeaways

1. The time to act is now

2. IT has dual responsibilities

3. Research your companies' commitments

4. Understand Circular Economy Principles

5. Develop an IT framework to align objectives & provide focus

6. Leverage Cisco Refresh and Product Takeback Programs

7. Share what you learn.

Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!

- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.

- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.

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From technology training and team development to Cisco certifications and learning plans, let us help you empower your business and career. www.cisco.com/go/certs

Pay for Learning with Cisco Learning Credits

(CLCs) are prepaid training vouchers redeemed directly with Cisco.

Learn

Cisco U.
IT learning hub that guides teams and learners toward their goals

Cisco Digital Learning
Subscription-based product, technology, and certification training

Cisco Modeling Labs
Network simulation platform for design, testing, and troubleshooting

Cisco Learning Network
Resource community portal for certifications and learning

Train

Cisco Training Bootcamps
Intensive team & individual automation and technology training programs

Cisco Learning Partner Program
Authorized training partners supporting Cisco technology and career certifications

Cisco Instructor-led and Virtual Instructor-led training
Accelerated curriculum of product, technology, and certification courses

Certify

Cisco Certifications and Specialist Certifications
Award-winning certification program empowers students and IT Professionals to advance their technical careers
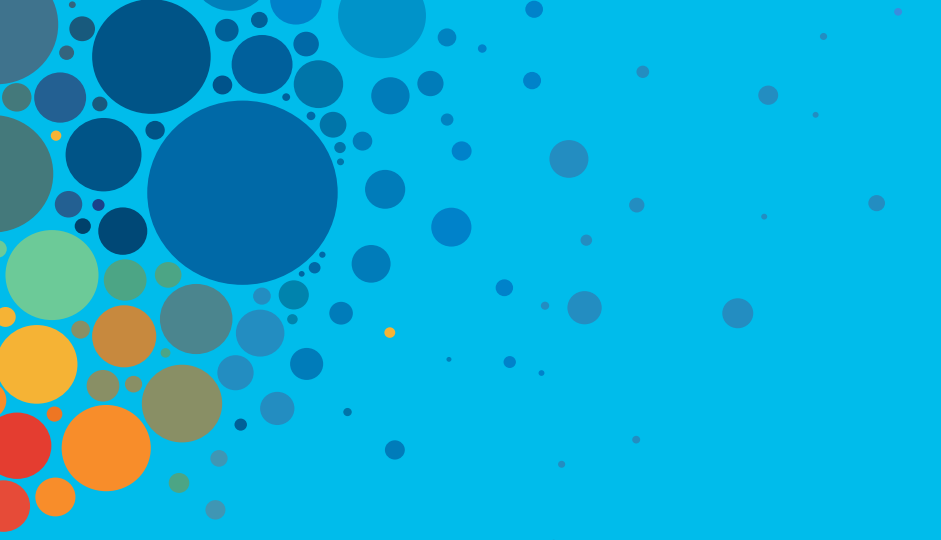
Cisco Guided Study Groups
180-day certification prep program with learning and support

Cisco Continuing Education Program
Recertification training options for Cisco certified individuals

Here at the event? Visit us at The Learning and Certifications lounge at the World of Solutions

Continue your education

- Visit the Cisco Showcase for related demos

- Book your one-on-one Meet the Engineer meeting

- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs

- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand

Thank you

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ALL IN

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