

Achieving Net Zero in the Telecoms Industry:

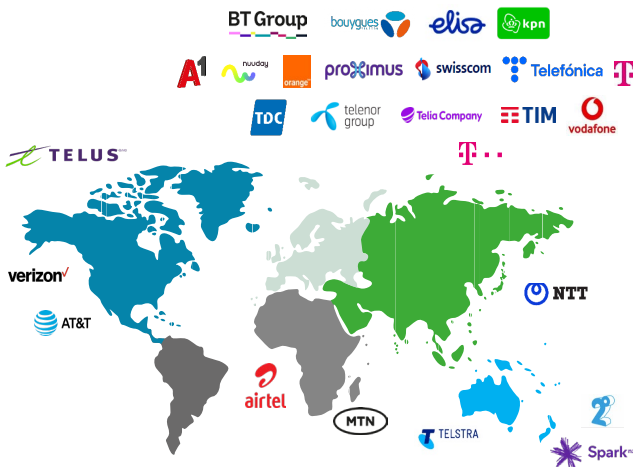
Tackling Supply Chain Emissions

About JAC

JAC is an association of telecom operators aiming to **verify, assess and develop** the CSR implementation across the manufacturing centres of ICT suppliers.



JAC's Global Presence



JAC was previously known as Joint Audit Cooperation and has been rebranded in 2022 to **Joint Alliance for CSR** to capture a wider scope of activities developed.

It was set up in January 2010 by Deutsche Telekom, Orange and Telecom Italia and since then has grown to **26 telecom operators** from around the world, representing a significant percentage of the global telecommunications supply chain spend.

The JAC 2023 Climate Change & Circularity Survey

The JAC Climate Change and Circularity Survey was carried out in **January 2023**.

The survey showed that both climate change and circularity are **key priorities** for the majority of JAC members.

The survey gathered data on the climate change and circularity **goals, achievements and activities** of 26 JAC members across Europe, North America, Africa, Asia and Australasia.

The survey highlights **best practices across the JAC member base**, which members of the ICT ecosystem can implement to improve on their circularity and climate change performance.

NOTE: The sharing of resources and best practices by JAC does not involve the sharing of any commercially sensitive information.

For more information on the JAC initiative, please visit the website: <https://jac-initiative.com/>

Foreword



As we face the reality of climate change and its adverse impacts on people and the planet, it has become increasingly clear that no single entity can solve this problem alone. The telecom industry in general and the Joint Alliance for CSR in particular recognize the urgency of collaborative climate action. We believe that our shared goal of a net-zero future can be achieved by joining forces across our sector and value chain.

As an industry, we have already set ambitious targets and taken concrete measures to reduce our emissions and mitigate climate change. A case in point: Around 90% of JAC members have committed to science-based and/or net-zero targets. However, most of our carbon footprint lies beyond our direct operations, in what is known as Scope 3 emissions. Our supply chain is a significant contributor to these emissions, and to achieve our targets, we must work together to reduce our collective carbon footprint.

This publication is a result of a collaborative effort by 26 leading telecom companies across the globe in JAC, united in our mission to decarbonize the economy. By means of an internal JAC survey, we have taken stock of our respective climate strategies and actions and, more importantly, identified best practices aimed at helping our suppliers to transform their businesses to become 1.5°C aligned. As such, this guide offers practical and scalable solutions to reduce emissions across their operations, supply chains and products.

Our goal is to work hand in hand with our suppliers, supporting them in their journey towards becoming 1.5°C aligned, as we all navigate the path towards net-zero emissions. We understand that this transformation will not be easy, but we are confident that with the right mindset and actions, it is achievable.

JAC is proud to be at the forefront of the fight against climate change and committed to leading the way in our sector. We hope that this publication will serve as a useful tool for the ICT ecosystem as we work together towards a more sustainable future. Happy reading – and action!



Dr. Carlo Drauth

Chair of JAC Climate Change Working Group
Head of Responsible Business and Human Rights, Telefónica S.A.

The Climate Change Challenge

Global temperatures are now around 1.1°C above pre-industrial levels¹, the IPCC found, and “there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.”² However, if greenhouse gas emissions can be made to peak as soon as possible, and are reduced rapidly in the following years, it may still be possible to avoid the catastrophic human and ecological impacts that would follow a 1.5°C rise.



The IPCC’s AR6 report, finalised in March 2023, warned that limiting global warming to within 1.5°C above pre-industrial levels will require “rapid, deep and in most cases immediate greenhouse gas emissions reductions in all sectors.”³

At the upcoming UN Climate Change Conference (COP28) starting in November 2023, G20 leaders are expected to outline their emissions cut targets for 2035 and 2040.⁴ These stark warnings are a clarion call for nations and corporations alike and are likely to be cascaded not only as political calls to action, but also through policy, regulation and capital investment.

At COP 26, nearly 500 global financial services firms agreed to align \$130 trillion⁵ – around 40 percent of the world’s financial assets – with science-based climate change goals, and capital investment trends are likely to continue in this direction.

In 2022, the US Securities and Exchange Commission (SEC) proposed a new rule that, if adopted, will require public companies to provide detailed reporting of their climate-related risks, emissions, and net-zero plans.⁶ Meanwhile the EU, United Kingdom, New Zealand, Japan, and Hong Kong and many other countries are all moving ahead with similar measures.

This regulatory and capital markets pressure is compounded by increasing expectations from consumers, employees and populations to take action to combat climate change.



In response, **UN Secretary-General** António Guterres has called on developed countries to “reach net zero as close as possible to **2040**, and developing countries as close as possible to **2050**.”⁴

¹ Source: [Climate change widespread, rapid, and intensifying – IPCC – IPCC](#)

² Source: [AR6 Synthesis Report Headline Statement C.1](#)

³ Source: [AR6 Synthesis Report Headline Statement B.6](#)

⁴ Source: [A liveable future for all is possible, if we take urgent climate action: flagship UN report | UN News](#)

⁵ Source: [GLASGOW / COP26 FINANCING OUR FUTURE | United Nations UN Audiovisual Library \(unmultimedia.org\)](#)

⁶ Source: [SEC.gov | SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors](#)

The Progress of Global Business On Climate Change

Yet across many industries, data shows that hundreds of major companies are falling short in the extent of their commitments. Nearly seven years on from the adoption of the Paris Agreement, only 57% of the world's 2,000 largest companies (by revenue) have announced a carbon reduction commitment, according to findings from the Net Zero Tracker initiative.⁷

When it comes to impacting climate change however, "carbon reduction" targets are no longer enough. Only commitments approaching the rigour and ambition of science-based Net Zero targets can deliver impact needed to keep global warming to within 1.5°C above pre-industrial levels.

Data from the Net Zero Tracker initiative shows that, so far, only 43% of the Fortune 2,000 companies have announced Net Zero or Science Based Targets (or similar).⁷

Through the Joint Alliance for CSR (JAC), a collective of 26 of the world's leading telecoms companies have been working to align the telecoms industry to the latest scientific evidence and urgent requirements of climate change.

In contrast to the 43% statistic, the 2023 JAC survey showed that 93% of JAC Members have committed to Net Zero or Science Based targets. This level of commitment places the telecoms industry at the forefront of corporate action when it comes to tackling emissions produced by their business activities.

Furthermore, JAC members have been working to extend their commitments beyond their own directly controlled business emissions (Scope 1 and 2 emissions), to emissions produced across their entire value chain (Scope 3 emissions).

While Scope 1, which covers **direct emissions from owned or controlled sources** such as fuel burnt by company delivery trucks, and Scope 2, which covers **emissions from energy used** by the company, such as electricity used in networks and data centres, can be directly controlled by companies, Scope 3 covers **all other indirect emissions** that occur across a company's value chain.

Scope 3 can include anything from emissions produced by **customers** using the company's products, to emissions from the manufacture of products by the company's **suppliers**.

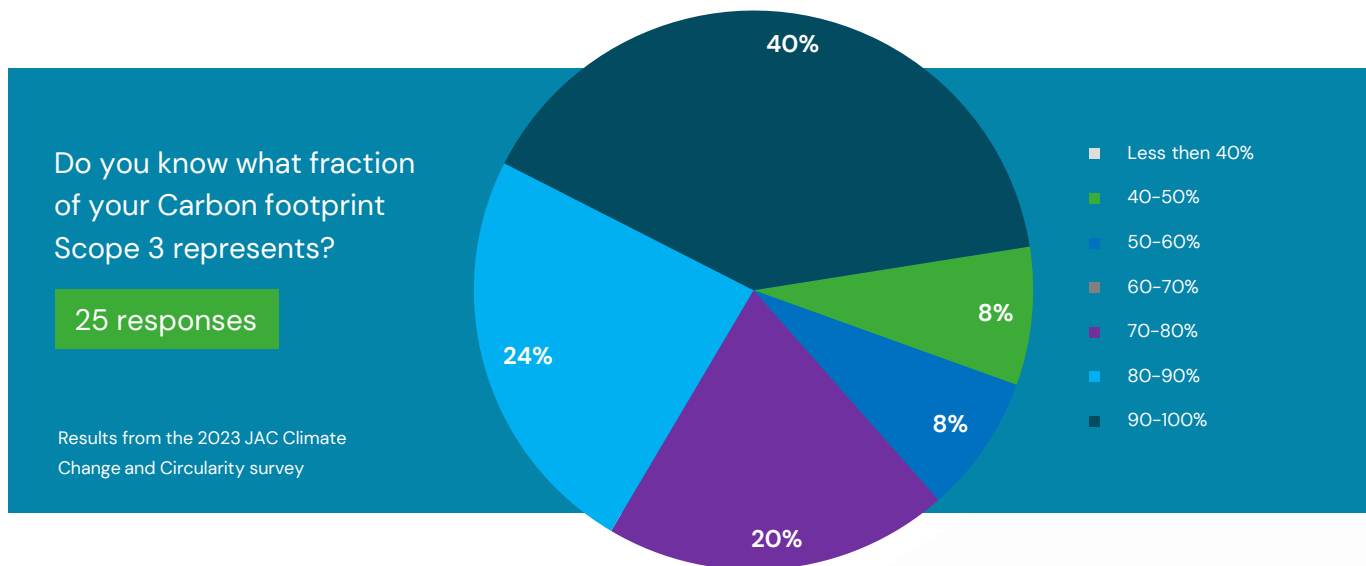
⁷Citation: [Net Zero Tracker](#). Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. 2023. The 43% number accounts for company targets recorded as "1.5°C target", "Carbon negative", "Carbon neutral(ity)", "Climate neutral", "Climate positive", "GHG neutral(ity)", "Net zero", "Science-based target", "Zero carbon", "Zero emissions"

The Importance of Scope 3 Emissions

The significance of Scope 3 emissions stems from the fact that, although the exact proportion may vary across different industries, Scope 3 emissions tend to constitute the majority of a company's total carbon footprint. Consequently, Scope 3 represents the most substantial sphere of influence for a company's endeavours to address climate change.

Within JAC, a Climate Change Workstream has been setup focusing primarily on initiatives to impact Scope 3 emissions. One of the first actions of this workstream was to survey all JAC members, facilitated by epi Consulting.⁸

The JAC survey showed that 84% of JAC members now have anywhere between 70-100% of their total carbon emissions falling under Scope 3:



Because of its indirect nature, however, Scope 3 is generally the most difficult area for a company to impact and even to measure, and many companies in the Fortune 2,000 have chosen to focus their efforts on Scope 1 and 2 instead.

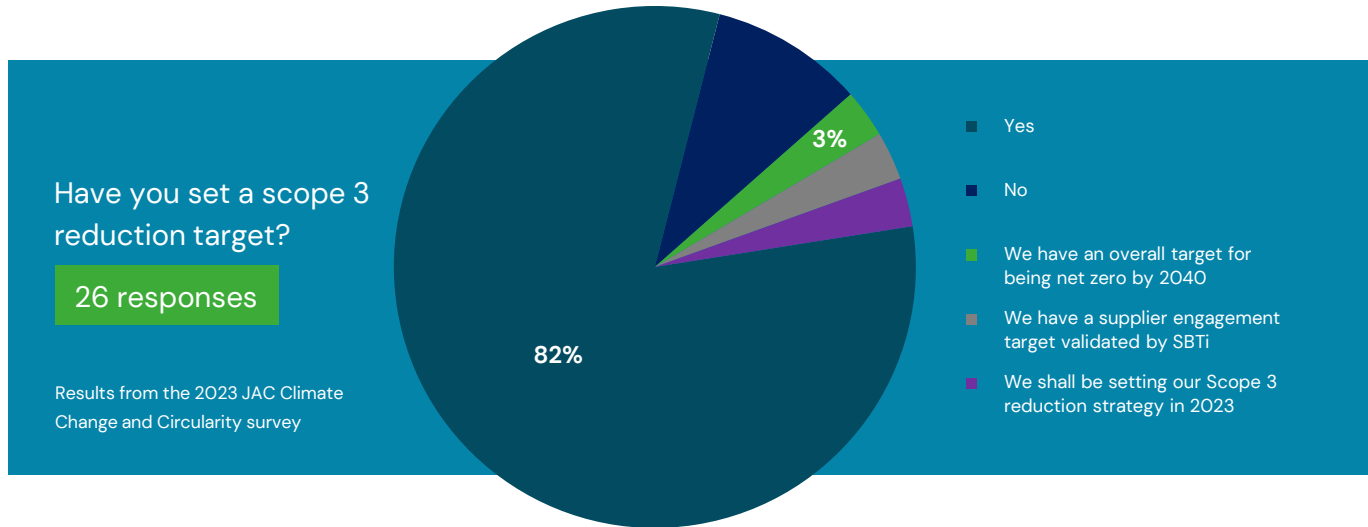
The global telecoms industry has made early progress on Scope 1 and 2, with some JAC members expecting to be Net Zero for Scope 1 and Scope 2 by 2025.

With significant Scope 1 and 2 emissions reductions achieved in recent years, the members of JAC are now extending and expanding their ongoing efforts in the area of Scope 3 emissions.

⁸Note: The sharing of resources and best practices does not involve the sharing of any commercially sensitive information

Setting Targets For Scope 3

While the Net Zero Tracker initiative shows that only 31% of the world’s top 2,000 companies have set a Scope 3 emissions target, in contrast, the survey showed that 85% of JAC members now have Scope 3 reduction targets in place.



This makes the telecoms industry one of the leading sectors when it comes to the extent and comprehensiveness of company emissions targets.

Simply having an ambition and a target, however, is not enough. When it comes to safeguarding the environment, the gap between ambition and impact is action.

To make a real impact on Scope 3 emissions, the action required is both urgent and concerted, not just within companies but across industries and wider stakeholders in the value chain.

Given its indirect nature, the challenge in tackling Scope 3 begins with identifying the biggest sources of emissions in their wider value chain, so they know where best to exert their influence to accelerate emissions cuts.

The Supply Chain Challenge

Based on experience with companies across the ICT value chain, epi Consulting estimates that between 60% – 80% of telco operators’ typical Scope 3 carbon footprint is derived from the supply chain.

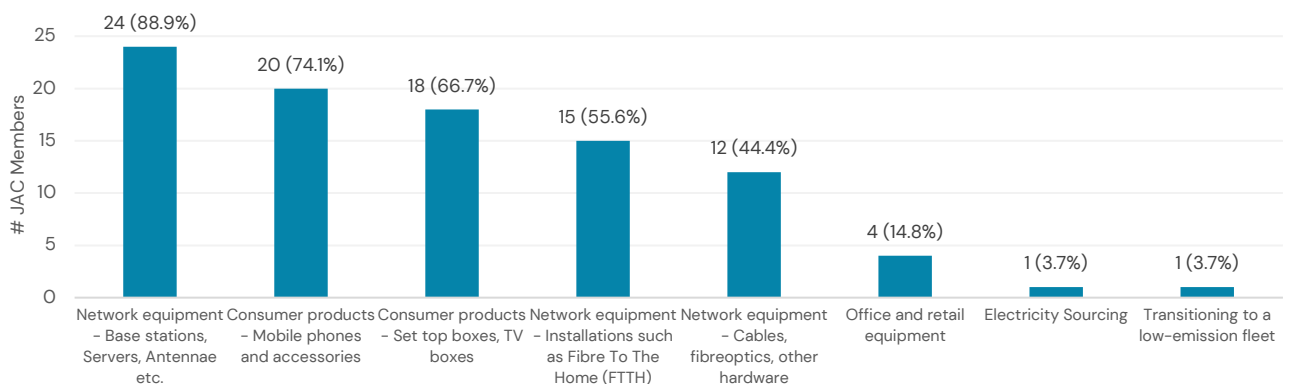
This includes key upstream emitting activities like the production of capital goods such as fibre optic cables, network equipment and consumer goods such as set top boxes. However, suppliers can also have reach-through impact on downstream scope 3 emissions too, for example through the energy efficiency of consumer devices like mobile phones.

Working with suppliers to take action on key product categories is therefore a key priority for JAC members to reduce Scope 3 emissions.

The 2023 JAC Climate Change and Circularity Survey showed that the top product categories on the climate agenda for JAC members are network equipment items like base stations, servers and antennae, and consumer products like mobile phones set top boxes/TV boxes, routers and switches.

What are the priority product categories on your climate agenda?

26 responses



Results from the 2023 JAC Climate Change and Circularity Survey

For telecoms companies, the primary way they can **impact Scope 3 emissions** in their supply chain is through the influence they have on suppliers at a corporate and site production level. This includes:

- The expectations they communicate to suppliers
- The type of suppliers they engage with
- The scoring they use to award supplier contracts when sourcing new products
- The criteria they use for manufacturing site audits
- The structure of contracts they have with suppliers
- The emphasis they put on sustainability KPIs used with suppliers
- The way they support suppliers and provide them with the tools and information to improve

A Call To Action For The Telecoms Supply Chain

The following are just three examples of projects that individual JAC members have been running to tackle supply chain emissions:



Running a **Supplier Engagement Programme**, engaging with large suppliers in their supply chain to understand their degree of maturity in handling carbon footprint reduction and identifying potential areas for collaboration to accelerate the achievement of carbon reduction goals.



Increasing sustainability criteria on supplier scorecards to **20% of the overall score weighting**. This means suppliers with good sustainability credentials are much more likely than before to be awarded a contract.

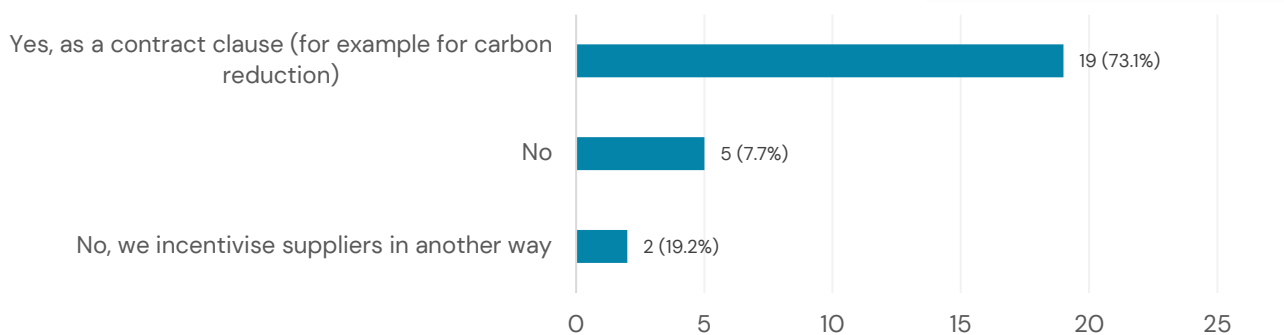


Working to develop and embed **contract clauses** into supplier contracts, requiring them to meet incremental sustainability goals as part of their contractual requirements.

These types of initiatives are becoming increasingly common across telecoms companies and across the JAC member base. The recent JAC survey showed that 73% of JAC members now include contractual terms in supplier agreements to support working with suppliers to achieve ongoing sustainability improvements:

Is your supplier engagement process enabled by your contractual teams?

26 responses



Results from the 2023 JAC Climate Change and Circularity Survey

As the growing risk posed by climate change and related regulation make urgent action by businesses and their supply chains of growing importance, it is clear that suppliers in the telecoms supply chain need to work with their customers to address the climate change crisis.

Leading Practice Supplier Sustainability

Having looked at what JAC members (the telecoms operator community) are doing to tackle climate change, we have collated ten best practices that suppliers can adopt to address the issue:

1. Understand your **Carbon Footprint** – know how much of your emissions arise from your direct operations, energy usage and your wider value chain so that you can focus your action in the right areas
2. Have a **carbon reduction plan** with a clear Net Zero Goal and interim targets with board level ownership
3. Align your carbon reduction planning to the **SBTi standard** so that you have a valid science-based carbon reduction target across Scope 1, 2, and 3
4. Where your supply chain emissions are a significant part of your carbon footprint, develop a **supply chain hot spot analysis** so that you know what areas of your supply chain to prioritise engagement with, to drive emissions reduction
5. Maintain **LCAs (Life Cycle Assessments)** for the products and services you offer so that you can identify and address the major opportunities to decarbonise the products you offer. Maintaining LCAs is important as your operator customers may ask for LCAs when assessing emissions arising from their purchasing of your products
6. Measure and **report your emissions reduction activities** following recognised standards like the GHG protocol, and ensure you have independent external assurance and verification of your methodology and calculations
7. Use **green energy** in line with its availability – this is the simplest thing any business can do to reduce its emissions
8. Have goals to improve the **power efficiency** of the products you offer and your operations, with incentives for employees who drive the change
9. Understand and support the Carbon reduction **goals of your customers**
10. Engage with **your supply chain** to incentivise and help them to reduce their carbon emissions by requiring them to address points 1 through to 10

Case Study: Supplier Emissions Reduction

Some suppliers are already implementing some or all of the above practices. For example, one company (a key global supplier working with multiple JAC members) has taken a collaborative approach to working with sub-suppliers in their supply chain to reduce emissions. Using Life Cycle Assessments (LCAs), the company was able to identify the key drivers of emissions in their key products, and produce a list of 300 emitting tier 2 sub-suppliers. From this list the company was able to offer a number of sub-suppliers a voluntary improvement program to improve the carbon footprint of their inputs to the main product.

Engaging with these suppliers through a mix of training and cooperative consultancy support, they were able to identify virgin-sourced aluminium components as a key emissions driver and help the companies switch their mix towards recycled aluminium, which results in a much lower embodied carbon footprint. The company was then able to input this reduction into their revised Life Cycle Assessment for their products, to demonstrate reductions in carbon footprint to their JAC member customers, who in turn incorporated this into their Scope 3 reduction achievements.

How Suppliers Can Take Action On Emissions

The next page includes a non-exhaustive list of resources which are available to suppliers to support them in their journey towards best practice in the area of carbon reduction and climate change.

Additional Resources

[Joint Alliance for CSR \(JAC\)](#): Find more information about JAC and the work JAC is doing on Climate Change and wider CSR issues

[Carbon Disclosure Project \(CDP\)](#): Understand more about CDP and how it helps companies to measure and manage environmental impact

[epi Carbon Maturity Assessment](#): A 10 question online assessment for suppliers to rate their readiness for typical carbon and climate change requirements of major Telco customers

[Scope 3 Guidance for Telecommunications Operators developed by GSMA, GeSI and ITU](#): Understand the principles behind how Telco companies are categorising and managing Scope 3 emissions

[GreenHouse Gas \(GHG\) Protocol](#): Access standards, guidance, tools and training to measure and manage climate-warming emissions

[Science Based Targets initiative \(SBTi\)](#): Understand how to set validated science-based targets for emissions reduction

[Global Enabling Sustainability Initiative \(GeSI\)](#): Access information, resources and best practices for achieving sustainability through Digital technologies

[International Telecommunication Union \(ITU\)](#): Learn about how the UN specialised agency ITU is promoting sustainability initiatives in the industry

[GSMA \(global mobile industry association\)](#): Learn more about the GSMA Climate Action programme and the resources available for mobile network operators to help measure and manage climate impacts

[Exponential Roadmap Initiative](#): Learn how a group of innovative, disruptive and transformative businesses are taking concrete action in line with limiting global warming to 1.5°C

[Race To Zero](#): Learn how a group of companies and non-state actors are taking rigorous and immediate action to halve emissions by 2030

[SME Climate Hub](#): Access resources designed to empower small to medium sized companies to take climate action and build resilient businesses for the future

