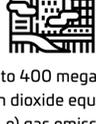# COMMSCOPE®

Unintended network output

The world relies on enterprise technology more than ever. In terms of data processing, storage and transmission, our networks are immensely productive. Unfortunately, they are also profuse producers of things we don't need.
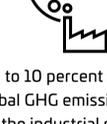
Enterprise technology is responsible for:[1]

≈ 350 to 400 megatons of carbon dioxide equivalent (CO_2e) as emissions
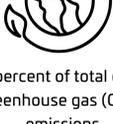
≈ 1 percent of total global greenhouse gas (GHG) emissions

5 to 10 percent of total global GHG emissions from the industrial sector

Within enterprise IT, the physical layer infrastructure is a significant contributor to the overall carbon footprint.

Power consumed by network switches, ghost ports

Inefficient use of cabling

Increase in material waste related to cabling infrastructure

It's hard to manage what you can't see

The problem isn't irresponsible network management, but a lack of visibility into the connected network environment.

Without the ability to see and control your entire physical layer network, it's tough to optimize port utilization, cabling infrastructure, energy consumption and the environmental impacts associated with each.

imVision®

CommScope's imVision is the industry's leading automated infrastructure management (AIM) solution. It enables you to monitor and document your cabling infrastructure and all network-connected devices. Providing real-time visibility and insights into your connected environment, imVision helps you:

- Optimize infrastructure capacity, availability and efficiency
- Eliminate or consolidate unused or un-necessary switch ports and cables
- Better plan network upgrades and expansion based on accurate data
- Reduce energy usage across the network infrastructure environment
- Best of all, using imVision to optimize network performance and the bottom line automatically furthers your sustainability objectives.
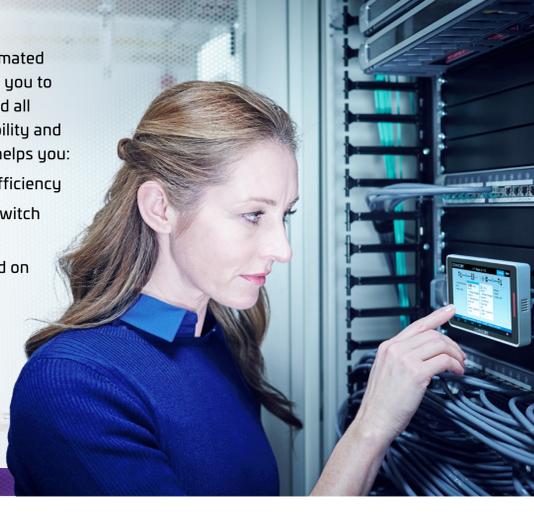
*Read on and see how…*

Standards-based

ISO/IEC 14763-5 Sustainability Standard (under development)

Specifies requirements for maximizing the sustainability of cabling systems for customer premises infrastructure and the accommodation of information technology equipment.

Key recommendations:

Operation/maintenance to minimize environmental footprint during system lifecycle
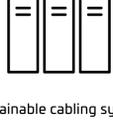
Sustainable cabling system should include maintaining infrastructure records

Evaluate sustainability using proper tools and make improvements

How imVision supports the standard	Documentation and Compliance	Process Automation	Remote Monitoring and Automation	Risk Mitigation

imVision maintains a precise connectivity database that tracks the records regarding the sustainable cabling infrastructure and provides an ongoing evaluation tool for monitoring sustainability.

imVision's process automation, remote administration and risk mitigation capabilities enable network managers to minimize the environmental impact of the cabling system throughout its lifecycle.

Sustainability beyond the standards

A survey of CommScope customers revealed four key areas in which imVision makes a significant impact on network performance and the health of the planet.

1. Lowered energy consumption
2. Decreased CO_2 emissions
3. Maximized use of the existing cabling
4. Reduced non-recyclable waste

The following is a closer look at each.

1. Lowered energy consumption

imVision automatically detects, maps and monitors all switch connections—enabling you to better manage the energy consumption of your network.

Using imVision provides real-time visibility of switch port status and value, allowing customers to:

- Consolidate ports and maximize utilization
- Reduce the number of powered switches per IDF
- Decrease overall power requirements and consumption

2. Decrease CO_2 emissions

imVision's remote monitoring and administration capabilities enable:

- Remote identification of unplanned connectivity changes
- Remote guidance to help onsite staff diagnose and resolve issues
- Fewer truck rolls, lower CO_2e, lower fuel consumption

Why it matters

Consider the environmental cost of a truck roll:
- Typical passenger vehicle[1] emits ≈ **4.6 metric tons of CO_2/year**
- Every gallon of gasoline burned creates ≈ **8,887 grams of CO_2**

Results

Using imVision, customers can realize the following savings:

Average travel reduction per customer/year	Average CO_2 reduction per customer/year
516 km /320 miles	**0.13 metric tons**

3. Reduce cable manufacturing requirements

imVision Spaces feature is combination with connectivity reports can show you where and how to get the most productivity from your existing cabling and reduce the amount of new cable to be produced and pulled.

Why it matters

Average amount of new cable pulled by a customer in a year:

Copper:	Fiber optic:
4,233 meters	**1,963 meters**

Results

Maximizing cable utilization enables customers to:

- Reduce the number of new cables needed to be produced and pulled
- Eliminate unnecessary redundant cabling and complexity
- Redeploy existing cabling and outlets
- Optimize infrastructure for sustainability

4. Less non-recyclable waste

The imVision System provides electronic labeling capabilities by making panel, port and patch cord labeling information available on the imVision Controller displays installed in racks, eliminating the need for printed/paper labels.

Why it matters

Over the lifetime of their system, the average CommScope customer will consume

12,000 panel ports/BOM

2,000 ft/600m of cord labels

Results

By using imVision's end-to-end rack-based circuit tracing, port LED signals and controller display, the average customer above can, over the life of their system:

- Eliminate 1.5 kg of paper/plastic from their waste stream
- Save 3 kWh of energy
- For the potential global impact, multiply by thousands of cabling installations each year worldwide.

imVision by the numbers

Customers in **65** countries. The software interface supports 15 different languages

27M+ installed intelligent ports

Number of certified imVision specialists **=300+** (150 accredited imVision partners)

Easily scales to effectively manage **600K+** ports at single or multiple locations

Over **1300** supported network switches from 30 vendors

90+ patents

The only AIM system that…

…supports using standard copper and fiber patch cords and the only one that supports three different sensing technologies

…that supports field upgrade without disruption of network service and modification of patch cords

…complies with the requirement for PoE monitoring…

See the opportunity in your network infrastructure

Your network's switches, cabling and connectivity provide the physical layer foundation upon which everything else depends. To keep your network running at its best requires visibility of how the physical layer is functioning.

As it turns out, using imVision to optimize your infrastructure's performance and efficiency delivers some serious environmental benefits as well.

To learn more visit our imVision Fact File >>

COMMSCOPE®

commscope.com
Visit our website or contact your local CommScope representative for more information.