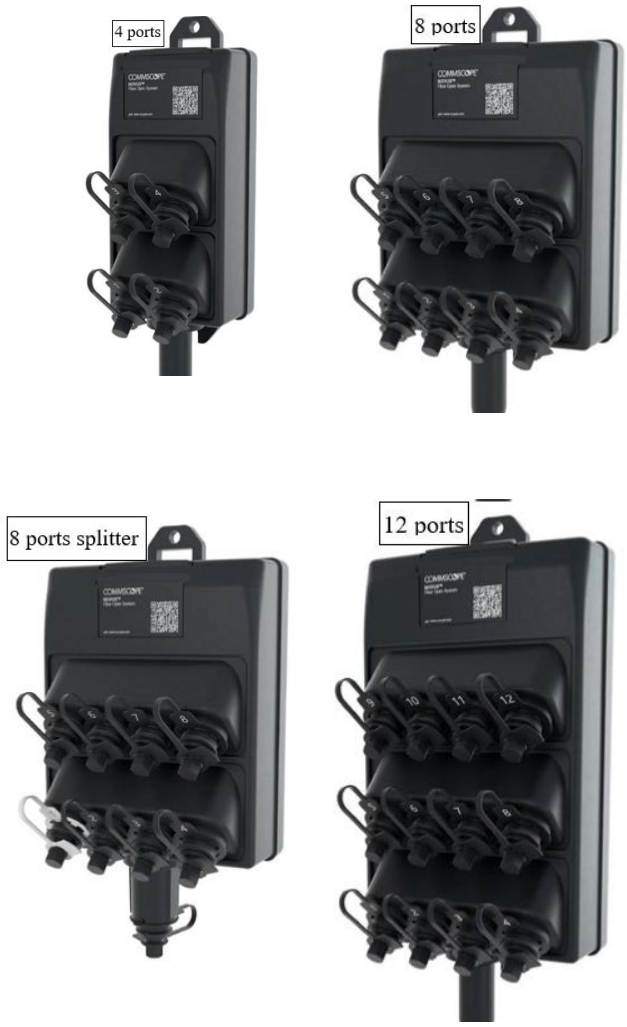
ENVIRONMENTAL PRODUCT DECLARATION (EPD)

CommScope Hardened Terminals



At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive impact on our people, planet and bottom line.

CommScope's leaders have adopted a philosophy on corporate responsibility that embraces our core company values and holds us accountable to produce smart solutions that respect our people and our planet:

Meaningful integrity is a decisive personal and company-wide commitment to enable faster, smarter and more sustainable solutions while demonstrating the utmost respect for our human and natural resources.

This philosophy finds form in three pillars:

- Environmental

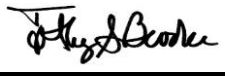
- Social

- Governance

Our commitment enables us to invest wisely in our future. By utilizing innovative technology, intelligent engineering and energy-efficient designs, we're building sustainable networks that make our customers more agile while also preserving the natural ecosystems from which we source our raw materials.

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, EN 15804 + A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International, 100 barr harbor drive west conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	General Program Instructions. Version 8.0. April 29, 2020
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 70, Claremont, North Carolina 28610
DECLARATION NUMBER	EPD 1168
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope® Hardened Terminals Functional Unit: one piece of Hardened Terminals provides fiber distribution function for fiber-to-the-X (FTTx) access networks, with a service life of 25 years, including end-of-life disposition.
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: Part A PCR for Electrical, Electronic and HVAC-R Products and Part B PSR Specific Rules for Wire Cables and Accessories
DESCRIPTION OF PRODUCT APPLICATION/USE	CommScope's Hardened Terminals products are outdoor-rated, plug and play fiber distribution terminals designed for FTTx access networks, forming part of CommScope's NOVUX™ modular FTTX ecosystem. They provide environmentally hardened connection points between feeder/distribution fibers and drop cables, enabling fast deployment and long term reliability in outside plant (OSP) environments.
PRODUCT RSL DESCRIPTION (IF APPL.)	25 Years
MARKETS OF APPLICABILITY	EMEA
DATE OF ISSUE	April 22, 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2025
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.0 & Ecoinvent 3.11
LCIA METHODOLOGY & VERSION NUMBER	CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03

The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program PCR for electrical, electronic and HVAC-R products", v4.0, 2021 based on EN 15804:2012 + A2:2019, serves as the core PCR. ☐ INTERNAL ☒EXTERNAL	Timothy S Brooke ASTM International
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by:	Thomas P. Gloria, Ph. D. Industrial Ecology Consultants

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

General Information

Description of Company/Organization

CommScope helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

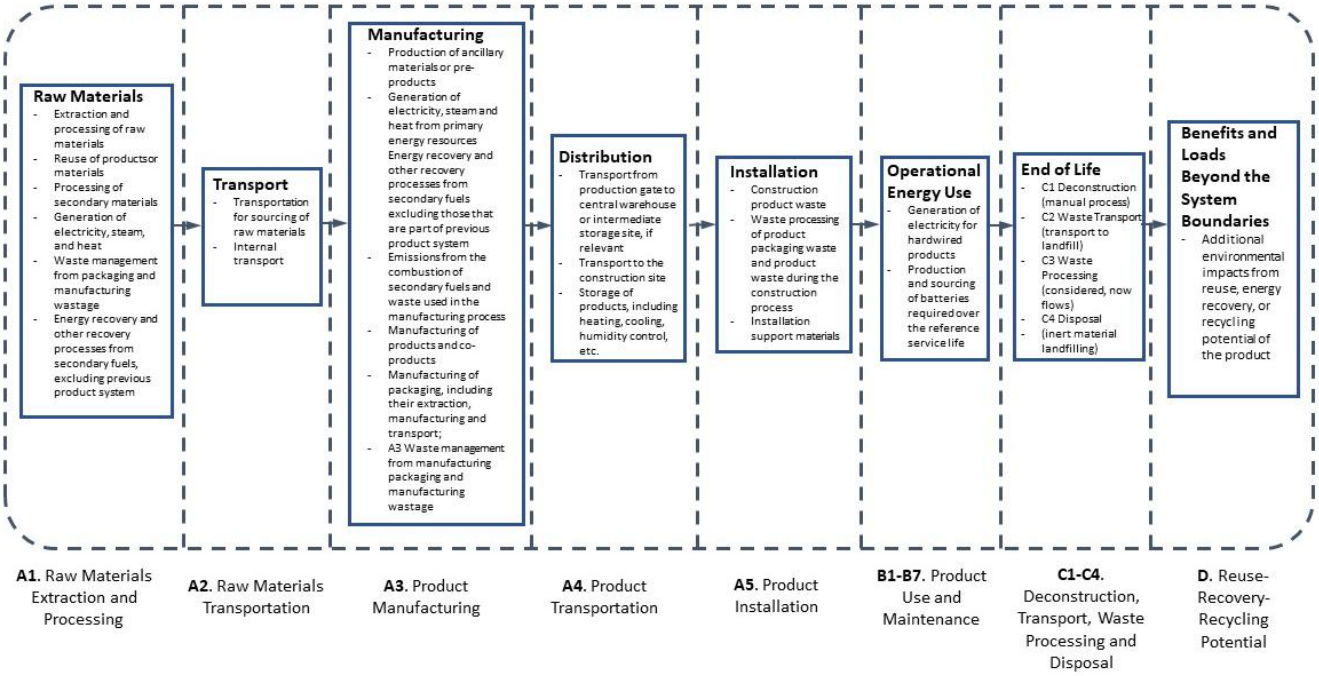
Product Description

CommScope's Hardened Terminals products are outdoor-rated, plug and play fiber distribution terminals designed for FTTx access networks, forming part of CommScope's NOVUX™ modular FTTX ecosystem. They provide environmentally hardened connection points between feeder/distribution fibers and drop cables, enabling fast deployment and long term reliability in outside plant (OSP) environments.

This EPD covers Hardened Terminals product types:

- HST – Hardened Standard Terminals

Flow Diagram



Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-C4) Life Cycle Assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, disposal, and potential benefits and loads following the end-of-life disposal. The products were analyzed by 3 parts: one piece of terminal box, one meter of cable + one piece of cable accessories (components for cable assembly to terminal box) and one piece of packaging, respectively. The total environmental impact results were sum up with the results from 3 parts together, by using the formular given in **LCA sum results calculation guidance** (Page 32).

Application

The Hardened Terminals products provide environmentally hardened connection points between feeder/distribution fibers and drop cables, enabling fast deployment and long term reliability in outside plant (OSP) environments.

Material Composition

The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The compositions of the hardened standard terminals products are given by one piece of terminal box, one meter of cable + one piece of cable accessories separately as follows:

Product raw materials							Packaging material
Terminal box	**Total weight (g)**	**PP resin**	**PEI resin**	**PC+ABS resin**	**Stainless Steel**	**Others**	**LDPE (g)**
4 ports	604.4	58.1%	13.0%	8.7%	12.3%	7.9%	52
8 ports	901.1	56.1%	17.4%	9.0%	8.3%	9.1%	92
8 ports splitter	833.8	60.7%	18.8%	9.9%	0.1%	10.4%	90
12 ports	1100.6	53.2%	21.4%	7.9%	6.9%	10.6%	132

1m of Cable	Total weight (g)	HDPE	PBT	GEL	Polyester yarn	GRPR	OF
Cable Q	20.9	59.3%	12.7%	9.8%	8.9%	7.8%	1.4%

Cable accessories	Total weight (g)	PP	PE Heatshrink	PA Hotmelt	Alum Tape	Adhesive
1 piece	17.0	53.0%	23.5%	10.4%	7.2%	5.9%

Technical Details

For the declared product, the following technical data in the delivery status must be provided with reference to the test standard:

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Product Type	Access terminal, with splitter/tap | Access terminal, without splitter/tap
Product Brand	NOVUX™
Product Series	HST

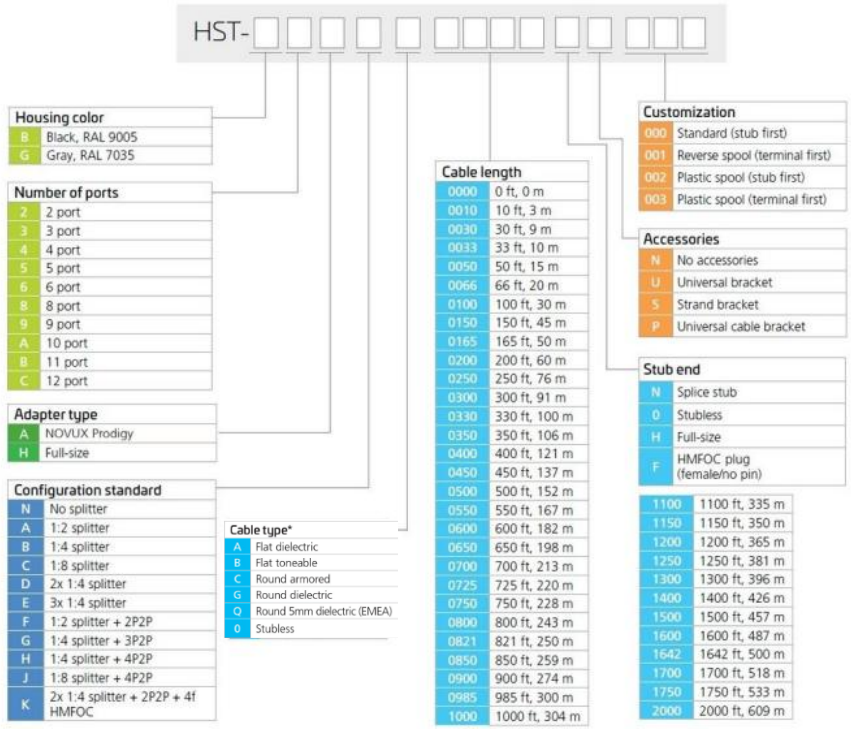
General Specifications

Distribution Type	1 x 2 splitter | 1 x 2 splitter + P2P ports (2) | 1 x 4 splitter | 1 x 4 splitter (2) | 1 x 4 splitter (2) + P2P ports (2) + 4f ports (1) | 1 x 4 splitter (3) | 1 x 4 splitter + P2P ports (3) | 1 x 4 splitter + P2P ports (4) | 1 x 8 splitter | 1 x 8 splitter + P2P ports (4) | 12 ports | 2 ports | 4 ports | 6 ports | 8 ports
Port Type	Hardened full-size SC/APC

Port Configuration

NOVUX HT	TECHNOLOGIES AVAILABLE	SMALL	MEDIUM	LARGE
HST Series	Single-fiber: P2P/no splitters	2 ports	6 ports	12 ports
		4 ports	8 ports	
	Single-fiber: P2P w/splitters	2 ports, 1x1:2	8 ports, 2x1:4	12 ports, 3x1:4
		4 ports, 1x1:4	8 ports, 1x1:8	
	Hybrid for multi-use		7 ports, 1x1:4 splitter, 3 P2P	12 ports, 1x1:8 splitter, 4 P2P
		4 ports, 1x1:2 splitter, 2 P2P	8 ports, 1x1:4 splitter, 4 P2P	11 ports, 2x1:4 splitter, 2 P2P, 1 HMFOC 4f

Ordering Tree



Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Methodological Framework

Functional Unit

The declaration refers to the functional unit of one piece of HST product. The assembled terminal piece consists of one piece of terminal box, the fiber optic cable with required length, one piece of cable accessories (components for cable assembly to terminal box) and one piece of packaging.

Name	Value	Unit
Function Unit	1	Assembled terminal piece

System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Life Cycle Stage	Life Cycle Module	Module	X = Included/ MND = Module Not Declared
Product Stage	Raw Material Supply & Parts manufacturing	A1	X
	Transport	A2	X
	Assembly process	A3	X
Construction Process Stage	Transport from gate to the site	A4	X
	Installation process	A5	X
Use Stage	Use	B1**	X
	Maintenance	B2**	X
	Repair	B3**	X
	Replacement	B4**	X
	Refurbishment	B5**	X
	Operational energy use	B6**	X
	Operational water use	B7**	X
End of Life Stage*	Deconstruction/ demolition	C1**	X
	Transport	C2	X
	Waste processing	C3	X
	Disposal	C4	X
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	X

*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

**There is no activity in these stages, their declared value is “0”.

Reference Service Life

The reference service life of the installed HST product is 25 years.

Allocation

Allocation was determined on a per meter basis for cables, and on a per piece basis for terminal box, cable accessories and packaging.

Cut-off Criteria

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For this, a documented assumption is permissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the Ecoinvent 3.11 database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

The data sources used are complete and representative of global systems in terms of geographic and technological coverage and are a recent vintage (i.e. less than ten years old). Primary data are based on direct information from CommScope manufacturing site. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Period Under Review

The period under review is the full calendar year of 2025.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804 + A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the PCR allows for EPD comparability only when all stages of a product's life cycle have been considered. However, variations and deviations are possible.

Units

The LCA results within this EPD are reported in SI units.

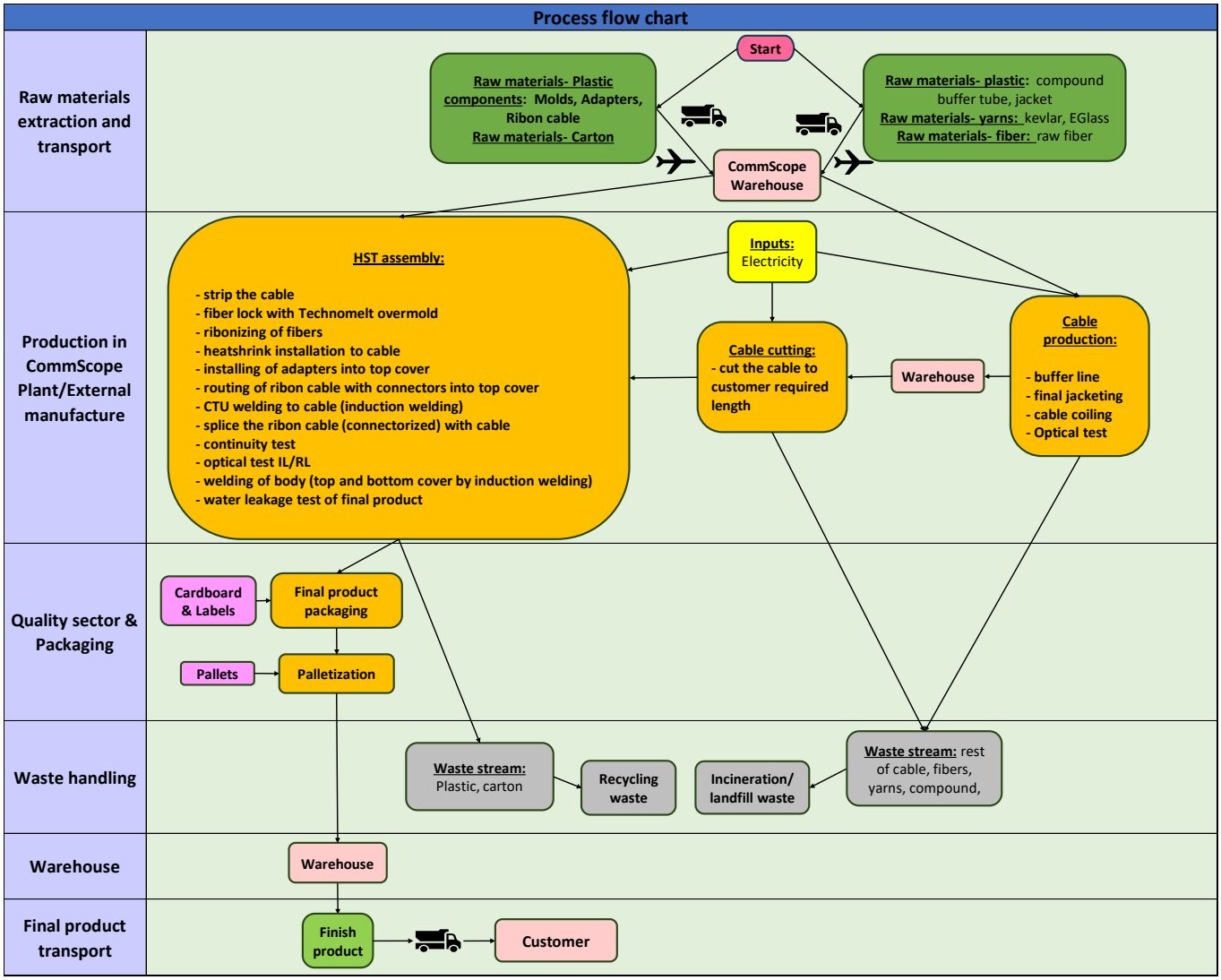
Additional Environmental Information

Background Data

For life cycle modeling of the products considered, SimaPro- LCA software tool, developed by PRé-Sustainability, is used. The Ecoinvent database contains consistent and documented datasets which are available online. To ensure comparability of results in the LCA, data from the Ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

The manufacturing process for hardened terminals products begins with the sourcing of raw materials, primarily polymer compounds, yarns, optic fiber, buffer gel, mold plastic parts, adapters, etc. with transportation to CommScope manufacturing plant. Through buffer, jacketing lines, the fiber cable is coiled in reel and moved to cable assembly department. The cable will be cut to the required length in the final assembly first, followed by HST assembly processes. After optical and water leakage testing, the final hardened terminal product will be packaged and ready to be shipped to customers.



Packaging

The packaging for this product depends on the length of the cable, 4 different packaging size variations are included. The packaging is composed of two materials: corrugated fiberboard, which is used for the outer packaging and inner buffer inserts, and small amount of Nylon66 cable tie to fix the cable coil.

HST packaging	Total weight (g)	Corrugated fiberboard	Polyamide	Biogenic Carbon content (kg/C)
33~500ft	354.8	97.0%	3.0%	0.172
821ft	2654.8	98.9%	1.1%	1.313
1150ft	3475.8	99.2%	0.8%	1.724
1642ft	4296.8	99.3%	0.7%	2.134

*The Biogenic Carbon Content in packaging materials is calculated based on 50% dry mass of fiberboard and wood.

Transformation

Transport to Installation Site (A4)		
Description	**Value**	**Unit**
Transport type	Truck/ lorry > 32 metric ton	
Fuel type/ Liters of Fuel	Diesel, compliant with EURO5	
Liters of Fuel	35	l/100 km
Transport Distance (average)	3500	km
Capacity Utilization	85	%
Weight of products transported	1.19 ~ 15.86*	kg

*The range of the Minimum and Maximum product weight including packaging is reported for the full product group.

Product Installation

CommScope Hardened Terminals products are distributed and installed by trained technicians in accordance with applicable local and national standards. Installation involves only the management of packaging, as there is no energy consumption, material loss, or use of auxiliary materials during the process. The product is designed for complete manual installation without the need for power tools, resulting in negligible electricity use and no installation scrap.

Installation into the building (A5)					
Name	**33~500ft**	**821ft**	**1150ft**	**1642ft**	**Unit**
Auxiliary materials	-	-	-	-	kg
Water consumption	-	-	-	-	m^3
Other resources	-	-	-	-	kg
Electricity consumption	-	-	-	-	kWh
Other energy carriers	-	-	-	-	MJ
Product loss per functional unit	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Waste materials at construction site	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Output substance (recycle)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Output substance (landfill)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Output substance (incineration)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Packaging waste (recycle)	0.35E-01	2.65E+00	3.48E+00	4.30E+00	kg
Packaging waste (landfill)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg
Packaging waste (incineration)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg

Direct emissions to ambient air*, soil, and water	0.00E+00	0.00E+00	0.00E+00	0.00E+00	kg CO_2
VOC emissions	-	-	-	-	kg

*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	**Value**	**Unit**
Reference Service Life	25	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. There is no operational energy or water use.

Operational Energy Use (B6)		
Name	**Value**	**Unit**
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m^3
Electricity consumption	-	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-
Further assumptions for scenario development	-	-

Disposal

The product can be manually disassembled to separate different individual parts or materials for disposal. Most of the parts are disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of Life (C2-C4)							
Name	**4 ports**	**8 ports**	**12 ports**	**8 ports Splitter**	**Cable (1m)**	**Cable accessories**	**Unit**
Collected separately	0	0	0	0	0	0	kg
Collected as mixed waste	0	0	0	0	0	0	kg
Reuse	0	0	0	0	0	0	kg
Recycling	5.97E-02	6.02E-02	6.07E-02	9.8E-04	0	0	kg
Landfilling	2.82E-01	4.31E-01	5.32E-01	4.20E-01	1.04E-03	8.5E-03	kg
Incineration with energy recovery	2.63E-01	4.10E-01	5.08E-01	4.13E-01	1.04E-03	8.5E-03	kg
Energy conversion- Electricity	20	20	20	20	20	20	%
Energy conversion- Heat	50	50	50	50	50	50	%

Re-use Phase

Re-use of the product is not common. However, energy in the form of heat and electricity has been recovered from the waste processing of product materials at the end-of-life disposal stage (C2-C4). Energy recovery for the incineration of polymer materials was calculated according to Appendix D of the Part A PCR.

Energy recovery Potential (D)							
Name	**4 ports**	**8 ports**	**12 ports**	**8 ports Splitter**	**Cable (1m)**	**Cable accessories**	**Unit**
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of heat	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	3.29E+00	5.08E+00	6.23E+00	5.12E+00	1.90E-01	9.60E-02	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	1.32E+00	2.03E+00	2.49E+00	2.05E+00	7.58E-02	3.84E-02	MJ
Total Net energy benefits of energy recovery in the form of heat	3.29E+00	5.08E+00	6.23E+00	5.12E+00	1.90E-01	9.60E-02	MJ
Total Net energy benefits of energy recovery in the form of electricity	1.32E+00	2.03E+00	2.49E+00	2.05E+00	7.58E-02	3.84E-02	MJ

LCA Results – HST terminal box

Results shown below are for HST terminal box with 4 ports.

CML-IA baseline V3.11 / EU25									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Abiotic depletion	kg Sb eq	6.07E-05	5.97E-05	6.81E-07	1.60E-08	1.86E-07	1.22E-07	3.58E-08	-9.86E-08
Abiotic depletion (fossil fuels)	MJ	7.14E+01	6.58E+01	3.48E+00	8.16E-02	9.49E-01	8.65E-01	1.81E-01	-2.75E+00
Global warming (GWP100a)	kg CO2 eq	4.97E+00	3.77E+00	2.41E-01	5.75E-03	6.68E-02	2.45E-01	6.49E-01	-2.45E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	1.15E-05	1.14E-05	4.22E-09	6.27E-11	7.28E-10	7.61E-10	2.41E-10	-1.23E-09
Photochemical oxidation	kg C2H4 eq	3.01E-03	2.95E-03	3.70E-05	8.84E-07	1.03E-05	1.41E-05	6.40E-06	-3.83E-05
Acidification	kg SO2 eq	1.53E-02	1.40E-02	6.08E-04	1.54E-05	1.79E-04	3.28E-04	1.18E-04	-1.01E-03
Eutrophication	kg PO4--- eq	1.20E-02	7.24E-03	1.66E-04	5.15E-06	5.99E-05	2.00E-04	4.34E-03	-5.86E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Ozone depletion	kg CFC-11 eq	1.15E-05	1.15E-05	5.58E-09	8.23E-11	9.57E-10	8.73E-10	2.87E-10	-1.55E-09
Global warming	kg CO2 eq	4.92E+00	3.72E+00	2.39E-01	5.70E-03	6.63E-02	2.44E-01	6.47E-01	-2.43E-01
Smog	kg O3 eq	2.31E-01	2.01E-01	1.70E-02	4.04E-04	4.70E-03	4.31E-03	4.49E-03	-1.43E-02
Acidification	kg SO2 eq	1.60E-02	1.46E-02	7.10E-04	1.81E-05	2.11E-04	3.50E-04	1.55E-04	-1.05E-03
Respiratory effects	kg PM2.5 eq	3.18E-03	2.87E-03	1.44E-04	3.48E-06	4.05E-05	1.12E-04	9.75E-06	-3.56E-04
Freshwater eutrophication	kg P eq	1.24E-03	6.21E-04	9.96E-06	4.11E-07	4.78E-06	2.46E-05	5.83E-04	-7.21E-05
Marine eutrophication	kg N eq	6.07E-03	5.52E-03	1.46E-04	3.46E-06	4.02E-05	3.96E-05	3.17E-04	-1.27E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Acidification	mol H+ eq	1.86E-02	1.70E-02	8.02E-04	2.01E-05	2.34E-04	3.96E-04	1.65E-04	-1.22E-03
Climate change	kg CO2 eq	4.98E+00	3.77E+00	2.43E-01	5.79E-03	6.72E-02	2.45E-01	6.50E-01	-2.77E-01
Climate change - Biogenic	kg CO2 eq	-1.72E-02	-1.73E-02	1.48E-04	1.94E-06	2.25E-05	-9.29E-05	5.75E-05	-3.12E-02
Climate change - Fossil	kg CO2 eq	5.00E+00	3.79E+00	2.42E-01	5.78E-03	6.72E-02	2.45E-01	6.50E-01	-2.45E-01
Climate change - Land use and LU change	kg CO2 eq	3.42E-03	3.15E-03	8.70E-05	2.62E-06	3.04E-05	1.44E-04	6.71E-06	-5.19E-04
Ecotoxicity, freshwater	CTUe	6.82E+02	6.73E+02	4.15E-01	1.35E-02	1.57E-01	5.82E+00	2.13E+00	-5.36E-01
Ecotoxicity, freshwater - inorganics	CTUe	6.13E+02	6.05E+02	3.99E-01	1.31E-02	1.52E-01	5.82E+00	2.12E+00	-5.25E-01
Ecotoxicity, freshwater - organics	CTUe	6.82E+01	6.82E+01	1.65E-02	4.20E-04	4.89E-03	4.27E-03	1.64E-03	-1.14E-02
Particulate matter	disease inc.	1.93E-07	1.57E-07	2.45E-08	5.65E-10	6.56E-09	3.12E-09	1.24E-09	-1.14E-08
Eutrophication, marine	kg N eq	5.45E-03	4.39E-03	2.72E-04	6.49E-06	7.54E-05	8.05E-05	6.29E-04	-2.52E-04
Eutrophication, freshwater	kg P eq	1.45E-03	1.39E-03	1.71E-05	6.28E-07	7.30E-06	3.96E-05	2.37E-06	-1.21E-04
Eutrophication, terrestrial	mol N eq	3.96E-02	3.42E-02	2.96E-03	7.05E-05	8.20E-04	7.70E-04	7.81E-04	-2.51E-03
Human toxicity, cancer	CTUh	1.59E-08	1.58E-08	3.96E-11	9.36E-13	1.09E-11	3.97E-11	5.49E-11	-2.69E-11
Human toxicity, cancer - inorganics	CTUh	1.08E-09	9.96E-10	1.70E-11	4.04E-13	4.69E-12	1.86E-11	4.81E-11	-1.76E-11
Human toxicity, cancer - organics	CTUh	1.48E-08	1.48E-08	2.26E-11	5.32E-13	6.19E-12	2.11E-11	6.86E-12	-9.28E-12
Human toxicity, non-cancer	CTUh	5.56E-08	4.95E-08	2.28E-09	5.28E-11	6.14E-10	9.39E-10	2.16E-09	-1.34E-09
Human toxicity, non-cancer - inorganics	CTUh	5.30E-08	4.72E-08	2.14E-09	4.96E-11	5.76E-10	9.31E-10	2.12E-09	-1.30E-09
Human toxicity, non-cancer - organics	CTUh	2.51E-09	2.28E-09	1.41E-10	3.23E-12	3.76E-11	8.18E-12	3.21E-11	-3.64E-11

Ionising radiation	kBq U-235 eq	4.76E-01	4.60E-01	3.97E-03	7.14E-05	8.30E-04	1.09E-02	2.57E-04	-3.46E-02
Land use	Pt	2.14E+01	1.65E+01	3.57E+00	8.20E-02	9.53E-01	1.13E-01	1.92E-01	-4.63E-01
Ozone depletion	kg CFC11 eq	1.04E-05	1.03E-05	5.30E-09	7.81E-11	9.08E-10	8.38E-10	2.75E-10	-1.45E-09
Photochemical ozone formation	kg NMVOC eq	2.02E-02	1.81E-02	1.27E-03	2.89E-05	3.36E-04	2.25E-04	2.10E-04	-7.41E-04
Resource use, fossils	MJ	7.98E+01	7.40E+01	3.54E+00	8.28E-02	9.62E-01	1.04E+00	1.85E-01	-3.30E+00
Resource use, minerals and metals	kg Sb eq	6.07E-05	5.97E-05	6.81E-07	1.60E-08	1.86E-07	1.21E-07	3.58E-08	-9.71E-08
Water use	m3 depriv.	2.22E+00	2.13E+00	1.61E-02	4.31E-04	5.01E-03	9.50E-02	-2.22E-02	-3.39E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
PERE	MJ	1.75E+01	1.72E+01	5.47E-02	1.15E-03	1.33E-02	1.46E-01	5.75E-03	-4.38E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.75E+01	1.72E+01	5.47E-02	1.15E-03	1.33E-02	1.46E-01	5.75E-03	-4.38E-01
PENRE	MJ	8.27E+01	7.65E+01	3.77E+00	8.80E-02	1.02E+00	1.11E+00	1.99E-01	-3.51E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	8.27E+01	7.65E+01	3.77E+00	8.80E-02	1.02E+00	1.11E+00	1.99E-01	-3.51E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.65E+00	2.56E+00	1.61E-02	4.34E-04	5.05E-03	9.45E-02	-2.23E-02	-3.46E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
HWD	kg	1.03E-02	4.85E-03	1.01E-04	2.49E-06	2.90E-05	-6.62E-05	5.36E-03	-3.03E-03
NHWD	kg	9.69E-01	2.77E-01	3.06E-01	6.93E-03	8.05E-02	1.02E-02	2.89E-01	-6.33E-03
RWD	kg	1.11E-04	1.07E-04	9.75E-07	1.75E-08	2.03E-07	2.66E-06	6.45E-08	-8.43E-06
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	5.97E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-02	0.00E+00
MER	kg	2.63E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-01	0.00E+00
EE	MJ	4.60E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST terminal box with 8 ports.

CML-IA baseline V3.11 / EU25

Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	8.56E-05	8.40E-05	1.03E-06	2.83E-08	2.77E-07	1.81E-07	5.57E-08	-1.52E-07
Abiotic depletion (fossil fuels)	MJ	1.15E+02	1.07E+02	5.26E+00	1.44E-01	1.41E+00	1.29E+00	2.81E-01	-4.25E+00
Global warming (GWP100a)	kg CO2 eq	7.90E+00	6.05E+00	3.64E-01	1.02E-02	9.96E-02	3.65E-01	1.01E+00	-3.78E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	2.20E-05	2.19E-05	6.39E-09	1.11E-10	1.09E-09	1.13E-09	3.74E-10	-1.90E-09
Photochemical oxidation	kg C2H4 eq	5.63E-03	5.53E-03	5.60E-05	1.56E-06	1.53E-05	2.10E-05	9.95E-06	-5.92E-05
Acidification	kg SO2 eq	2.42E-02	2.23E-02	9.20E-04	2.73E-05	2.68E-04	4.90E-04	1.83E-04	-1.56E-03

Eutrophication	kg PO4--- eq	1.85E-02	1.11E-02	2.51E-04	9.11E-06	8.93E-05	2.98E-04	6.77E-03	-9.06E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	2.21E-05	2.20E-05	8.45E-09	1.46E-10	1.43E-09	1.30E-09	4.46E-10	-2.40E-09
Global warming	kg CO2 eq	7.82E+00	5.98E+00	3.61E-01	1.01E-02	9.88E-02	3.64E-01	1.01E+00	-3.76E-01
Smog	kg O3 eq	3.68E-01	3.21E-01	2.58E-02	7.15E-04	7.01E-03	6.43E-03	6.99E-03	-2.21E-02
Acidification	kg SO2 eq	2.54E-02	2.33E-02	1.07E-03	3.20E-05	3.14E-04	5.22E-04	2.41E-04	-1.62E-03
Respiratory effects	kg PM2.5 eq	4.57E-03	4.10E-03	2.17E-04	6.16E-06	6.03E-05	1.66E-04	1.51E-05	-5.50E-04
Freshwater eutrophication	kg P eq	1.80E-03	8.28E-04	1.51E-05	7.27E-07	7.12E-06	3.67E-05	9.10E-04	-1.11E-04
Marine eutrophication	kg N eq	1.12E-02	1.03E-02	2.21E-04	6.12E-06	6.00E-05	5.91E-05	4.94E-04	-1.96E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set

Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Acidification	mol H+ eq	2.95E-02	2.71E-02	1.21E-03	3.56E-05	3.49E-04	5.90E-04	2.56E-04	-1.88E-03
Climate change	kg CO2 eq	7.91E+00	6.06E+00	3.67E-01	1.02E-02	1.00E-01	3.65E-01	1.01E+00	-4.28E-01
Climate change - Biogenic	kg CO2 eq	-2.89E-02	-2.91E-02	2.24E-04	3.43E-06	3.35E-05	-1.38E-04	8.96E-05	-4.82E-02
Climate change - Fossil	kg CO2 eq	7.94E+00	6.09E+00	3.67E-01	1.02E-02	1.00E-01	3.65E-01	1.01E+00	-3.79E-01
Climate change - Land use and LU change	kg CO2 eq	5.15E-03	4.75E-03	1.32E-04	4.63E-06	4.53E-05	2.15E-04	1.04E-05	-8.02E-04
Ecotoxicity, freshwater	CTUe	1.35E+03	1.33E+03	6.29E-01	2.39E-02	2.34E-01	8.68E+00	3.31E+00	-8.29E-01
Ecotoxicity, freshwater - inorganics	CTUe	1.21E+03	1.20E+03	6.04E-01	2.32E-02	2.27E-01	8.67E+00	3.31E+00	-8.11E-01
Ecotoxicity, freshwater - organics	CTUe	1.36E+02	1.36E+02	2.50E-02	7.44E-04	7.29E-03	6.36E-03	2.54E-03	-1.77E-02
Particulate matter	disease inc.	2.98E-07	2.44E-07	3.71E-08	9.99E-10	9.79E-09	4.65E-09	1.92E-09	-1.75E-08
Eutrophication, marine	kg N eq	9.01E-03	7.37E-03	4.12E-04	1.15E-05	1.12E-04	1.20E-04	9.81E-04	-3.89E-04
Eutrophication, freshwater	kg P eq	2.10E-03	2.00E-03	2.59E-05	1.11E-06	1.09E-05	5.90E-05	3.70E-06	-1.87E-04
Eutrophication, terrestrial	mol N eq	6.24E-02	5.42E-02	4.48E-03	1.25E-04	1.22E-03	1.15E-03	1.22E-03	-3.88E-03
Human toxicity, cancer	CTUh	3.07E-08	3.05E-08	5.99E-11	1.66E-12	1.62E-11	5.92E-11	8.56E-11	-4.15E-11
Human toxicity, cancer - inorganics	CTUh	1.46E-09	1.32E-09	2.57E-11	7.15E-13	7.00E-12	2.77E-11	7.49E-11	-2.72E-11
Human toxicity, cancer - organics	CTUh	2.92E-08	2.91E-08	3.41E-11	9.42E-13	9.22E-12	3.15E-11	1.07E-11	-1.43E-11
Human toxicity, non-cancer	CTUh	8.18E-08	7.26E-08	3.45E-09	9.34E-11	9.15E-10	1.40E-09	3.36E-09	-2.07E-09
Human toxicity, non-cancer - inorganics	CTUh	7.78E-08	6.89E-08	3.24E-09	8.77E-11	8.59E-10	1.39E-09	3.31E-09	-2.01E-09
Human toxicity, non-cancer - organics	CTUh	3.96E-09	3.62E-09	2.14E-10	5.72E-12	5.60E-11	1.22E-11	4.99E-11	-5.63E-11
Ionising radiation	kBq U-235 eq	7.30E-01	7.06E-01	6.01E-03	1.26E-04	1.24E-03	1.62E-02	4.00E-04	-5.34E-02
Land use	Pt	3.29E+01	2.55E+01	5.39E+00	1.45E-01	1.42E+00	1.69E-01	2.97E-01	-7.15E-01
Ozone depletion	kg CFC11 eq	1.98E-05	1.98E-05	8.02E-09	1.38E-10	1.35E-09	1.25E-09	4.27E-10	-2.25E-09
Photochemical ozone formation	kg NMVOC eq	3.35E-02	3.03E-02	1.92E-03	5.12E-05	5.01E-04	3.35E-04	3.27E-04	-1.14E-03
Resource use, fossils	MJ	1.28E+02	1.19E+02	5.36E+00	1.46E-01	1.43E+00	1.55E+00	2.87E-01	-5.10E+00
Resource use, minerals and metals	kg Sb eq	8.55E-05	8.40E-05	1.03E-06	2.83E-08	2.77E-07	1.81E-07	5.57E-08	-1.50E-07
Water use	m3 depriv.	3.74E+00	3.60E+00	2.44E-02	7.63E-04	7.47E-03	1.42E-01	-3.46E-02	-5.23E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
PERE	MJ	2.02E+01	1.99E+01	8.27E-02	2.03E-03	1.99E-02	2.17E-01	8.95E-03	-6.78E-01

PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.02E+01	1.99E+01	8.27E-02	2.03E-03	1.99E-02	2.17E-01	8.95E-03	-6.78E-01
PENRE	MJ	1.32E+02	1.22E+02	5.70E+00	1.56E-01	1.53E+00	1.65E+00	3.10E-01	-5.43E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.32E+02	1.22E+02	5.70E+00	1.56E-01	1.53E+00	1.65E+00	3.10E-01	-5.43E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	4.59E+00	4.45E+00	2.44E-02	7.68E-04	7.52E-03	1.41E-01	-3.49E-02	-5.35E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
HWD	kg	1.43E-02	5.85E-03	1.53E-04	4.41E-06	4.32E-05	-9.88E-05	8.36E-03	-4.68E-03
NHWD	kg	1.40E+00	3.51E-01	4.62E-01	1.23E-02	1.20E-01	1.51E-02	4.42E-01	-9.79E-03
RWD	kg	1.65E-04	1.59E-04	1.48E-06	3.09E-08	3.03E-07	3.97E-06	1.00E-07	-1.30E-05
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-02	0.00E+00
MER	kg	4.10E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-01	0.00E+00
EE	MJ	7.12E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST terminal box with 12 ports.

CML-IA baseline V3.11 / EU25

Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	1.03E-04	1.01E-04	1.28E-06	4.05E-08	3.38E-07	2.21E-07	6.90E-08	-1.87E-07
Abiotic depletion (fossil fuels)	MJ	1.50E+02	1.40E+02	6.53E+00	2.07E-01	1.73E+00	1.58E+00	3.48E-01	-5.20E+00
Global warming (GWP100a)	kg CO2 eq	1.02E+01	7.96E+00	4.52E-01	1.46E-02	1.22E-01	4.45E-01	1.25E+00	-4.64E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	3.25E-05	3.25E-05	7.93E-09	1.59E-10	1.33E-09	1.39E-09	4.64E-10	-2.32E-09
Photochemical oxidation	kg C2H4 eq	8.15E-03	8.02E-03	6.94E-05	2.24E-06	1.87E-05	2.57E-05	1.24E-05	-7.25E-05
Acidification	kg SO2 eq	3.16E-02	2.93E-02	1.14E-03	3.92E-05	3.27E-04	5.98E-04	2.27E-04	-1.91E-03
Eutrophication	kg PO4--- eq	2.36E-02	1.44E-02	3.12E-04	1.31E-05	1.09E-04	3.63E-04	8.40E-03	-1.11E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	3.26E-05	3.26E-05	1.05E-08	2.09E-10	1.74E-09	1.59E-09	5.53E-10	-2.94E-09
Global warming	kg CO2 eq	1.01E+01	7.86E+00	4.48E-01	1.45E-02	1.21E-01	4.45E-01	1.25E+00	-4.61E-01
Smog	kg O3 eq	4.81E-01	4.23E-01	3.20E-02	1.03E-03	8.56E-03	7.86E-03	8.66E-03	-2.70E-02
Acidification	kg SO2 eq	3.33E-02	3.06E-02	1.33E-03	4.60E-05	3.83E-04	6.38E-04	2.98E-04	-1.99E-03
Respiratory effects	kg PM2.5 eq	5.75E-03	5.17E-03	2.70E-04	8.84E-06	7.37E-05	2.03E-04	1.88E-05	-6.74E-04
Freshwater eutrophication	kg P eq	2.17E-03	9.66E-04	1.87E-05	1.04E-06	8.70E-06	4.49E-05	1.13E-03	-1.36E-04
Marine eutrophication	kg N eq	1.60E-02	1.50E-02	2.74E-04	8.79E-06	7.33E-05	7.21E-05	6.14E-04	-2.40E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Acidification	mol H+ eq	3.86E-02	3.56E-02	1.51E-03	5.11E-05	4.26E-04	7.20E-04	3.18E-04	-2.31E-03
Climate change	kg CO2 eq	1.03E+01	7.97E+00	4.55E-01	1.47E-02	1.22E-01	4.45E-01	1.26E+00	-5.24E-01
Climate change - Biogenic	kg CO2 eq	-3.24E-02	-3.26E-02	2.78E-04	4.91E-06	4.10E-05	-1.69E-04	1.11E-04	-5.90E-02
Climate change - Fossil	kg CO2 eq	1.03E+01	8.01E+00	4.55E-01	1.47E-02	1.22E-01	4.45E-01	1.26E+00	-4.64E-01
Climate change - Land use and LU change	kg CO2 eq	6.45E-03	5.95E-03	1.63E-04	6.64E-06	5.54E-05	2.63E-04	1.29E-05	-9.82E-04
Ecotoxicity, freshwater	CTUe	2.01E+03	1.99E+03	7.80E-01	3.43E-02	2.86E-01	1.06E+01	4.11E+00	-1.02E+00
Ecotoxicity, freshwater - inorganics	CTUe	1.80E+03	1.79E+03	7.49E-01	3.33E-02	2.77E-01	1.06E+01	4.11E+00	-9.94E-01
Ecotoxicity, freshwater - organics	CTUe	2.02E+02	2.02E+02	3.10E-02	1.07E-03	8.90E-03	7.77E-03	3.15E-03	-2.16E-02
Particulate matter	disease inc.	3.87E-07	3.19E-07	4.61E-08	1.43E-09	1.20E-08	5.68E-09	2.38E-09	-2.15E-08
Eutrophication, marine	kg N eq	1.21E-02	1.00E-02	5.11E-04	1.65E-05	1.37E-04	1.47E-04	1.22E-03	-4.77E-04
Eutrophication, freshwater	kg P eq	2.61E-03	2.49E-03	3.21E-05	1.59E-06	1.33E-05	7.21E-05	4.58E-06	-2.28E-04
Eutrophication, terrestrial	mol N eq	8.13E-02	7.12E-02	5.56E-03	1.79E-04	1.49E-03	1.40E-03	1.51E-03	-4.75E-03
Human toxicity, cancer	CTUh	4.52E-08	4.50E-08	7.43E-11	2.38E-12	1.98E-11	7.23E-11	1.06E-10	-5.09E-11
Human toxicity, cancer - inorganics	CTUh	1.74E-09	1.57E-09	3.19E-11	1.03E-12	8.55E-12	3.38E-11	9.29E-11	-3.33E-11
Human toxicity, cancer - organics	CTUh	4.35E-08	4.34E-08	4.24E-11	1.35E-12	1.13E-11	3.85E-11	1.32E-11	-1.76E-11
Human toxicity, non-cancer	CTUh	1.02E-07	9.08E-08	4.28E-09	1.34E-10	1.12E-09	1.71E-09	4.16E-09	-2.53E-09
Human toxicity, non-cancer - inorganics	CTUh	9.69E-08	8.59E-08	4.02E-09	1.26E-10	1.05E-09	1.69E-09	4.10E-09	-2.46E-09
Human toxicity, non-cancer - organics	CTUh	5.18E-09	4.76E-09	2.66E-10	8.20E-12	6.84E-11	1.49E-11	6.20E-11	-6.89E-11
Ionising radiation	kBq U-235 eq	9.09E-01	8.79E-01	7.45E-03	1.81E-04	1.51E-03	1.98E-02	4.95E-04	-6.54E-02
Land use	Pt	4.16E+01	3.24E+01	6.69E+00	2.08E-01	1.73E+00	2.06E-01	3.68E-01	-8.76E-01
Ozone depletion	kg CFC11 eq	2.93E-05	2.93E-05	9.95E-09	1.98E-10	1.65E-09	1.53E-09	5.29E-10	-2.75E-09
Photochemical ozone formation	kg NMVOC eq	4.48E-02	4.09E-02	2.39E-03	7.34E-05	6.12E-04	4.10E-04	4.06E-04	-1.40E-03
Resource use, fossils	MJ	1.67E+02	1.56E+02	6.66E+00	2.10E-01	1.75E+00	1.89E+00	3.56E-01	-6.25E+00
Resource use, minerals and metals	kg Sb eq	1.03E-04	1.01E-04	1.28E-06	4.05E-08	3.38E-07	2.21E-07	6.90E-08	-1.84E-07
Water use	m3 depriv.	5.02E+00	4.85E+00	3.03E-02	1.09E-03	9.12E-03	1.73E-01	-4.31E-02	-6.41E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use									
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
PERE	MJ	2.21E+01	2.17E+01	1.03E-01	2.91E-03	2.43E-02	2.65E-01	1.11E-02	-8.30E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.21E+01	2.17E+01	1.03E-01	2.91E-03	2.43E-02	2.65E-01	1.11E-02	-8.30E-01
PENRE	MJ	1.70E+02	1.59E+02	7.08E+00	2.23E-01	1.86E+00	2.01E+00	3.83E-01	-6.65E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.70E+02	1.59E+02	7.08E+00	2.23E-01	1.86E+00	2.01E+00	3.83E-01	-6.65E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	6.30E+00	6.13E+00	3.03E-02	1.10E-03	9.19E-03	1.72E-01	-4.34E-02	-6.56E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows									
Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
HWD	kg	1.70E-02	6.50E-03	1.90E-04	6.33E-06	5.28E-05	-1.21E-04	1.04E-02	-5.73E-03
NHWD	kg	1.70E+00	4.00E-01	5.74E-01	1.76E-02	1.47E-01	1.85E-02	5.46E-01	-1.20E-02
RWD	kg	2.00E-04	1.92E-04	1.83E-06	4.44E-08	3.70E-07	4.85E-06	1.24E-07	-1.60E-05
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-02	0.00E+00
MER	kg	5.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-01	0.00E+00
EE	MJ	8.72E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST terminal box with 8 ports splitter.

CML-IA baseline V3.11 / EU25									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	7.46E-05	7.32E-05	9.58E-07	2.76E-08	2.56E-07	1.68E-07	5.60E-08	-1.53E-07
Abiotic depletion (fossil fuels)	MJ	1.10E+02	1.03E+02	4.90E+00	1.41E-01	1.31E+00	1.19E+00	2.81E-01	-4.28E+00
Global warming (GWP100a)	kg CO2 eq	7.44E+00	5.64E+00	3.39E-01	9.95E-03	9.22E-02	3.37E-01	1.02E+00	-3.81E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	2.29E-05	2.29E-05	5.95E-09	1.08E-10	1.00E-09	1.05E-09	3.75E-10	-1.91E-09
Photochemical oxidation	kg C2H4 eq	5.54E-03	5.44E-03	5.21E-05	1.53E-06	1.42E-05	1.95E-05	1.00E-05	-5.96E-05
Acidification	kg SO2 eq	2.22E-02	2.05E-02	8.56E-04	2.67E-05	2.48E-04	4.53E-04	1.84E-04	-1.57E-03
Eutrophication	kg PO4--- eq	1.68E-02	9.38E-03	2.34E-04	8.92E-06	8.26E-05	2.75E-04	6.82E-03	-9.12E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	2.30E-05	2.30E-05	7.86E-09	1.42E-10	1.32E-09	1.21E-09	4.47E-10	-2.42E-09
Global warming	kg CO2 eq	7.36E+00	5.57E+00	3.36E-01	9.87E-03	9.15E-02	3.37E-01	1.02E+00	-3.79E-01
Smog	kg O3 eq	3.42E-01	2.98E-01	2.40E-02	7.00E-04	6.48E-03	5.95E-03	7.03E-03	-2.22E-02
Acidification	kg SO2 eq	2.34E-02	2.14E-02	9.99E-04	3.14E-05	2.90E-04	4.83E-04	2.42E-04	-1.63E-03
Respiratory effects	kg PM2.5 eq	3.42E-03	2.99E-03	2.02E-04	6.03E-06	5.58E-05	1.54E-04	1.52E-05	-5.54E-04
Freshwater eutrophication	kg P eq	1.57E-03	5.99E-04	1.40E-05	7.11E-07	6.59E-06	3.40E-05	9.17E-04	-1.12E-04
Marine eutrophication	kg N eq	1.09E-02	1.01E-02	2.05E-04	5.99E-06	5.55E-05	5.46E-05	4.98E-04	-1.97E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Acidification	mol H+ eq	2.72E-02	2.49E-02	1.13E-03	3.49E-05	3.23E-04	5.46E-04	2.58E-04	-1.90E-03
Climate change	kg CO2 eq	7.44E+00	5.64E+00	3.41E-01	1.00E-02	9.28E-02	3.37E-01	1.02E+00	-4.31E-01
Climate change - Biogenic	kg CO2 eq	-4.06E-02	-4.08E-02	2.08E-04	3.35E-06	3.10E-05	-1.28E-04	9.03E-05	-4.85E-02
Climate change - Fossil	kg CO2 eq	7.48E+00	5.68E+00	3.41E-01	1.00E-02	9.27E-02	3.37E-01	1.02E+00	-3.81E-01
Climate change - Land use and LU change	kg CO2 eq	4.64E-03	4.27E-03	1.22E-04	4.53E-06	4.19E-05	1.99E-04	1.05E-05	-8.08E-04
Ecotoxicity, freshwater	CTUe	1.34E+03	1.33E+03	5.85E-01	2.34E-02	2.17E-01	8.03E+00	3.34E+00	-8.35E-01
Ecotoxicity, freshwater - inorganics	CTUe	1.21E+03	1.19E+03	5.61E-01	2.27E-02	2.10E-01	8.02E+00	3.34E+00	-8.17E-01
Ecotoxicity, freshwater - organics	CTUe	1.36E+02	1.36E+02	2.33E-02	7.28E-04	6.74E-03	5.89E-03	2.55E-03	-1.78E-02

Particulate matter	disease inc.	2.61E-07	2.10E-07	3.45E-08	9.78E-10	9.06E-09	4.30E-09	1.92E-09	-1.77E-08
Eutrophication, marine	kg N eq	8.55E-03	6.95E-03	3.83E-04	1.12E-05	1.04E-04	1.11E-04	9.89E-04	-3.92E-04
Eutrophication, freshwater	kg P eq	1.68E-03	1.58E-03	2.41E-05	1.09E-06	1.01E-05	5.46E-05	3.72E-06	-1.88E-04
Eutrophication, terrestrial	mol N eq	5.77E-02	5.00E-02	4.17E-03	1.22E-04	1.13E-03	1.06E-03	1.22E-03	-3.90E-03
Human toxicity, cancer	CTUh	3.01E-08	2.99E-08	5.57E-11	1.62E-12	1.50E-11	5.48E-11	8.63E-11	-4.18E-11
Human toxicity, cancer - inorganics	CTUh	1.03E-09	8.93E-10	2.39E-11	6.99E-13	6.48E-12	2.56E-11	7.55E-11	-2.74E-11
Human toxicity, cancer - organics	CTUh	2.91E-08	2.90E-08	3.18E-11	9.21E-13	8.53E-12	2.91E-11	1.08E-11	-1.44E-11
Human toxicity, non-cancer	CTUh	7.26E-08	6.37E-08	3.21E-09	9.14E-11	8.47E-10	1.30E-09	3.39E-09	-2.08E-09
Human toxicity, non-cancer - inorganics	CTUh	6.87E-08	6.02E-08	3.01E-09	8.58E-11	7.95E-10	1.28E-09	3.34E-09	-2.03E-09
Human toxicity, non-cancer - organics	CTUh	3.77E-09	3.46E-09	1.99E-10	5.59E-12	5.18E-11	1.13E-11	5.03E-11	-5.67E-11
Ionising radiation	kBq U-235 eq	6.79E-01	6.56E-01	5.59E-03	1.24E-04	1.15E-03	1.50E-02	4.02E-04	-5.38E-02
Land use	Pt	2.98E+01	2.29E+01	5.02E+00	1.42E-01	1.31E+00	1.56E-01	2.95E-01	-7.20E-01
Ozone depletion	kg CFC11 eq	2.07E-05	2.07E-05	7.46E-09	1.35E-10	1.25E-09	1.16E-09	4.28E-10	-2.26E-09
Photochemical ozone formation	kg NMVOC eq	3.19E-02	2.90E-02	1.79E-03	5.01E-05	4.64E-04	3.10E-04	3.29E-04	-1.15E-03
Resource use, fossils	MJ	1.23E+02	1.14E+02	4.99E+00	1.43E-01	1.33E+00	1.43E+00	2.87E-01	-5.14E+00
Resource use, minerals and metals	kg Sb eq	7.46E-05	7.31E-05	9.58E-07	2.76E-08	2.56E-07	1.67E-07	5.60E-08	-1.51E-07
Water use	m3 depriv.	3.64E+00	3.52E+00	2.27E-02	7.46E-04	6.91E-03	1.31E-01	-3.50E-02	-5.27E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
PERE	MJ	1.89E+01	1.86E+01	7.70E-02	1.98E-03	1.84E-02	2.01E-01	9.00E-03	-6.82E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.89E+01	1.86E+01	7.70E-02	1.98E-03	1.84E-02	2.01E-01	9.00E-03	-6.82E-01
PENRE	MJ	1.26E+02	1.17E+02	5.30E+00	1.52E-01	1.41E+00	1.53E+00	3.10E-01	-5.46E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.26E+02	1.17E+02	5.30E+00	1.52E-01	1.41E+00	1.53E+00	3.10E-01	-5.46E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	4.46E+00	4.33E+00	2.27E-02	7.51E-04	6.96E-03	1.30E-01	-3.53E-02	-5.39E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
HWD	kg	1.21E-02	3.57E-03	1.42E-04	4.32E-06	4.00E-05	-9.14E-05	8.43E-03	-4.71E-03
NHWD	kg	1.28E+00	2.86E-01	4.30E-01	1.20E-02	1.11E-01	1.40E-02	4.31E-01	-9.86E-03
RWD	kg	1.52E-04	1.46E-04	1.37E-06	3.03E-08	2.80E-07	3.68E-06	1.01E-07	-1.31E-05
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	9.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.79E-04	0.00E+00
MER	kg	4.13E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-01	0.00E+00
EE	MJ	7.17E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

LCA Results – HST cable (per 1 meter) and cable accessories (per piece)

Results shown below are for HST cable (per 1 meter).

CML-IA baseline V3.11 / EU25								
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**C2**	**C3**	**C4**	**D**
Abiotic depletion	kg Sb eq	9.72E-07	9.38E-07	2.17E-08	6.20E-09	4.21E-09	1.41E-09	-5.68E-09
Abiotic depletion (fossil fuels)	MJ	1.74E+00	1.56E+00	1.11E-01	3.17E-02	2.99E-02	7.07E-03	-1.58E-01
Global warming (GWP100a)	kg CO2 eq	1.06E-01	6.21E-02	7.67E-03	2.19E-03	8.46E-03	2.58E-02	-1.41E-02
Ozone layer depletion (ODP)	kg CFC-11 eq	5.22E-08	5.20E-08	1.35E-10	3.84E-11	2.63E-11	9.46E-12	-7.07E-11
Photochemical oxidation	kg C2H4 eq	1.97E-05	1.75E-05	1.18E-06	3.36E-07	4.88E-07	2.51E-07	-2.21E-06
Acidification	kg SO2 eq	2.39E-04	1.98E-04	1.94E-05	5.53E-06	1.14E-05	4.64E-06	-5.81E-05
Eutrophication	kg PO4--- eq	2.65E-04	8.18E-05	5.29E-06	1.51E-06	6.90E-06	1.70E-04	-3.38E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008								
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**C2**	**C3**	**C4**	**D**
Ozone depletion	kg CFC-11 eq	7.00E-08	6.97E-08	1.78E-10	5.08E-11	3.02E-11	1.13E-11	-8.95E-11
Global warming	kg CO2 eq	1.05E-01	6.11E-02	7.60E-03	2.17E-03	8.44E-03	2.57E-02	-1.40E-02
Smog	kg O3 eq	3.95E-03	2.93E-03	5.42E-04	1.55E-04	1.49E-04	1.78E-04	-8.23E-04
Acidification	kg SO2 eq	2.51E-04	2.04E-04	2.26E-05	6.46E-06	1.21E-05	6.11E-06	-6.05E-05
Respiratory effects	kg PM2.5 eq	4.06E-05	3.05E-05	4.58E-06	1.31E-06	3.86E-06	3.82E-07	-2.05E-05
Freshwater eutrophication	kg P eq	3.31E-05	9.05E-06	3.17E-07	9.06E-08	8.52E-07	2.28E-05	-4.15E-06
Marine eutrophication	kg N eq	4.64E-05	2.67E-05	4.64E-06	1.33E-06	1.37E-06	1.24E-05	-7.30E-06

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set								
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**C2**	**C3**	**C4**	**D**
Acidification	mol H+ eq	2.94E-04	2.41E-04	2.55E-05	7.29E-06	1.37E-05	6.51E-06	-7.02E-05
Climate change	kg CO2 eq	1.07E-01	6.29E-02	7.72E-03	2.21E-03	8.46E-03	2.58E-02	-1.59E-02
Climate change - Biogenic	kg CO2 eq	2.59E-04	2.54E-04	4.72E-06	1.35E-06	-3.21E-06	2.28E-06	-1.80E-03
Climate change - Fossil	kg CO2 eq	1.07E-01	6.27E-02	7.72E-03	2.20E-03	8.46E-03	2.58E-02	-1.41E-02
Climate change - Land use and LU change	kg CO2 eq	5.19E-05	4.31E-05	2.77E-06	7.92E-07	4.99E-06	2.64E-07	-2.99E-05
Ecotoxicity, freshwater	CTUe	4.89E-01	1.86E-01	1.32E-02	3.78E-03	2.01E-01	8.40E-02	-3.09E-02
Ecotoxicity, freshwater - inorganics	CTUe	4.77E-01	1.76E-01	1.27E-02	3.63E-03	2.01E-01	8.39E-02	-3.02E-02
Ecotoxicity, freshwater - organics	CTUe	1.13E-02	1.04E-02	5.26E-04	1.50E-04	1.48E-04	6.43E-05	-6.59E-04
Particulate matter	disease inc.	3.21E-09	2.05E-09	7.81E-10	2.23E-10	1.08E-10	4.83E-11	-6.54E-10
Eutrophication, marine	kg N eq	9.02E-05	5.16E-05	8.67E-06	2.48E-06	2.78E-06	2.47E-05	-1.45E-05
Eutrophication, freshwater	kg P eq	1.60E-05	1.38E-05	5.44E-07	1.56E-07	1.37E-06	9.39E-08	-6.95E-06
Eutrophication, terrestrial	mol N eq	6.88E-04	5.09E-04	9.44E-05	2.70E-05	2.66E-05	3.09E-05	-1.45E-04
Human toxicity, cancer	CTUh	2.11E-11	1.59E-11	1.26E-12	3.60E-13	1.37E-12	2.18E-12	-1.55E-12
Human toxicity, cancer - inorganics	CTUh	1.21E-11	8.81E-12	5.42E-13	1.55E-13	6.42E-13	1.91E-12	-1.01E-12
Human toxicity, cancer - organics	CTUh	9.04E-12	7.11E-12	7.19E-13	2.05E-13	7.31E-13	2.72E-13	-5.34E-13
Human toxicity, non-cancer	CTUh	9.42E-10	7.31E-10	7.27E-11	2.08E-11	3.25E-11	8.55E-11	-7.71E-11
Human toxicity, non-cancer - inorganics	CTUh	8.75E-10	6.71E-10	6.82E-11	1.95E-11	3.22E-11	8.42E-11	-7.50E-11
Human toxicity, non-cancer - organics	CTUh	6.74E-11	6.01E-11	4.51E-12	1.29E-12	2.83E-13	1.25E-12	-2.10E-12

Ionising radiation	kBq U-235 eq	5.38E-03	4.83E-03	1.26E-04	3.61E-05	3.77E-04	1.01E-05	-1.99E-03
Land use	Pt	3.21E-01	1.63E-01	1.14E-01	3.24E-02	3.91E-03	7.36E-03	-2.67E-02
Ozone depletion	kg CFC11 eq	7.77E-08	7.74E-08	1.69E-10	4.82E-11	2.90E-11	1.08E-11	-8.38E-11
Photochemical ozone formation	kg NMVOC eq	4.41E-04	3.73E-04	4.05E-05	1.16E-05	7.78E-06	8.31E-06	-4.27E-05
Resource use, fossils	MJ	1.83E+00	1.65E+00	1.13E-01	3.22E-02	3.59E-02	7.23E-03	-1.90E-01
Resource use, minerals and metals	kg Sb eq	9.72E-07	9.38E-07	2.17E-08	6.19E-09	4.19E-09	1.41E-09	-5.59E-09
Water use	m3 depriv.	2.68E-02	2.38E-02	5.13E-04	1.47E-04	3.29E-03	-8.59E-04	-1.95E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	C2	C3	C4	D
PERE	MJ	2.30E-01	2.23E-01	1.74E-03	4.97E-04	5.03E-03	2.27E-04	-2.53E-02
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.30E-01	2.23E-01	1.74E-03	4.97E-04	5.03E-03	2.27E-04	-2.53E-02
PENRE	MJ	1.97E+00	1.77E+00	1.20E-01	3.43E-02	3.82E-02	7.79E-03	-2.02E-01
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.97E+00	1.77E+00	1.20E-01	3.43E-02	3.82E-02	7.79E-03	-2.02E-01
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.63E-02	2.32E-02	5.14E-04	1.47E-04	3.27E-03	-8.65E-04	-2.00E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	C2	C3	C4	D
HWD	kg	2.88E-04	7.27E-05	3.22E-06	9.20E-07	-2.29E-06	2.13E-04	-1.75E-04
NHWD	kg	3.01E-02	6.49E-03	9.73E-03	2.78E-03	3.51E-04	1.07E-02	-3.65E-04
RWD	kg	1.36E-06	1.22E-06	3.11E-08	8.87E-09	9.21E-08	2.54E-09	-4.86E-07
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	1.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-02	0.00E+00
EE	MJ	2.65E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-01	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST Cable accessories (per 1 piece).

CML-IA baseline V3.11 / EU25

Impact category	Unit	Total	A1-A3	A4	C2	C4	D
Abiotic depletion	kg Sb eq	2.94E-07	2.71E-07	1.76E-08	5.04E-09	1.15E-09	-2.88E-09
Abiotic depletion (fossil fuels)	MJ	1.95E+00	1.83E+00	9.01E-02	2.57E-02	5.75E-03	-8.02E-02
Global warming (GWP100a)	kg CO2 eq	1.26E-01	9.71E-02	6.24E-03	1.78E-03	2.10E-02	-7.15E-03
Ozone layer depletion (ODP)	kg CFC-11 eq	2.31E-09	2.16E-09	1.09E-10	3.12E-11	7.70E-12	-3.58E-11
Photochemical oxidation	kg C2H4 eq	2.90E-05	2.76E-05	9.57E-07	2.74E-07	2.04E-07	-1.12E-06
Acidification	kg SO2 eq	3.68E-04	3.44E-04	1.57E-05	4.50E-06	3.78E-06	-2.95E-05

Eutrophication	kg PO4--- eq	2.58E-04	1.15E-04	4.30E-06	1.23E-06	1.38E-04	-1.71E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	C2	C4	D
Ozone depletion	kg CFC-11 eq	2.98E-09	2.78E-09	1.45E-10	4.13E-11	9.16E-12	-4.53E-11
Global warming	kg CO2 eq	1.25E-01	9.59E-02	6.18E-03	1.77E-03	2.09E-02	-7.11E-03
Smog	kg O3 eq	7.79E-03	7.08E-03	4.41E-04	1.26E-04	1.44E-04	-4.17E-04
Acidification	kg SO2 eq	4.05E-04	3.76E-04	1.84E-05	5.25E-06	4.97E-06	-3.06E-05
Respiratory effects	kg PM2.5 eq	4.73E-05	4.23E-05	3.72E-06	1.06E-06	3.11E-07	-1.04E-05
Freshwater eutrophication	kg P eq	2.93E-05	1.04E-05	2.58E-07	7.37E-08	1.86E-05	-2.10E-06
Marine eutrophication	kg N eq	7.65E-05	6.15E-05	3.77E-06	1.08E-06	1.01E-05	-3.70E-06

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set

Impact category	Unit	Total	A1-A3	A4	C2	C4	D
Acidification	mol H+ eq	4.65E-04	4.34E-04	2.08E-05	5.93E-06	5.29E-06	-3.56E-05
Climate change	kg CO2 eq	1.22E-01	9.34E-02	6.28E-03	1.79E-03	2.10E-02	-8.08E-03
Climate change - Biogenic	kg CO2 eq	-4.33E-03	-4.34E-03	3.83E-06	1.10E-06	1.85E-06	-9.10E-04
Climate change - Fossil	kg CO2 eq	1.27E-01	9.77E-02	6.27E-03	1.79E-03	2.10E-02	-7.15E-03
Climate change - Land use and LU change	kg CO2 eq	9.45E-05	9.14E-05	2.25E-06	6.44E-07	2.14E-07	-1.51E-05
Ecotoxicity, freshwater	CTUe	3.01E-01	2.18E-01	1.08E-02	3.07E-03	6.83E-02	-1.57E-02
Ecotoxicity, freshwater - inorganics	CTUe	2.57E-01	1.76E-01	1.03E-02	2.95E-03	6.82E-02	-1.53E-02
Ecotoxicity, freshwater - organics	CTUe	4.34E-02	4.28E-02	4.28E-04	1.22E-04	5.23E-05	-3.34E-04
Particulate matter	disease inc.	3.80E-09	2.95E-09	6.35E-10	1.81E-10	3.93E-11	-3.31E-10
Eutrophication, marine	kg N eq	1.49E-04	1.20E-04	7.05E-06	2.01E-06	2.01E-05	-7.35E-06
Eutrophication, freshwater	kg P eq	1.81E-05	1.74E-05	4.43E-07	1.26E-07	7.64E-08	-3.52E-06
Eutrophication, terrestrial	mol N eq	1.35E-03	1.22E-03	7.67E-05	2.19E-05	2.51E-05	-7.32E-05
Human toxicity, cancer	CTUh	2.68E-11	2.37E-11	1.02E-12	2.93E-13	1.78E-12	-7.84E-13
Human toxicity, cancer - inorganics	CTUh	9.54E-12	7.42E-12	4.40E-13	1.26E-13	1.55E-12	-5.14E-13
Human toxicity, cancer - organics	CTUh	1.72E-11	1.62E-11	5.84E-13	1.67E-13	2.21E-13	-2.71E-13
Human toxicity, non-cancer	CTUh	2.06E-09	1.91E-09	5.91E-11	1.69E-11	6.95E-11	-3.90E-11
Human toxicity, non-cancer - inorganics	CTUh	8.87E-10	7.47E-10	5.54E-11	1.58E-11	6.85E-11	-3.80E-11
Human toxicity, non-cancer - organics	CTUh	1.17E-09	1.16E-09	3.66E-12	1.05E-12	1.02E-12	-1.06E-12
Ionising radiation	kBq U-235 eq	6.55E-03	6.41E-03	1.03E-04	2.94E-05	8.24E-06	-1.01E-03
Land use	Pt	7.61E-01	6.36E-01	9.23E-02	2.64E-02	5.99E-03	-1.35E-02
Ozone depletion	kg CFC11 eq	2.80E-09	2.62E-09	1.37E-10	3.92E-11	8.77E-12	-4.24E-11
Photochemical ozone formation	kg NMVOC eq	5.64E-04	5.15E-04	3.29E-05	9.40E-06	6.76E-06	-2.16E-05
Resource use, fossils	MJ	2.06E+00	1.94E+00	9.17E-02	2.62E-02	5.88E-03	-9.63E-02
Resource use, minerals and metals	kg Sb eq	2.94E-07	2.70E-07	1.76E-08	5.03E-09	1.15E-09	-2.83E-09
Water use	m3 depriv.	2.79E-02	2.81E-02	4.17E-04	1.19E-04	-6.99E-04	-9.88E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	C2	C4	D
PERE	MJ	1.46E-01	1.57E-01	1.42E-03	4.04E-04	1.85E-04	-1.28E-02

PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.46E-01	1.57E-01	1.42E-03	4.04E-04	1.85E-04	-1.28E-02
PENRE	MJ	2.10E+00	2.08E+00	9.76E-02	2.79E-02	6.34E-03	-1.02E-01
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	2.10E+00	2.08E+00	9.76E-02	2.79E-02	6.34E-03	-1.02E-01
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.61E-02	2.72E-02	4.18E-04	1.19E-04	-7.03E-04	-1.01E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows							
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**C2**	**C4**	**D**
HWD	kg	1.57E-04	6.90E-05	2.62E-06	7.48E-07	1.73E-04	-8.84E-05
NHWD	kg	2.22E-02	3.44E-03	7.91E-03	2.26E-03	8.73E-03	-1.85E-04
RWD	kg	1.42E-06	1.63E-06	2.52E-08	7.21E-09	2.07E-09	-2.46E-07
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	8.50E-03	0.00E+00	0.00E+00	0.00E+00	8.50E-03	0.00E+00
EE	MJ	1.34E-01	0.00E+00	0.00E+00	0.00E+00	1.34E-01	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

LCA Results – HST Packaging

Results shown below are for HST Packaging with cable length (33~500ft)

CML-IA baseline V3.11 / EU25					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Abiotic depletion	kg Sb eq	2.01E-06	1.54E-06	3.68E-07	1.05E-07
Abiotic depletion (fossil fuels)	MJ	8.12E+00	5.71E+00	1.88E+00	5.37E-01
Global warming (GWP100a)	kg CO2 eq	6.15E-01	4.47E-01	1.30E-01	3.72E-02
Ozone layer depletion (ODP)	kg CFC-11 eq	1.12E-08	8.29E-09	2.28E-09	6.52E-10
Photochemical oxidation	kg C2H4 eq	1.05E-04	7.98E-05	2.00E-05	5.71E-06
Acidification	kg SO2 eq	1.91E-03	1.49E-03	3.29E-04	9.39E-05
Eutrophication	kg PO4--- eq	1.23E-03	1.12E-03	8.98E-05	2.57E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Ozone depletion	kg CFC-11 eq	1.44E-08	1.05E-08	3.02E-09	8.62E-10
Global warming	kg CO2 eq	6.09E-01	4.43E-01	1.29E-01	3.69E-02
Smog	kg O3 eq	4.01E-02	2.82E-02	9.21E-03	2.63E-03
Acidification	kg SO2 eq	2.14E-03	1.65E-03	3.84E-04	1.10E-04
Respiratory effects	kg PM2.5 eq	2.77E-04	1.77E-04	7.77E-05	2.22E-05

Freshwater eutrophication	kg P eq	1.15E-04	1.08E-04	5.38E-06	1.54E-06
Marine eutrophication	kg N eq	4.75E-04	3.74E-04	7.88E-05	2.25E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Acidification	mol H+ eq	2.54E-03	1.98E-03	4.33E-04	1.24E-04
Climate change	kg CO2 eq	5.23E-01	3.54E-01	1.31E-01	3.75E-02
Climate change - Biogenic	kg CO2 eq	-8.85E-02	-8.86E-02	8.01E-05	2.29E-05
Climate change - Fossil	kg CO2 eq	6.09E-01	4.40E-01	1.31E-01	3.74E-02
Climate change - Land use and LU change	kg CO2 eq	2.99E-03	2.93E-03	4.70E-05	1.34E-05
Ecotoxicity, freshwater	CTUe	3.36E+00	3.07E+00	2.25E-01	6.42E-02
Ecotoxicity, freshwater - inorganics	CTUe	2.50E+00	2.22E+00	2.16E-01	6.16E-02
Ecotoxicity, freshwater - organics	CTUe	8.65E-01	8.54E-01	8.94E-03	2.55E-03
Particulate matter	disease inc.	3.72E-08	2.01E-08	1.33E-08	3.79E-09
Eutrophication, marine	kg N eq	1.05E-03	8.63E-04	1.47E-04	4.21E-05
Eutrophication, freshwater	kg P eq	2.12E-04	2.01E-04	9.24E-06	2.64E-06
Eutrophication, terrestrial	mol N eq	8.31E-03	6.25E-03	1.60E-03	4.58E-04
Human toxicity, cancer	CTUh	1.42E-10	1.15E-10	2.14E-11	6.11E-12
Human toxicity, cancer - inorganics	CTUh	5.59E-11	4.41E-11	9.20E-12	2.63E-12
Human toxicity, cancer - organics	CTUh	8.64E-11	7.07E-11	1.22E-11	3.48E-12
Human toxicity, non-cancer	CTUh	6.82E-09	5.24E-09	1.23E-09	3.52E-10
Human toxicity, non-cancer - inorganics	CTUh	5.49E-09	4.00E-09	1.16E-09	3.31E-10
Human toxicity, non-cancer - organics	CTUh	1.33E-09	1.23E-09	7.65E-11	2.19E-11
Ionising radiation	kBq U-235 eq	4.32E-02	4.04E-02	2.15E-03	6.13E-04
Land use	Pt	1.65E+01	1.40E+01	1.93E+00	5.51E-01
Ozone depletion	kg CFC11 eq	1.38E-08	1.01E-08	2.87E-09	8.19E-10
Photochemical ozone formation	kg NMVOC eq	2.58E-03	1.70E-03	6.87E-04	1.96E-04
Resource use, fossils	MJ	9.03E+00	6.56E+00	1.92E+00	5.47E-01
Resource use, minerals and metals	kg Sb eq	1.93E-06	1.46E-06	3.68E-07	1.05E-07
Water use	m3 depriv.	2.85E-01	2.74E-01	8.71E-03	2.49E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use					
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
PERE	MJ	2.91E+00	2.87E+00	2.96E-02	8.45E-03
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.91E+00	2.87E+00	2.96E-02	8.45E-03
PENRE	MJ	9.70E+00	7.08E+00	2.04E+00	5.82E-01
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	9.70E+00	7.08E+00	2.04E+00	5.82E-01
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

FW	m^3	2.79E-01	2.68E-01	8.73E-03	2.49E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5
HWD	kg	3.72E-03	3.65E-03	5.47E-05	1.56E-05
NHWD	kg	2.91E-01	7.83E-02	1.65E-01	4.72E-02
RWD	kg	1.10E-05	1.03E-05	5.27E-07	1.51E-07
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	3.55E-01	0.00E+00	0.00E+00	3.55E-01
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST Packaging with cable length (821ft)

CML-IA baseline V3.11 / EU25

Impact category	Unit	Total	A1-A3	A4	A5
Abiotic depletion	kg Sb eq	1.50E-05	1.15E-05	2.75E-06	7.87E-07
Abiotic depletion (fossil fuels)	MJ	5.47E+01	3.66E+01	1.41E+01	4.02E+00
Global warming (GWP100a)	kg CO2 eq	4.18E+00	2.93E+00	9.74E-01	2.78E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	8.34E-08	6.15E-08	1.71E-08	4.88E-09
Photochemical oxidation	kg C2H4 eq	7.16E-04	5.23E-04	1.50E-04	4.27E-05
Acidification	kg SO2 eq	1.28E-02	9.66E-03	2.46E-03	7.03E-04
Eutrophication	kg PO4--- eq	8.89E-03	8.03E-03	6.72E-04	1.92E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	A5
Ozone depletion	kg CFC-11 eq	1.07E-07	7.83E-08	2.26E-08	6.45E-09
Global warming	kg CO2 eq	4.15E+00	2.90E+00	9.66E-01	2.76E-01
Smog	kg O3 eq	2.84E-01	1.96E-01	6.89E-02	1.97E-02
Acidification	kg SO2 eq	1.46E-02	1.09E-02	2.87E-03	8.20E-04
Respiratory effects	kg PM2.5 eq	1.97E-03	1.22E-03	5.81E-04	1.66E-04
Freshwater eutrophication	kg P eq	8.47E-04	7.95E-04	4.03E-05	1.15E-05
Marine eutrophication	kg N eq	3.35E-03	2.59E-03	5.89E-04	1.68E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set

Impact category	Unit	Total	A1-A3	A4	A5
Acidification	mol H+ eq	1.72E-02	1.31E-02	3.24E-03	9.26E-04
Climate change	kg CO2 eq	3.48E+00	2.22E+00	9.81E-01	2.80E-01
Climate change - Biogenic	kg CO2 eq	-6.76E-01	-6.76E-01	5.99E-04	1.71E-04
Climate change - Fossil	kg CO2 eq	4.13E+00	2.87E+00	9.80E-01	2.80E-01
Climate change - Land use and LU change	kg CO2 eq	2.27E-02	2.22E-02	3.52E-04	1.01E-04

Ecotoxicity, freshwater	CTUe	2.51E+01	2.29E+01	1.68E+00	4.80E-01
Ecotoxicity, freshwater - inorganics	CTUe	1.86E+01	1.65E+01	1.61E+00	4.61E-01
Ecotoxicity, freshwater - organics	CTUe	6.50E+00	6.41E+00	6.69E-02	1.91E-02
Particulate matter	disease inc.	2.61E-07	1.34E-07	9.92E-08	2.83E-08
Eutrophication, marine	kg N eq	7.25E-03	5.83E-03	1.10E-03	3.15E-04
Eutrophication, freshwater	kg P eq	1.57E-03	1.48E-03	6.91E-05	1.98E-05
Eutrophication, terrestrial	mol N eq	5.93E-02	4.39E-02	1.20E-02	3.42E-03
Human toxicity, cancer	CTUh	1.06E-09	8.53E-10	1.60E-10	4.57E-11
Human toxicity, cancer - inorganics	CTUh	4.10E-10	3.21E-10	6.88E-11	1.97E-11
Human toxicity, cancer - organics	CTUh	6.49E-10	5.31E-10	9.13E-11	2.61E-11
Human toxicity, non-cancer	CTUh	5.13E-08	3.94E-08	9.23E-09	2.64E-09
Human toxicity, non-cancer - inorganics	CTUh	4.14E-08	3.02E-08	8.66E-09	2.47E-09
Human toxicity, non-cancer - organics	CTUh	9.95E-09	9.21E-09	5.72E-10	1.64E-10
Ionising radiation	kBq U-235 eq	3.11E-01	2.91E-01	1.61E-02	4.59E-03
Land use	Pt	1.25E+02	1.06E+02	1.44E+01	4.12E+00
Ozone depletion	kg CFC11 eq	1.03E-07	7.53E-08	2.14E-08	6.13E-09
Photochemical ozone formation	kg NMVOC eq	1.83E-02	1.17E-02	5.14E-03	1.47E-03
Resource use, fossils	MJ	6.06E+01	4.21E+01	1.43E+01	4.10E+00
Resource use, minerals and metals	kg Sb eq	1.44E-05	1.09E-05	2.75E-06	7.87E-07
Water use	m3 depriv.	1.63E+00	1.55E+00	6.52E-02	1.86E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5
PERE	MJ	2.19E+01	2.17E+01	2.21E-01	6.32E-02
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.19E+01	2.17E+01	2.21E-01	6.32E-02
PENRE	MJ	6.50E+01	4.55E+01	1.52E+01	4.36E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	6.50E+01	4.55E+01	1.52E+01	4.36E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	1.62E+00	1.53E+00	6.53E-02	1.87E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5
HWD	kg	2.83E-02	2.78E-02	4.09E-04	1.17E-04
NHWD	kg	2.18E+00	5.91E-01	1.24E+00	3.53E-01
RWD	kg	7.92E-05	7.41E-05	3.94E-06	1.13E-06
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	2.65E+00	0.00E+00	0.00E+00	2.65E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST Packaging with cable length (1150ft)

CML-IA baseline V3.11 / EU25					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Abiotic depletion	kg Sb eq	1.96E-05	1.50E-05	3.61E-06	1.03E-06
Abiotic depletion (fossil fuels)	MJ	7.06E+01	4.69E+01	1.84E+01	5.26E+00
Global warming (GWP100a)	kg CO2 eq	5.40E+00	3.76E+00	1.28E+00	3.64E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	1.09E-07	8.03E-08	2.24E-08	6.39E-09
Photochemical oxidation	kg C2H4 eq	9.24E-04	6.72E-04	1.96E-04	5.60E-05
Acidification	kg SO2 eq	1.65E-02	1.24E-02	3.22E-03	9.20E-04
Eutrophication	kg PO4--- eq	1.16E-02	1.05E-02	8.80E-04	2.51E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Ozone depletion	kg CFC-11 eq	1.40E-07	1.02E-07	2.96E-08	8.45E-09
Global warming	kg CO2 eq	5.36E+00	3.73E+00	1.26E+00	3.61E-01
Smog	kg O3 eq	3.69E-01	2.53E-01	9.02E-02	2.58E-02
Acidification	kg SO2 eq	1.88E-02	1.40E-02	3.76E-03	1.07E-03
Respiratory effects	kg PM2.5 eq	2.56E-03	1.58E-03	7.61E-04	2.17E-04
Freshwater eutrophication	kg P eq	1.11E-03	1.04E-03	5.27E-05	1.51E-05
Marine eutrophication	kg N eq	4.35E-03	3.35E-03	7.72E-04	2.21E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Acidification	mol H+ eq	2.23E-02	1.68E-02	4.25E-03	1.21E-03
Climate change	kg CO2 eq	4.48E+00	2.83E+00	1.28E+00	3.67E-01
Climate change - Biogenic	kg CO2 eq	-8.87E-01	-8.88E-01	7.84E-04	2.24E-04
Climate change - Fossil	kg CO2 eq	5.33E+00	3.68E+00	1.28E+00	3.67E-01
Climate change - Land use and LU change	kg CO2 eq	2.98E-02	2.92E-02	4.61E-04	1.32E-04
Ecotoxicity, freshwater	CTUe	3.28E+01	3.00E+01	2.20E+00	6.29E-01
Ecotoxicity, freshwater - inorganics	CTUe	2.43E+01	2.16E+01	2.11E+00	6.04E-01
Ecotoxicity, freshwater - organics	CTUe	8.51E+00	8.40E+00	8.75E-02	2.50E-02
Particulate matter	disease inc.	3.39E-07	1.72E-07	1.30E-07	3.71E-08
Eutrophication, marine	kg N eq	9.37E-03	7.52E-03	1.44E-03	4.12E-04
Eutrophication, freshwater	kg P eq	2.05E-03	1.94E-03	9.05E-05	2.59E-05
Eutrophication, terrestrial	mol N eq	7.70E-02	5.69E-02	1.57E-02	4.48E-03
Human toxicity, cancer	CTUh	1.38E-09	1.12E-09	2.10E-10	5.99E-11
Human toxicity, cancer - inorganics	CTUh	5.35E-10	4.19E-10	9.01E-11	2.57E-11
Human toxicity, cancer - organics	CTUh	8.50E-10	6.96E-10	1.19E-10	3.41E-11
Human toxicity, non-cancer	CTUh	6.72E-08	5.17E-08	1.21E-08	3.45E-09

Human toxicity, non-cancer - inorganics	CTUh	5.42E-08	3.96E-08	1.13E-08	3.24E-09
Human toxicity, non-cancer - organics	CTUh	1.30E-08	1.21E-08	7.49E-10	2.14E-10
Ionising radiation	kBq U-235 eq	4.06E-01	3.79E-01	2.10E-02	6.01E-03
Land use	Pt	1.64E+02	1.40E+02	1.89E+01	5.39E+00
Ozone depletion	kg CFC11 eq	1.35E-07	9.85E-08	2.81E-08	8.02E-09
Photochemical ozone formation	kg NMVOC eq	2.38E-02	1.52E-02	6.73E-03	1.92E-03
Resource use, fossils	MJ	7.81E+01	5.39E+01	1.88E+01	5.36E+00
Resource use, minerals and metals	kg Sb eq	1.89E-05	1.42E-05	3.60E-06	1.03E-06
Water use	m3 depriv.	2.05E+00	1.94E+00	8.53E-02	2.44E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use					
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
PERE	MJ	2.87E+01	2.84E+01	2.90E-01	8.27E-02
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.87E+01	2.84E+01	2.90E-01	8.27E-02
PENRE	MJ	8.39E+01	5.82E+01	2.00E+01	5.70E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	8.39E+01	5.82E+01	2.00E+01	5.70E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.03E+00	1.92E+00	8.55E-02	2.44E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows					
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
HWD	kg	3.71E-02	3.64E-02	5.36E-04	1.53E-04
NHWD	kg	2.85E+00	7.73E-01	1.62E+00	4.62E-01
RWD	kg	1.03E-04	9.65E-05	5.16E-06	1.48E-06
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	3.48E+00	0.00E+00	0.00E+00	3.48E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

Results shown below are for HST Packaging with cable length (1642ft)

CML-IA baseline V3.11 / EU25					
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
Abiotic depletion	kg Sb eq	2.43E-05	1.85E-05	4.46E-06	1.27E-06
Abiotic depletion (fossil fuels)	MJ	8.65E+01	5.72E+01	2.28E+01	6.51E+00
Global warming (GWP100a)	kg CO2 eq	6.63E+00	4.60E+00	1.58E+00	4.51E-01

Ozone layer depletion (ODP)	kg CFC-11 eq	1.35E-07	9.92E-08	2.77E-08	7.90E-09
Photochemical oxidation	kg C2H4 eq	1.13E-03	8.21E-04	2.42E-04	6.92E-05
Acidification	kg SO2 eq	2.02E-02	1.51E-02	3.98E-03	1.14E-03
Eutrophication	kg PO4--- eq	1.43E-02	1.29E-02	1.09E-03	3.11E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	A5
Ozone depletion	kg CFC-11 eq	1.74E-07	1.27E-07	3.66E-08	1.04E-08
Global warming	kg CO2 eq	6.57E+00	4.56E+00	1.56E+00	4.47E-01
Smog	kg O3 eq	4.54E-01	3.11E-01	1.11E-01	3.19E-02
Acidification	kg SO2 eq	2.31E-02	1.71E-02	4.65E-03	1.33E-03
Respiratory effects	kg PM2.5 eq	3.15E-03	1.94E-03	9.41E-04	2.69E-04
Freshwater eutrophication	kg P eq	1.37E-03	1.28E-03	6.52E-05	1.86E-05
Marine eutrophication	kg N eq	5.34E-03	4.12E-03	9.54E-04	2.73E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set

Impact category	Unit	Total	A1-A3	A4	A5
Acidification	mol H+ eq	2.73E-02	2.05E-02	5.25E-03	1.50E-03
Climate change	kg CO2 eq	5.48E+00	3.43E+00	1.59E+00	4.54E-01
Climate change - Biogenic	kg CO2 eq	-1.10E+00	-1.10E+00	9.70E-04	2.77E-04
Climate change - Fossil	kg CO2 eq	6.54E+00	4.50E+00	1.59E+00	4.53E-01
Climate change - Land use and LU change	kg CO2 eq	3.69E-02	3.61E-02	5.70E-04	1.63E-04
Ecotoxicity, freshwater	CTUe	4.05E+01	3.70E+01	2.72E+00	7.77E-01
Ecotoxicity, freshwater - inorganics	CTUe	3.00E+01	2.66E+01	2.61E+00	7.46E-01
Ecotoxicity, freshwater - organics	CTUe	1.05E+01	1.04E+01	1.08E-01	3.09E-02
Particulate matter	disease inc.	4.17E-07	2.10E-07	1.61E-07	4.59E-08
Eutrophication, marine	kg N eq	1.15E-02	9.21E-03	1.78E-03	5.09E-04
Eutrophication, freshwater	kg P eq	2.54E-03	2.39E-03	1.12E-04	3.20E-05
Eutrophication, terrestrial	mol N eq	9.48E-02	6.99E-02	1.94E-02	5.54E-03
Human toxicity, cancer	CTUh	1.71E-09	1.38E-09	2.59E-10	7.40E-11
Human toxicity, cancer - inorganics	CTUh	6.60E-10	5.17E-10	1.11E-10	3.18E-11
Human toxicity, cancer - organics	CTUh	1.05E-09	8.60E-10	1.48E-10	4.22E-11
Human toxicity, non-cancer	CTUh	8.31E-08	6.39E-08	1.49E-08	4.27E-09
Human toxicity, non-cancer - inorganics	CTUh	6.70E-08	4.90E-08	1.40E-08	4.00E-09
Human toxicity, non-cancer - organics	CTUh	1.61E-08	1.49E-08	9.26E-10	2.65E-10
Ionising radiation	kBq U-235 eq	5.00E-01	4.66E-01	2.60E-02	7.42E-03
Land use	Pt	2.03E+02	1.73E+02	2.33E+01	6.67E+00
Ozone depletion	kg CFC11 eq	1.66E-07	1.22E-07	3.47E-08	9.91E-09
Photochemical ozone formation	kg NMVOC eq	2.93E-02	1.86E-02	8.32E-03	2.38E-03
Resource use, fossils	MJ	9.56E+01	6.57E+01	2.32E+01	6.63E+00
Resource use, minerals and metals	kg Sb eq	2.33E-05	1.76E-05	4.46E-06	1.27E-06
Water use	m3 depriv.	2.47E+00	2.34E+00	1.05E-01	3.01E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.

EN15804+A2: Resource Use					
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
PERE	MJ	3.56E+01	3.51E+01	3.58E-01	1.02E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	3.56E+01	3.51E+01	3.58E-01	1.02E-01
PENRE	MJ	1.03E+02	7.09E+01	2.47E+01	7.05E+00
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.03E+02	7.09E+01	2.47E+01	7.05E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.45E+00	2.32E+00	1.06E-01	3.02E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

EN15804+A2: Waste Categories and Output Flows					
Parameter	**Unit**	**Total**	**A1-A3**	**A4**	**A5**
HWD	kg	4.60E-02	4.51E-02	6.62E-04	1.89E-04
NHWD	kg	3.53E+00	9.55E-01	2.00E+00	5.72E-01
RWD	kg	1.27E-04	1.19E-04	6.38E-06	1.82E-06
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	4.30E+00	0.00E+00	0.00E+00	4.30E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study.
**The abbreviations' detailed meaning in parameter column can be found at the end of LCA results session.

For all the terminal boxes, cables/cable accessories and packaging parts:

Disclaimer 1: The environmental impact category "Ionsing radiation" in "EN15804+A2 (adapted) V1.03 / EF 3.1 normalization and weighting set" deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2: The results of environmental impact indicators "Human toxicity, cancer & non-cancer" in "EN15804+A2 (adapted) V1.03 / EF 3.1 normalization and weighting set" and the results from "EN15804+A2: Resource Use" shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicators.

EN15804+A2: Resource Use (Abbreviation)	
PERE	Use of renwable primary energy excluding renewable primary energy resources used as raw materials
PERM	Use of renewable primary energy resources used as raw materials
PERT	Total use of renewable primary energy resources

PENRE	Use of non-renwable primary energy excluding renewable primary energy resources used as raw materials
PENRM	Use of non-renewable primary energy resources used as raw materials
PENRT	Total use of non-renewable primary energy resources
SM	Use of secondary material
RSF	Use of renewable secondary fuels
NRSF	Use of non-renewable secondary fuels
FW	Net use of fresh water

EN15804+A2: Waste Categories and Output Flows (Abbreviation)	
HWD	Hazardous waste disposed
NHWD	Non-hazardous waste disposed
RWD	Radioactive waste disposed
CRU	Components for re-use
MFR	Materials for recycling
MER	Materials for energy recovery
EE	Exported energy

LCA sum results calculation guidance

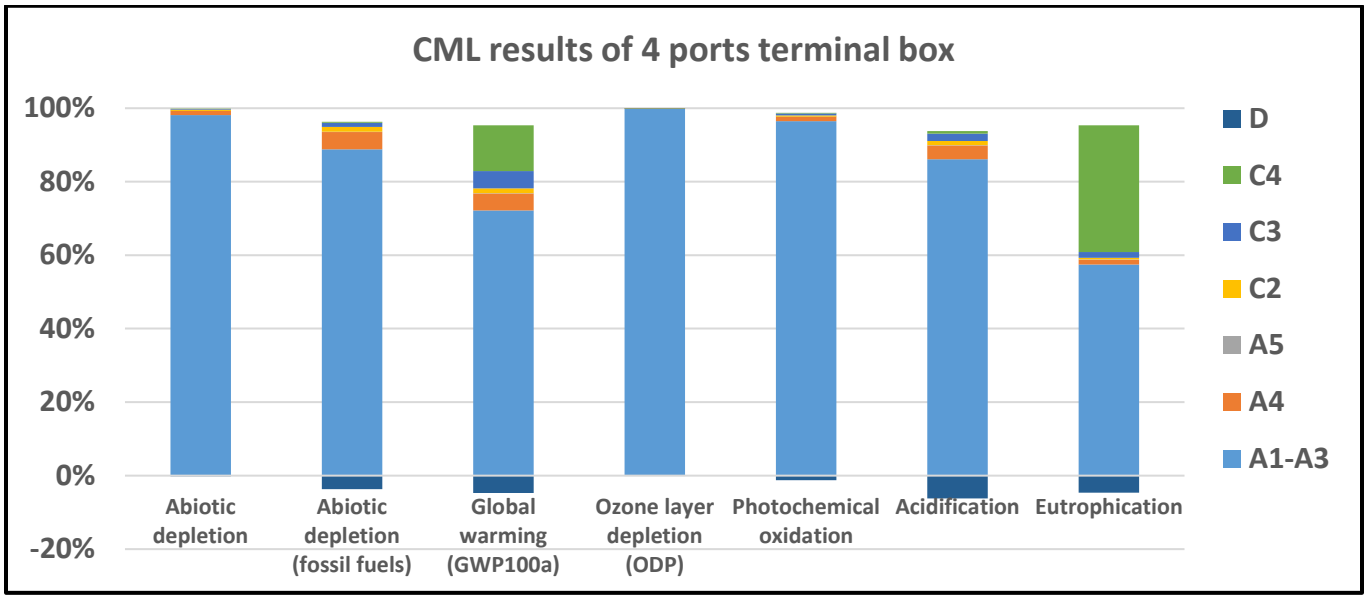
The LCA results of HST terminal box, HST cable (per meter) + HST cable accessories (per piece) and HST packaging have been demonstrated above, respectively. The LCA sum results of HST products can be easily calculated based on the formular below. The product description indicates the terminal box size, the cable length and the packaging size, which can be found in the “Ordering Tree” on Page 5.

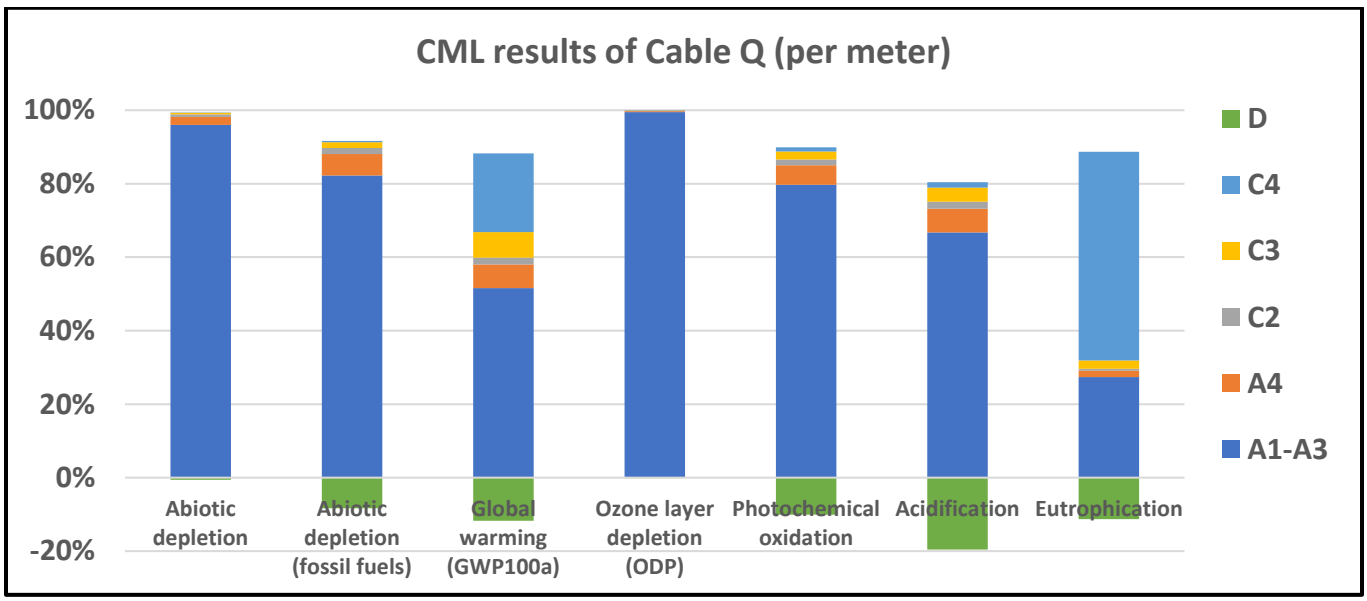
$$Environmental\ Impact\ Total = Terminal\ box + L * Cable\ Q\ (per\ meter) + Cable\ accessories + Packaging$$

*L is the cable length in meter.

LCA Interpretation

Based on LCA sum calculation formular and the LCA results of HST terminal box, HST cable + cable accessories and packaging respectively, the LCA sum result of HST product mainly depends on the contribution of the terminal box and the cable, especially with the increasing of the cable length. Therefore, the LCA interpretation will be focused on the terminal box and the cable. The figures below show the CML results of HST terminal box with 4 ports and cable (per meter), indicating stages A1-A3 are the dominant contributors across most environmental impact categories. This is due to the upstream production of raw materials used in the product, along with electricity usage in the manufacturing of parts. This highlights the importance of targeting the stages A1-A3 to effectively reduce global warming potential and most other environmental impacts.





Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our EHS Policy.

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle—from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.

Environmental and Health During Installation

There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

Extraordinary Effects

Fire

No extraordinary effects to the environment can be anticipated during exposure to fire.

Water

Contains no substances that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at https://www.commscope.com/corporate-responsibility-and-sustainability/.

CommScope maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certification (ISO9001/TL9000)
- Environmental Management System certification (ISO14001)
- Health and Safety Management System certification (ISO45001)

These certificates can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/

Further Information

CommScope Inc.
3642 E US Highway 70
Claremont, North Carolina 28610
ProductSustainability@commscope.com

References

- PCR — PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021.
- PSR — PEP ecopassport Program Product Specific Rules specific for Wires, Cables and Accessories, v4.0, 2022
- LCA tool & Databases — Simapro Craft version 10.2.0.0 of LCA software & ecoinvent 3.11, Industry data 2.0 databases.
- ISO 14025 — ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.
- ISO 14040 — ISO 14040:2009-11, Environmental management — Life cycle assessment — Principles and framework.
- ISO 14044 — ISO 14044:2006-10, Environmental management — Life cycle assessment — Requirements and guidelines.
- EN 15804 + A2 — EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products
- ASTM 2020 — ASTM International General Program Instructions v8.0, April 29, 2020
- Characterization Method — IPCC. 2021. Climate Change 2021. The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson, delmotte, V., et al] Cambridge University Press, Cambridge, UK and New York, NY, USA (http://www.ipcc.ch/report/ar6/wg1/).
- Characterization Method — Hauschild M.Z., & Wenzel H. Environmental Assessment of Products. Springer, US, Vol. 2, 1998.
- Characterization Method — Heijungs R., Guinée J.B., Huppes G., Lankreijer R.M., Udo de Haes H.A., Wegener Sleeswijk A. Environmental Life Cycle Assessment of Products: Guide and Backgrounds. CML. Leiden University, Leiden.
- Characterization Method — Jenkin M.E., & Hayman G.D. Photochemical ozone creation potentials for oxygenated volatile organic compounds: sensitivity to variations in kinetic and mechanistic parameters. Atmospheric Environment. 1999, 33 (8) pp. 1275-1293.
- Characterization Method — WMO. 1999. Scientific Assessment of Ozone Depletion: 1998, World Meteorological Organization Global Ozone Research and Monitoring Project - Report No. 44, WMO, Geneva.
- Characterization Method — Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers- version 1.2, January 2017.

Contact Information

For more information, visit our website at https://www.commscope.com/

- Contact customer support for product and technical questions at https://www.commscope.com/contact-us/
- Contact product compliance at productsustainability@commscope.com
- Contact Corporate Responsibility & Sustainability team for sustainability questions at sustainability@commscope.com

LCA Practitioner

Zhipeng Wang

LCA Analyst and Materials Engineer, PhD

CTO Sustainability, CCS, CommScope

Diestsesteenweg 692, 3010, Leuven, Belgium

ProductSustainability@commscope.com