

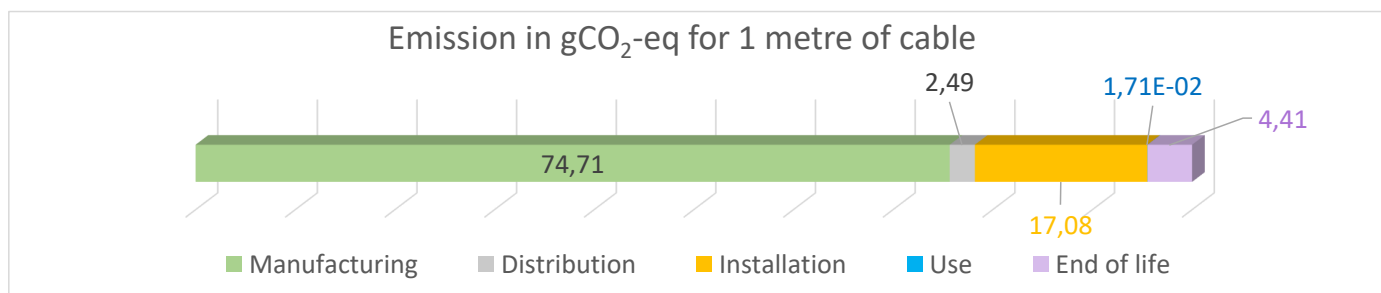
LCA study reference: Ecobilan=S[BY]-BSBC\BAZ_F->#55%-BZ]->#55-C->#56-B-58,=->%#<'7/-	
Self declaration according to ISO 14021	
LCA according to ISO 14040-44	
ECOBILAN software version:	V27-04
Database :	Base CODDE® 2025-04+ supplier data
Date of publication:	04-03-26

ECOBILAN OPTICAL FIBRE CABLE_ACOPTIC

PAD1826 12F M6

Lifecycle Analysis Results

Carbon equivalent emissions (i.e. carbon footprint in gCO₂-eq) over the complete life cycle, for 1 metre of cable delivered to our customers at a distance of 1000km by lorry from our manufacturing plant and packaged in 2000m lengths on BCHPC :



PAD1826 12F M6	Carbon Footprint "cradle-to-gate"*	Carbon Footprint "cradle-to-grave"***
Declared unit (1m of cable = 12 FO)	74,7 g CO ₂ -eq.	98,7 g CO ₂ -eq.
Functional unit (1m of cabled optical fiber)	6,2 g CO ₂ -eq.	8,2 g CO ₂ -eq.

Life cycle analysis methodology

Calculation methodology according to the common rules of PCR ed4 and the additional rules of PSR0001 ed4 (Wires & Cables) of the PEpecopassport Program (compliant with the cable PSR IEC TR 62839-1:2025) with the CO₂ emission factors (GWP) of the EIME 6.3 software and its database in version CODDE-2025-04 (Indicators for PEF EF 3.1 - Compliance PEP ed.4, EN15804+A2 v2.0).

Emission factors used: generic data from the CODDE database supplemented by supplier data when available.

Description of the Life Cycle

The complete life cycle corresponds to the following stages:

- **Manufacturing:** Production, packaging and transport of raw materials, industrial manufacturing processes, end-of-life treatment of manufacturing waste and packaging of the finished product. Factory located in France - ACOME electricity mix (23,5 g CO₂e/kWh)
- **Distribution:** transport of the cable with its packaging, over a total distance = 1000km by truck
- **Installation :** 5% installation scrap (manufacturing + transport + end of life) and treatment of the packaging waste
- **Use :** Power loss during transmission at 100% of the time over 20 years
- **End of life of the cable:** Transport 1000 km + 100% landfill.

Notes:

* **Cradle-to-gate:** Life cycle assessment of the product from raw material extraction to the factory gate, excluding distribution, use, and end-of-life stages.

** **Cradle-to-grave:** Full life cycle assessment of the product from raw material extraction through manufacturing, transport, use, and end-of-life (recycling, recovery, or disposal).