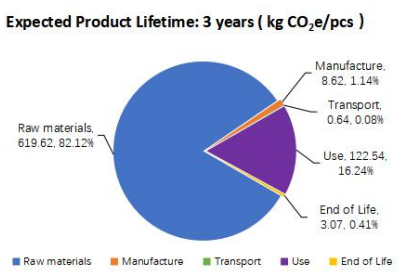
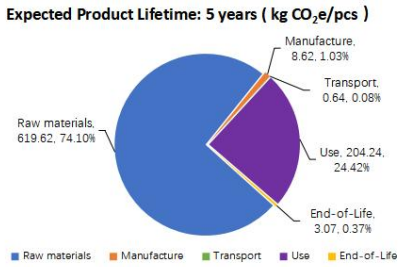
TPV PHILIPS Product Carbon Footprint (PCF) Information Sheet

Company Name	TPV Technology Group
Manufacturer Name	MMD-Monitors & Displays Nederland B.V.
Commercial Name	LCD monitor
Model Number	49B2U5900C
Review Date	2025-12-04
Issue Date	2025-12-05

Product Environmental Attributes			
(a) Product Carbon Footprint Value:	**Expected Product Lifetime (see Note 1 below)**	**3 years**	**754.49 kg of CO_2e**
		5 years	**836.19 kg of CO_2e**
	Estimates Uncertainty	**± 14.01 %**	
(b) Product Picture:	**(c) Life Cycle Detail by Life Stage (Pie Chart):**		





Note 1:

Disclaimer:

All estimates of carbon footprint are uncertain.

This information sheet contains a description of the carbon footprint data for this declared product, which is based on estimates of the current state of the product life cycle, but is subject to known or unknown risks or uncertainties, so actual results may be different from the statement.

Note 2:

This product is based on the PAS2050:2011 & ISO 14067:2018 standard for carbon footprint inventory and calculation.

And this product use SimaPro 10.2.0.0 for PCF calculation tool. The lifecycle impact assessment methodology follows the IPCC 100-year Greenhouse Gas Emissions Assessment Method (IPCC 2021 GWP 100a) to calculate the CO_2 emission equivalent of a product from raw material extraction to product disposal (Cradle to Grave).

Note 3:

This calculation was based upon a 49B2U5900C with the assumptions and configuration described in the calculation assumptions in the next page.

Note 4:

This pie chart provides the percent contribution of the mean value for each element of the analysis for the full life cycle CO_2e impacts of the product. If individual elements displaying 0% are less than 0.1%.

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Assumption Table			
Category	**Element**	**Unit**	**Input**
Product Specifics	Product Weight (with packaging)	kg	22.704
	Screen Size	inches	49
	Product Lifetime	years	3
	Standby Mode & Power-On Mode	w	0.3 & 61.8
	Estimated standby hour & usage hour	hrs	8 & 8
	Estimated total ***annual*** standby and power-on consumption	kwh	124.2
Location	Assembly Location	no unit	CN
	Use Location	no unit	GLO
Transport from Assembly to Customer	To country of use: by air	fraction	0
	To country of use: by ship	fraction	1
	To country of use: by rail	fraction	0
	To country of use: by truck	fraction	0
	In country of use: by air	fraction	0
	In country of use: by ship	fraction	0
	In country of use: by rail	fraction	0
	In country of use: by truck	fraction	0
End of Life	Waste incineration	%	20
	Material recycling	%	80
The PCF value is calculated using the specific attributes above for assembly, use and transportation mode.			

Notes:

Life Cycle Analysis (LCA) can be grouped into five categories which include Raw Material, Manufacture, Transport, Use, and End-of-Life. Below is a brief description of each phase.

Raw Material: This life cycle phase captures emissions generated during the extraction, production, and transport of raw materials.

Manufacture: This life cycle phase captures emissions generated during the manufacture of subassemblies (including the product packaging) and product assembly.

Transport: Emissions included in the distribute phase include all those generated during the air, ocean or land distribute of finished or semi-finished MMD products between MMD facilities and from MMD facilities to customers.

Use: In use energy consumption is calculated in accordance with the U.S. Environmental Protection Agency's Energy Star® Typical Energy Consumption (TEC) methodology. Calculated energy consumption is then used in combination with average emissions factors for the designated country of use to calculate emissions. Estimated monitor usage days by end user are 250 days a year.

End-of-life: The recycle rate is calculated based on the company's own calculated WEEE recycle rate. It is also assumed that the balance of the product waste materials is disposed of by incineration. Emissions generated during the mechanical destruction, separation and transport of end of life materials are included in the calculation.