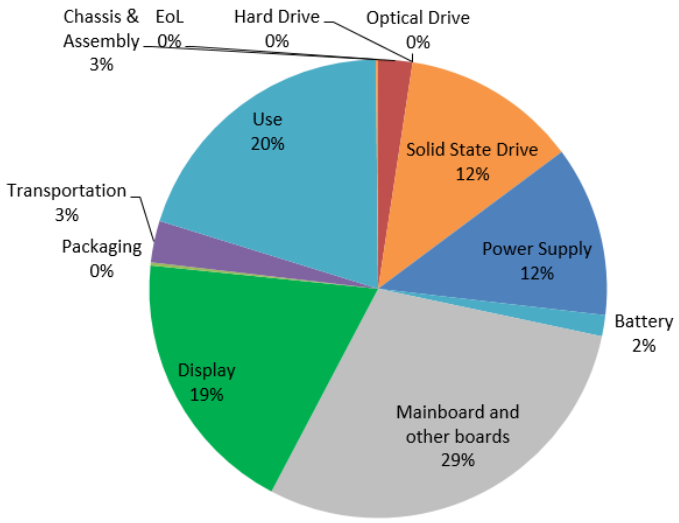
Lenovo Product Carbon Footprint (PCF) Information Sheet

PC/Notebook/Monitor/Tablet

Commercial Name	ThinkPad P15/ThinkPad T15g
Model Number	20ST, 20SU, 20UR, 20US
Issue Date	2020/08/07

Product Environmental Attributes	
(a) Product Carbon Footprint Value:	**923 kg of CO_2e (see Note 1 below)**
(b) Product Picture:	**(c) Life Cycle Detail by Component & Life Stage (Pie Chart):**





Note 1:
All estimates of carbon footprint are uncertain. Lenovo reports the 95th percentile of the carbon footprint estimate to reflect that uncertainty. For this product, that estimate has a mean of 706 kg of CO_2e and standard deviation of 129 kg of CO_2e. For a quantity that follows a normal distribution, the 95th percentile value is equal to the mean plus the standard deviation multiplied by 1.64. Other organizations might report this value as 706 +/- 129 kg of CO_2e.

This PCF was generated using the Product Attribute to Impact Algorithm model, Date: May 8th, 2019 (Product Type: Notebook), © Massachusetts Institute of Technology's Materials Systems Laboratory, August 2012. Please refer to the Intended Uses and Limitations of the PAIA Model, © Massachusetts Institute of Technology's Materials Systems Laboratory, August 2012 for further details. Link to Document

This calculation was based upon a Lenovo ThinkPad P15, ThinkPad T15g with the assumptions and configuration described in the calculation assumptions in the next page.

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. Individual elements displaying 0% are less than 0.5%.

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Assumption Table					
Category	**Element**	**Unit**	**Input**	**Mean**	**COV**
Product Specifics	Product Weight	kg		2.708	Primary data
	Form Factor	no unit			
	Screen Size	inches		15.6	Primary data
	Product Lifetime	years		5	Low COV
Location	Assembly Location	no unit	CN		
	Use Location	no unit	EU		
Transportation from Assembly to Customer	To country of use: by air	fraction		0.25	Low COV
	To country of use: by ship	fraction		0.75	Low COV
	To country of use: by rail	fraction			
	To country of use: by truck	fraction			
	In country of use: by air	fraction		0.1	Low COV
	In country of use: by ship	fraction			
	In country of use: by rail	fraction		0.2	Low COV
	In country of use: by truck	fraction		0.7	Low COV
End of Life	Fraction Recycled (remainder to landfill)	fraction		0.8	
	Fraction Shredded Recycling (remainder to manual)	fraction		0.77	
The PCF value is calculated using the specific attributes above for assembly, use and transportation mode. If you need any other country specific information, please contact environment@lenovo.com.					

Notes:

Life cycle phases included in the streamlined Product Attribute to Impact Algorithm (PAIA) Life Cycle Analysis (LCA) can be grouped into four categories which include Manufacture, Transport, Use, and End of Life. Below is a brief description of each phase.

Manufacture: This life cycle phase captures emissions generated during the extraction, production, and transport of raw materials, the manufacture of components and subassemblies (including the product packaging) and product assembly.

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

End of Life: It is assumed that a designated portion of the product (see table above) is recycled at the end of the use period determined in the TEC methodology. It is also assumed that the balance of the product waste materials is disposed of by landfill. Emissions generated during the mechanical destruction, separation and transport of end of life materials are included in the calculation.

Product scope of this sheet includes desktop computer, integrated desktop computer, notebook computer, monitor and tablet.
This document is only valid in connection with "THE ECO DECLARATION" of the specific product.