


# THE ECO DECLARATION



## Product environmental attributes – THE ECO DECLARATION


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Company name *	Lenovo	
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Internet site *	<a href="http://www.pc.ibm.com/ww/lenovo/about/environment">www.pc.ibm.com/ww/lenovo/about/environment</a>	
Additional information		

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.	
Type of product *	Monitor
Commercial name *	Lenovo L190x
Model number *	4439-HB2
Issue date *	2007-10-11
Intended market *	<input checked="" type="checkbox"/> Global <input type="checkbox"/> Europe <input type="checkbox"/> Japan <input type="checkbox"/> U.S. <input type="checkbox"/> Other
Additional information	


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The declaration may be published only when all rows and/or fields marked with a \* are filled-in (n.a. for not applicable).


Quality Control	Requirement met	Yes	No
Item	Additional information regarding each item may be found under P14.		
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see <a href="http://www.itecodeclaration.org">www.itecodeclaration.org</a> ).	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Product environmental attributes - Legal requirements		Requirement met		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
<b>P1 Hazardous substances and preparations</b>				
P1.1*	Products do not contain lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) as specified in <i>EU 2002/95/EC and its amendments</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.2*	Products do not contain Asbestos ( <i>EU 76/769/EEC, amendment 1999/77/EC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide ( <i>EU : Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.4*	Products do not contain polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), ( <i>EU 76/769/EEC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.5*	Products do not contain short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP as specified in <i>Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridiny)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) ( <i>EU 76/769/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.7*	Textile and leather parts with direct skin contact do not contain Azo colourants that split aromatic amines as specified in <i>EU 76/769/EEC, amendment 2003/3/EC</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives ( <i>EU 76/769/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations higher than specified in <i>76/769/EEC, amendment 94/27/EEC</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P2 Batteries</b>				
P2.1*	If hazardous batteries (as defined in <i>91/157/EEC</i> ) are used in the product they are easily removable and labelled with the disposal and the substance logo (as defined in <i>91/157/EEC, 93/86/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P2.2*	If batteries are used in the product they do not contain mercury in concentrations higher than specified in <i>91/157/EEC</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P2.3*	If batteries are permanently installed in the product, information on the environmentally hazardous substances and safe removal method is listed in the user manual ( <i>91/157/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P3 Electrical safety, EMC and connection to the telephone network</b>				
P3.1*	The product meets the Low Voltage Directive (LVD) regarding electrical safety ( <i>73/23/EEC &amp; 93/68/EEC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product meets the EMC Directive regarding electromagnetic compatibility ( <i>89/336/EEC / 2004/108/EEC after June, 20<sup>th</sup> 2007</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it meets the EU R&TTE Directive ( <i>1999/5/EC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.4*	The product is CE-marked and a Declaration of Conformity is available ( <i>93/68/EEC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4 Consumable materials</b>				
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium in concentrations higher than specified in ( <i>76/769/EEC and 91/338/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P4.2*	If ink/toner is used in the product, it does not contain cadmium in concentrations higher than specified in ( <i>76/769/EEC and 91/338/EEC</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to EU Directive 1999/45/EC, and as amended, the product/packaging is labelled and a Material Safety Data Sheet (MSDS) in accordance with ( <i>99/45/EC &amp; 2001/58/EC</i> ) is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P5 Product packaging</b>				
P5.1*	The sum of the concentration levels of lead, cadmium, mercury, and hexavalent chromium present in packaging or packaging components does not exceed 0,01% by weight ( <i>94/62/EC</i> ).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043. ( <i>97/129/EEC</i> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P5.3*	The product packaging material is free from CFC/HCFC.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P6 Treatment information</b>				
P6.1*	Information for recyclers/treatment facilities (e.g. as requested by 2002/96/EC) is available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Product environmental attributes - Market requirements - Environmental conscious design							
Requirement met							
Item	* =mandatory to fill in. Additional information regarding each item may be found under P14.				Yes	No	n.a.
<b>P7 Design</b>							
<b>Disassembly, recycling</b>							
P7.1*	Parts that have to be treated separately are easily separable				<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P7.2*	Plastic materials in covers/housing have no surface coating.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Product lifetime</b>							
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.9.	Spare parts are available after end of production for: <b>5</b> years						<input type="checkbox"/>
P7.10	Service is available after end of production for: <b>5</b> years						<input type="checkbox"/>
<b>Material and substance requirements</b>							
P7.11*	Product cover/housing material type: Material type: <b>ABS</b> Material type: Material type:						
P7.12*	Electrical cable insulation material of power cables are halogen free (including PVC)				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.13*	Electrical cable insulation material of signal cables are halogen free (including PVC)				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.14	All cover/housing plastic parts >25g are halogen free				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	All printed circuit boards (without components) >25g are halogen free				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.16	Chemical specifications of flame retardants in cover / housing plastic parts >25g according ISO 1043-4:				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.17	Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <b>FR(16)</b>				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	Weight of recycled material in plastic parts is						
P7.19	Plastic parts >25g are free from flame retardant substances/preparations above 0.1% classified as R45/46, R50/51/53 and R60/61 ( <i>67/548/EEC</i> )				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.20	Light sources are free from mercury If mercury is used specify: Number of lamps: <b>4</b> and max. mercury content per lamp: <b>2.5</b> mg				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>P8 Batteries</b>							
P8.1*	Product does not contain batteries defined as hazardous according to 91/157/EEC				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P8.2*	Battery chemical composition:						<input checked="" type="checkbox"/>
P8.3	Batteries meet the requirements of the following voluntary program/s:						<input checked="" type="checkbox"/>
<b>P9 Energy consumption</b>							
9.1	For the product the following power levels or energy consumptions have been measured:						
Mode	Power level at * <b>115</b> Volts	Time (s) to <mode>	Mode description	Reference/ Standard	n.a.		
On-max	<b>W</b>		*	*	<input checked="" type="checkbox"/>		
On-normal	* <b>27</b> W	to	* <b>On Mode/Active Power</b>	* <b>See P14</b>	<input type="checkbox"/>		
On-idle	<b>W</b>	to	*	*	<input checked="" type="checkbox"/>		
Save 1	* <b>0.59</b> W	to	* <b>Sleep Mode/Low Power</b>	* <b>See P14</b>	<input type="checkbox"/>		
Save 2	<b>W</b>	to	*	*	<input checked="" type="checkbox"/>		
Off 1	* <b>0.57</b> W	to	* <b>Off Mode/Standby Power</b>	* <b>See P14</b>	<input type="checkbox"/>		
Off 2	* <b>0.33</b> W	to	* <b>Hard Off Mode</b>	* <b>See P14</b>	<input type="checkbox"/>		
No load	* <b>W</b>		External power supplies/charger plugged in but disconnected from the product	*	<input checked="" type="checkbox"/>		
TEC	* <b>kWh/y</b> Typical Energy Consumption per year			*	<input checked="" type="checkbox"/>		
P9.2*	Information about the energy save function is provided with the product.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P9.3	The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® 4.0 MOU Others specify:				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Product environmental attributes - Market requirements (continued) Requirement met**

Item \* = mandatory to fill in. Additional information regarding each item may be found under P14. Yes No n.a.

**P10 Emissions**

**Noise emission** – Declared according to ISO 9296

P10.1	Mode	Mode description	Declared A-weighted sound power level L <sub>WAd</sub> (B)	Declared A-weighted sound pressure level L <sub>pAm</sub> (dB)		
				Operator position <input type="checkbox"/>	Bystander positions <input type="checkbox"/>	
	Idle	*	*	Desktop <input type="checkbox"/>	(only if product is not operator attended) <input type="checkbox"/>	<input checked="" type="checkbox"/>
	Operation	*	*	or Deskside <input type="checkbox"/>		<input checked="" type="checkbox"/>
	Other mode					
Measured according to: <input checked="" type="checkbox"/> ISO 7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74 with L <sub>pAm</sub> measurement distance m)						

P10.2 The product meets the acoustic noise requirements of the following voluntary program/s:

**Chemical emissions from printing products**

P10.3\* Test performed according to ECMA-328 standard , other specify:

The test covers: Dust  Ozone  Styrene  Benzene  TVOC

P10.4 The product meets the chemical emission requirements of the following voluntary program/s:

**Electromagnetic emissions**

P10.5 Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s:

**P11 Consumable materials for printing products**

P11.1\* A Material Safety Data Sheet (MSDS) is available for the ink/toner preparation, even if not legally required (see P4.3).

P11.2\* Paper containing recycled fibres that meets the requirements of EN12281 can be used.

P11.3\* 2-sided (duplex) printing/copying is an integrated product function.

**P12 Ergonomics for computing products**

P12.1\* The computer system meets the ergonomic requirements of EN 29241-3, -7, -8 for CRT displays and EN-ISO13406-2 for flat panel displays.

P12.2\* The product keyboard meets the requirements of ISO 9995 and EN 29241-4.

P12.3\* The computer input device meets the requirements of ISO 9241-9.

**P13 Packaging and documentation**

P13.1\* Product packaging material type(s): **Corrugated cardboard** weight (kg): **1.04**  
Product packaging material type(s): **Polyethylene** weight (kg): **0.06**  
Product packaging material type(s): **EPS** weight (kg): **0.3**

P13.2\* Product plastic packaging is halogen free (including PVC)

P13.3\* User and product documentation do not contain chlorine bleached paper

P13.4\* User and product documentation contain recycled paper

**P14 Additional information**

**NOTE:** Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.

**P7.11 Product contains postconsumer recycled content plastic.**

**P7.17 Product does not contain free TBBPA in printed circuit boards.**

**P9.1 EPA Energy Star Eligibility Criteria (Version 4.0)**  
Power level at 230 Volts  
**27 W On Mode/Active Power**  
**0.78 W Sleep Mode/Low Power**  
**0.77 W Off Mode/Standby Power**  
**0.46 W Hard Off Mode**