Declarație de conformitate în UE

Producător:	**Denumire:**	Apple Inc.
	Adresă:	One Apple Park Way Cupertino, California 95014, USA
Echipament:		
	Număr model:	A2873
	Software:	MAC OS
	Tip produs:	Desktop Computer
	***Accesorii furnizate:**	Power cable

*Nu sunt acoperite de nr. cert. definit.

Noi, Apple Inc, declarăm pe propria răspundere exclusivă că produsul susmenționat este conform cu următoarele:

Directive: 2011/65/EU as amended by 2015/863/EU
2009/125/EC
2014/53/EU

Procedura de evaluare: **Nr. cert.:** *DK-RED002823 i01*

Annex III has been applied with the involvement of a notified body for assessment against Articles; 3.1a, 3.1b and 3.2. Notified Body Name: TUV SUD DANMARK ApS: Number: 2443

Au fost aplicate următoarele standarde:

3.1a: **Siguranță și sănătate**

IEC 62368-1: 2018 [2020+A11:2020]
EN 50665:2017

3.1b: **Compatibilitate electromagnetică**

EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.5 [DRAFT]
EN 55032:2015 + A11:2020
EN 55035:2017+A11:2020

3.2: **Utilizare eficace a spectrului de frecvențe radio**

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 300 440 V2.2.1
EN 303 687 V1.1.1

Complianță suplimentară:

RoHS: EN IEC 63000:2018
Energie: Regulation 617/2013, IEC 62623:2012, EN 62623:2013

Semnat pentru și în numele:		**Apple Inc**	
Locul:	London	**Data:**	20 octombrie 2023

Numele:	**Funcția:**	**Semnătura:**
Stuart Thomas	Senior Engineering Manager	
Frank Kiernan	Product Compliance Manager	

EU Declaration of Conformity

Manufacturer:	**Name:**	Apple Inc.
	Address:	One Apple Park Way Cupertino, California 95014, USA
Equipment:		
	Model Number:	A2874
	Software:	MAC OS
	Product Type:	Desktop Computer
	***Supplied Accessories:**	Power cable

*Not covered by the defined cert #.

We, Apple Inc, declare under our sole responsibility that the above referenced product complies with the following:

Directives: 2011/65/EU as amended by 2015/863/EU
2009/125/EC
2014/53/EU

Assessment procedure: **Cert #:** *DK-RED002825 i01*

Annex III has been applied with the involvement of a notified body for assessment against Articles; 3.1a, 3.1b and 3.2. Notified Body Name: TUV SUD DANMARK ApS: Number: 2443

The following standards have been applied:

3.1a: **Safety and Health**

IEC 62368-1: 2018 [2020+A11:2020]
EN 50665:2017

3.1b: **EMC**

EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.5 [DRAFT]
EN 55032:2015 + A11:2020
EN 55035:2017+A11:2020

3.2: **RF Spectrum Efficiency**

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 300 440 V2.2.1
EN 303 687 V1.1.1

Additional Compliance:

RoHS: EN IEC 63000:2018
Energy: Regulation 617/2013, IEC 62623:2012, EN 62623:2013

Signed for and on behalf of:		**Apple Inc**	
Place:	London	**Date:**	20 October 2023

Name:	**Function:**	**Signature:**
Stuart Thomas	Senior Engineering Manager	
Frank Kiernan	Product Compliance Manager	

Declarație de conformitate în UE

Producător:	**Denumire:**	Apple Inc.
	Adresă:	One Apple Park Way Cupertino, California 95014, USA
Echipament:		
	Număr model:	A2874
	Software:	MAC OS
	Tip produs:	Desktop Computer
	***Accesorii furnizate:**	Power cable

*Nu sunt acoperite de nr. cert. definit.

Noi, Apple Inc, declarăm pe propria răspundere exclusivă că produsul susmenționat este conform cu următoarele:

Directive: 2011/65/EU as amended by 2015/863/EU
2009/125/EC
2014/53/EU

Procedura de evaluare: **Nr. cert.:** *DK-RED002825 i01*

Annex III has been applied with the involvement of a notified body for assessment against Articles; 3.1a, 3.1b and 3.2. Notified Body Name: TUV SUD DANMARK ApS: Number: 2443

Au fost aplicate următoarele standarde:

3.1a: **Siguranță și sănătate**

IEC 62368-1: 2018 [2020+A11:2020]
EN 50665:2017

3.1b: **Compatibilitate electromagnetică**

EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.5 [DRAFT]
EN 55032:2015 + A11:2020
EN 55035:2017+A11:2020

3.2: **Utilizare eficace a spectrului de frecvențe radio**

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 300 440 V2.2.1
EN 303 687 V1.1.1

Complianță suplimentară:

RoHS: EN IEC 63000:2018
Energie: Regulation 617/2013, IEC 62623:2012, EN 62623:2013

Semnat pentru și în numele:		**Apple Inc**	
Locul:	London	**Data:**	20 octombrie 2023

Numele:	**Funcția:**	**Semnătura:**
Stuart Thomas	Senior Engineering Manager	
Frank Kiernan	Product Compliance Manager	

THE ECO DECLARATION

ecma INTERNATIONAL

ECMA/TC38-TG3/2015/026
(Rev. 1 – 15 April 2017)

Annex B2 - Product environmental attributes
Desktop/All-in-One Computers

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable).
Additional information regarding each item may be found under P15.

Brand *	***Lenovo***	**Logo**
Company name *	***Lenovo***	
Contact information * **e-mail address**	***Lenovo Global Environmental Affairs*** ***Alvin L Carter*** ***alcarter@lenovo.com***	
Internet site *	***https://www.lenovo.com/us/en/sustainability-resources/***	
Additional information	***The latest version of this document can be found at:*** ***http://www.lenovo.com/ecodeclaration***	

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 *	***All in One Computer***
Commercial name *	***IdeaCentre AIO 3 24IAP7***
Model number *	***F0GH***
Issue date *	***2022.1.24, updated 2023.07.28***
Intended market *	☒ **Global** ☐ **Europe** ☐ **Asia, Pacific & Japan** ☐ **Americas** ☐ **Other**
Additional information	***Energy Star***

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:
P4.1 – P4.3 Consumable materials
P9.1 TEC and Print speed
P10.2 - P10.3 Chemical emissions from printing products
P11.1 - P11.3 Consumable materials for printing products.

Model number *	*F0GH*	Logo	Lenovo
Issue date *	*2022.1.24, updated 2023.07.28*		

Product environmental attributes - Legal requirements		Requirement met		
Item		Yes	No	n.a.
P1	**Hazardous substances and preparations**			
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and NOTE B1)	☒	☐	
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	☒	☐	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.	☒	☐	
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	☒	☐	
P1.5*	Products do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	☒	☐	
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 $\mu g/cm^2$/week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:2011-5.	☒	☐	☐
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): ***https://www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure***	☒	☐	☐
P2	**Batteries**			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)	☒	☐	☐
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal reference)	☒	☐	☐
P2.3*	Batteries and accumulators are readily removable. (See legal reference)	☒	☐	☐
P3	**Conformity verification & Eco design (ErP)**			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at: ***https://www.lenovo.com/us/en/compliance/eu-doc for EU and https://www.lenovo.com/us/en/compliance/uk-doc for UK***	☒	☐	☐
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference).	☒	☐	☐
	Required information is; ☒ given in item P15 or added to this document, ☒ available at: ***https://www.lenovo.com/us/en/compliance/eco-declaration***	☒	☐	☐
P5	**Product packaging**			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	☒	☐	
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference).	☒	☐	☐
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	☒	☐	☐
P6	**Treatment information**			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	☒	☐	☐

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *	F0GH	Logo	Lenovo
Issue date *	2022.1.24, updated 2023.07.28		

Product environmental attributes - Market requirements (See General NOTE GN below) **- Environmental conscious design**		**Requirement met**		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P7	**Design, Disassembly, recycling**			
P7.1*	Parts that have to be treated separately are easily separable	☒	☐	☐
P7.2*	Plastic materials in covers/housing have no surface coating.	☒	☐	☐
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	☒	☐	☐
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	☒	☐	☐
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	☒	☐	☐
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	☒	☐	☐
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	☒	☐	☐
P7.8*	Upgrading can be done using commonly available tools	☒	☐	☐
P7.9	Spare parts are available after end of production for: ***5*** years			☐
P7.10	Service is available after end of production for: ***5*** years			☐
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: ***ABS*** Material type: ***PC*** Material type: ***PC+ABS*** Material type: ***SGCC*** Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.	☐	☒	☐
P7.13	Insulation materials of internal electrical cables are PVC free.	☐	☒	☐
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing more than 25% post-consumer recycled content.	☒	☐	☐
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all ☐ PCBs > 25 g ☐ are low halogen as defined in IEC 61249-2-21. (See 1NOTE B2)	☐	☒	☐
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking: ***>FR(40)<***	☒	☐	☐
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): ☐ TBBPA (additive), ☒ TBBPA (reactive) (See NOTE B3), ☐ Other: , CAS #: Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4:	☒ ☐	☐ ☐	☐ ☐
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: **confidential**, CAS #: **confidential** (See NOTE B4) 2. Chemical name: , CAS #: " 3. Chemical name: , CAS #: " Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	☒ ☐	☐ ☐	☐ ☐
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been assigned the following Risk phrases; and Hazard statements: The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)	☐	☒	☐
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6): If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is ***11.4*****%**.black ***11.25*****%**.white or b) The weight of recycled material is ***137.7*** g.	☒	☐	☐

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *	F0GH	Logo	Lenovo
Issue date *	2022.1.24, updated 2023.07.28		

Product environmental attributes - Market requirements (continued)	Requirement met
Item	Yes No n.a.

	Material and substance requirements (continued)			
P7.21*	Biobased plastic material content is used in the product (See NOTE B7): If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %. or b) The weight of the biobased plastic material is g.			☐ ☒ ☐
P7.22*	Light sources are free from mercury, i.e. less than 0,1 mg/lamp. If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg			☒ ☐ ☐
P8	**Batteries**			
P8.1*	Battery chemical composition:			☐
P9	**Energy consumption (See NOTE B8)**			
P9.1	For the product the following power levels or energy consumptions are reported:			

Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *
Peak (On-max)	W	W	W	*Full load*
Category ---1				
Short Idle State - WOL Enabled	*16.69* W	*17.16* W	*16.55* W	*ENERGY STAR Computers V8 (P_{idle})*
Long Idle State - WOL Enabled	*1.37* W	*1.11* W	*1.11* W	*ENERGY STAR Computers V8 (P_{idle})*
Sleep (S3) - WOL Enabled	*1.37* W	*1.11* W	*1.11* W	*ENERGY STAR Computers V8 (P_{sleep})*
Off (S5) - WOL Enabled	*0.72* W	*0.72* W	*0.77* W	*ENERGY STAR Computers V8 (P_{off})*
Category ---2				
Short Idle State - WOL Enabled	*15.15* W	*14.55* W	*15.31* W	*ENERGY STAR Computers V8*
Long Idle State - WOL Enabled	*1.17* W	*1.17* W	*1.2* W	*ENERGY STAR Computers V8*
Sleep (S3) - WOL Enabled	*1.17* W	*1.17* W	*1.2* W	*ENERGY STAR Computers V8*
Off (S5) - WOL Enabled	*0.72* W	*0.71* W	*0.73* W	*ENERGY STAR Computers V8*
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	*0.118* W	*0.122* W	*0.24* W	☐
ETEC * Annual Energy Consumption	*1 : 51.41* kWh/year *2 : 46.40* kWh/year	*1 : 51.39* kWh/year *2 : 44.81* kWh/year	*1 : 49.85* kWh/year *2 : 46.98* kWh/year	*E_{TEC} = (8760/1000) x (P_{off} x 0.45 + P_{sleep} x 0.05 + P_{long_Idle} x 0.15+ P_{short_Idle} x 0.35)* ☐
P_{off}: Off Mode(S5) - WOL Enabled; P_{sleep}: Sleep Mode(S3) - WOL Enabled; P_{idle}: Idle State - WOL Enabled				
External Power Supply Efficiency Level (International Efficiency Marking Protocol) * : *VI*				*International Efficiency Marking Protocol for External Power Supplies* ☐
Display resolution * : *2.07* megapixels				☐
Default time to enter energy save mode: *10* minutes				☐

P9.2*	Information about the energy save function is provided with the product.	☒ ☐	☐
P9.3	Energy efficiency class (monitors only):		☒

P10	**Emissions**		
	Noise emission – Declared according to ISO 9296 (See NOTE B9)		
P10.1	Mode	Mode description	Statistical upper limit A-weighted sound power level, $L_{WA,c}$ (B)
	Idle	* *HDD:Idle*	* *3.3* ☐
	Operation	* *HDD: Operating*	* *3.4* ☐
	Other mode	*Declared A-weighted sound pressure level (dB) L_{pAm}*	*21 (operator position desktop – idle)*
	Other mode	*Declared A-weighted sound pressure level (dB) L_{pAm}*	*22 (operator position desktop – operating)*
	Measured according to: ☒ ISO 7779 ☐ ECMA-74 ☐ Other (only if not covered by ECMA-74)		

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

Model number *	F0GH	Logo	Lenovo
Issue date *	2022.1.24, updated 2023.07.28		

Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	n.a.
	Electromagnetic emissions			
P10.4	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program(s): ***ex. CE,FCC,VCCI,C-Tick***	☒	☐	☐
P12	**Ergonomics for computing products**			
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	☐	☒	☐
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	☐	☒	☐
P13	**Packaging and documentation**			
P13.1*	Product packaging material type(s): ***Paper -Corrugated Double wall*** weight (kg): ***1.328*** Product packaging material type(s): ***Paper - Corrugated single wall*** weight (kg): ***0.1896*** Product packaging material type(s): ***Plastic - Solid EPE (solid Expanded polyethylene)*** weight (kg): ***0.845*** Product packaging material type(s): ***Plastic - HDPE (high density polyethylene)*** weight (kg): ***0.0405***			
P13.2*	Product plastic primary packaging is free from PVC.	☒	☐	☐
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: ***80*** %			☐
P13.4*	Specify media for user and product documentation (tick box): ☒Electronic, ☒Paper, ☐Other			☐
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free:	☒	☐	
	If Yes, please specify: Totally chlorine-free	☒		
	Elemental chlorine-free	☐		
	Processed chlorine-free	☐		
P14	**Voluntary programs**			
P14.1	The product meets the requirements of the following voluntary program(s):			
	ENERGY STAR® Criteria version: ***8.0*** Date: ***2022.1.21*** Product category: ***Computer***			
	Eco-label: Criteria version: Date: Product category:			
	Eco-label: Criteria version: Date: Product category:			
P15	**Additional information (See NOTE B10)**			
P9	***Energy consumption of specific configuration may vary; description of the tested product configuration:*** ***CPU : Intel I3-1215U/I7-1260P ; GPU : Nvidia ; RAM : 8+8G ; Storage : 1T HDD +1TB SSD ; OS :WIN11***			
	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.			
P9	See Energy Star Qualified Notebooks & Tablet Computers for the latest information: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CO			

NOTE B10 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

Legal references Europe Annex B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation（EC）No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

Lenovo ErP Lot3 Information Sheet
- PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

Products scope of this sheet:
Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	***IdeaCentre AIO 3 24IAP7***	**Logo**
Model Number	***F0GH***	
Issue Date	***2022.1.24, updated 2023.07.28***	
Additional information	ES	

P7.1.1 Product environmental attributes

(d) year of manufacture:

(e) **Etec value** (kWh) per ErP Lot 3 Category and capability adjustments applied when **all discrete graphics cards (dGfx) are disabled** and if the system is tested with switchable graphics mode with UMA driving the display.

(f) **Etec value** (kWh) per ErP Lot 3 Category and capability adjustments applied when **all discrete graphics cards (dGfx) are enable**

		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)
capability adjustments applied during testing	Memory over base [GB]				***16***
	Additional internal storage	(Yes / No)	(Yes / No)	(Yes / No)	***Yes*** (Yes / No)
	Discrete television tuner	(Yes / No)	(Yes / No)	(Yes / No)	***No*** (Yes / No)
	Discrete Audio Card	(Yes / No)	(Yes / No)	(Yes / No)	***No*** (Yes / No)
	Discrete graphics Card(s) [number / #]	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)	***No*** #: (Yes / No)
	Category of discrete graphics Card(s)				
Test results	**Etec Value (kWh) - dGfx disabled** all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)				***22.22***
	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				***N/A***

(g) Idle state power demand (Watts); ***D : 5.08W***

(h) Sleep mode power demand (Watts); ***D : 1.1W***

(i) Sleep mode with WOL enabled power demand (Watts) (where enabled); ***D : 1.32W***

(j) Off mode power demand (Watts); ***D : 0.804W***

(k) Off mode with WOL enabled power demand (Watts) (where enabled); ***D : 0.798W***

(l) Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):

10% *N/A* 20% *N/A* 50% *N/A* 100% *N/A* Average *N/A*

(m) External power supply efficiency (if applicable)*:

Average active efficiency: ***90W - 87.59%, 135W - 88.01%***

*internal note: show values for all available external power supplies

(o) Minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):

(p-1) Measurement methodology used to determine information mentioned in points (l) – internal PSU efficiency:

N/A

(p-2)	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: ***refer to EN 50563:2011 External a.c. — d.c. and a.c.-a.c. power supplies***	
(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: ***N/A***	
(p-4)	Measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration: ***refer to IEC62623:2013-Desktop and notebook computers-Measurement of energy consumption***	
(q)	Sequence of steps for achieving a stable condition with respect to power demand: ***Based on user manual/Power on->Wait 5 minutes->Stable condition***	
(r)	Description of how sleep and/or off mode was selected or programmed: ***Based on user manual-Set power button behaviors*** **Set power button behaviors** You can define what the power button does according to your preference. For example, by press power button, you can turn off the computer or put the computer to sleep or hibernation mode. To change what the power button does: 1. Go to **Control Panel** and view by large icons or small icons. 2. Click **Power Options → Choose what the power buttons do.** 3. Change the settings as you prefer.	
(s)	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode: ***Based on user manual/Control Panel->Power Options-> Change Settings-> Restore default settings for this plan***	
(t)	**Duration of idle state condition before the computer automatically reaches sleep mode**, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes):	***10***
(u)	**Length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power** demand requirement than sleep mode (in minutes):	***N/A***
(v)	**Length of time before the display sleep mode is set to activate** after user inactivity (in minutes):	***10***
(w)	Information on the energy-saving potential of power management functionality: ***N/A***	
(x)	User information on how to enable the power management functionality: ***Based on user manual-Set the power plan*** **Set the power plan** For ENERGY STAR® compliant computers, the following power plan takes effect when your computers been idle for a specified duration: *Table 1. Default power plan (when plugged into ac power)* • Turn off the display: After 10 minutes • Put the computer to sleep: After 25 minutes To awaken the computer from Sleep mode, press any key on your keyboard. To reset the power plan to achieve the best balance between performance and power saving: 1. Go to **Control Panel** and view by large icons or small icons. 2. Click **Power Options**, and then choose or customize a power plan of your preference.	

(z) Test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:

Test voltage in V and frequency in Hz: 230V/50Hz

Total harmonic distortion of the electricity supply system: ≦2%

Instrument Type	Range Used Or ***	Make and Model **
AC Power Source	230V;50Hz	EXTECH;6810;SN:1450172
Power Meter	0~200V;0~20A	YOKOGAWA;WT210;SN:91H427511
Hygrothermograph	−20 to 50℃;20 to 90%	SEKONIC;ST-50
Light Measuring	1° ; 0.01 to 999,900 cd/m2	Konica Minolta;LS-150

Additional Notebook Battery Information:

	Battery[ies] **not** user replaceable The battery[ies] in this product cannot be easily replaced by users themselves. [1)]	Battery[ies] user replaceable	n/a
Internal/built-in Battery	☐	☐	☒
External/detachable Battery	☐	☐	☒
Bios Backup Battery	☒	☐	☐
Other:	☐	☐	☒

Additional information

1)
The battery[ies] in this product cannot be easily replaced by users themselves.
Акумулаторната[ите] батерия[и] в този продукт не може да се замени[ят] лесно от самите потребители.
Las baterías de este producto no pueden ser sustituidas fácilmente por los propios usuarios.
Výměnu baterie/baterií v tomto výrobku by neměli provádět sami uživatelé.
Brugeren kan ikke uden videre udskifte batteriet/batterierne i dette produkt.
Der Akku/die Akkus dieses Produkts kann/können nicht ohne weiteres vom Benutzer selbst ausgetauscht werden.
Kasutajad ei saa selle toote akut/akusid ise hõlpsasti asendada.
Η μπαταρία[-ες] στο προϊόν αυτό δεν μπορούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες
La/les batterie(s présente(s) dans ce produit ne peuvent être facilement remplacée(s) par les utilisateurs eux-mêmes.
Korisnik ne može lako zamijeniti Bateriju sam u ovom proizvodu.
La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente.
Lietotāji paši nevar nomainīt šā ražojuma akumulatoru(-us).
Šio gaminio baterijos [baterijų] pats vartotojas negali lengvai pakeisti.
A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni.
Il-batterija/batteriji f'dan il-prodott ma tistax/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess.
Batteriet [ene] i dette produktet kan ikke lett erstattes av brukerne selv.
De batterij(en) in dit product is (zijn) door de gebruiker niet gemakkelijk vervangbaar.
Użytkownik nie może sam w łatwy sposób wymienić baterii w tym produkcie.
A ou as baterias deste produto não podem ser facilmente substituídas pelos próprios utilizadores.
Bateria (bateriile) din acest produs nu poate (pot) fi ușor înlocuită (înlocuite) de utilizatorii înșiși.
Batériu(-ie) v tomto výrobku nemôže vymieňať používateľ.
Baterij/baterije v tem izdelku uporabniki sami ne morejo zlahka zamenjati.
Tämän tuotteen akku [akut] ei[vät] ole helposti käyttäjän vaihdettavissa.
Det är inte enkelt för kunden att själv byta ut batteriet/batterierna.
Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.

Lenovo (Singapore) Pte. Ltd.
151 Lorong Chuan,
#02-01, New Tech Park,
Singapore, 556741
(Tel - 65-6827-1000 & Fax- 65-6827-1100)

EU Declaration of Conformity

For the **IdeaCentre AIO 3 24IAP7** Personal Computer
Machine Type: F0GH

We, Lenovo (Singapore) Pte Ltd, declare under sole responsibility that the above products, manufactured for:

Lenovo PC HK Limited.
23/F, Lincoln House, Taikoo Place 979 King's Road,
Quarry Bay, Hong Kong

to which this declaration relates, is in conformity with the requirements of the following EU Directives:

- **Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment.**
- **Directive 2009/125/EC establishing a framework for the setting of Ecodesign requirements for Energy-related products.**
- **Council Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment as amended by Directive 2015/863/EU.**

The conformity assessment procedure referred to in Article 17.4a of Directive 2014/53/EU has been followed and performed with the involvement of a Notified Body, in accordance with Article 3.2:

Notified Body Name/number : MiCOM Labs Inc./2280
Issued the EU-type examination certificate: SGSC170-EU

The Technical Documentation (TD), relevant to the product described above and which support this DoC is available from the EU contact address on this DoC.

Signed:_____ Date: 16th Feb 2022
Joseph Chua (Executive Director)
Place of issue: Lenovo (Singapore) Pte Ltd.

European Contact for regulatory topics only:
Lenovo (Slovakia), Landererova 12, 811 09 Bratislava, Slovakia
Tel: +421 2 6868 3018

Lenovo (Singapore) Pte. Ltd.
151 Lorong Chuan,
#02-01, New Tech Park,
Singapore, 556741
(Tel - 65-6827-1000 & Fax- 65-6827-1100)

Standards References

The following harmonized standards and normative documents are those to which the product's conformance is declared, and by specific reference to the essential requirements of the referenced Directives:

RE Directive

Article 3.1(a) (Safety & Health)	EN62368-1	:	2014+A11:2017	✓
	EN IEC 62311	:	2020	✓

Article 3.1(b) (EMC)	EN 55032	:	2015+A11:2020	✓
	EN IEC 61000-3-2	:	2019	✓
	EN 61000-3-3	:	2013+A1:2019	✓
	EN 55035	:	2017+A11:2020	✓
	EN 301 489-1	V2.2.3	2019-11	✓
	EN 301 489-3	V2.1.1	2019-03	✓
	EN 301 489-17	V3.2.4	2020-09	✓

				Wireless module inside				
				WLAN with Bluetooth 1	WLAN with Bluetooth 2			
Article 3.2 (Radio Spectrum)	EN 300 328	V2.2.2	2019-07	✓	✓			
	EN 301 893	V2.1.1	2017-05	✓	✓			
	EN 300 440	V2.2.1	2018-07	✓				

RoHS Directive	EN 50581:2012 EN IEC 63000:2018	✓
ErP Directive	(EU) 2019/1782 EC 617/2013 ErP – Class B EN 50564:2011, EN 50563:2011	✓

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ANNEX

Wireless modules and External AC Adapters

Wireless module inside	MODEL
WLAN with Bluetooth 1	RTL8852BE
	AX201NGW
	9560NGW R
WLAN with Bluetooth 2	RTL8822CE

Description	MODEL	LENOVO P/N
External AC Adapter	ADLX90NDC3A	SA10M42754
	ADLX90NLC3A	5A10J75109
	ADLX90NCC3A	SA10M42797
	A19-090P3A	SA11B48992
	ADP-90ME B	SA11B48990
	PA-1900-74XX(X=A-Z, 0-9 or hyphen)	SA11B48991
	ADL135SDC3A	SA11B49017
	ADL135SLC3A	SA11B49018
	ADL135SCC3A	SA11B49019

European Contact for regulatory topics only:
Lenovo (Slovakia), Landererova 12, 811 09 Bratislava, Slovakia
Tel: +421 2 6868 3018

Product Environmental Report

iMac

Date introduced
October 30, 2023

Progress toward our 2030 goal

Over 23% carbon emissions reduction against baseline[1]

Over 28% of manufacturing electricity sourced from supplier clean energy projects[2]

Responsible packaging

98% fiber-based, due to our work to eliminate plastic in packaging

100% recycled or responsibly sourced wood fibers

Supplier Responsibility

The Apple Supplier Code of Conduct sets strict standards for safeguarding people in our supply chain and the planet.

Smarter chemistry[3]

- Arsenic-free display glass
- Mercury-free
- Brominated flame retardant–free
- PVC-free
- Beryllium-free

Longevity

To ensure durability, we assessed iMac in our Reliability Testing Lab, using rigorous testing methods that simulate customers' experiences.

Recovery

Return your device through Apple Trade In, and we'll give it a new life or recycle it for free.

Now using 100 percent recycled gold in the plating of multiple printed circuit boards

This report includes data current as of product launch. Product evaluations are based on U.S. configuration of iMac with two ports and 256GB. Product carbon footprint calculations include inbox accessories as well as packaging.

ENERGY STAR

epeat GOLD [4]

Our product carbon neutrality strategy

Our goal is for Apple and all the products we make to be carbon neutral by 2030, reducing our total carbon emissions to no more than 9.6 million metric tons—at least a 75 percent reduction against our 2015 baseline. The only way to reach this ambitious goal is to substantially decarbonize our products.

Our plan to decarbonize products is rigorous and focuses on transitioning to clean electricity, designing with recycled and low-carbon materials, and prioritizing lower-carbon ways of shipping products, like with ocean freight. Only after we've substantially reduced emissions will we apply credits from high-quality carbon removal projects to achieve carbon neutrality.

How we are reducing emissions

- **Transition to 100% clean electricity for manufacturing:** To eliminate emissions from the electricity used to make products, we're prioritizing manufacturing energy efficiency and helping to transition our entire supply chain to 100 percent clean electricity.[5]
- **Transition to 100% clean electricity for product use:** To gradually negate emissions from the electricity our customers use to charge their Apple products, we're prioritizing product energy efficiency and investing in clean energy projects around the world.
- **Prioritize non-air transportation:** To reduce emissions from transporting products, we're prioritizing the use of lower-carbon non-air shipping modes, like ocean or rail.
- **Use recycled and low-carbon materials:** To address emissions generated by using primary materials, we're increasing the recycled content of our products, maximizing material and manufacturing efficiencies, and improving yields. And where we've not yet fully transitioned to recycled content, we're prioritizing low-carbon materials, such as aluminum smelted with hydroelectricity.

How we'll get to carbon neutral

For emissions that remain after reductions, we and our suppliers are supporting nature-based solutions that result in high-quality carbon credits. These play an important role in addressing our climate crisis, as nature-based solutions contribute to the health of ecosystems in addition to removing carbon from the atmosphere. We are aligned with the scientific consensus that these solutions should only be deployed alongside aggressive emissions reductions.

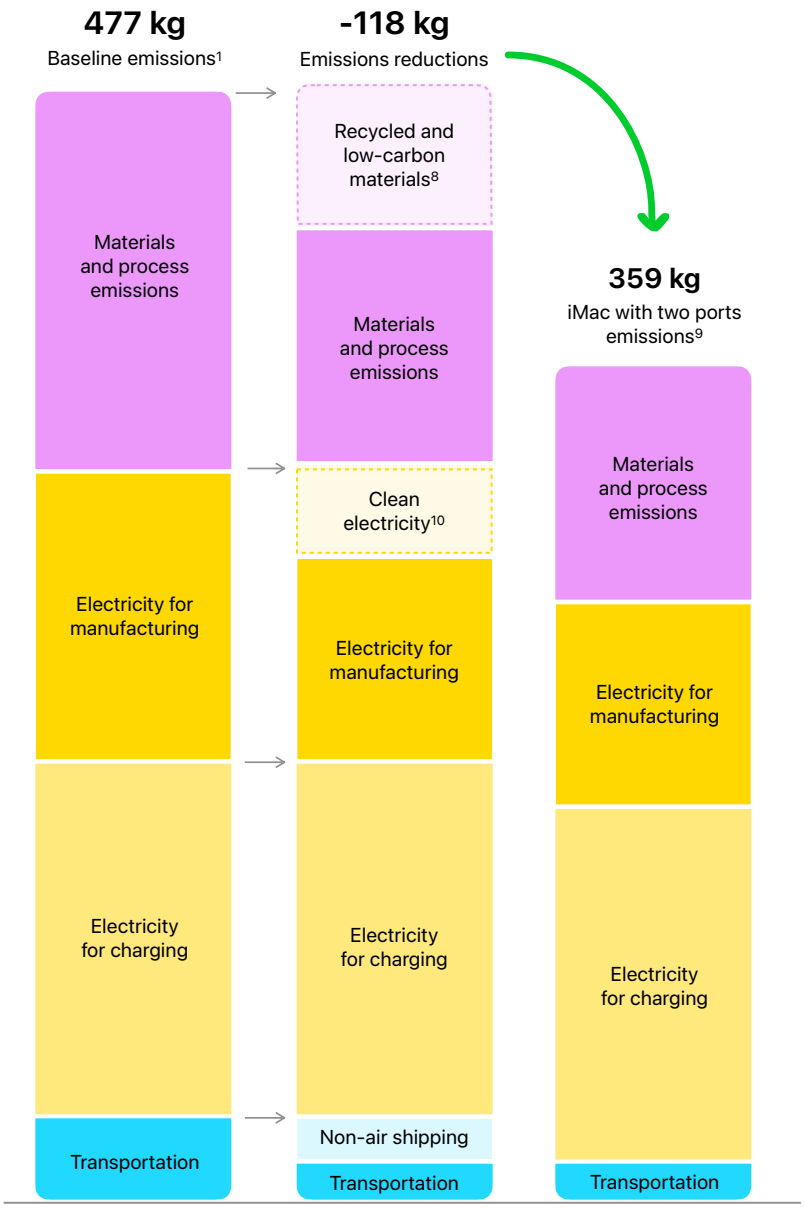
How we're monitoring progress

We first calculate the final carbon footprint of the product using a life cycle carbon analysis approach, in accordance with international standards. To help ensure our work is translating to real reductions, we consider what emissions would have been without our actions. We apply the following assumptions to create this baseline scenario:

- No use of clean electricity for manufacturing or product use, beyond what is already available on the grid (based on regional emissions factors).
- Apple's carbon intensity of key materials as of 2015. Carbon intensity of materials reflects use of recycled content and production technology.
- Apple's average mix of transportation modes (air, rail, ocean, ground) by product line across three years (fiscal years 2017 to 2019) to best capture the baseline transportation emissions of our products.

Progress toward carbon neutral

We've reduced emissions for iMac with two ports by 25 percent against our baseline.[1] This device contains 14 percent recycled content, reducing product emissions by about 12 percent.[6] We're also working with our suppliers to transition to 100 percent clean electricity for Apple production. The clean electricity solutions that suppliers have already implemented to date have reduced iMac with two ports emissions by 7 percent. We've also created a logistics plan that prioritizes non-air modes of transport for iMac with two ports, resulting in 4 percent fewer product emissions and reducing transportation-related emissions by over 50 percent.[7]



Taking responsibility for our products at every stage

We take responsibility for our products throughout their life cycles—including the materials they are made of, the people who build them, and how they are recycled at end of life. And we focus on the areas where we can make the biggest difference for our planet: reducing our impact on climate change, conserving important resources, and using safer materials.

We sell millions of products. So making even small adjustments can have a meaningful impact.

Source Materials

iMac contains a total of 14 percent recycled or renewable content.[6]

To conserve important resources, we work to reduce the material we use and aim to one day source only recycled or renewable materials in our products. And as we make this transition, we remain committed to the responsible sourcing of primary materials. We're proud to be recognized as a worldwide leader in the responsible sourcing of minerals in our products. We map many materials, some to the mineral source, and establish the strictest standards for smelters and refiners. Apple also requires all identified tin, tantalum, tungsten, gold, cobalt, and lithium smelters and refiners to participate in third-party audits.[11] Our product designs also consider the safety of those who make, use, and recycle our products, restricting the use of hundreds of harmful substances. Our standards go beyond what's required by law to protect people and the environment.

Aluminum

Our focus on Apple's carbon footprint extends to the materials we source. For iMac, we use 100 percent recycled aluminum in the stand.

Plastic

We're transitioning from fossil fuel–based plastics to renewable or recycled alternatives. For iMac, we use 35 percent or more recycled plastic in multiple components.

Tin

We use 100 percent recycled tin in the solder of multiple printed circuit boards.

Rare earth elements

We use 100 percent recycled rare earth elements in all magnets, representing 100 percent of the total rare earth elements in the device.[12]

Gold

Apple is pioneering industry-leading levels of traceability in recycled materials to build a gold supply chain of exclusively recycled content. We're now using 100 percent recycled gold in the plating of multiple printed circuit boards.

Smarter chemistry

iMac is free of harmful substances like beryllium, brominated flame retardants, PVC, phthalates, arsenic in the display glass, and mercury.[3] And 100 percent of the materials in iMac are covered by our Regulated Substances Specification. We go beyond what's required by aiming to understand the non-regulated substances in every part of every product—an effort that requires an industry-leading level of transparency through the entire supply chain. We consistently identify the makeup of over 80 percent by mass of Mac devices.

Make

The Apple Supplier Code of Conduct sets strict standards for safeguarding people in our supply chain and the planet that we all share. Every year, we assess our suppliers' performance in upholding the standards required by our Code.

We work closely with our suppliers to provide safe and healthy workplaces where people are treated with dignity and respect, and to reduce suppliers' environmental impact. Our requirements apply across our supply chain and include the responsible sourcing of materials. From the strong foundation set by our Code, we go further—from helping suppliers transition to clean electricity, to providing educational opportunities for their employees, to supporting suppliers in reducing waste. For more information, see apple.com/supplier-responsibility.

Greener chemicals

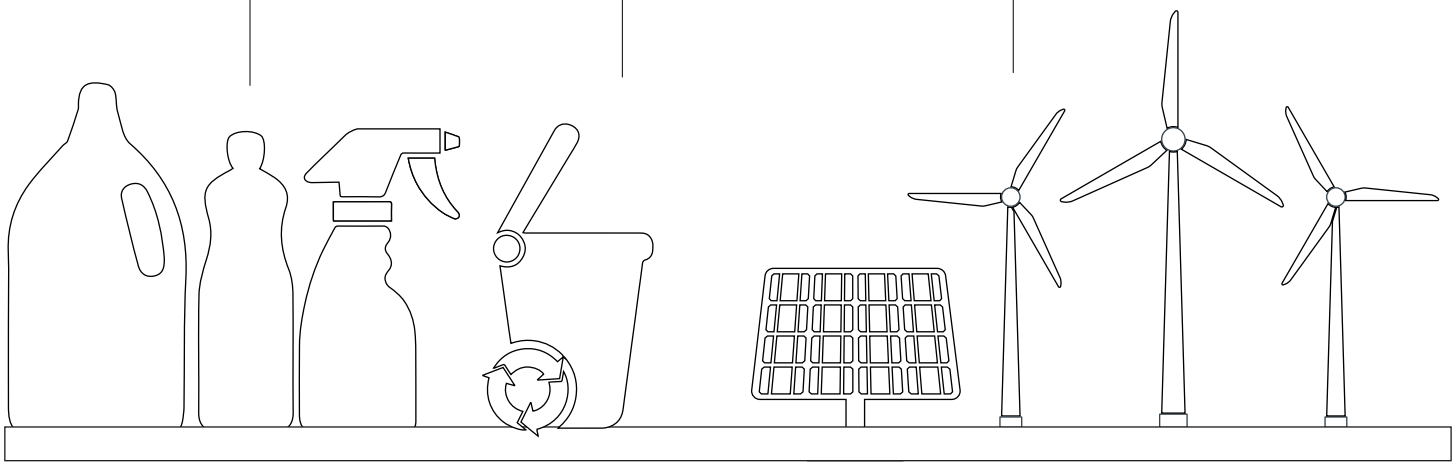
All established iMac final assembly supplier sites use safer cleaners and degreasers in their manufacturing processes, as determined by methodologies like the GreenScreen® assessment.[13]

Zero Waste to Landfill

No established iMac final assembly supplier sites generate any waste sent to landfill.[14]

Supplier energy use

Over 28 percent of manufacturing electricity is sourced from supplier clean energy projects, supported by Apple's Supplier Clean Energy Program.[2]



Package and Ship

iMac packaging is 98 percent fiber-based,[15] which brings us one step closer to our goal of completely removing plastic from all our packaging by 2025.

To improve our packaging, we are working to eliminate plastics, increase recycled content, and use less packaging overall. All of the wood fiber in our packaging is either recycled or comes from responsibly managed forests.[16] And we have protected or created enough responsibly managed forests to cover all the virgin wood fiber we use in our packaging.[17] This ensures working forests are able to regrow and continue to clean our air and purify our water.

As we transport our products from our manufacturers to our consumers, we're prioritizing less carbon-intensive shipping modes than air transport, such as rail and ocean.

98%

of the packaging[18] is fiber-based, due to our work to eliminate plastic in packaging

78%

recycled content in fiber packaging

100%

of the virgin wood fiber in the packaging comes from responsibly managed forests[16]

Use

iMac uses 58 percent less energy than the requirement for ENERGY STAR.[19]

We design our products to be energy efficient, long-lasting, and safe. iMac uses software and power-efficient components that intelligently manage power consumption. We also run our own Reliability and Environmental Testing Labs, where our products go through rigorous testing before they leave our doors. Our support continues throughout each product's life cycle, with regular software updates to keep devices current and a network of authorized repair professionals to service them, if necessary. To address emissions tied to the electricity our products use, we are building clean energy projects and engaging with our customers to educate and provide opportunities to support the decarbonization of the grid.

Energy consumption of ENERGY STAR–rated products

Apple devices consistently rank among the high-performing products rated by ENERGY STAR, which sets specifications that typically reflect the 25 percent most energy-efficient devices on the market. iMac consumes 58 percent less energy than the requirement for ENERGY STAR.[19]

Designed to last

To ensure durability, we assessed iMac in our Reliability Testing Lab, using rigorous testing methods that simulate the customers' experiences.

Made with smarter chemistry

We apply rigorous controls for materials users touch—all based on recommendations from toxicologists and dermatologists.

Recover

Return your product with Apple Trade In, and we'll ensure it has a long life or recycle it for free.

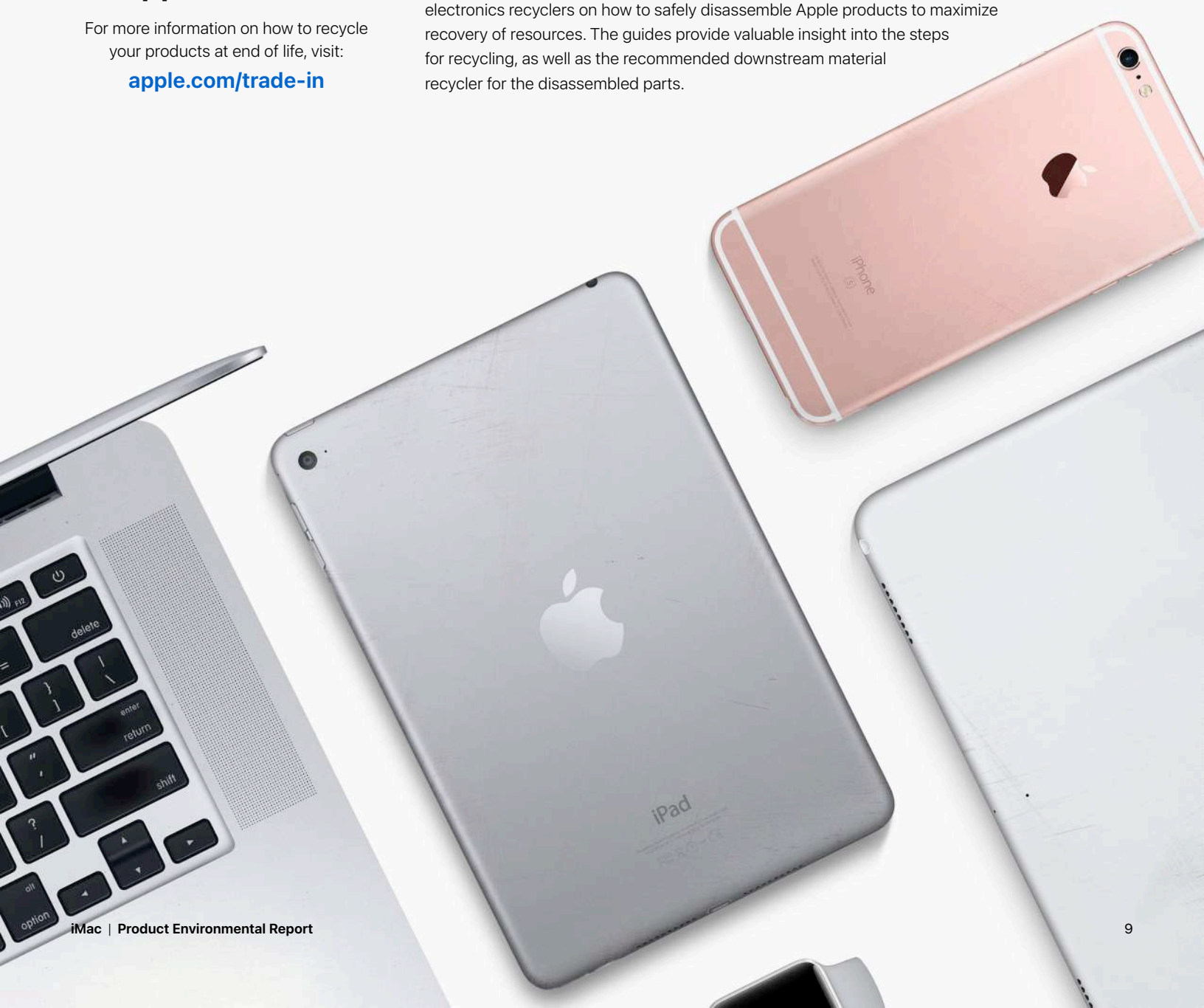
When products are used longer, fewer resources are extracted from the earth. And we want the materials in our products to live on in other products. That's why we launched Apple Trade In—it offers customers a seamless way to return their old devices and accessories to Apple. Eligible devices can be traded in for credit or an Apple Store Gift Card, while accessories and other devices can be recycled for free.[20] We also offer and participate in product take-back and recycling collection programs for 99 percent of the countries where we sell products—and we hold our recyclers to high standards. Our efforts to keep harmful substances out of our products mean our materials are safer to recover and reuse.

We're also creating Apple Recycler Guides to provide guidance for professional electronics recyclers on how to safely disassemble Apple products to maximize recovery of resources. The guides provide valuable insight into the steps for recycling, as well as the recommended downstream material recycler for the disassembled parts.

Apple Trade In

For more information on how to recycle your products at end of life, visit:

apple.com/trade-in



Definitions

Bio-based plastics: Bio-based plastics are made from biological sources rather than from fossil-fuel sources. Bio-based plastics allow us to reduce reliance on fossil fuels.

Carbon footprint: Estimated emissions are calculated in accordance with guidelines and requirements as specified by ISO 14040, ISO 14044, and ISO 14067. There is inherent uncertainty in modeling carbon emissions due primarily to data limitations. For the top component contributors to Apple's carbon emissions, Apple addresses this uncertainty by developing detailed process-based environmental models with Apple-specific parameters. For the remaining elements of Apple's carbon footprint, we rely on industry average data and assumptions. We calculate carbon emissions using the 100-year time horizon global warming potentials (GWP100) from the IPCC Sixth Assessment Report (AR6), including biogenic carbon. Our carbon footprint calculation includes emissions for the following life cycle phases in CO_2 equivalency (CO_2e):

- **Production:** Includes the extraction, production, and transportation of raw materials, as well as the manufacture, transport, and assembly of all parts and product packaging.
- **Transport:** Includes ground, air, and sea transportation of the finished product and its associated packaging from manufacturing site to regional distribution hubs. Transport of products from distribution hubs to end customers is modeled using average distances based on regional geography.
- **Use:** Apple assumes a three-year period for power use by first owners for iOS, iPadOS, and watchOS devices and a four-year period four years for macOS and tvOS devices. Product use scenarios are based on historical customer use data for similar products. Energy use is simulated in various ways; for example, by modeling daily battery drain or through performing activities like movie and music playback. Geographic differences in the power grid mix have been accounted for at a regional level.
- **End-of-life processing:** Includes transportation from collection hubs to recycling centers and the energy used in mechanical separation and shredding of parts.

  For more information on our product carbon footprint methodology, visit apple.com/environment/answers.

Low-carbon materials: Refers to materials created using production techniques with reduced carbon impact, such as Elysis (a patented technology that eliminates direct greenhouse gas emissions from the traditional aluminum smelting process) or aluminum smelted using hydroelectricity instead of coal.

Recycled materials: Recycling makes better use of finite resources by sourcing from recovered rather than mined materials. Recycled content claims for materials used in our products have been verified by an independent third party to a recycled content standard that conforms to ISO 14021.

Renewable materials: We define bio-materials as those that can be regenerated in a human lifespan, like paper fibers or sugarcane. Bio-materials can help us use fewer finite resources. But even though bio-materials have the ability to regrow, they are not always managed responsibly. Renewable materials are a type of bio-material managed in a way that enables continuous production without depleting earth's resources. That's why we focus on sources that are certified for their management practices.

Supplier Clean Energy Program: Since the electricity used to make our products is the largest contributor to our overall carbon footprint, we're helping our suppliers decarbonize their Apple production, including by transitioning electricity use to 100 percent clean sources.

Carbon Footprint

Greenhouse gas emissions were calculated using a life cycle assessment (LCA) methodology in accordance with ISO 14040, 14044, and 14067 standards and based on iMac with two ports and 256GB. The LCA boundary for this product includes the physical product and all of its components, packaging, as well as all in-box accessories.

Greenhouse gas emissions	iMac (two ports) 256GB	iMac (four ports) 512GB
Total product footprint	**359 kg CO_2e**	**389 kg CO_2e**
Apple emissions from utility-purchased electricity (scope 2)	0 kg CO_2e	0 kg CO_2e
Life cycle product emissions (scope 3)	359 kg CO_2e	389 kg CO_2e
• Production	52%	52%
• Transportation	5%	5%
• Product use	42%	43%
• End-of-life processing	<1%	<1%
GHG reductions achieved[1]	↓25%	↓23%

Note: Percentages may not total 100 due to rounding.

Endnotes

[1] Carbon reductions are calculated against a baseline scenario: 1) No use of clean electricity for manufacturing or product use, beyond what is already available on the latest modeled grid (based on regional emissions factors). 2) Apple's carbon intensity of key materials as of 2015 (our baseline year for our 2030 product carbon neutrality goal). Carbon intensity of materials reflects use of recycled content and production technology. 3) Apple's average mix of transportation modes (air, rail, ocean, ground) by product line across three years (fiscal years 2017 to 2019) to best capture the baseline transportation emissions of our products.

[2] We estimate the percentage of electricity-related emissions in our manufacturing that is sourced from clean electricity by attributing to our carbon model clean energy procured by our suppliers in the prior fiscal year, based on the supplier manufacturing allocations at time of product launch. Included in this number is only clean electricity that Apple or its suppliers have procured as part of Apple's Supplier Clean Energy Program.

[3] Apple's Regulated Substances Specification describes Apple's restrictions on the use of certain chemical substances in materials in Apple products, accessories, manufacturing processes, and packaging used for shipping products to Apple's end-customers. Restrictions are derived from international laws or directives, regulatory agencies, eco-label requirements, environmental standards, and Apple policies. Every Apple product is free of PVC and phthalates except for AC power cords in India, Thailand (for 2-prong AC power cords), and South Korea, where we continue to seek government approval for our PVC and phthalates replacement. Apple products comply with the European Union Directive 2011/65/EU and its amendments, including exemptions for the use of lead such as high-temperature solder. Apple is working to phase out the use of these exempted substances for new products where technically possible.

[4] iMac achieved a Gold rating in the United States and Canada, in accordance with IEEE 1680.1 or UL 110, and is listed as such on the Electronic Product Environmental Assessment Tool (EPEAT) Registry. EPEAT registers computers, displays, and mobile phones based on environmental requirements in these standards. For more information, visit www.epeat.net.

[5] We recognize that even clean sources of electricity have residual carbon emissions across their life cycle (e.g., from manufacturing), which we account for when calculating our product scope 3 emissions.

[6] Product recycled or renewable content is the mass of certified recycled material relative to the overall mass of the device, not including packaging or in-box accessories.

[7] Projected plan as of product launch.

[8] We calculate emissions savings from the use of recycled or low carbon materials in our products by comparing the carbon intensity of key materials today with their 2015 baseline for Apple products. We currently only quantify the carbon savings from the use of recycled aluminum, which means the actual emissions avoided are likely larger. We plan to improve our accounting of recycled content over time.

[9] Greenhouse gas emissions were calculated using a life cycle assessment methodology in accordance with ISO 14040, 14044, and 14067 standards and based on iMac with two ports with 256GB storage configuration. The life cycle assessment boundary for this product includes the physical product and all of its components, packaging, as well as all in-box accessories.

[10] We estimate emissions savings from supplier clean electricity by allocating to our carbon model clean electricity generated by our suppliers in the prior fiscal year, based on the supplier manufacturing allocations at time of product launch.

[11] We map materials in our supply chain and publish a list of identified tin, tantalum, tungsten, and gold (3TG), cobalt, and lithium smelters and refiners in our supply chain. Third-party assessments seek to confirm sourcing practices and are part of our responsible sourcing program. In addition, our efforts consider a broad range of risks, including social, environmental, human rights, and governance risks.

[12] Excludes trace amount of rare earth elements found outside of the magnets and accounting for less than 0.5 percent of the total found in the device.

[13] Chemicals that meet GreenScreen® benchmark 3 or 4 or other equivalent methodologies like U.S. EPA Safer Choice are considered safer and preferred for use. GreenScreen® is a comprehensive hazard assessment tool that evaluates substances against 18 different criteria. For more information, visit www.greenscreenchemicals.org.

[14] All established final assembly supplier sites—those that have been Apple suppliers for more than one year—for iMac are third-party verified as Zero Waste by UL LLC (UL 2799 Standard). UL requires at least 90 percent diversion through methods other than waste to energy to achieve Zero Waste to Landfill (Silver 90–94 percent, Gold 95–99 percent, and Platinum 100 percent) designations.

[15] Based on retail packaging as shipped by Apple.

[16] Responsible sourcing of wood fiber is defined in Apple's Responsible Fiber Specification. We consider wood fibers to include bamboo.

Endnotes

[17] For more information about our work to protect and create responsibly managed forests, please read our Environmental Progress Report.

[18] Breakdown of U.S. retail packaging by weight. Adhesives, inks, and coatings are excluded from our calculations of plastic content and packaging weight.

[19] Energy consumption and energy efficiency values are based on the ENERGY STAR Program Requirements for Computers, including the max energy allowance for iMac. For more information, visit www.energystar.gov. ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency. iMac is tested with the 143W Power Adapter, AC Cable (1m), and DC Cable (2m).

- Off: Lowest power mode of the system. System is shut down.
- Sleep: Low power state that is entered automatically after 10 minutes of inactivity (default), or by selecting Sleep from the Apple menu. Wake for network access enabled.
- Idle—Display on: System is on and has completed loading macOS. Display brightness was set as defined by ENERGY STAR Program Requirements for Computers and Auto-Brightness was turned off. Connected to Wi-Fi.
- Power adapter, no-load: Condition in which the 143W Power Adapter with the AC Cable (1m) and DC Cable (2m) is connected to AC power, but not connected to the system.
- Power adapter efficiency: Average of the 143W Power Adapter with the AC Cable (1m) and DC Cable (2m) measured efficiency when tested at 100 percent, 75 percent, 50 percent, and 25 percent of the power adapter's rated output current, but not connected to the system.

	Power consumption for iMac		
Mode	**100V**	**115V**	**230V**
Off	0.24W	0.23W	0.28W
Sleep	0.55W	0.62W	0.58W
Idle—Display On	20.2W	20.2W	20.5W
Power adapter, no load	0.10W	0.10W	0.12W
Power adapter efficiency	91.1%	91.5%	91.9%

[20] Trade-in values vary based on the condition, year, and configuration of your trade-in device, and may also vary between online and in-store trade-in. You must be at least 18 years old. In-store trade-in requires presentation of a valid, government-issued photo ID (local law may require saving this information). Additional terms from Apple or Apple's trade-in partners may apply.

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