



# Product Environmental Report

(i.d.i.g.n ion)

December 2022

## Made with better materials

100% 100%

100% recycled aluminum in enclosure  
100% recycled rPET in enclosure and lid

## Energy efficient

56%

56% energy consumption reduction  
ENERGY STAR® design  
efficiency qualification



## Tackling climate change

100%

100% committed to joining our net-zero manufacturing supply chain by 2030

## Smarter chemistry<sup>1</sup>

- 100% nickel-free design
- 100% copper-free
- 100% rosin-free solder
- 100% C-free
- 100% lead-free

## Responsible packaging

100% 97%

100% of wood fiber comes from certified sustainable sources  
97% of packaging fiber-based due to our work on recycled ink, packaging

## Apple Trade In

Round-trip logistics and in-store pickup available for free

## Enclosure made with 100% recycled aluminum

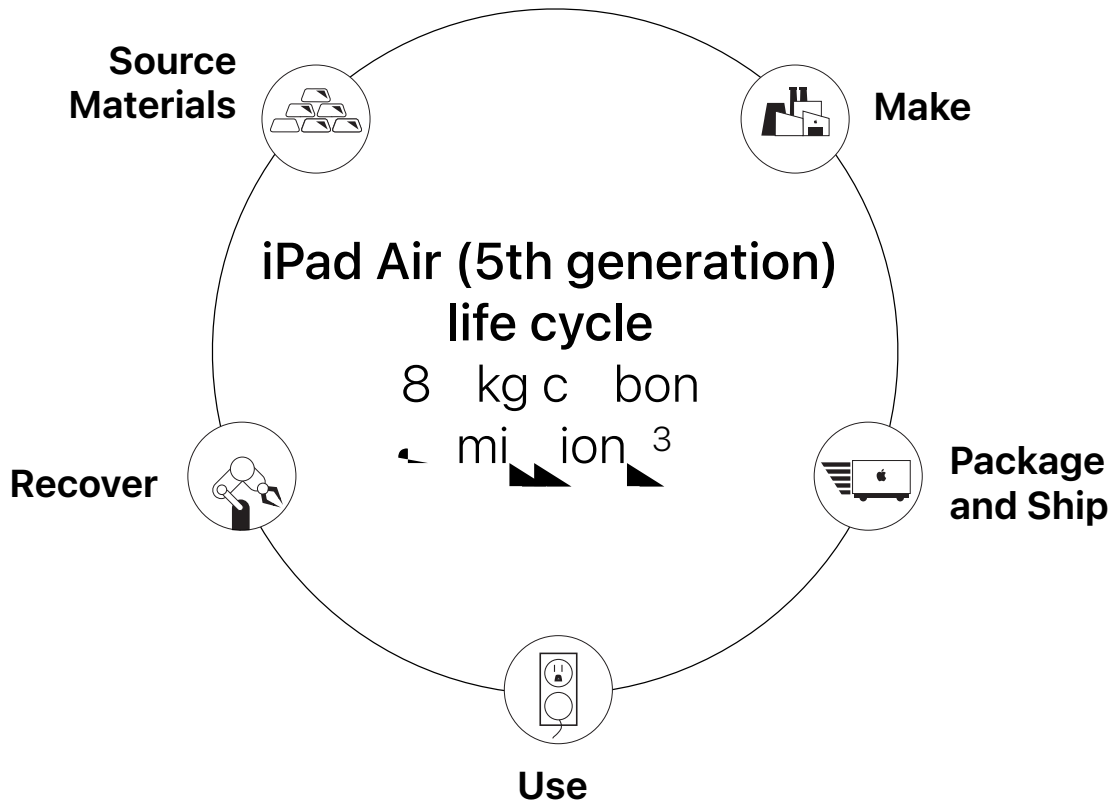
1. Includes enclosure of product sold in U.S. configuration of i.d.i.g.n ion).



# Taking responsibility for our products at every stage

We take responsibility for our products throughout their lifecycle—including the materials we use, the way we make them, how we package and ship them, and how we focus on recovering them. We work on making big differences for our products, including our commitment to using recycled materials.

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



## Carbon footprint

We continue to work on reducing our carbon footprint by focusing on making a greener product, with a lower carbon footprint and with a greener packaging. In addition, we offer a new way to reduce our carbon footprint by using recycled materials. We are committed to using recycled materials in our products, and we are committed to using recycled materials in our packaging. We are committed to using recycled materials in our products, and we are committed to using recycled materials in our packaging.

## iPad Air (5th generation) life cycle carbon emissions

- 70% Production
- 7% Packaging
- 14% Use
- 1% End-of-life recycling



# Source Materials

Aluminum is a key material used in the iPad Air (5th generation). It is a lightweight, durable metal that is also highly recyclable.

Aluminum is a key material used in the iPad Air (5th generation). It is a lightweight, durable metal that is also highly recyclable. The iPad Air (5th generation) is made from 100% recycled aluminum. This means that the aluminum used in the iPad Air (5th generation) has been recycled from old products, such as cans and other metal products. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin aluminum. The iPad Air (5th generation) is also made from other recycled materials, such as plastic and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).



## Aluminum

Aluminum is a key material used in the iPad Air (5th generation). It is a lightweight, durable metal that is also highly recyclable. The iPad Air (5th generation) is made from 100% recycled aluminum. This means that the aluminum used in the iPad Air (5th generation) has been recycled from old products, such as cans and other metal products. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin aluminum. The iPad Air (5th generation) is also made from other recycled materials, such as plastic and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).



## Rare earth elements

Rare earth elements are a group of 17 elements that are essential for many modern technologies, including smartphones. They are used in the iPad Air (5th generation) for their unique magnetic and optical properties. The iPad Air (5th generation) is made from 100% recycled rare earth elements. This means that the rare earth elements used in the iPad Air (5th generation) have been recycled from old products, such as magnets and other electronic components. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin rare earth elements. The iPad Air (5th generation) is also made from other recycled materials, such as plastic and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).



## Plastic

Plastic is a key material used in the iPad Air (5th generation). It is a lightweight, durable material that is also highly recyclable. The iPad Air (5th generation) is made from 100% recycled plastic. This means that the plastic used in the iPad Air (5th generation) has been recycled from old products, such as bottles and other plastic products. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin plastic. The iPad Air (5th generation) is also made from other recycled materials, such as aluminum and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).



## Tin

Tin is a key material used in the iPad Air (5th generation). It is a lightweight, durable metal that is also highly recyclable. The iPad Air (5th generation) is made from 100% recycled tin. This means that the tin used in the iPad Air (5th generation) has been recycled from old products, such as cans and other metal products. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin tin. The iPad Air (5th generation) is also made from other recycled materials, such as aluminum and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).

## Smarter chemistry

Smarter chemistry is a key material used in the iPad Air (5th generation). It is a lightweight, durable material that is also highly recyclable. The iPad Air (5th generation) is made from 100% recycled smarter chemistry. This means that the smarter chemistry used in the iPad Air (5th generation) has been recycled from old products, such as batteries and other electronic components. This helps to reduce the amount of waste that goes into landfills and also saves energy compared to using virgin smarter chemistry. The iPad Air (5th generation) is also made from other recycled materials, such as aluminum and glass. This helps to reduce the overall environmental impact of the iPad Air (5th generation).





# Make

Apple's Supplier Code of Conduct is designed to ensure the production of our products in a way that respects the environment. It is a key part of our commitment to responsible manufacturing and is a key part of our Supplier Code of Conduct.

We work with our suppliers to ensure that they work in a way that respects the environment. This includes ensuring that they use energy efficiently, reduce waste, and use sustainable materials. We also work with our suppliers to ensure that they are committed to responsible manufacturing and are committed to the environment. This includes ensuring that they are committed to the environment and are committed to the environment.

## Greener chemicals

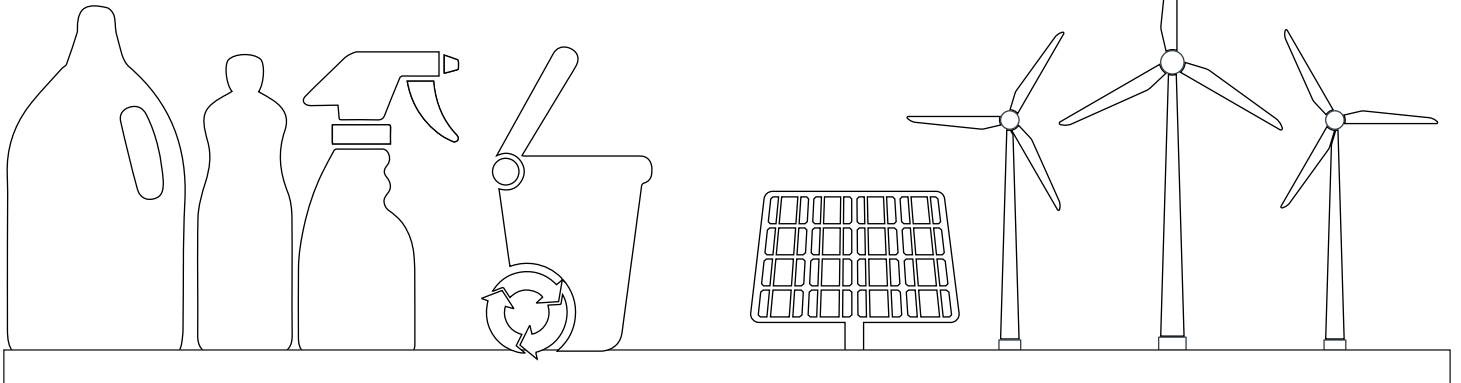
Apple is committed to using safer chemicals in our products and in our manufacturing processes. We are working with our suppliers to ensure that they are using safer chemicals and are committed to the environment. This includes ensuring that they are committed to the environment and are committed to the environment.

## Zero Waste to Landfill

Apple is committed to achieving zero waste to landfill. We are working with our suppliers to ensure that they are achieving zero waste to landfill. This includes ensuring that they are committed to the environment and are committed to the environment.

## Supplier energy use

Apple is committed to reducing our supplier energy use. We are working with our suppliers to ensure that they are reducing their energy use. This includes ensuring that they are committed to the environment and are committed to the environment.





# Package and Ship

iPad Air (5th generation) packaging is made with 100% recycled cardboard and 36% recycled wood fiber.

During production, packaging is made with 100% recycled cardboard and 36% recycled wood fiber. iPad Air packaging is made with 100% recycled cardboard from 100% recycled wood fiber. iPad Air packaging is made with 100% recycled cardboard from 100% recycled wood fiber. iPad Air packaging is made with 100% recycled cardboard from 100% recycled wood fiber.

**97%**

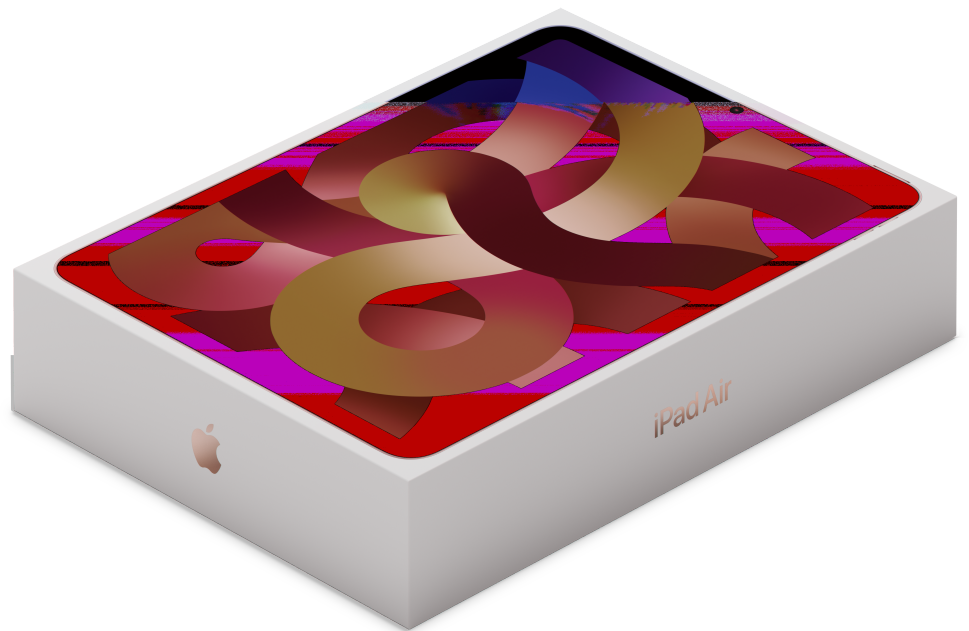
of iPad Air packaging<sup>11</sup> is fiber-based and does not contain any plastic.

**36%**

of recycled content in fiber packaging.

**100%**

of virgin wood fiber in iPad Air packaging comes from 100% recycled wood fiber.





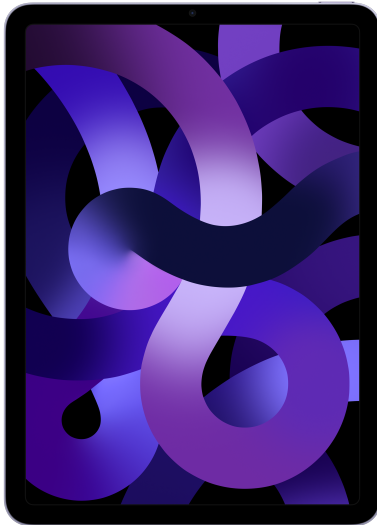
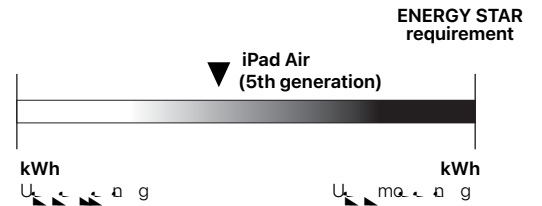
# Use

Product life cycle (including use) is a key component of the ENERGY STAR<sup>12</sup> program.

When you purchase a product, you are also purchasing a product life cycle. The product life cycle includes the energy used to produce the product, the energy used to transport the product, the energy used to use the product, and the energy used to dispose of the product. The ENERGY STAR program is designed to help you choose products that are more energy efficient and have a longer life cycle.

## Energy consumption of ENERGY STAR-rated products

The ENERGY STAR program is designed to help you choose products that are more energy efficient and have a longer life cycle. The ENERGY STAR program is designed to help you choose products that are more energy efficient and have a longer life cycle.



## Designed to last

The iPad Air (5th generation) is designed to last. It features a durable aluminum unibody and a long-lasting battery that can last up to 10 hours of use.

## Made with smarter chemistry

The iPad Air (5th generation) is made with smarter chemistry. It features a new generation of lithium-ion battery cells that are more energy efficient and have a longer life cycle.



# Recover

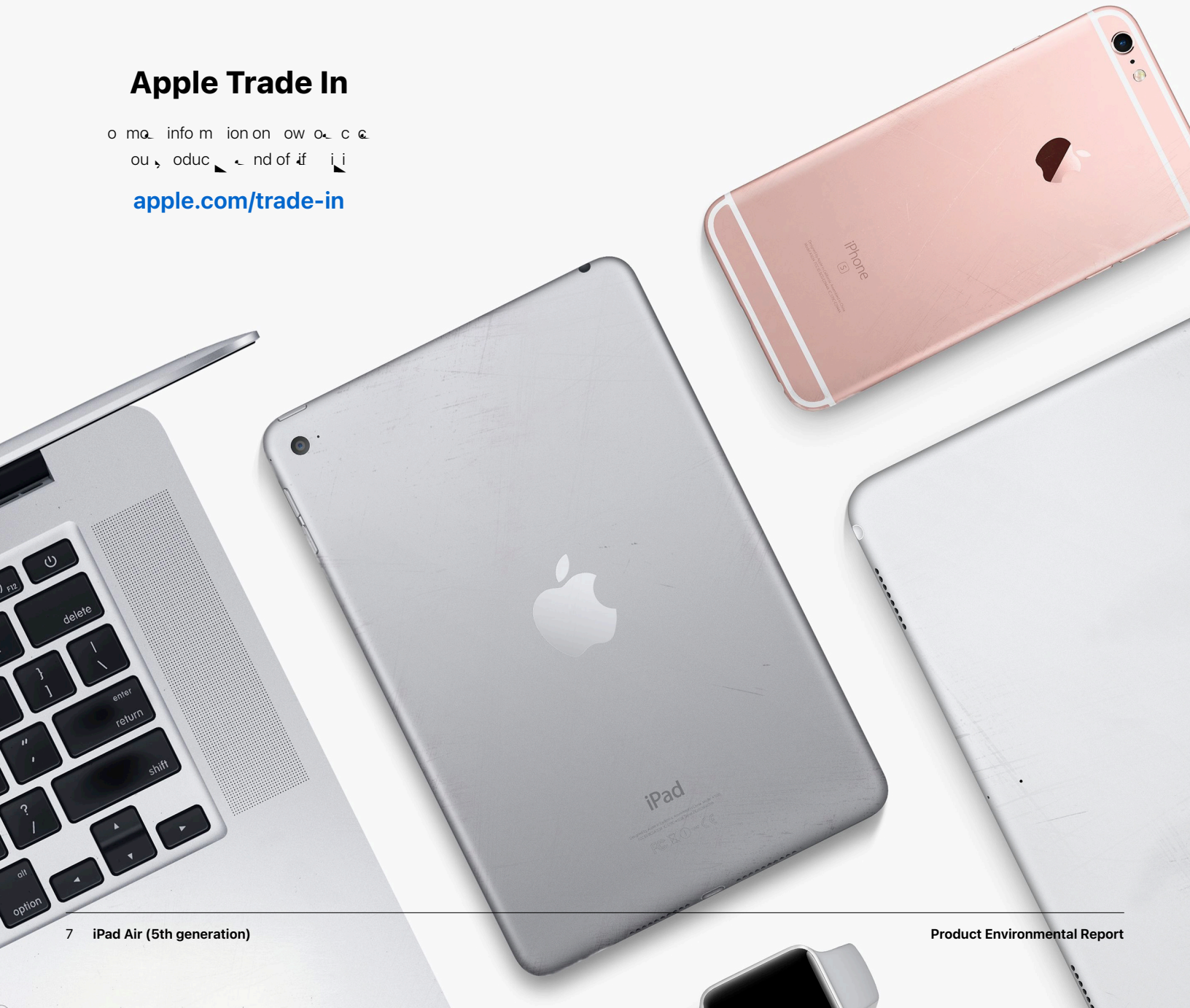
Recovery of products is a key part of our environmental strategy. We work with our suppliers and customers to ensure that our products are designed for recovery and reuse.

We are committed to reducing our environmental footprint and increasing the use of recycled materials. We work with our suppliers to ensure that our products are designed for recovery and reuse. We are committed to reducing our environmental footprint and increasing the use of recycled materials. We work with our suppliers to ensure that our products are designed for recovery and reuse.

## Apple Trade In

For more information on how we can help you trade in your old Apple products, visit [apple.com/trade-in](http://apple.com/trade-in).

[apple.com/trade-in](http://apple.com/trade-in)



# Definitions

**Bio-based plastics:** io-b e d s ic e m d f om bio ogic ou c e n f om fo i-fu ou c io-b e d s ic ow u o e duc e i nc on fo i fu

d i b e d in o oug e fo ming c i k i k mo j nd mu ic s b ck G og s ic d i f e n c in e s ow g id mi e b e n c c our d fo e gion e e .

**Carbon footprint:** E im e d m i ion e c cu e d in cco d nc wi guid ia nd e qui r a n e c i f i d b IS 14 4 nd IS 14 44. e e i in e n unc in in mod ing c bor m i ion du s im i o d i m i ion o e q con s on n con ibu o a s s e ' c bor m i ion s s e d d e i unc in b d e q ing d i d s oc b e d n i on r a n mod wi s s e e c i f i c s r a e o e e m in ing e r a n o f s s e ' c bonfoo s in w e on indu e g d nd um i ion C cu ion in c ud e m i ion fo e fo owing if c e s e con ibu ing o Gob W ming a n i GW 1 e ) in C e qui e n c f c o ( e )

→ **End-of-life processing:** Incud n e o ion f om c a c ion ub a c c ing c r e nd e e a g u d in r a c nic s s ion nd e dding of, o m a info m ion on e c bonfoo s in i i s s e . [.com/ n i on r a n / n w](#)

**Recycled materials:** R c c ing m k b e u e of fini e ou e b ou c ing f om e c a e d e n m i a d m e i R c e d c o r n c i m fo m e i u e d in o u s o duc e b e n e i f i d b n ind e nd n i d s o e c e d c o r n nd d confo m o IS 14 21.

**Renewable materials:** W d fia bio-m e i o e c n b e g a e d in um n if e n ik s e fib o u g c a . io-m e i c n e s u u e f w fini e ou c . u e n oug bio-m e i e e b i i a e g ow e e no w m n g d e on ib . R a w l e m e i e e of bio-m e i m n g d in w e n l e con in uou s o duc ion wi ou d s e ing e e ' e ou c e w w focu on ou c e c i f i d fo e i m n g r a n s c i c

**Supplier Clean Energy Program:** Sinc e e e c i c i u d o m k ou s o duc i e g con ibu o o ou a c bonfoo s in w l e s ing ou u s s i b cor a m a e a g e f f i c i n nd n i ion o a w e a w l e a g ou c . W l e commi d o n i ioning ou e n i m nuf c u ing u s c in o 1 e c n e a w l e e c i c i b 2 3 .

- **Production:** Incud e e c ion s o duc ion nd n e o ion of w m e i w e m nuf c u e n e o nd e mb of s nd s o duc s ck ging.
- **Transport:** Incud i nd e n e o ion of e fini e d s o duc nd i o c i e d s ck ging f om m nuf c u ing i a e gion di ibu ion ub . n e o of s o duc f om di ibu ion ub a nd cu o r a i mod e du ing e g di n c b e d on e gion g og s .
- **Use:** s s e um e e - o fou e e i od fo s ow u e b fi owa b e d on e s o duc e . o duc u e c n i o e b e d on i o i c cu o r a u e d fo i m i s o duc . E a g u e i i mu e d in iou w fo e m e b mod ing

# Endnotes

<sup>1</sup> s s e d fia i e ic ion on mfu ub nc including d fini ion fo w s s e con id o b " e e of " in e s s e R gu e d Sub nc s s e c i f i c ion. E e s s e s o duc i e e of C nd s e e c s fo C s ow co d in Indi i nd fo 2 s ong C s ow co d ) nd Sou s a w e e w con inu o e e k g a e n r a n s s o fo ou C nd s e e s c r a n s s e s o duc con s wi e Eu e n Union D l e k 2 11 e / EU nd i r a nd r a n including e m i ion fo e u e of d u c ig e m e u o d s s e i wo king o s e ou e u e of e e e m e d ub nc w e e c nic s o i l e .

<sup>2</sup> i d i e g a ion) c d e d God ing in e Uni d S e nd C n d in cco d nc wi IEEE 1 8 . 1 o U 11 nd i j e d u c on e e c onic o duc En i on r a n e e r a n o o ( E E ) R g i . E E e g e con s u e d i e nd mobi s o a b e d o r e n i on r a n e qui r a n in e e nd d e o m a info m ion i i [www. e . a](#) .

<sup>3</sup> G e n ou g e m i ion w e c cu e du ing if c e e r a n r a o d o g in cco d nc wi IS 14 4 nd 14 44 nd d nd b e d on i d i e g a ion) nd d configu ion wi e 4 G o g . W o e n u d e ou c bon mod a e g a w info m ion e u ou e im e fo e c bonfoo s in of e s e iou g a ion-i d i e g a ion) wi e 4 G o g configu ion-ina e d f om 82 kg C e e ub i e d in i o duc En i on r a n R s o ) o 88 kg C e .

Carbon footprint		
	iPad Air (5th generation)	iPad Air (4th generation)
64G	8 kg C e	88 kg C e
128G	84 kg C e	-
256G	82 kg C e	1.2 kg C e



# Endnotes

4 i d i (A g a ion) w u d fo com i on e mo e c n e e d nd imi d ic . e s oduc ion i d i (A g a ion) nd d configu ion wi 04G o g w com e d o i s ingi d i (A g a ion) nd d configu ion wi 04G o g configu ion inc e e e wo ow o g configu ion off e d.

W m s m e i in ou u s c in nd s ubi j of id n i f i d in n um ung e n nd god (8\_G) cob nd i um ra e nd e fia in ou u s c in i d s ra n e k o confi m ou cing s c ic nd e s of ou e s on i la ou cing s og m. In ddi ion ou e ffo con id b o d ng of i k including oci e n ion n a n um n ig nd go n n c i k.

6 R c e d m e i c im s s i o e n c o u nd i b e d on u di ing do a b U C.

7 C mic ra e G e n S a e n @ b n c m k 3 o 4 o o e e qui e n r a o do og i k U.S. E S f C o i c e con id e d f nd s e f e d fo u e G e n S a e n @ i com e e n i e d e ra n o o e u e ub n c g in 18 diff e n c i i . o m a e i n f o m i o n i i [www.g-n.com](http://www.g-n.com) o g.

8 e b i e d fin e mb u s i i o o e b e n s e u s i fo m a n o a e - fo i d i (A g a ion) e i d s e i f i d e o W e b U C ( 2 7 2 9 S nd d). U e qui e e e c n d e ion ou g ra od o e n w e a a g o c i e e o W e o nd f i e e 4 e c n God e e c n nd inum 1 e c n) d ign ion.

9 R s on i la ou cing of wood fib i d fia d in s e ' S u in la i b S e cific ion. W con id wood fib o incud b mboo.

10 m a e i n f o m i o n bou ou wo k o s a e c n d a e e on i b m n g d fa e e d ou [Enionran.org](http://Enionran.org) R s o .

11 e kdown of U.S. i s ck ging b w ig . S e c non s ic non-fib m e i e c ud d.

12 E a g con um ion nd a g e f f i a i n c u e b e d on e ENERGY S \_ R og m R qui ra n fo Com u including e m e a g ow n c fo i d i (A g a ion). o m a e i n f o m i o n i i [www.a-g.com](http://www.a-g.com) . ENERGY S \_ R nd e ENERGY S \_ R m k e e g i e d d m k o w a d b e U.S. En ion n a n a e c i a n g n c .

i d i (A g a ion) i e e d wi fu c g d b e nd s ow e d b e 2 W US -C ow d s e wi e US -C o C g C l a ( m).

→ S e s , ow ow e i e r e d u o m i c e w o m i n u of in c i i ( d f u ) o b s e i n g e S e s / W k bu on. Con a e d o Wi- i o e e i n g w e e f in e i d f u e .

→ I d -D i s on D i s big a w e d fia d b ENERGY S \_ R og m R qui ra n fo Com u nd u o- ig a w u a d off. Con a e d o Wi- i o e e i n g w e e f in e i d f u e .

→ ow d s e no- o d Con d i o n i n w i c e 2 W US -C ow d s e wi e US -C o C g C l a ( m) i con a e d a C s ow bu no con a e d o i d i (A g a ion).

→ ow d s e e f f i a i n c e g of e 2 W US -C ow d s e wi e US -C C g C l a ( m) ra u d f f i a i n c w e n e d 1 e c n 7 e c n e c n nd 2 e c n of e s ow d s e e d ou s u c u e n .

Power consumption for iPad Air (5th generation)			
Mode	100V	115V	230V
S e s	.44W	.44W	.42W
I d -D i s on	3.3W	3.3W	3. W
ow d s e no- o d	. 4W	. 4W	. W
ow d s e e f f i a i n c	80.8	87.0	87.8

13 \_ d -in u b e d on e con d i o n e nd configu ion of ou d -in d ic nd m o b w e n on i a nd in- a d -in. You mu b e 18 e o d. In- a d -in e qui e e n ion of id go n r a n i u d s o o D o c w m e qui i n g i n f o m i o n) d d i o n e m f o m s s e o s s e d -in s a m s s .

© 2 2 2 2 Inc. i g e e d s s e e s s e o g o . c e . c o g o i o a i d s s e W c H o r a o d s s e \_ i S i d S m c S S S nd w c S e d m k of s s e Inc. e g i e d in e U.S. nd o e coun j nd e gion i d i (A g a ion) i d m k of s s e Inc. s s e S a i e i c m k of s s e Inc. e g i e d in e U.S. nd o e coun j nd e gion ENERGY S \_ R nd e ENERGY S \_ R m k e e g i e d d m k o w a d b e U.S. En ion n a n a e c i a n g n c . e s oduc nd com n n ra ra n ion d e e in m b d m k of e i e e c k com ra i .