



Product Environmental Report

2022

December 2022

Progress toward our 2030 goal

40% recycled content
Over 20% of manufacturing facilities
powered from renewable energy

Responsible Sourcing

100% recycled content in wood fiber
96% fiber-based products work
with recycled ink

Responsible Manufacturing

Supplier Code of Conduct
and disclosure of
information



Smarter chemistry

- Reduced use of hazardous chemicals
- Elimination of lead
- Elimination of mercury
- Elimination of cadmium
- Elimination of hexavalent chromium

Log it

Product lifecycle tracking
from raw materials to
recycling

Recycle

Recycled content
and use of recycled materials

First in the world to use certified recycled steel in the battery tray

Information contained herein is confidential and intended for U.S. configuration of the product only. It is not to be distributed outside the U.S. without the express written consent of Apple.



Our product carbon neutrality strategy

We go forward and reduce our carbon footprint by 23% during our 2023-2025 period. Our goal is to reach net-zero emissions by 2030. We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint.

We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint. We will also focus on reducing our energy consumption and improving our energy efficiency. We will also focus on reducing our water consumption and improving our water efficiency.

How we're reducing emissions

- **Transition to 100 percent clean electricity for manufacturing:** We will transition our manufacturing operations to 100% clean electricity by 2025. We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint.
- **Transition to 100 percent clean electricity for product use:** We will transition our product use to 100% clean electricity by 2025. We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint.
- **Prioritize non-air transportation:** We will prioritize non-air transportation for our employees and customers. We will continue to invest in sustainable transportation options to reduce our carbon footprint.
- **Use recycled and low-carbon materials:** We will use recycled and low-carbon materials in our products. We will continue to invest in sustainable materials to reduce our carbon footprint.

How we'll get to net zero emissions

We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint. We will also focus on reducing our energy consumption and improving our energy efficiency. We will also focus on reducing our water consumption and improving our water efficiency.

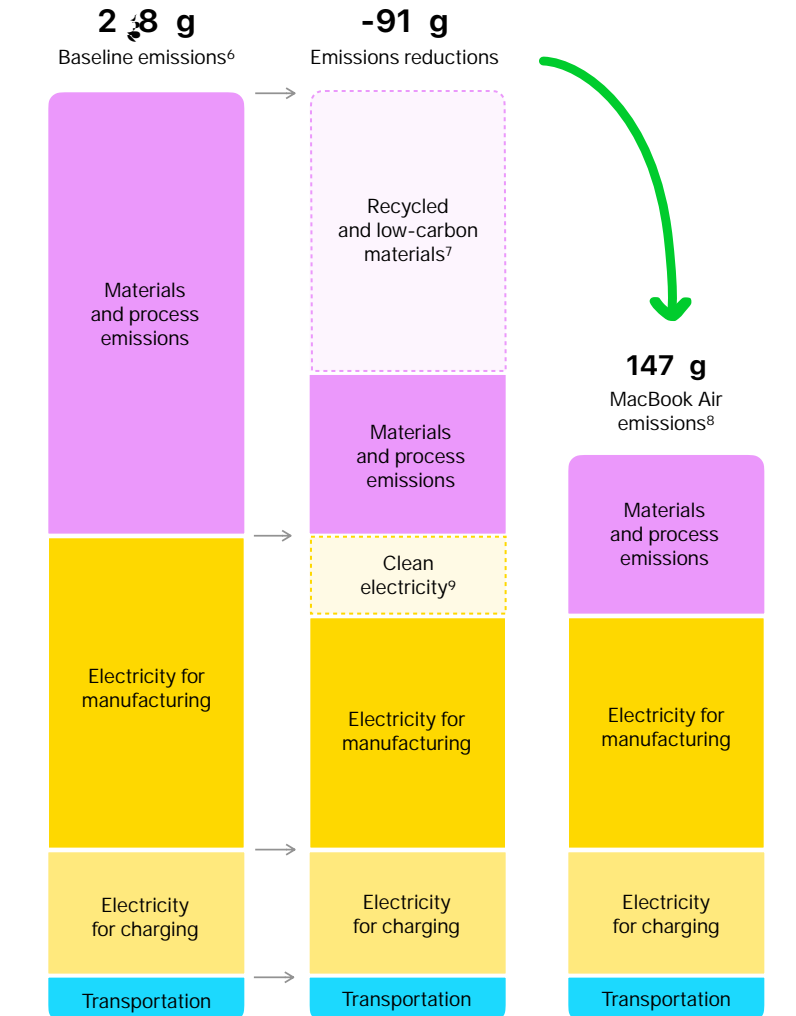
How we're monitoring progress

We will continue to invest in renewable energy and sustainable materials to reduce our carbon footprint. We will also focus on reducing our energy consumption and improving our energy efficiency. We will also focus on reducing our water consumption and improving our water efficiency.

- No use of air conditioning for manufacturing operations.
- 100% of our energy consumption will be from renewable sources.
- 100% of our water consumption will be from sustainable sources.

Progress to reach carbon neutral

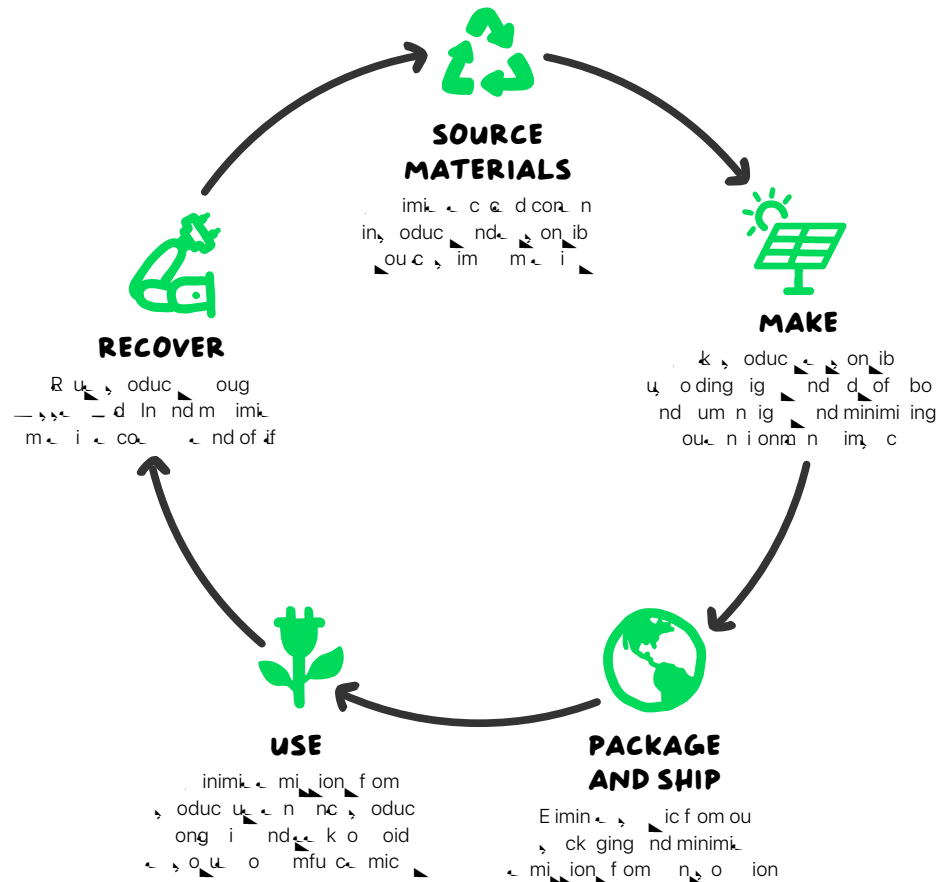
With reduced material for cookiwi, 2cib 38% en g in ou b e in .
 cookiwi 2cib con in 4 % en e e d con n including 1 % en
 e e d aluminu n e u e ducing cookiwi 2cib mi ion b bou
 3 % en . W e o wo king wi ou u y d i o n i ion o 1 % en e e e c i c i
 fo u y e y o duc ion. e e e c i c i o u ion u y d i e e d i m e r e d
 o d e e e duc d cookiwi 2cib mi ion b 8 % en .



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 source them, how we make them, how we package and ship them, how we use them, and how we recover them. We work to make big differences for our products by reducing our impact on the environment, our communities, and our customers.

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





Source materials

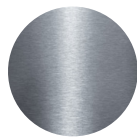
... cook i wi ... 2 c i con in 4 ... c n c e d o ... n w b e con n.1

... con ... im o n e ou c w w o k o d u c e m e i w u e nd im o o a d ... ou c on e c e d o e n w b e m e i in ou s o d u c ... nd w m k i n i o n w ... m in commi d o e e ... on i l a ou c i n g o f ... im m e i . W m s m n m e i ... o r a o e m i n o u c n d b i e i e ... nd d f o r a e n d e f i a ... o e q u i 1 ... c n o f i d n i f i d i n n u m u n g e n g o d c o b n d i u m r a e ... n d e f i a o s i c i e i n i d s u d i .¹⁰ W l s o u d o b e c o g n i d w o d w i d ... d i n e e ... on i l a ou c i n g o f m i n i n o u s o d u c . u s o d u c d i g n o c o n i d ... e f o f o w o m k u e n d e c e o u s o d u c e i c i n g e u e o f u n d d o f ... m f u u b n c . u n d d g o b o n d w ' e q u i d b w o s a e c e e n d ... e n i o n r a n .



Rare earth elements

W u 1 ... c n e c e d e e ... r a n i n m g a ... n i n g ... 8 ... c n o f e o ... e e r a n ... i n e d i c .



Steel

W u 9 ... c n e c e d e e i n e ... b e ... - f i f o s s e .



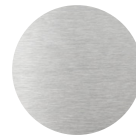
Ti

W u 1 ... c n e c e d i n i n e o d ... o f e m i n o g i c b o d .



Elastomer

W l ... n i o n i n g f o m f o i f u - b e d ... s ... i c o o m d f o m e n w b ... o e c e d o u c . o o c o o k i ... w i ... 2 c i w u 3 ... c n o m a ... e c e d s ... i c i n 1 c o m p o a n .



Aluminum

... e e d n u m i n u m o m d o f 1 ... c n e c e d u m i n u m w i c w u e f o ... e n c o u e o f ... c o o k i w i ... 2 c i .¹¹ ... i o d i e ... r a e n g d u b i i ... n d f w ... f i n i - w i o u m i n i n g n a w ... b u i (u m i n u m e) f o m e e .



Smarter chemistry

... c o o k i w i ... 2 c i i f e o f m f u u b n c i k b i u m b o m i n e d f r a e d n ... C s ... e ... n i c i n e d i s g ... n d r a c u 3 n d 1 ... c n o f e m e i i n ... c o o k i w i ... 2 c i e c o e d b o u R g u e d S u b n c S e c i f i c i o n . W g o b o n d ... w ' e q u i d b i m i n g o u n d ... n d e n o n e g u e d u b n c i r e s o f e ... s o d u c - r e f f o ... e q u i n i n d u e d i n g e o f n e n c o u g e e n i u s ... c i n . W c o n i e n i d n i f e m k u o f a 7 ... c n b m o f . c d i c .



Value

Supplier Code of Conduct is a standard for the operation of our business in and around the world. It is a way for our suppliers to form a new industry standard and guide our business.

We work with our suppliers to identify and work on areas where we can improve our business and reduce our environmental impact. We require our suppliers to include environmental clauses in their contracts. Our findings from our audits are shared with our suppliers. For more information, visit www.3m.com/suppliercodeofconduct.

Reduce chemicals

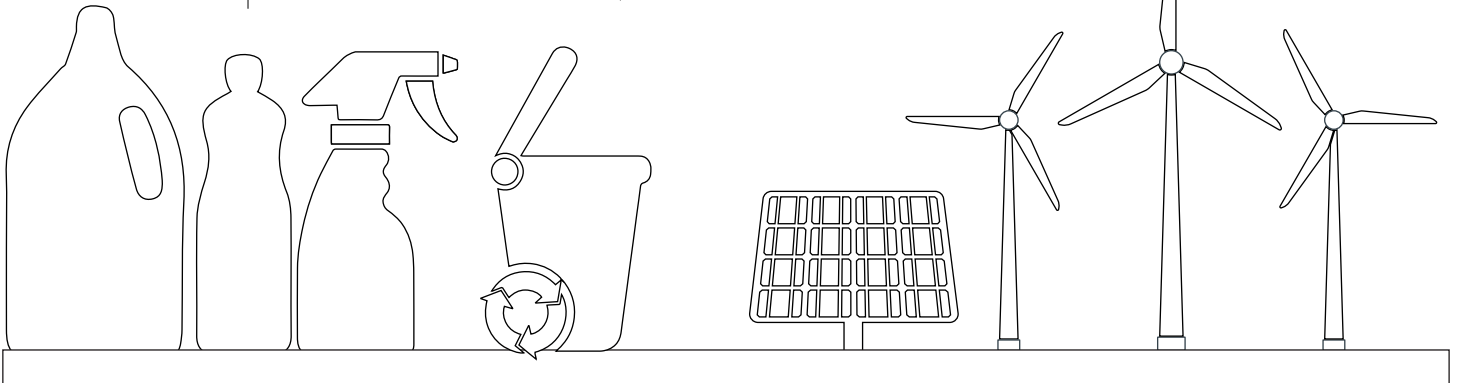
Our biodegradable cleaning products are designed to be safe for the environment and our employees. We are committed to reducing our chemical footprint and are working to eliminate the use of hazardous chemicals. For more information, visit www.3m.com/chemicalreduction.

Zero Waste to Landfill

Our biodegradable cleaning products are designed to be safe for the environment and our employees. We are committed to reducing our chemical footprint and are working to eliminate the use of hazardous chemicals. For more information, visit www.3m.com/zerowaste.

Sustainable energy use

Our biodegradable cleaning products are designed to be safe for the environment and our employees. We are committed to reducing our chemical footprint and are working to eliminate the use of hazardous chemicals. For more information, visit www.3m.com/sustainableenergy.





ac age a d Shi

ac ool i wi 2 c i s ck ging i m d wi 1 c n
 c e d nd e on ib ou c d wood fib .

oim, a ou, ck ging w e wo king e imin e s ic ing e c e d cor n nd
 u e s ck ging a of e wood fib in ou, ck ging i e e c e d o cor
 f om e s on ib m n g d fa .¹⁴ nd w e s e e d o e e d noug e s on ib
 m n g d fa o ca e i gin wood fib w u e in ou, ck ging.¹⁵ i e n u
 wo king fa e b e o g ow nd con inu o e n ou i nd, u if ou w e .

— w n s o ou, oduc f om ou m nuf c u o ou con um w e s io i ing
 c bon-in n k i s ing mod n i n s o uc i nd oc n.

95%

of e s ck ging¹⁶
 i fib -b e d du o
 ou wo k e imin e
 s ic in s ck ging

45%

e c e d cor n in
 fib s ck ging

10%

of e i gin wood
 fib in e s ck ging
 com f om e s on ib
 m n g d fa .¹⁴





Use

... cook i wi ... 2 c i u ... 7 ... c n ... a g ... n ...
 ... qui m n fo ENERGY S...R.17

W d ignou s, oduc o b e a g e f f i a i n o n g - i n g n d f . c o o k i w i ... 2 c i u ...
 of w e n d s o w e f f i a i n c o m o a n i r i g n m n g s o w c o n u m i o n .
 W o u n o u o w n R i b i i n d E n i o n r a n e i n g b w e o u s o d u c g o u g
 i g o u e i n g b f e e e o u d o o u u o c o n i n u o u g o u e c s o d u c '
 i f c e w i e g u of w e u d e o k e d i c c u e n n d a w o k o f u o i d
 e s i q f i o n o i c e m i f a c . o d d e m i i o n i d o e e c i c i o u
 s o d u c u w e b u i l d i n g e r a g s a c n d n g g i n g w i o u c u o m o
 e d u c e n d s o i d a s o u n i k i o u s o e d c b o n i i o n o f e g i d .

Ei erg col sum tio of ENER Y S R-rated roducts

... d i c c o n j e n n k m o n g e i g f o m i n g s o d u c e d b ENERGY S...R
 w i c e c i f i c i o n s i c e f c e 2 ... c n m o e a g e f f i a i n d i c o n
 e m k ... c o o k i w i ... 2 c i c o n u m 7 ... c n ... a g ... n ... e q u i m n
 fo ENERGY S...R.17

esig ed to last

e n u d u b i i w ... d
 ... c o o k i w i ... 2 c i i n o u
 R i b i i e i n g b u i n g i g o u
 e i n g m o d i m u e
 c u o m e e i n c

ade ith smarter chemistr

W s s i g o u c o n o f o
 m e i u o u c - b e d
 o n e c o m m a n d i o n f o m
 o i c o o g i n d d m o o g i



Recover

Run our product waste and In and we're not just doing it for the planet.

When you buy a new product, you're also buying a product that's made from recycled materials. In our products, we use recycled materials. For example, we use recycled aluminum in our iPhone cases. We also use recycled materials in our packaging. We're committed to using recycled materials in our products and packaging. We're committed to using recycled materials in our products and packaging.

Apple Trade In

Learn more about our Trade In program and how to get the most out of your old device. Visit apple.com/trade-in.

With our new [Recycle Guide](#), you can find out how to recycle your old device. The guide is available in English, Spanish, and French. You can also find out how to recycle your old device at [apple.com/trade-in](#).



Definition

Bio-based plastics Bio-based plastics are made from biological sources and can be used for a wide range of applications. Bio-based plastics are made from renewable resources and can be used for a wide range of applications.

Carbon footprint The carbon footprint of a product is the total amount of greenhouse gases that are emitted during its production, use, and disposal. The carbon footprint of a product is the total amount of greenhouse gases that are emitted during its production, use, and disposal.

Reduction Reduction is the process of reducing the amount of waste that is generated during the production of a product. Reduction is the process of reducing the amount of waste that is generated during the production of a product.

Transport Transport is the process of moving goods from one location to another. Transport is the process of moving goods from one location to another.

Use Use is the process of using a product. Use is the process of using a product.

End-of-life process End-of-life process is the process of disposing of a product at the end of its useful life. End-of-life process is the process of disposing of a product at the end of its useful life.

For more information on our products, visit www.bonfo.com/en/online.

Low-carbon materials Low-carbon materials are materials that have a low carbon footprint. Low-carbon materials are materials that have a low carbon footprint.

Recycled materials Recycled materials are materials that have been recycled. Recycled materials are materials that have been recycled.

Renewable materials Renewable materials are materials that can be replenished naturally. Renewable materials are materials that can be replenished naturally.

Supplier Clean Energy program The Supplier Clean Energy program is a program that encourages suppliers to use clean energy. The Supplier Clean Energy program is a program that encourages suppliers to use clean energy.

Carbon Footprint

Greenhouse gas emissions were calculated during the production of the product in accordance with ISO 14047 and ISO 14044 and based on the data provided in the 2023 Product Environmental Footprint (PEF) report. The data used for the calculation is based on the 2023 Product Environmental Footprint (PEF) report. The data used for the calculation is based on the 2023 Product Environmental Footprint (PEF) report.

Product Environmental Footprint (PEF) - 2023	
Greenhouse gas emissions	256GB storage
Total product footprint	147 kg CO₂e
Greenhouse gas emissions (CO ₂ e)	147 kg CO ₂ e
Production	0
Transportation	8
Usage	22
End-of-life recycling	-1
GHG reduction credit ⁶	-38

Not including the 1st round of recycling.

Weight of the product is used to calculate the carbon footprint in different configurations.

Carbon Footprint by Configuration	
20GB storage	147 kg CO ₂ e
12GB storage	171 kg CO ₂ e

Et dnotes

- 1 oduc e e do e a w la cor n i e m of c ifi d e e d m e i e k o e a m of e d ic no including, ck ging o in-bo cc ai
- 2 We im e e e c n o e c i c i e e d m i j o n i n o u m n u f c u i n g i j o u c d f o m e a e c i c i b i b u i n g o o u c b o n m o d e a r a g s o c u d b o u u s i i n e s i o f i c e b e d o n e u s i m n u f c u i n g o c i o n i r a o f s o d u c u n c . I n c u d d i n i n u m b j o n e a e c i c i u s e o i u s i i n e s o c u d s a f s s e ' S u s i G e n E a g o g m .
- 3 s s e ' R g u e d S u b n c S e c i f i c i o n d c i b s s e ' e i c i o n o n e u e o f c i n a m i c u b n c i n m e i i n s s e s o d u c c c a i m n u f c u i n g s o c e n d s c k g i n g u e d f o i s i n g s o d u c o u s s e ' e n d c u o r a R i c i o n e d k d f o m i r a n i o n w o d i c i e g u o g n e i e c o b e q u i r a n e n i o n r a n n d d n d s s e s o i a i . E e u s s e ' o d u c i e e o f C n d s e e c s f a C s o w c o d i n d i i n d f o 2 s o n g C s o w c o d j n d S o u s a e w e w c o n i n u o e k g o e n a n s s o f o o u C n d s e e s c r a n s s e s o d u c c o m w i e E u a n U n i o n D i c k 2 1 1 6 . E U n d i r a n d r a n i n c u d i n g e m j o n f o e u o f d u c i g e m e u o d . s s e i w o k i n g o s e o u e u e o f e e e m e d u b n c f o a w s o d u c w e e c n i c s o i a .
- 4 c o o k i w i 2 c i c i e d G o d i n g i n e U n i d S e n d C n d i n c c o d n c w i I E E E 1 0 8 . 1 o U 1 1 n d i j e d u c o n e E c o n i c o d u c E n i o n r a n e e r a n o o E E J R g i . E E e g i e c o m u d i s n d m o b i s o a b e d o r a n i o n r a n e q u i r a n i n e e n d d . o m a i n f o m i o n i j i www.e.a .
- 5 We cogni e e n e n o u c o f e c i c i e e i d u c b o r m i j o n c o e i f c e e g . f o m m n u f c u i n g w i c w e c c o u f o w e n e c u i n g o u s o d u c c a e 3 m i j o n .
- 6 C b o n e d u c i o n e c c u e d g i n b e i a c n i o 1) N o u o f e a e c i c i f o m n u f c u i n g o s o d u c u b o n d w i e d i l a o n e g i d b e d o n e g i o n e m i j o n f c o . 2) s s e ' c b o n i r a n j i o f k m e i o f 2 1 . o u b e i a e f o u 2 3 s o d u c c b o n a u i g o . C b o n i r a n j i o f m e i e f c u e o f e c e d c o r n n d s o d u c i o n e c n o o g . 3) s s e ' e g m i o f n s o i o n m o d i i o c n u c k i n g b s o d u c i a c o e e e f i c e 2 1 7 o 2 1 0 o b c s u e b e i a n s o i o r m i j o n o f o u s o d u c .
- 7 W c c u e e m i j o n i n g f o m e u e o f e c e d o o w c b o n m e i i n o u s o d u c b o m i n g e c b o n i r a n j i o f k m e i o 2 1 . b e i a . W c u e n o n q u n i f e c b o n i n g f o m e u e o f e c e d u m i n u m w i c r a n e c u e m i j o n o i d d e i k g . W s n o i m a o u c c o u n i n g o f e c e d c o r n a i r a .
- 8 G e n o u e g e m i j o n w e c c u e d u i n g i f c e e r a n r a o d o o g i n c c o d n c w i I S 1 4 4 n d 1 4 4 4 n d d n d b e d o n . c o o k i w i 2 c i n d 2 0 G o g .
- 9 We im e e m i j o n i n g f o m u s i e a w l a e c i c i b o c i n g o o u c b o n m o d e a e c i c i g a e d b o u u s i i n e s i o f i c e b e d o n e u s i m n u f c u i n g o c i o n i r a o f s o d u c u n c .
- 10 W m s m e i i n o u u s c i n d s u b i j i o f i d n i f i d i n n u m u n g e n n d g o d 0 G c o b n d i i u m r a e n d e f i a i n o u u s c i n . i d s e r a n e k o c o n f i m o u c i n g s c i c n d e s o f o u e o n i b o u c i n g s o g m . I n d d i o n o u e f f o c o n i d b o d n g o f i k i n c u d i n g o c i e n i o n r a n u m n i g n d g a n n e i k .
- 11 R e d m e i c i m s s i o e e n c o u .
- 12 C e m i c r e G e n S a e n 0 b n c m k 3 o 4 o o e e q u i e n r a o d o o g i k U S E S f C o i c e c o n i d e d e f n d e f e d f o u e G e n S a e n 0 j c o m e e n k d e r a n o o e u e u b n c g i n 1 8 d i f f e n c i i . o m a i n f o m i o n i j i www.g.e.n.e.n.c.mic.o.g .
- 13 e b j e d f i n e m b u s i i o o e e b e n s s e u s i f o m a n o a e f o c o o k i w i 2 c i e i d s e i f i d e o W e b U C 2 7 0 0 S n d d j . U e q u i e e c n d e i o n o u g r a o d o e n w e e a g o c i e e o W e o n d f i i e e 0 4 e c n G o d 0 0 e c n n d i n u m 1 e c n d i g n i o n .
- 14 R o n i l a o u c i n g o f w o o d f i b i d f i a d i n s s e ' S u i n l e i b S e c i f i c i o n .
- 15 o m a i n f o m i o n b o u o u w o k o s a e c n d a e e s o n i b m n g d f a s s e e e d o u E n i o n r a n o g . R s o .
- 16 e k d o w n o f U S e i s c k g i n g b w i g d e k i n k n d c o i n g e e c u d d f o m o u c c u i o n o f s i c o r a n n d s c k g i n g w i g .

Ednotes

¹⁷ Energy consumption and efficiency under the Energy Star program for the 2013 model year. ENERGY STAR and the Energy Star logo are trademarks of the U.S. Environmental Protection Agency.

For more information, visit www.energystar.gov. ENERGY STAR is a program of the U.S. Environmental Protection Agency.

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Mode	Power consumption for ac power input 2-ch		
	115V	115V	230V
Idle	.13W	.13W	.13W
Standby	.27W	.27W	.27W
Idle - Display on	3.0W	3.14W	3.18W
Power down - no od	.7W	.7W	.8W
Power down - efficiency	88.8	89.1	88.8

¹⁸ The information provided in this document is for informational purposes only. The information provided in this document is for informational purposes only. The information provided in this document is for informational purposes only.