



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 it

Recycled content
in our products

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.



Our product carbon neutrality strategy

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

We will continue to invest in renewable energy and sustainable practices 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. We will also focus on reducing our waste and improving our waste management.

How we're reducing emissions

- **Transition to 100 percent clean electricity for manufacturing:** We will transition our manufacturing operations to 100% clean electricity by 2030. We will continue to invest in renewable energy and sustainable practices 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 2030. We will continue to invest in renewable energy and sustainable practices 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 and packaging. 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 practices 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. We will also focus on reducing our waste and improving our waste management.

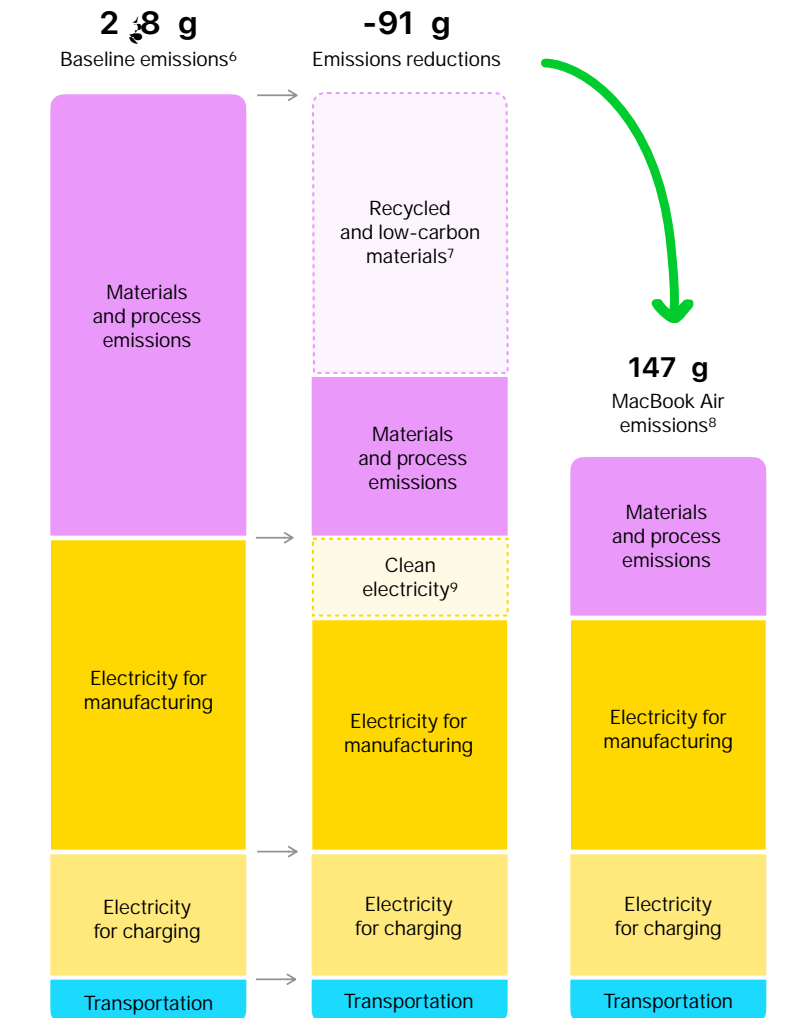
How we're monitoring progress

We will continue to invest in renewable energy and sustainable practices 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. We will also focus on reducing our waste and improving our waste management.

- No use of air conditioning, electric heating, or electric cooling in our buildings.
- 100% of our energy consumption from renewable sources.
- 100% of our products and packaging made from recycled and low-carbon materials.

Progress to reach carbon neutral

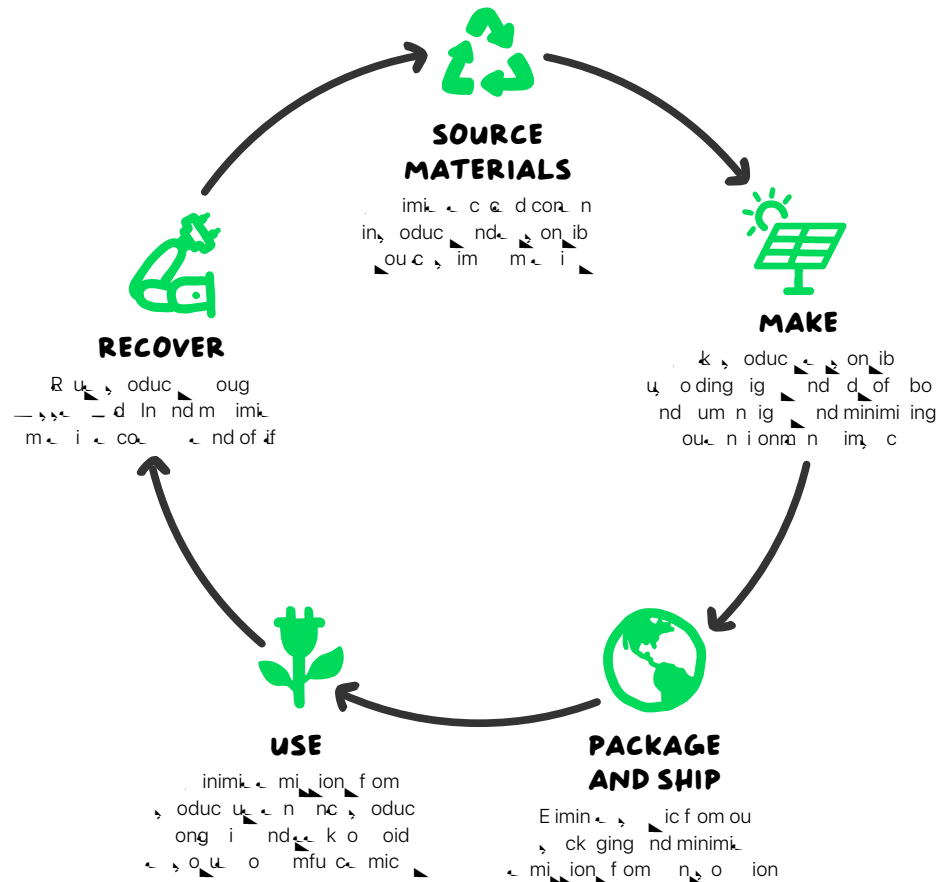
We reduced emissions for MacBook Air by 20% by 2020, and by 38% by 2022. We are on track to reach carbon neutrality for MacBook Air by 2025. We are committed to reducing MacBook Air emissions by 50% by 2030. We are committed to reducing MacBook Air emissions by 80% by 2040.



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 climate change, conserving resources, and using materials.

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





Source materials

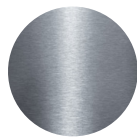
... cook i wi ... 2 c i con in 4 ... c n c e d o ... n w b e con n.1

... 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



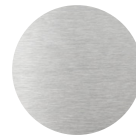
Ti

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 ... 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

Our Supplier Code of Conduct is a guide for the selection of our suppliers and the way we work with our suppliers to form a partnership in doing business under our Code.

We work with our suppliers to identify and work to reduce the environmental and social risks in our supply chain. Our Code of Conduct includes provisions on the ongoing monitoring of our Code of Conduct performance from ongoing supplier risk assessments and ongoing financial and social information. For more information, visit www.3m.com/suppliercodeofconduct.

Reduce chemicals

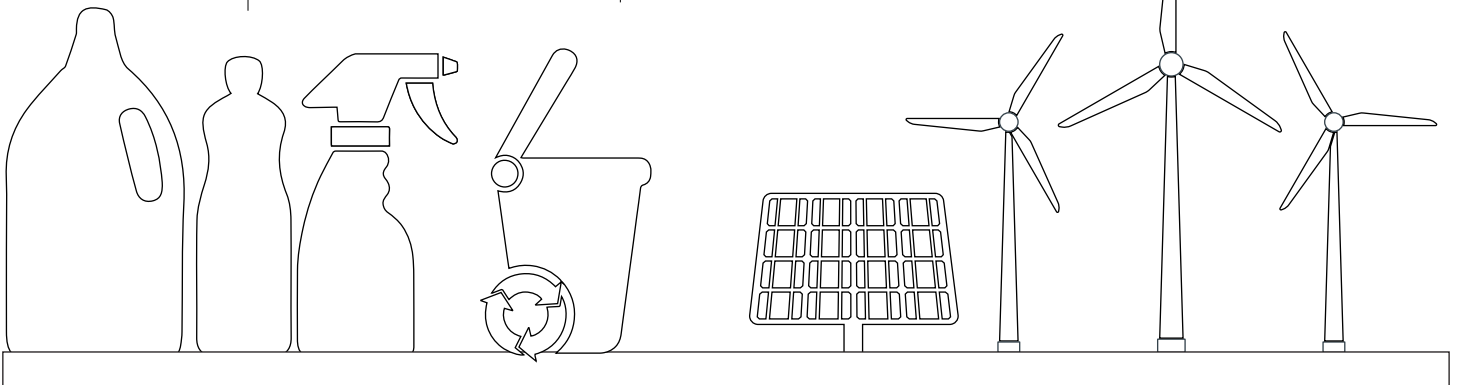
Our biodegradable water-based finishing materials are designed to reduce the use of hazardous chemicals in manufacturing, according to the GreenScreen® methodology.¹²

Zero Waste to Landfill

Our biodegradable water-based finishing materials are designed to be 100% landfill-free.¹³

Supplier energy use

Our 2020 commitment to reducing our carbon footprint from our suppliers is a key part of our Supplier Code of Conduct. Supplier Energy Footprint.





ac age a d Shi

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

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

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

95%

of ... ck ging¹⁶ ... fib -b ... d du o ... ou wo k a imin ... s ... ic in, ck ging

45%

c e d cor n in fib ... ck ging

10%

of ... i gin wood fib in ... ck ging com ... f om ... 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, oduc ob 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 , o w e f f i a i n c o m , o a n ... i r i g n m n g , 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 ... i n g b w e o u , o d u c g o u g
 i g o u e ... i n g b f a e e e o u d o o . u u , o c o n i n u ... o u g o u e c , 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 , i , q f ... i o n ... o ... i c e m i f a c o d d ... m i , i o n , i d o e e e c i c i o u
 , o d u c u w e b u i l d i n g e r a a g , a j 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 , o i d a , o u n i k i ... o u , 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 T 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 , o d u c e d b ENER Y S _ R
 w i c e ... c i f i c i o n ... , 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 du b i i w ... d
 ... c o o k i w i . 2 c i i n o u
 R i b i i ... i n g b u i n g i g o u
 ... i n g m o d ... i m u e
 c u o m ... e i n c .

ade ith smarter chemistr

W ... i g o u c o n o f o
 m e i u e 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 with us and in new ways. It's a long if not a life cycle.

When you use our products, we're not just using them, we're making them. Our products are made from recycled materials, and we're using them to make more products. We're using them to make more products. We're using them to make more products. We're using them to make more products.

The Trade In

Our information on how to trade in your old products is available at apple.com/trade-in.

With our new [Recycle Guide](#), you can find out how to recycle your old products. The guide is available in English, Spanish, and French. You can also find out how to recycle your old products 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 decreasing the amount of waste or emissions. Reduction is the process of decreasing the amount of waste or emissions.

Transition Transition is the process of moving from one state or condition to another. Transition is the process of moving from one state or condition to another.

Use Use is the process of utilizing a resource or material. Use is the process of utilizing a resource or material.

End-of-life process End-of-life process is the process of disposing of a product or material. End-of-life process is the process of disposing of a product or material.

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. Renewable materials are materials that can be replenished.

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 2022 GRI report. The carbon footprint is based on the production of the product, including the production of the components, the production of the in-box components, and the packaging.

Greenhouse gas emissions		Scope 1 & 2 GHG emissions
Total product footprint		147 kg CO ₂ e
Greenhouse gas emissions from the production of the product (CO ₂ e)		147 kg CO ₂ e
Greenhouse gas emissions from the production of the product (CO ₂ e)		147 kg CO ₂ e
Production		147
Manufacturing		8
Production		22
End-of-life recycling		-1
GHG reduction credit		-38

Net carbon footprint is 109 kg CO₂e.

The carbon footprint is based on the production of the product, including the production of the components, the production of the in-box components, and the packaging.

Configuration		Scope 1 & 2 GHG emissions
20GB storage		147 kg CO ₂ e
12GB storage		171 kg CO ₂ e

Et dnotes

- 1 oduc c e d o e a w l e cor n i e m of c i f i d e d m e i e k o e a m of e d i c n o i n c u d i n g , c k g i n g o i n b o c c o i
- 2 W e i m 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 , 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 c 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 o 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 o i e 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 o 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 o e 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 e o f d u c i g e m e u o d . u 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 e .
- 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.ee.a .
- W e c o g n i t 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 c e d c o r a 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 6) 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 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 a 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 W e i m e e m i j o n i n g f o m u s i e a w l e 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 .
- 1 0 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 8 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 .
- 1 1 R c e d m e i c i m s s i o e e n c o u .
- 1 2 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.gcn.gcn.mic.o.g .
- 1 3 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) . 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 .
- 1 4 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 .
- 1 5 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 .
- 1 6 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 following products including the following: Cooktop, 2017. For more information, visit www.energystar.gov. ENERGY STAR is a program of the U.S. Environmental Protection Agency.

Cooktop, 2017. For more information, visit www.energystar.gov. ENERGY STAR is a program of the U.S. Environmental Protection Agency.

Efficiency, 2017. 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 each of the three		
	115V	115V	230V
Efficiency	.13W	.13W	.13W
Energy Star	.27W	.27W	.27W
Idle - Display	3.0W	3.14W	3.18W
Power - no load	.7W	.7W	.8W
Power - efficiency	88.8	89.1	88.8

¹⁸ Under the Energy Star program, the following products are eligible for the Energy Star label: Cooktop, 2017. For more information, visit www.energystar.gov. ENERGY STAR is a program of the U.S. Environmental Protection Agency.