



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.

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 also focus on reducing our energy consumption and improving our energy efficiency.
- **Transition to 100 percent clean electricity for product use:** We will transition our product use to 100% clean electricity by 2025. We will also focus on reducing our energy consumption and improving our energy efficiency.
- **Prioritize non-air transportation:** We will prioritize non-air transportation for our employees and customers. We will also focus on reducing our energy consumption and improving our energy efficiency.
- **Use recycled and low-carbon materials:** We will use recycled and low-carbon materials in our products. We will also focus on reducing our energy consumption and improving our energy efficiency.

How we'll get to net zero emissions

We will achieve net-zero emissions by 2030 through a combination of measures. 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.

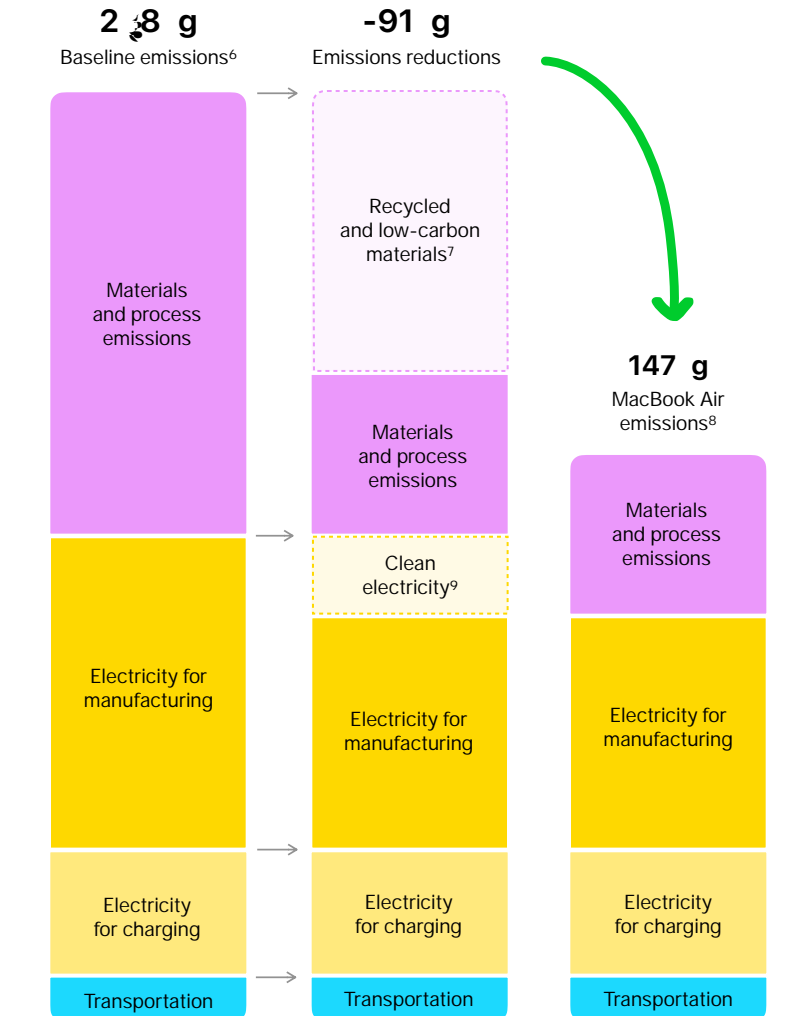
How we're monitoring progress

We will monitor our progress through a combination of measures. 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.

- No use of air conditioning or other energy-intensive equipment in our facilities.
- Use of recycled and low-carbon materials in our products.
- Use of renewable energy for our operations.

Progress to reach carbon neutral

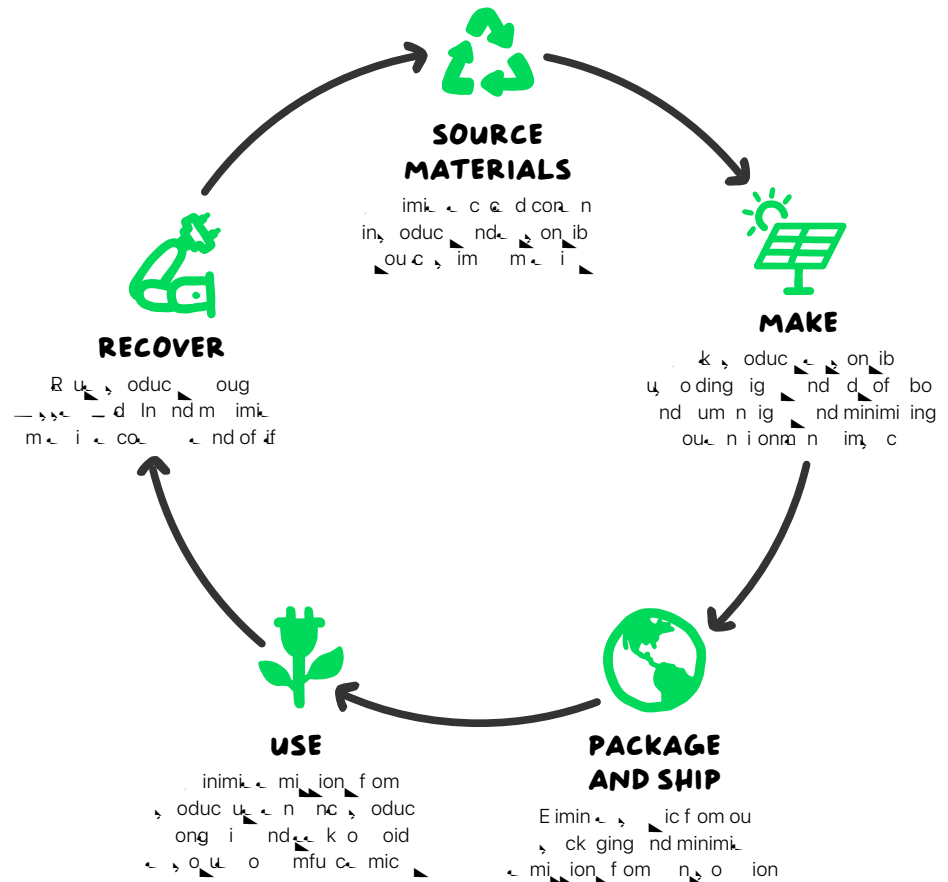
We reduced emissions for MacBook Air by 20% by 2020, and by 38% by 2022. We are on track to reach carbon neutrality for MacBook Air by 2025. We are committed to reducing MacBook Air emissions by 50% by 2030. We are committed to reducing MacBook Air emissions by 80% by 2040.



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 the environment, including the climate.

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





Source materials

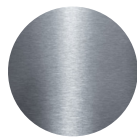
... cook i wi ... 2 c i con in 4 ... c n c e d o ... n w b e con n.1

... 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 of, 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 fo r a e n d e f i a ... o e q u i 1 ... c n of 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 ... n d e f i a o s i c i e i n i d s u d i .¹⁰ W e 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 of 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 of 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 of u n d d of ... m f 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 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 in m g a ... n i n g ... 8 ... c n of 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 a



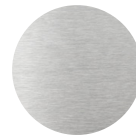
Ti

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



Carbon black

W e n i o n i n g f o m f o i f u - b e d ... 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 of 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 of 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 of m f 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 of 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 of 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 of 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 of a 7 ... c n b m of c d i c .



Value

Our Supplier Code of Conduct is a key element of our commitment to ethical and responsible business practices. It sets out the standards we expect of our suppliers and partners, covering areas such as human rights, labor practices, environmental protection, and anti-corruption. We believe that ethical and responsible business practices are essential for long-term success and sustainable growth.

We work closely with our suppliers to identify and address any risks or issues that may arise. We provide training and support to help our suppliers understand and meet the requirements of our Code of Conduct. We also conduct regular audits and assessments to ensure compliance. For more information, please visit www.3m.com/SupplierCodeofConduct.

Reduce Chemicals

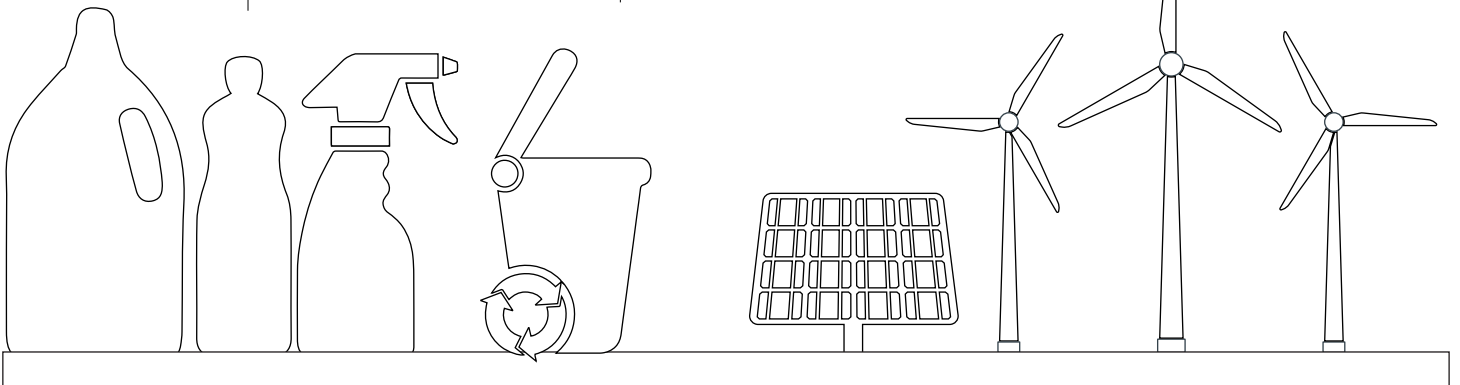
Our commitment to reducing chemicals is a key part of our environmental strategy. We are working to eliminate the use of hazardous substances and reduce the overall volume of chemicals used in our products and processes. This includes using safer alternatives, improving efficiency, and exploring new technologies. We are also working to ensure that our suppliers are using safe and sustainable chemical practices.

Zero Waste to Landfill

Our goal is to achieve zero waste to landfill by 2025. This means that all waste generated in our operations will be recycled, reused, or otherwise managed in an environmentally responsible way. We are working to reduce waste at the source, improve recycling programs, and explore new waste management solutions. We are also working to ensure that our suppliers are following best practices for waste management.

Sustainable Energy Use

Our commitment to sustainable energy use is a key part of our environmental strategy. We are working to increase the use of renewable energy sources, such as wind, solar, and hydro. This includes installing renewable energy systems at our facilities, purchasing renewable energy credits, and exploring new technologies. We are also working to improve energy efficiency and reduce our overall energy consumption.





ac age a d Shi

ac age a d Shi 2 c i s ck ging i m d wi 1 c n
 c e d cor n on ib ou c d wood fib .

o im, a ou, ck ging w e wo king e imin e s ic in e c e d cor n nd
 u e s ck ging a of e wood fib in ou, ck ging i e c e d o cor n
 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 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 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 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 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. In our factories, we use recycled materials to create our products. It's a long if not a life cycle. We're not just using them, we're making them. In our factories, we use recycled materials to create our products. It's a long if not a life cycle.

Apple Trade In

Learn more about our trade-in program. Visit apple.com/trade-in.

Visit our [Recycling Guide](#) for more information on how to recycle your Apple products. Visit [apple.com/recycling](#) for more information.



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 that are produced. Reduction is the process of decreasing the amount of waste or emissions that are produced.

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 bio-based plastics, visit www.bonfoos.com/en/onran/nw.

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 Cleanberg program The Supplier Cleanberg program is a program that encourages suppliers to reduce their carbon footprint. The Supplier Cleanberg program is a program that encourages suppliers to reduce their carbon footprint.

Carbon Footprint

Greenhouse gas emissions were calculated during the production of the product in accordance with ISO 14047 and ISO 14048 and based on the data provided by the manufacturer. The data is based on the 2019 data provided by the manufacturer. The data is based on the 2019 data provided by the manufacturer. The data is based on the 2019 data provided by the manufacturer.

Product	Carbon Footprint (kg CO ₂ e)
Product (including 256GB storage)	147
Total product footprint	147 kg CO₂e
Product (including 256GB storage)	147
Production	0
Transportation	8
Usage	22
End-of-life recycling	-1
GHG reduction credit	-38

Net carbon footprint is 109 kg CO₂e.

Weight of product is 1.2kg.

Configuration	Carbon Footprint (kg CO ₂ e)
2.0G	147
1.2G	171

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 incuding, 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 j i n e s i o f i c e b e d o n e u s j 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 j i e s o c u d s a f s s e ' S u s j 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 e u 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 u s s e s 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 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 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 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 l 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.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 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 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 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 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 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 j i e a w l a 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 j i i n e s i o f i c e b e d o n e u s j 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 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 l a 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 e o e e n c o u .
- 12 C e m i c r e G e n S a e n @ 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 s e f e d f o u . G e n S a e n @ 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 i e d f i n e m b u s j i i o o e e b e n s s e u s j 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 .
- 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 bed on ENERGY STAR and required for Compu including the following for cook i wi 2c i . o ma info m ion i i www.aga.gov. ENERGY STAR and ENERGY STAR kitchen and kitchen owa db U.S. En ion n a c ion g nc .

cook i wi 2c i i d wi fu c g db nd, ow db 3 WUS -C ow d, wi US -C o gsf 3C b 2m).

- ff ow ow mod of m. S m i u down.
- Se, ow, ow i r d u om ic f 1 minu of in c i d f u) o b c ing Se, fom r nu. W k fo a wok cc n b d.
- Id -Di on S m j on nd com d o ding m c S. Di big a w d fia db ENERGY STAR og m R qui ra n fo Com u nd u o- ig a w u a d off. Cona d o Wi- i.
- ow d, no- o d Condi on in w ic 3 WUS -C ow d, wi US -C o gsf 3C b 2m) i cona d a C, ow bu no cona d o m.
- ow d, e ffici nc g of 3 WUS -C ow d, wi US -C o gsf 3C b 2m) ra u d ffici nc w nc d 1 c n 7 c n c n nd 2 c n of s, ow d, c d ou, u cu n.

ode	o er co, sum tio, for, ac oo \ ir ith, 2 chi		
	1, V	115V	2, V
ff	.13W	.13W	.1.W
Se,	.27W	.2W	.27W
Id -Di on	3. 9W	3.14W	3.18W
ow d, no o d	. 7W	. 7W	. 8W
ow d, e ffici nc	88.8	89.1	88.8

¹⁸ d -in u b d on e condi on e nd config ion of ou d -in d ic nd m o b w n on ia nd in- a d -in. You mu b 18 e od. In- a d -in qui s n ion of id go n ra n -i u d, o o ID roc w m e qui ing i info m ion) d di on e m fom s, a s, d -in, a m s s .