





# Metal: A permanent resource for current and future generations.





#### The Can is the Sustainable Solution. Here's why:

- 1. Cans are the most recycled food and beverage package in the United States.
- 2. Cans are produced with abundant and recycled materials.

- 3. Cans save energy.
- 4. Cans ensure safe, nutritious food and beverages.
- 5. Cans prevent spoilage and product waste.
- 6. Cans are economically efficient.

 Cans are the most recycled food and beverage package in the United States.
 Minimizing landfill waste

#### Food and Beverage Package Recycling Rates



1 Steel Recycling Institute, 2012 rate

2 Aluminum Association, 2012 rate

3 EPA's 2010 MSW Characterization Report

**4 NAPCOR** 

5 EPA lists a broad category of "bags and wraps" in its recycling data, but does not break out flexible plastic packaging. The Flexible Packaging Association does not claim that flexible packaging is recyclable and instead claims that flexible containers are "pre-cycled."

### Recycling facts: Aluminum cans



The highest recycling rate of all beverage packages in the U.S.

- > 100% recyclable
- Endlessly recyclable
- Due to the high value of aluminum, cans self-finance their recycling

Aluminum cans have a true closedloop recycling process with old cans being recycled into new cans

### **Recycling facts: Steel cans**

- > The highest recycling rate
  - among food packages in the U.S.
- > 100% recyclable
- Because of its magnetic properties, steel can be easily reclaimed from the waste stream and recycled endlessly

the the states

- Steel is the most recycled material globally

# 2. Cans are produced with abundant and recycled materials.

Minimizing natural resource depletion

#### The can minimizes resource depletion.

Here's why:

- The virgin materials that go into a can

   aluminum or iron are the third
   and fourth most abundant elements
   on Earth.
- Cans have high recycled content.
   Because cans are endlessly recyclable, they provide continuous feedstock for new cans.

Aluminum: Nearly 75% of all aluminum that's ever been produced is still in use.<sup>1</sup>

It just keeps coming back in the form of new products.



In the case of a beverage can, it can be recycled and back on a store shelf in just 60 days.<sup>2</sup>



# 80-90% of all steel ever produced is still in use.<sup>1</sup>

Metal maintains its molecular structure throughout the recycling process, enabling it to be **endlessly recycled into new steel products**, such as cars, bridges or other cans.





Chances are, the next can you pick up will contain metal that was used by your grandparent's generation and will someday be used by your grandchildren's generation. **Reusing limited resources over and over epitomizes sustainability.** 

#### Less metal is needed to produce today's cans

In addition to high recycled content, cans also require less metal today. Over the past two decades, innovations in "light weighting" technology have enabled the industry to reduce the amount aluminum and steel needed to produce each can.

15% reduction in aluminum since 1993<sup>1</sup>

31% reduction in steel since 1990<sup>2</sup>

<sup>1</sup> "Lifecycle Analysis of Aluminum Beverage Cans." Aluminum Association. May 21, 2010.
 <sup>2</sup> "Sustainability and Steel Packaging." www.steel.org. American Iron and Steel Institute. 2011.

#### 3. Cans save energy.

Reducing pollution and carbon emissions

# The can's endless recyclability also saves significant energy.

Being endlessly recyclable doesn't just cut down on landfill space and the need for raw materials. Each can that is recycled greatly reduces the energy and therefore the carbon footprint of the next. That's because it takes far less energy to produce the aluminum and steel for a can when using recycled material.



<sup>1</sup> "Lifecycle Analysis of Aluminum Beverage Cans," Prepared May 21, 2010 for Aluminum Association <sup>2</sup> "Facts About Steel Recycling." Steel Recycling Institute. 2010.

#### Every can recycled saves energy:





#### X 1 hour

#### **1 load laundry**

Source: Woods, Jim. Steel Recycling Institute. 2010.

#### Every can recycled saves energy:



Source: "Facts About Aluminum Recycling." Earth911.org. 2011.

### And the energy savings don't stop there.

Product packaged in cans **never requires freezing or refrigeration**. In fact, canned foods require no energy at all during storage.<sup>1</sup> This saves energy for producers, shippers, retailers and consumers.



### 4. Cans ensure safe, nutritious food and beverages.

Providing the highest degree of product quality





### **Best protection for food and beverages**

Food and beverages packed in cans are protected by the most robust package available.

The durable metal exterior, combined with an airtight seal, locks in the product's quality, while locking out germs, air, light and other elements that degrade product quality and threaten consumer health.

It's the most tamper-resistant and tamper-evident package on the market.





#### Best protection against food-borne illnesses



According to the CDC, 48 million Americans fall ill and 3,000 die every year from food-borne diseases.<sup>1</sup> Foodborne illnesses cost Americans \$77.7 billion annually.<sup>2</sup>

The durable structure and air-tight seal on cans offers the most robust protection against food-borne illnesses.

Furthermore, the canning process itself kills off bacteria and other harmful agents, ensuring safe and nutritious food for the consumer.

<sup>1</sup> "Estimates of Foodborne Illness in the United States." www.cdc.gov. Centers for Disease Control and Prevention. 2011.

<sup>2</sup> Journal of Food Protection. January 2012.



#### Farm-fresh quality long after the harvest

Canned food is picked at the peak of ripeness and immediately canned, locking in its flavor and nutrition.

Cans ensure farm-fresh taste and nutrition long after the product was harvested.

There are myths that canned food contains preservatives and that its nutritional value is degraded. The fact is, most canned food is packed in just water or another liquid, with other ingredients sometimes added for flavor. And studies have shown that fresh, frozen and canned foods have about the same nutritional value at the time of consumption.<sup>1</sup>

<sup>1</sup> "Nutritional Comparison of Fresh, Frozen and Canned Fruits and Vegetables." Joy C. Rickman, Diane M. Barrett, PhD, Christine M. Bruhn, Phd.

#### Better for the beer. Better for the Earth.

Cans also offer better protection of beverage quality.

Take beer for example. Its two greatest enemies are air and light and cans offer complete protection against both. It's not surprising that a canned revolution is underway in the craft beer market, with more than 300 craft beers now available in cans.

There is no dispute that only cans provide complete protection of beverage quality. And due to the can's protective coating, the beer or other beverage maintains its true taste.

"A can is an unbroken design canvas that provides the opportunity to really tell a consistent story without the break up of the bottle structure" -Kevin Ford, Senior brand design MillerCoors

# 5. Cans minimize spoilage and product waste.

Reducing food waste benefits consumers & society

# Food waste: A problem for consumers, producers, retailers and society

## Nearly half of all food grown in the U.S. goes to waste.

According to a study by the University of Arizona, funded in part by the USDA, **40-50% of all** harvestable food in the U.S. is discarded.<sup>1</sup>

Food waste also poses significant environmental problems. According to the EPA, food waste is now the single largest component of the landfill stream – a staggering 34 million tons of food is wasted each year.<sup>2</sup>

<sup>1</sup> Timothy Jones, PhD, Bureau of Applied Research in Anthropology, University of Arizona. 2004. <sup>2</sup> "Basic Information About Food Waste." www.epa.gov. U.S. Environmental Protection Agency. 2011.



#### 6. Cans are economically efficient. Saving money for producers, retailers & consumers

#### Economical to ship and store

#### **Shipping efficiencies**

The can's light weight and cubic efficiency allows more product to be shipped using less fuel.

#### **Energy savings**

Product packaged in cans requires no refrigeration or freezing, saving money through warehousing, shipping and retailing.

#### Less food and beverage waste = Less money waste

"...[S]ince we now throw away more food than anything else, that means we are throwing away a lot of our money. Often, simple changes in food purchasing, storage and preparation practices can yield significant reductions in food waste generation." – U.S. EPA<sup>1</sup>



### Food waste costs the U.S. economy more than \$1 billion each year.<sup>2</sup>

## The average family of four throws away nearly \$600 annually in food waste.<sup>2</sup>

Cans help minimize food and beverage waste by providing the longest shelf life of any package. That means more profit for producers and retailers, and more money in the pockets of consumers.

1 "Basic Information About Food Waste." www.epa.gov. U.S. Environmental Protection Agency. 2011.

2 Timothy Jones, PhD, Bureau of Applied Research in Anthropology, University of Arizona. 2004.

