

16 Things You Didn't Know About Vending Machines in Japan and Around the World

By: Maki Shiozawa | Feb 20, 2015 – from CocaCola Journey Website



Coca-Cola's first ever fully automated, coin-operated cooler.

There are more than 3.8 million vending machines in Japan. No, they don't all dispense Coca-Cola products, but there are some intriguing facts and unexpected history about them that may surprise you.

The *Coca-Cola Journey* team in Japan uncovered 16 little-known facts about vending machines in Japan and around the world:

1. There are about 3.8 million vending machines in Japan.

Of this total, 2.2 million dispense soft drinks.

2. Vending machines have operated in Japan for more than 50 years.

There are approximately 980,000 Coca-Cola system vending machines in Japan (Coca-Cola owns the No. 1 share of soft drink vending machines in Japan). The first Coca-Cola vending machine began operating in 1962 when the system introduced the first-ever domestically manufactured bottled soft drink machine. Coca-Cola had a strong desire to provide chilled Coca-Cola “whenever, wherever, to whomever” and, half a century later, the fruits of that desire can be seen in every corner of Japan.

3. Japanese vending machines tell you your current location.

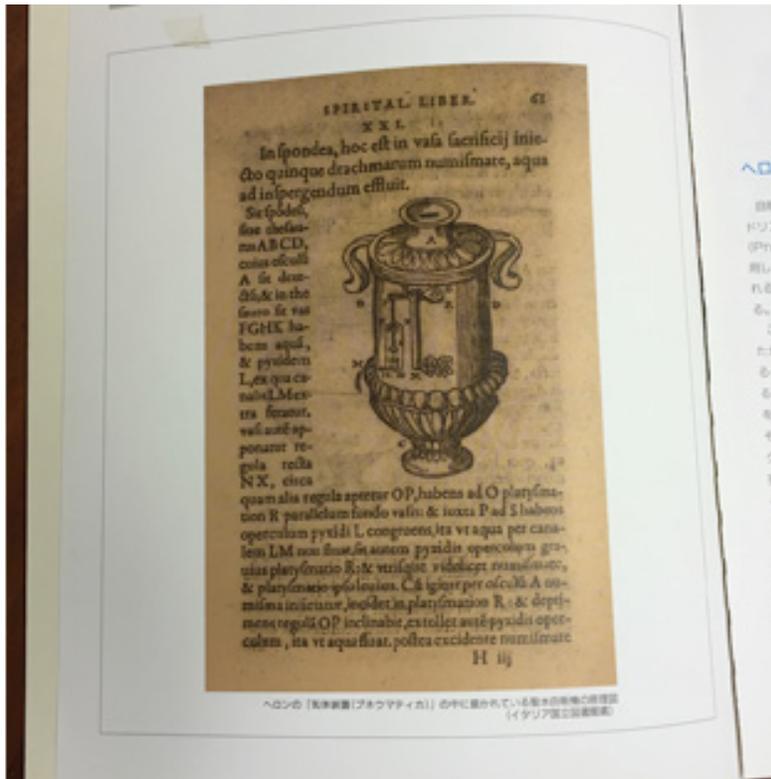
Since 2005, all vending machines in Japan are equipped with a sticker that shows their address. In a joint initiative with the vending machine industry and police and fire services, these stickers allow emergency responders to immediately track the location in the event of disasters, accidents or other times of emergency. Of course, you can also make use of them when you're lost.



Coca-Cola's first ever fully automated, coin-operated cooler.

4. The world's first vending machine was invented in Ancient Egypt in 215 BCE.

As the story goes, the vending machine sold holy water in a temple in Alexandria. Utilizing the principle of levers, the weight of a five-drachma coin would tilt a receptacle inside the machine and a tap would pour water until the receptacle returned to its original position. While the machine itself has not survived, Heron of Alexandria recorded its existence in his *Pneumatika*.



世界最古の自動販売機（冊子より抜粋）

The world's oldest vending machine (excerpt from booklet)

5. The first *patented* vending machine sold stamps.

In 1857, an Englishman named Simeon Denham acquired a patent for a stamp vending machine he invented. This is said to be the first *patented* vending machine.

6. 'Disaster-relief vending machines' dispense free beverages in times of disaster.

These vending machines were first installed in Japan in 2003 by the Coca-Cola system. Controlled remotely over communications networks, free beverages are dispensed in times of emergency. During the Great East Japan Earthquake, for example, a large number of soft drinks were provided free of charge. The majority of these disaster-relief vending machines are equipped either with storage batteries or independent electricity generation systems, allowing them to operate in a power outage. As of December 2011, the Coca-Cola system had installed 6,000 of these machines nationwide. They're primarily installed school gymnasiums, hospitals, and other public facilities that are used as evacuation sites in times of emergency.



The Coca-Cola system's "disaster-relief vending machine" (left) and a "noticeboard vending machine" in Rausucho, Hokkaido (right). Noticeboard vending machines display messages from municipal and prefectural authorities on an electronic display in times of emergency. Both types of vending machine not only sell beverages, but function as part of societal infrastructure. They are one of the hidden benefits of vending machines.

7. Annual sales from vending machines in Japan exceed 5 billion yen.

That's about \$40 million! Soft drink sales account for 1,913,357,300 yen (about \$16 million). Part of vending machine sales are used for social contribution activities, playing a significant role in Japan's social infrastructure.

8. Vending machine energy consumption dropped 70% in the last 20 years.

Although vending machines are extremely convenient, they came at the expense of large amounts of energy consumption. Consequently, the Japan Vending Machine Manufacturers Association began to develop a number of energy-saving measures. Between 1991-2012 they successfully reduced the annual electricity consumption per canned and bottled beverage vending machines by more than 70 percent.



A vending machine with a solar panel installed can generate its own electricity. Such a system is invaluable in times of disaster.

9. Many vending machines chill precise products based on consumer demand.

Known as “zone cooling,” this is one of many methods developed to lower vending machine energy consumption. Zone cooling only cools products likely to be sold next, instead of cooling all the products in the machine like a refrigerator. The machine determines the number of products that should be cooled using an on-board computer based on time-specific sales data. The majority of can and bottle beverage vending machines are equipped with this functionality today.

10. Some vending machines use the heat generated in cooling products to heat others.

This function called “heat pump” was also developed to reduce electricity consumption. Heat generated in the cooling process is recycled to heat hot products.

11. Other vending machines consume zero electricity for nighttime illumination.

Coca-Cola's latest vending machine—the Ecoru/Solar Vending Machine—is a huge energy saver. A solar panel affixed to the top of the vending machine generates electricity during the day. The energy is stored, and used at night allowing zero grid-energy consumption for nighttime illumination. In addition, the machine display features LED lighting which, used in combination with a sensor, only lights up when there's a sale in transaction.



The Ecoru/Solar Vending Machine consumes zero grid-energy for nighttime illumination.

12. A number of Coke system vending machines donate a portion of their revenues to worthwhile causes.

The money supports a large number of initiatives, including: regional nature conservation activities, civic groups and NPOs, initiatives to protect and nurture woodlands, research into treatments for childhood cancer and raising the quality of life for patients and social welfare support. The list of supported activities continues to grow.

13. Coca-Cola '[Peak Shift Vending Machines](#)' consume less than half the electricity as an electric fan.

Previous generations of vending machines would cool their products during the day when demand for electricity was at its peak. Now, intensive cooling at night—when there is excess electricity—combined with superior thermal insulation performance allows vending machines to provide cooled products for more than 12 hours with zero electricity consumption. By cooling products at night, daytime electricity consumption drops to 5% of previous vending machines. This equates to less than half the electricity consumption of an electric fan.



A “Peak Shift Vending Machine” provides substantial reductions in electricity consumption.

14. Employees who restock Coca-Cola system vending machines also engage in crime prevention initiatives to keep neighborhoods safe.

If they notice any suspicious activity or see someone who may need help these Coke employees alert local police or fire stations, or provide assistance themselves.

15. Some vending machines participate in ecological research for the Okinawa Rail (a species of bird)

In the north of the Okinawa mainland, a number of Coca-Cola system vending machines participate in ecological research for the Okinawa Rail, an endangered species of bird and Japanese natural monument. Follow this link (<https://www.coca-colacompany.com/stories/gone-to-the-birds-vending-machines-designed-to-save-the-okinawan-rail>) to learn more.



Vending machines continue to record the calls of the Okinawa rail for ecological research purposes.

16. The U.S. has the most vending machines in the world. Japan has the greatest density.

At the end of 2010, there were more than 6.9 million vending machines in the United States—the greatest number of any country in the world. But when population and land area are taken into account, Japan has the greatest density of vending machines in the world.

[This article](#) originally appeared on *Coca-Cola Journey Japan*.