

Dual loops of paper carton recycling



A used paper carton is a high-quality resource. It is reborn as recycled products.

Paper cartons have lower environmental load*
 CO₂ emissions from a 1000 ml paper carton total 32.4 g. The environmental load resulting from this is very small. Recycling a 1000 ml paper carton reduces CO₂ emissions by 23.4 g.
*Source: Institute for Policy Analysis and Social Innovation "2004 Report of Survey on Life Cycle Assessment of Containers and Packaging" (Entrusted by the Ministry of Environment)



Reborn as recycled products



Recycled paper manufacturers

Laminated portions are removed and the base paper (raw paper) portion is dissolved. At this point, foreign substances such as residual ink are extracted in order to produce clean pulp that is suitable for manufacturing recycled products such as toilet rolls.

Paper recyclers and wholesalers of used (consumed) paper

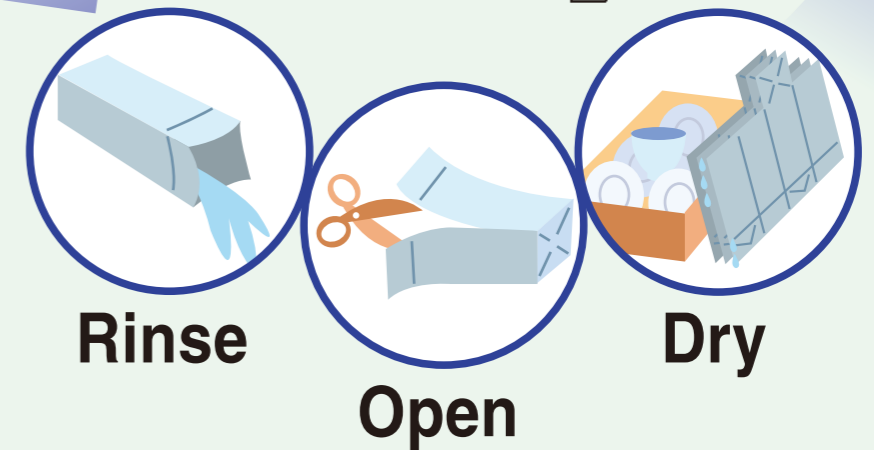
They sort paper cartons and transport them to recycled paper manufacturers.

Recycling of paper cartons



Paper cartons

Paper cartons refer to a container of milk, lactic beverages, juices, etc. that do not have a piece of aluminum laminated to the inside surface.



Collection

Collection methods include store collection at supermarkets and other similar stores, municipality collection, group collection by citizen's groups, and collection at schools.



New ACE Website is Started!

ACE (The alliance for Beverage Cartons and the Environment) is consisted of Tetra Pak International S.A., SIG Combibloc and Elopak AS, they are European paper container manufacturer for beverages, and base paper (raw paper) manufacturers Korsnäs AB and Stora Enso Co., Ltd.

The website of ACE is referenced as the platform of the industry when European paper container manufacturers and base paper (raw paper) manufacturers evaluate and analyze environmental aspects of their packaging in terms of recycling and carbon content. Because of the strong ties with various environmental-related stakeholders and partners, ACE provides specialist knowledge to EU when it develops policies, sets down laws and establishes standards.



We have renewed the website to make it convenient for you to search trends of the paper container industry for beverages and the matters to be considered with respect to environmental issues. The new website offers information you search in an easy-to-find and attractive manner.

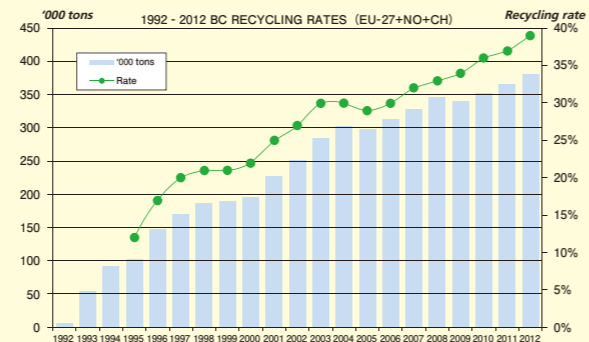
Source: Website of ACE <http://www.ace.be/>

Recycling Rate of Paper Containers for Beverages in Entire Europe Reached 40% in 2012!

Recycling rate of paper containers for beverages in EU reached 40% in 2012. This figure is an increase of 3 percentage points from 2011, indicating the accomplishment of continued efforts of the industry for improving the recycling rate of paper containers used for beverages. The total collection rate (recycling and collection of energy) in the EU reached 69%, and the recycling rate and total collection of all of Europe including Norway and Switzerland reached 39% and 70%, respectively.

"The amount of recycled paper containers for beverages was 6,000 tons more than that for 1992. That was an increase of approximately 380 thousand tons over 2012. We are very glad to see this increase in the recycling rate over the past 20 years. Manufacturers of paper containers for beverages proactively launch collection systems throughout Europe in order to ensure further advancement of recycling of paper containers," said Catherine Morin, Secretary General of ACE.

Recycling is definitely a widely supported waste management method. Entire Europe is making efforts along the lines of the Committee. The goal of the efforts is to come close to the recycling-based society set down in the road map for effective use of resources in Europe.










A paper container consists of 75% paper, 21% polyethylene and 4% aluminum. Paper fibers obtained from recycling of used paper containers for beverages are extremely high quality. Such characteristics of recycled papers assume a key role when they are recycled again to new, separate paper containers. Polyethylene and aluminium obtained from recycled paper containers have a range of uses. They may be used, for instance, for products made of complex material such as roof tiles and as industrial raw materials.

While paper containers for beverages are mainly recycled into home-use paper such as toilet rolls in Japan, they are recycled into paper boards for paper boxes and paper bags in Europe.

History

● History of COMCEI ■ History of JAMRA ★ Activities to strengthen collaboration

Fiscal year	History	Applicable laws
1984	■ A group of housewives started a milk carton recycling movement to teach their children to recognize the value of things.	
1985	■ "Japan Milk Carton Recycling Association" was established.	
1992	● "Committee for Milk Container Environmental Issues" was established. ■ "Milk carton recycled products mark" was created.	 Milk carton recycled products mark
1993	● COMCEI participated in "Forestry Fair" held by the Forestry Agency (COMCEI participated every year until 2008).	● The Basic Environmental Law was enacted.
1995	● "Basic survey on the present status and trends of beverage paper container (paper carton) recycling" was started.	● Containers and Packaging Recycling Law was enacted.
1996	● "The Beverage Paper Container Recycling Council" was established.	
1997	■ National case study on milk carton collection system was conducted.	● Containers and Packaging Recycling Law was enforced.
1998	● Model project for promotion of milk cartons used for school lunches was started (Hokkaido). ■ An experimental project was implemented to build a collection and recycling system of milk cartons used for school lunches (Fukuoka and Hyogo) ■ Convivial meetings were held to promote collection of paper drink cartons (Locations of meeting * 1)	
1999	★ Local conference to promote paper carton recycling was held (this has been continuing since then * 1).	
2000	● The Paper Carton Identification Mark was voluntarily established. ● Discussion Meeting to Promote Recycling of Paper Cartons for Beverages was started (this has been continuing since).	 Paper Carton Identification Mark
2001	★ Movement for expansion milk carton collection centers was started. (Provision of collection boxes to local communities)	 Collection box
2002	● A symposium commemorating the 10th anniversary of COMCEI was held. ★ Activities to expand milk carton collection centers to 10,000 locations was started. ● Survey on Paper Carton Life Cycle Assessment (LCA) was started (this has been continuing since).	 A symposium commemorating the 10th anniversary of COMCEI was held.
2003	Survey on paper carton LCA in North America was conducted.	 Survey on paper carton LCA in North America was conducted.
2004	● Environmental campaign was started (executed during Environment month and the 3R month each year). ★ Workshop on milk carton recycling was held (this has been continuing since * 2). ● Participated in one of the largest class environmental-related exhibitions, called "Eco Products Exhibition 2004" (this has been continuing every year).	 Participation in "Eco Products 2004".
2005	● Goal of the paper carton collection rate in fiscal 2010 was set to 50% or greater. ● The voluntary action plan for promoting 3R of containers and packaging was announced (The Beverage Paper Container Recycling Council). ★ The website for children's environmental education called "Milk Pack's Expedition" was started. ● Sponsoring of "Message Box Kit" for enlightening exhibition was started. ★ Nishi Hari project (Construction of local collection system) ★ Survey on paper carton LCA in Northern Europe	 Local Conference to Promote Paper Carton Recycling was held



History

Members list

Fiscal year	History	Applicable laws
2006	<ul style="list-style-type: none"> 20th anniversary memorial meeting of JAMRA 	<ul style="list-style-type: none"> Revised Containers and Packaging Recycling Law was enacted.
2007	<ul style="list-style-type: none"> "Plan 2010 -Action Plan for Recycling of Paper Cartons for Beverages - Toward collection rate of 50%" was established and published. Participated in the main event of the environmental moth "Eco Products and Eco Fair 2007" (this has been continuing every year). Supported "Friendly environment loop - JAMRA" (this has been continuing every year). Onsite lessons on milk carton recycling were started (this has been continuing since *3). The movement to expand the number of milk carton collection centers (20,000 locations were targeted) was developed further. 	
2008	<ul style="list-style-type: none"> Participated in the Toyako Summit Memorial General Environmental Exhibition 2008. Conference on employment of CTMP for beverage cartons 	
2009	<ul style="list-style-type: none"> A book "Paper Cartoon Manifesto" was published 	
2010	<ul style="list-style-type: none"> "Milk Packn's Expedition" DVD was produced. The 1st "Japan and Korea Forum on Processed Milk Industry Environmental Management (in Seoul, Korea) 	
2011	<ul style="list-style-type: none"> "Real Story of Paper Carton Recycling" pamphlet was published. Onsite lessons on paper carton recycling was held for the leaders of the movement in Korea (in Korea). Provision of collection boxes at 20,000 locations was achieved. "Plan 2015 - Action Plan for Recycling of Paper Cartons for Beverages" was established and published. The second voluntary action plan for promoting 3R of containers and packaging was announced (The Beverage Paper Container Recycling Council). Certified as PCR of "milk". The 2nd "Japan and Korea Forum on Processed Milk Industry Environmental Management (in Osaka) "The promotion council of Milk carton Recycle products mark" was established. 	
2012	<ul style="list-style-type: none"> New organizations for operation of COMCEI were started. (General Affairs, local organizations, Event Committee) The 3rd "Japan and Korea Forum on Processed Milk Industry Environmental Management (in Kyongju, Korea) Survey on paper carton LCA in Northern Europe was conducted. "Friendly environment loop forum - Efforts for utilization of renewable energy" Workshop at a commercial facility "Ginza Mitsukoshi" (Tokyo) 	<ul style="list-style-type: none"> Review of Containers and Packaging Recycling Law was started.
2013	<ul style="list-style-type: none"> A symposium commemorating the 20th anniversary of COMCEI was held. A booklet "Story of Waste" was published. Workshop at a commercial facility "Ario Hashimoto (Sagamihara City)" and "LaLa garden Nagamachi (Sendai City)". Supported "Friendly environment loop - Effects and problems of recycling of containers and packaging" 	<ul style="list-style-type: none"> Small-Appliance Recycling Law was enforced.

- *1 Venues of local conference to promote paper carton recycling (1998 to 2013)
Hokkaido, Hakodate, Aomori, Iwate, Miyagi, Fukushima, Yamagata, Niigata, Nagano, Shiga, Gunma, Warabi, Saitama, Chiba, Ibaraki, Tokyo (northern and eastern parts), Akishima, Kanagawa, Yokohama, Kuwana, Kasuga, Shizuoka, Gifu, Ishikawa, Fukui, Mie, Aichi, Osaka, Kyoto, Hyogo (Kobe and Hanshin area), Akashi, Shimane, Okayama, Hiroshima, Tokushima, Kochi, Fukuoka, Fukuoka, Oita, Saga, Kumamoto, Okinawa
- *2 Venues of workshop on milk carton recycling (2004 to 2013)
Asahikawa, Sapporo, Saitama, Shibuya, Shinagawa, Koto, Nakano, Kita, Nishitokyo, Yokohama, Sagami-hara, Otsuki, Kofu, Chikusai, Nisshin, Osaka, Nishinomiya, Matsuyama, Kochi, Beppu, Naha
- *3 We visited the following schools to run the onsite lessons on milk carton recycling (2007 to 2013)
Sukagawa City Abukuma Primary School, Toyama City Shinjo Primary School, Chikusai City Isa Primary School, Haga Cho Hagaminami Primary School, Motegi Cho Motegi Primary School, Ota City Chuo Primary School, Konosu City Akamidaiichi Primary School, Kawaguchi City Tozukaminami Primary School, Shibuya Ward Kakezuka Primary School, Yokohama City Hie Primary School, Hiratsuka City Okazaki Primary School, Yamato City Shibuya Primary School, Komagane City Akaho Primary School, Hokuto City Mukawa Primary School, Hamamatu City Hamana Primary School, Kanazawa City Izumino Primary School, Tarui Cho Iwade Primary School, Godo Cho Godo Primary School, Nisshin City Higashi Primary School, Nisshin City Nishi Primary School, Minamiise Cho Nantohigashi Primary School, Nabari City Mihata Primary School, Kishiwada City Jyoutou Primary School, Osaka City Bentencho Primary School, Osaka City Turumachi Primary School, Nishinomiya City Takagi Primary School, Amagasaki City Wakaba Primary School, Hiroshima City Asaniku-omachi Primary School, Hiroshima City Ushitashimachi Primary School, Hiroshima City Niho Primary School, Hiroshima City Nukushina Primary School, Mitoyo City Omi Primary School, Mitoyo City Matsusaki Primary School, Yoshinogawa City Kamiura Primary School, Kochi City Kamoda Primary School

- 4 related associations**
 - Japan Dairy Industry Association
 - Japan Dairy Association
 - National Association of Agricultural cooperative Dairy
 - Federation of Milk Processors Co-operatives
- 7 Carton manufacturers**
 - Nippon Paper Industries Co., Ltd.
 - Nihon Tetra Pak K.K.
 - ISHIZUKA GLASS Co.,Ltd.
 - Dai Nippon Printing Co.,Ltd.
 - TOPPAN PRINTING CO.,LTD.
 - Hokuetsu Package Co., Ltd.
 - TOKYO PAPER MFG. CO. ,LTD
- 133 dairy companies**
- [Hokkaido]**
 - Yotsuba Milk Products Co., Ltd.
 - Satsuraku Dairy Agricultural Coop
 - HOKKAIDO HOSHO MILK PLANT Co.,Ltd.
 - SHIN SAPPORO NYUGYO CO., LTD
 - KUMIAI DAIRIES LIMITED
 - Hokkaido Milk Product Co.,Ltd.
 - Hakodate Milk
 - Hokkaido Dairy Corporation Co.,Ltd.
 - MACHIMURA FARM ,Inc.
 - kurasimamilk.Co,ltd.
 - TOYOTOMI MILK PRODUCTS
- [Aomori]**
 - HAGIWARA MILK PLANT Co.Ltd.
- [Iwate]**
 - Fujiya Milk Co., Ltd.
 - Oofunato Milk Co., Ltd.
- [Miyagi]**
 - TOUHOKU MORINAGA MILK INDUSTRY CO., LTD
 - furukawa milk industry Co.Ltd
 - YAMADA MILK PRODUCTS
 - Michinoku Milk Co.,Ltd.
 - Touhoku Glico Dairy Products Co.,Ltd
- [Yamagata]**
 - Fuji Milk Co., Ltd.
 - GOTO Farm Co.,Ltd
 - Ohu Dairy Cooperative
- [Fukushima]**
 - Rakuou milk products Co.,Ltd.
 - Tohoku-kyodo Milk industry Co., Ltd
 - Aizu Chuoh Nyugyo Corporation
 - Matsunaga milk Co., Ltd.
 - Fukushima Milk Co., Ltd.
- [Ibaraki]**
 - IBARAKI DAIRY PRODUCT INDUSTRY CO., LTD.
 - TOMOE DAIRY PROCESSING CO., LTD
 - Ibaraku Co.,Ltd.
 - KANTO MILK INDUSTRY CO., LTD.
- [Tochigi]**
 - DAIRY TOCHIGI AGRI. CO-OP
 - Tochiraku Milk Co.,Ltd.
 - Harigai Milk Industry Co.,Ltd.
 - Tochigi Meiji Milk Co. Ltd
 - Tochigi Milk Co., Ltd.
 - HORAI Co.,Ltd. Dairy Industry Division
- [Gunma]**
 - Haruna Dairy Cooperatives
 - Tomo Dairy Cooperative
 - GUNMA MILKJOINT BUSINESS COOPERATIVES
- [Saitama]**
 - MORI MILK Co., Ltd.
 - SEIBU RAKUNOU
 - JA Saihoku Rakunou
 - osawa milk Co., Ltd.
- [Chiba]**
 - FURUYA MILK PRODUCTS CO.,LTD
 - Chiba Hokubu Rakuno Dairy Cooperative
 - Chiba-raku Dairy Cooperative
- [Tokyo]**
 - MEGMILK SNOW BRAND Co., Ltd
 - Meiji Co., Ltd.
 - MORINAGA MILK INDUSTRY CO.,LTD.
 - KYODO MILK INDUSTRY CO.,LTD.
 - Glico Dairy Products Co.,Ltd
 - KOIWAI DAIRY PRODUCTS CO., LTD.
 - Koshin Milk Products Co,Ltd
- [Kanagawa]**
 - Takanashi Milk Products Co.,Ltd.
 - YOKOHAMA MILK INDUSTRY CO.,LTD.
 - KONDO MILK PRODUCTS CO.,LTD.
 - Ashigara Milk Products Co.,Ltd.
 - Kyoudou Milk Co., Ltd.
- [Nagano]**
 - YATSUGATAKE MILK Co.,Ltd.
 - MATSUDA MILK co.ltd
- [Niigata]**
 - Niigata-ken Nokyo Milk Co., Ltd.
 - HARADA Daily Products.CO.,LTD.
 - Tsukada Milk Products.Co.LTD
 - Sado Milk Products Ltd.
- [Toyama]**
 - Tonami Milk Co., Ltd.
 - Kokuto milk
- [Ishikawa]**
 - i-Milk Hokuriku Co.,Ltd.
- [Fukui]**
 - MORINAGA-HOKURIKU MILK INDUSTRY CO.,LTD
- [Gifu]**
 - Hida Rakuno Dairy Cooperative
 - Bokuseisha Ltd.
 - Seki Milk Co., Ltd.
 - Mino Dairy Cooperatives
- [Shizuoka]**
 - Shimizu Milk Industry co.,Ltd
 - INASA MILK ASSOCIATION
 - Kannami toubu nougyoukyoudou kumiai
 - TOKAI MEIJI.CO.Ltd
 - Asagiri Milk Products Co.,Ltd
- [Aichi]**
 - Nagoya Gyunyu Co.,Ltd.
 - MIDORI NYUGYO CO.,LTD
 - CHUOSEINYU CO.,LTD.
 - toyota-nyugyou.co.jp
 - Aichi Brother Company Co.,Ltd.
 - TOKONAME MILK LIMITED PARTNERSHIP COMPANY
 - Showa Milk Co., Ltd
- [Mie]**
 - Ouchiyama Dairy Agricultural Cooperative
- [Kyoto]**
 - HIRAYA MILK
 - JA Kyoto Rakuno Center
- [Osaka]**
 - SEN-NAN Dairy Products Co.,Ltd.
 - NIPPON DAIRY CO-OPERATED CO.,LTD.
 - Takada Milk Co., Ltd.
 - Vitamin Milk Products Co.,Ltd
 - Ikaruga Milk Plant CO.,Ltd.
- [Hyogo]**
 - Hyogo-tantan Dairy Agricultural Cooperative
 - Awajishima Dairy Agricultural Cooperative
- [Tottori]**
 - DAISEN Dairy agricultural cooperative
- [Shimane]**
 - KISUKI Daily Product
 - Yasugi Milk Product Co.,Ltd
 - YUGEN GAISHA YOEKISHA
- [Okayama]**
 - OHAYO DAIRY PRODUCTS CO.,LTD
 - KAJIHARA MILKPRODUCTS CO.LTD
 - HIRUZENRAKUNOU NOUGYOU KYODOU KUMIAI
 - okayamanisinougyoukyoudoukumiai
- [Hiroshima]**
 - Sanyo Milk Industry Co., Ltd.
 - TOYO MILK INDUSTRY CO.,LTD.
 - Hiroshima Kyodo Milk Industry Co.,Ltd.
 - Chichiyasu Co.,Ltd.
- [Yamaguchi]**
 - Yamaguchi Kenraku Milk industry Co.,Ltd
 - houfurakunou agricultural cooperative
 - Nishimotobokujou
- [Kagawa]**
 - Shikoku Meiji Dairies Corporation
- [Ehime]**
 - SHIKOKU MILK PRODUCTS CO.,LTD.
- [Kochi]**
 - Himawari Milk
- [Fukuoka]**
 - nishirakunyuugyou Co.,Ltd
 - Omu Milk Products Co.,Ltd.
 - NAGATOSHI-MILK CO., LTD.
- [Nagasaki]**
 - SHIMABARA AREA DAIRY FARMERS COOPERATIVE
- [Kumamoto]**
 - KUMAMOTO DAIRY CO-OPERATIVE ASSOCIATION
 - KUMAMOTO MILK INDUSTRY CO., LTD.
 - Kuma Dairy Agricultural Cooperative
 - JA ASO
 - Limited Partnership (Corp.) HOTTA KOUNYUUSHA
- [Oita]**
 - KYUSUYUNYUGYO CO.,LTD
 - JA-Shimogo
 - Koyama Dairies Co., Ltd
- [Miyazaki]**
 - MINAMI NIHON RAKUNO KYODO CO.,LTD
- [Kagoshima]**
 - kagoshimakenrakunounyugyoukabushikigaisya
- [Okinawa]**
 - OKINAWA MEIJI MILK PRODUCTS CO.,LTD.
 - OKINAWA MORINAGA MILK INDUSTRY CO., LTD.
 - Mariya milk industry
 - YAEYAMA GENKI
 - Genki Seikatsu Co., Ltd.
 - Miyahira Dairy Corporation
- 13 supporting members**
 - Oji Eco Materials Co.,Ltd
 - NISHINIHON EIZAI CO.,LTD
 - Nissey Sangyo co.,Ltd.
 - NIPPON PAPER CRECIA CO.,LTD
 - DAIWA ITAGAMI CO., LTD.
 - SHIN-EI PAPER MFG.CO.,LTD.
 - Marutomi Paper Company
 - YAMADAYOUJI SYOUTEN CO., LTD.
 - CRESCO Corporation
 - MeadWestvaco Asia K.K.
 - Masukoo Paper Company
 - Stora Enso Japan
 - Weyerhaeuser Japan Ltd.

As of the end of October, 2013