



SUSTAINABILITY IN ACTION THAILAND KEY INITIATIVES IN 2019



GREEN ROOF PROJECT FOR FRIEND IN NEED (OF "PA") VOLUNTEERS FOUNDATION

In mid June 2010, Tetra Pak in collaboration with Friend in Need (of "Pa") Volunteers Foundation, Thai Red Cross, and Big C Supercenter signed a partnership agreement and jointly launched the "Green Roof Project for Friend in Need (of "Pa") Volunteers Foundation". Later TV 360 news program also joined the project as partner in 2015.

The project has campaigned for Thai people to donate used beverage cartons, primarily at Big C Supercenters across Thailand, to be recycled and turned into "Green Roof" tiles. The end products would be delivered to the foundation for further use in housing projects for disaster victims.

For 10 years the project had supported affected areas and poor communities in more than 20 provinces e.g. Mae Hong Som, Pa Yao, Uttaradit, Tak, Khonkhen, Roi Et, Rayong, Suratthani, Nakorn Sri Thammarat, Songkla and more.

More project details are available at www.greenroof.in.th and www.facebook.com/thaigreenroof or call our project call center at 02 -747 – 8881 to learn how to be "Green Roof" volunteers.

Since 2010, the collected volume has reached over

2,300 tons
or more than

230M



used beverage cartons which have been turned into over

65,000
roof sheets



for donation. These outcomes are from a great collaboration we have established with all partners and volunteers.



BEVERAGE CARTON RECYCLING PROJECT (BECARE)



Since 2016, Tetra Pak has played a leading role in developing a collaborative carton collection project - "Beverage Carton Recycling project or BECARE, primarily with local governments, like municipalities and subdistrict administrative organizations, whose waste management policy align with Tetra Pak carton recycling initiatives.

The BECARE project, mutually executed with industry partner, Department of Environmental Quality Promotion and a recycler, is committed to build awareness and develop carton drop-off or collection points at partner locations to create a long-term cooperation towards a sustainable carton collection.



For 4 years, the project has successfully raised awareness of carton recyclability and promoted carton collection and recycling through road shows and learning activities with target groups. Participating locations has greatly been expanded from scratch to 13 provinces in 2018, with used carton collection volume over 2,300 tons from over 300 municipalities, communities, and other local organizations.

In addition to collection volume, positive changes can be seen with consumer behaviour, specifically with their routine carton sorting and collection aiming to reduce environment impact and create value to society.



กล่องยูเอชที
รีไซเคิลได้

MEET THE BEVERAGE CARTON RECYCLERS

BEVERAGE CARTON RECYCLING CENTER BY FIBER PATTANA



In 2005, Fiber Pattana Co., Ltd., a paper mill located in Samutprakarn, started to recycle used beverage cartons into recycled pulp and roof sheets, made from carton's PolyAl (polyethylene and aluminium). Their annual capacity is roughly 24,000 tons. Fiber Pattana has acquired used beverage cartons for recycling through their waste brokerage network and recycling projects, jointly implemented with Tetra Pak and other partners, including the Green Roof project and the BECARE project. In 2019, they recycled around 6,700 tons of used beverage cartons and aim to increase recycling tonnage through diverse environmental activities in the years to come.

GREEN BOARD (THAILAND) FACTORY

Green Board (Thailand) Co., Ltd, a chipboard manufacturer, based in Khlong Sam, Pathum Thani, was established in 2017 under a new management. Green Board is basically a panel board, made from all components of used beverage cartons: paper, polyethylene and aluminium. Beverage carton materials are shredded and compressed at high temperature to become high quality chipboard called Green Board. These boards can be applied in paneling, ceiling

and flooring. Green Board has executed environmental activities with their partners and local communities nearby the factory to gain raw material. In 2019, they recycled approximately 150 tons of use beverage cartons.



S.P. PAPER FACTORY

Founded in 2001, S.P. Paper & Tube Co., Ltd. operates a paper business that goes hand in hand with sustainability concept. Their businesses of rewinding and cutting kraft paper, supplying used paper core and recycled paper, which help reduce environment impact and strengthen the recycling value chain. In 2017, the company extended their eco-friendly business by establishing a new used beverage carton recycling business of chipboard production, with initial recycling capacity of 900 tons/year. In 2019, they also upgraded their production line and expanded recycling capacity to 2,000 tons/year. The applications of their chipboard are very comprehensive, ranging from decoration to processing into a wide variety of consumer products, such as cabinet, table and chair.

ESTABLISHING AN ECOSYSTEM FOR SUSTAINABLE CARTON WASTE RECYCLING IN THAILAND



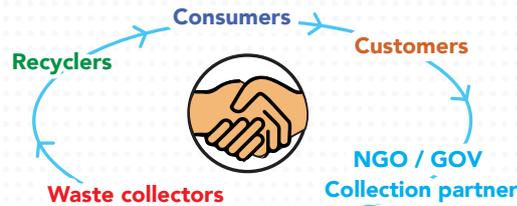
CHALLENGES (EARLY 2000s)

Waste was not segregated at source. Collection of recyclables was largely left to the informal sector. Used cartons were not seen as a separate grade.



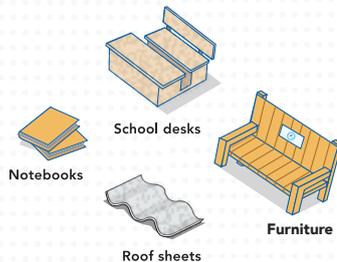
READING THE SIGNS EARLY

Anticipating the growth in demand for safe and hygienic food in Tetra Pak cartons, we initiated collection and recycling network for used cartons by identifying and connecting everyone in the value chain – recyclers, NGOs, waste collectors, retailers, customers, and consumers



CARTONS ARE RECYCLED INTO VALUABLE PRODUCTS

Paper products from fiber
Roofing sheets from Poly-Al
Furniture from Green board



USED CARTONS ARE...



STAYING AHEAD OF THE CURVE

Working with industry peers

Thailand Institute of Packaging Management for Sustainable Environment (TIPMSE) – founded by Tetra Pak and leading corporations since 2005 to facilitate packaging waste management and support recycling in Thailand by working with the government and recyclers

PARTNERING POWER

ENCOURAGING CONSUMERS TO BRING BACK USED CARTONS



Thai Children Love Recycling Project with Schools :

Partnership with the Ministry of Natural Resources and Environment and the Office of Basic Education Commission **700** schools involvement in **12** Provinces **8** tons or **8,000,000** used cartons collected in 2006-2007



JEAW Saves Earth Project

– 1st Nationwide Recycling Project :

Partnership with Channel 3 TV program **208** tons or **21,000,000** used cartons collected in 2008 **416,000** school notebooks, **6,240** sets of classroom desks and chairs donated to Border Patrol Police schools



Green Roof Project for Friends in Need (of "Pa") Volunteers Foundation

Partnership with the Foundation, Big C, and TV 360 degree : **2,300** tons or **230,000,000** used cartons collected and over **65,000** roof sheets donated to support those in need more than **20** provinces since 2010



Beverage Carton Recycling Project (BECARE):

Partnership with industry peers and local government **2,300** tons or **230,000,000** used cartons collected since 2016 in **13** provinces



School Milk Carton Recycling Project

Partnership with Bangkok Metropolitan Administration and Dairy Farming Promotion Organization of Thailand and industry peers Over **30** districts, about **350** schools under Bangkok Metropolitan Administration **77** tons or **7,700,000** used cartons collected in 2019