



FY 2021

Sustainability Promise

SEKISUI | KYDEX



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EXECUTIVE SUMMARY

We are pleased to share our first Sustainability Promise with you. Our mission at SEKISUI KYDEX is to deliver more than our customers can imagine while making the world a better place for future generations. We strive to support sustainable practices at all stages of our business operations. Throughout this document, you will find our current initiatives and data, along with our strategy and goals, to make positive change through our people, products, and processes.

CURRENT STATE

Our company has already taken steps towards sustainability. Our in-house recycling facility has enabled us to recycle over 15 million pounds of PVC scrap every year. This is further supported by our collaboration with the Aircraft Interior Recycling Association, which is dedicated towards recycling 100% of aircraft interior parts. The Green Cabin Alliance, co-founded by SEKISUI KYDEX, is similarly devoted to sustainability within the aviation industry.

Our company is also certified in ISO 14001:2015, an international standard that governs environmental management systems. Our SDG week held annually in August allows us to engage our employees in sustainability and promote good habits such as recycling, waste reduction, and more. Lastly, our community clean-ups in parks, highways, and beaches allows employees to make a tangible positive difference for our environment.

FUTURE STATE

Our future initiatives are linked to our corporate ownership's (SEKISUI CHEMICAL) Environmental, Social, and Governance (ESG) strategy of Innovation for the Earth. This strategy is realized through activities that support the United Nations' Sustainable Development Goals (SDGs).

SEKISUI KYDEX will focus on:

Measurement

- ISO 14040:2006
- Greenhouse gas data system
- Supplier audits

Management

- Sustainability Team
- Sustainability Training
- ISO 14001 & AS9100 D

Manufacturing

- Net Zero Emissions by 2030
- Renewable Energy Plan
- Recycling Infrastructures

While we have made great strides towards becoming a more sustainable company, there is still much work to be done. Through our various goals, in alignment with our green strategy, we seek to become an industry leader in sustainability and pave the way for a more prosperous future.

INTRODUCTION

SEKISUI KYDEX innovates and creates sustainable thermoplastic material solutions for the next generation of product design. SEKISUI Chemical's corporate commitment to Speed, Service, and Superiority is realized through the KYDEX® Thermoplastic business model of manufacturing bespoke materials with short lead times in small quantities. This Quick Response Manufacturing (QRM) model at three manufacturing campuses expands beyond thermoplastic sheet. The KYDEX® portfolio also includes injection molding resins, proprietary Infused Imaging™ technology, integral special effects, unique textures, and custom products and design. The SEKISUI KYDEX appLab™ and designLab® Innovation Centers are collaborative spaces for clients and customers to bring the supply chain together for rapid prototyping and design development. These spaces are the bridge between engineering and art. More than 400 dedicated professionals in Bloomsburg, PA, and Holland, MI, working with a global network of sales and distribution partners, are committed to delivering more than their customers can imagine. Visit www.kydex.com for more information.



MISSION & STRATEGY

OUR MISSION

Delivering more than our customers can imagine while making the world a better place for future generations.

OUR STRATEGY

At SEKISUI KYDEX, we recognize the importance of sustainability and preserving our planet for those who come after us. It is essential that we act responsibly with our limited natural resources, respect our environment, and listen to our customers and employees who are passionate about sustainable practices, policies, and products.

A key driver of sustainability is the growing global middle class. Today, there are 3.5 billion people considered 'middle class'. By 2030, this number is expected to grow to 4.8 billion people. With this demographic shift comes higher standards of living, greater disposable income, and increased development on a macroeconomic level. These factors all mean that the demand for sustainability will continue to grow.

As a manufacturer of bespoke thermoplastics, we will focus our efforts on areas we can have the greatest impact. We will aim to create long term, sustainable growth in air and rail transportation, medical devices, and heavy equipment for agriculture and construction. Additionally, we are striving to expand into emerging technologies to find new applications for our products in eco-friendly infrastructures.

Our strategy is to manufacture and innovate specialized polymers for use in global industries, while taking action to minimize negative impact on the environment, support sustainable practices at all stages of our business operations, and promote growth rooted in environmentalism, ethics, and a long-term mindset. We intend to realize this strategy in three key areas: the measurement of our processes, the management of our people, and the manufacturing of our products.

OUR GOALS

FUTURE STATE

At SEKISUI KYDEX, we are constantly striving to increase our positive impact on people and planet alike. By achieving our sustainability goals, we will be better able to deliver in both of these areas.

SEKISUI KYDEX will focus on the following areas to support a more sustainable future:



Measurement

- Implementation of ISO 14040:2006 to track our products throughout their life cycle.
- Greenhouse gas data tracking system to measure and reduce emissions.
- Supplier audits to ensure ethical and environmental standards are met throughout our supply chain.



Management

- Permanent sustainability team to spearhead initiatives to further support our green strategy.
- Comprehensive sustainability training for employees including environmental strategy, initiatives, and goals.
- Retain and improve ISO certification processes to continue working towards a more sustainable future.



Manufacturing

- Strive for net zero emissions by 2030.
- Develop renewable energy plan to reduce reliance on coal, petroleum, and natural gas.
- Expand recycling infrastructures to eliminate waste and achieve our goal of a circular economy.

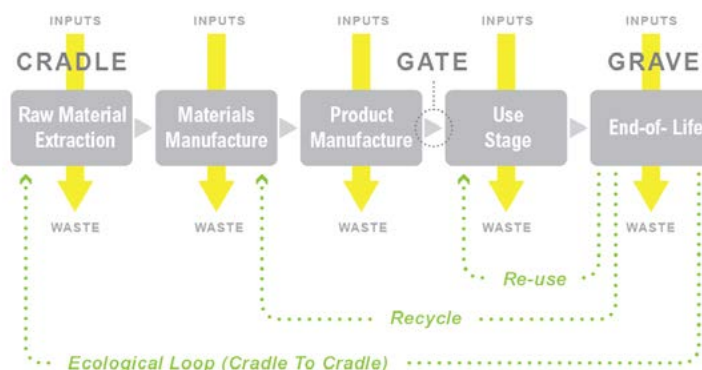
OUR MEASUREMENT GOALS



ISO 14040:2006

We are currently exploring ISO 14040, which focuses on Life Cycle Assessment. This standard would allow us to analyze the environmental impact of our products from “cradle” to “gate” to “grave”, to measure sustainability at all stages of the supply chain. With data on supplier sourcing of raw materials, energy usage both upstream and downstream, end-of-life use of our products, and more, we will be better positioned to assess our environmental impact and adjust our processes accordingly.

Product Life Cycle Stage Gates



Implementation of a Greenhouse Gas (GHG) Data Tracking System

By utilizing GHG tracking software, our company will be able to gather comprehensive data on emissions of CO₂, CH₄, N₂O, and more. Having a complete overview of these various greenhouse gases will enable us to observe trends over time and pinpoint key areas in our operations to improve. This work will be completed by the Renewable Energy Strategy Team (REST), a group of employees devoted to sourcing cleaner solutions of energy, analyzing data, conducting environmental research and more.

Supplier Audits

SEKISUI KYDEX strives to conduct audits of our suppliers, to ensure that material inputs are being sourced ethically and sustainably. By doing so, we can operate in good faith and move away from vendors that fail to live up to our standards.

OUR MANAGEMENT GOALS



Development of a Permanent Sustainability Team

This team will be comprised of strategic leaders within the company and employees with a passion for sustainability to spearhead the initiatives as outlined in this document. The team will be developed from our Renewable Energy Strategy Team (REST), a group of employees devoted to sourcing cleaner sources of energy, analyzing data, conducting environmental research, and more.

Cohesive Employee Sustainability Training

SEKISUI KYDEX will revitalize our internal sustainability training. Our training will educate employees on common assumptions about plastics, SEKISUI KYDEX environmental policy, Sustainable Development Goals, the recyclability of KYDEX® thermoplastics, and how to act more sustainably. In doing so, we will further our green company culture and ensure that employees are well-versed in our strategy and values.

Retention of ISO standards

Through internal audits, our sustainability team, and a strong company culture, we intend to maintain our current and future ISO certifications. We will regularly analyze any relevant data to ensure that we are compliant with ISO standards and identify areas to enhance our current practices.

OUR MANUFACTURING GOALS



Achieve Net Zero Emissions by 2030

In the past, zero emissions was primarily waste focused, looking specifically at landfill use, recycling, and incineration. Moving forward, “emissions” will be defined as anything we control that has a carbon footprint. By 2030, we want to achieve the practice of circular economy and become a net zero carbon company.

Increase Energy from Renewable Sources

Our Renewable Energy Strategy Team is currently exploring ways to shift from natural gas to renewable energy from both external and internal sources. Externally, we intend to utilize greener sources of power, such as wind, geothermal, and solar. Internally, we are examining our manufacturing processes to find places we can harness excess energy from (for example, thermal energy from heavy equipment).

Maximize Recycling Markets

We seek to expand our recycling initiatives in alignment with our corporate 2030 vision of a circular economy which creates innovation for the Earth. Ultimately, we are striving towards 100% recycling in our manufacturing processes and with our customers. This means sending nothing to landfills or waste to energy. SEKISUI KYDEX is exploring options through local recycling facilities and investing in infrastructure and processes to maximize the amount of end-of-life material we receive from our customers. This will allow us to increase our output of recycled-grade product.

UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOALS

The United Nations, recognizing the importance of sustainable growth, has laid out a framework of seventeen Sustainable Development Goals (SDGs) to ensure prosperity for future generations. These goals focus on key areas that are essential for improving the quality of life of people across the globe. At SEKISUI KYDEX, we strive towards making this mission a reality. We recognize that it is difficult to address all of these goals at one time, but have found strategic areas that we can make an impact in with current and future programs.

1 NO POVERTY  - Pays fair market wages - Offers comprehensive benefits - Regular donations to United Way and other charity organizations	2 ZERO HUNGER  - Supplied food to staff during peak of COVID-19 pandemic - Invested in local restaurants struggling due to shutdowns - Collaboration with Agape (food charity)	3 GOOD HEALTH AND WELL-BEING  - Company events to promote healthy living - Monthly charity miles - COVID contact tracing
4 QUALITY EDUCATION  - Offers stipends towards tuition and student loans - Heavy involvement with local schools and universities - Internship program for students	5 GENDER EQUALITY  - Has dedicated diversity committee - Supports women in STEM	6 CLEAN WATER AND SANITATION  - Has clean water training system - Water audited regularly
7 AFFORDABLE AND CLEAN ENERGY  - Energy partially sourced from renewables - Waste to energy program	8 DECENT WORK AND ECONOMIC GROWTH  - Has created over 300 jobs - Stimulates local economy	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE  - Products designed for use in infrastructure - Has multiple industry partnerships (GCA, AIRA) - Constantly innovating more sustainable alternatives
10 REDUCED INEQUALITIES  Has dedicated diversity committee	11 SUSTAINABLE CITIES AND COMMUNITIES  - Expanding investment into emerging markets - Supported local solar panels project	12 RESPONSIBLE CONSUMPTION AND PRODUCTION  - Waste to energy - Uses in-house recycling facility - ISO 14001:2015 certified
13 CLIMATE ACTION  Striving towards net zero emissions	14 LIFE, BELOW WATER  Beach clean ups	15 LIFE ON LAND  Park clean up
16 PEACE, JUSTICE AND STRONG INSTITUTIONS  - Bloomsburg University - Penn College of Technology - Central PA Manufacturing Partnership	17 PARTNERSHIPS FOR THE GOALS  - Green Cabin Alliance - Aircraft Interior Recycling Association - UltraPoly	

OUR INITIATIVES

At SEKISUI KYDEX, being “green” is no recent trend. In fact, being environmentally responsible is an essential part of our business philosophy. We strive to produce and sell all of our products while keeping with our commitment to and regard for safety, health, and environmental protection worldwide. Our broad range of sustainability initiatives are made possible by the dedicated employees that make sustainability a part of their daily lives.

CURRENT STATE



InHouse Recycling: UltraPoly



On-campus electric Nissan LEAFs for employee travel



Water coolers & reusable water bottles



Zero Waste to Landfill



SDG Week - Dedicated time to celebrate recycling, saving energy, and other eco initiatives



Community Education



Highway & Park Cleanup



Greenhouse Gas Reduction Initiative



Waste converted to energy powers our campuses



Monitor energy & waste concerns with ECO Track software



ISO 14001: 2015

OUR JOURNEY

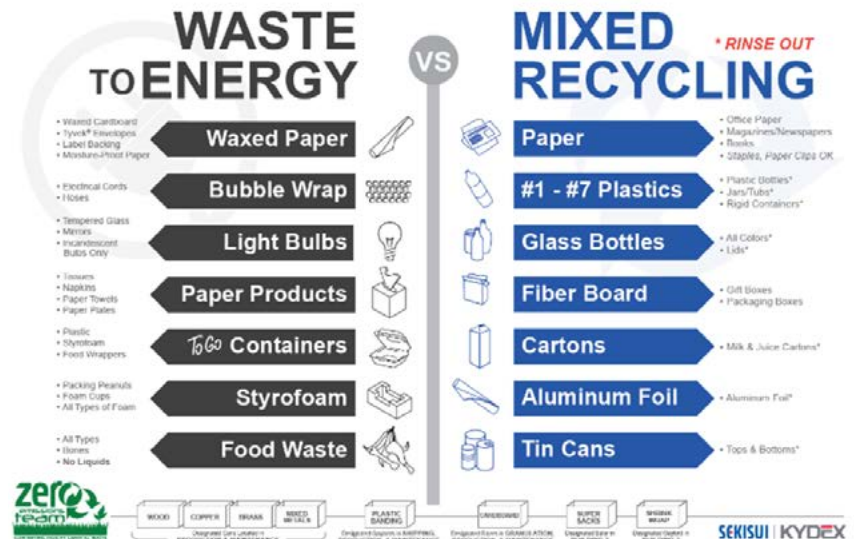
The SEKISUI KYDEX sustainability journey began on a long road. For over 30 years, SEKISUI KYDEX has included sustainability in our core mission, but strategic focus really began in 2013.

SEKISUI CHEMICAL, our corporate ownership, had a Zero Emissions Certification their companies could attain for developing zero waste to landfill infrastructures. In 2013, SEKISUI KYDEX began the process to attain this certification.

A team of volunteers, passionate about sustainability, came together to develop the Zero Emissions process. The team included members from across all areas of the business including production, safety, finance, and graphic design. With support from senior management that included funding and time, the team was positioned to make big change.

Our first action was to audit all company purchases by reviewing hundreds of invoices to identify everything coming into the system. The list was developed into 18 core items comprised of wood and energy to electronics and ink cartridges. With a list in hand, our team developed relationships with local partners to collect, measure, and responsibly manage the waste from the SEKISUI KYDEX facilities using a color coded bin system of green, blue and black.

Waste to energy were items that could be burned to recreate energy and were sorted into black bins. Mixed recycling, in the blue bins, were traditional items such as cans, bottles, etc, and nonrecycling materials like



powder were limited in quantities and placed in green bins. These bins are in all areas of the facility.

With the installation of the bin system internally and an external infrastructure of responsible partners, the program was implemented by 2015.

The most critical part of the project began, educating employees and following through on separating materials. It took time and dedication, but employees were on board and knew the appropriate way to discard waste materials. In 2016, SEKISUI KYDEX achieved their SEKISUI Zero Emissions program certification.

The golden lining of the journey is that this program was just the beginning. The Zero Emissions program became the catalyst for other SEKISUI KYDEX sustainability initiatives like SDG week, material recycling, and more.

OUR ACCOMPLISHMENTS

Recycling Infrastructures

Bloomsburg, PA Facility

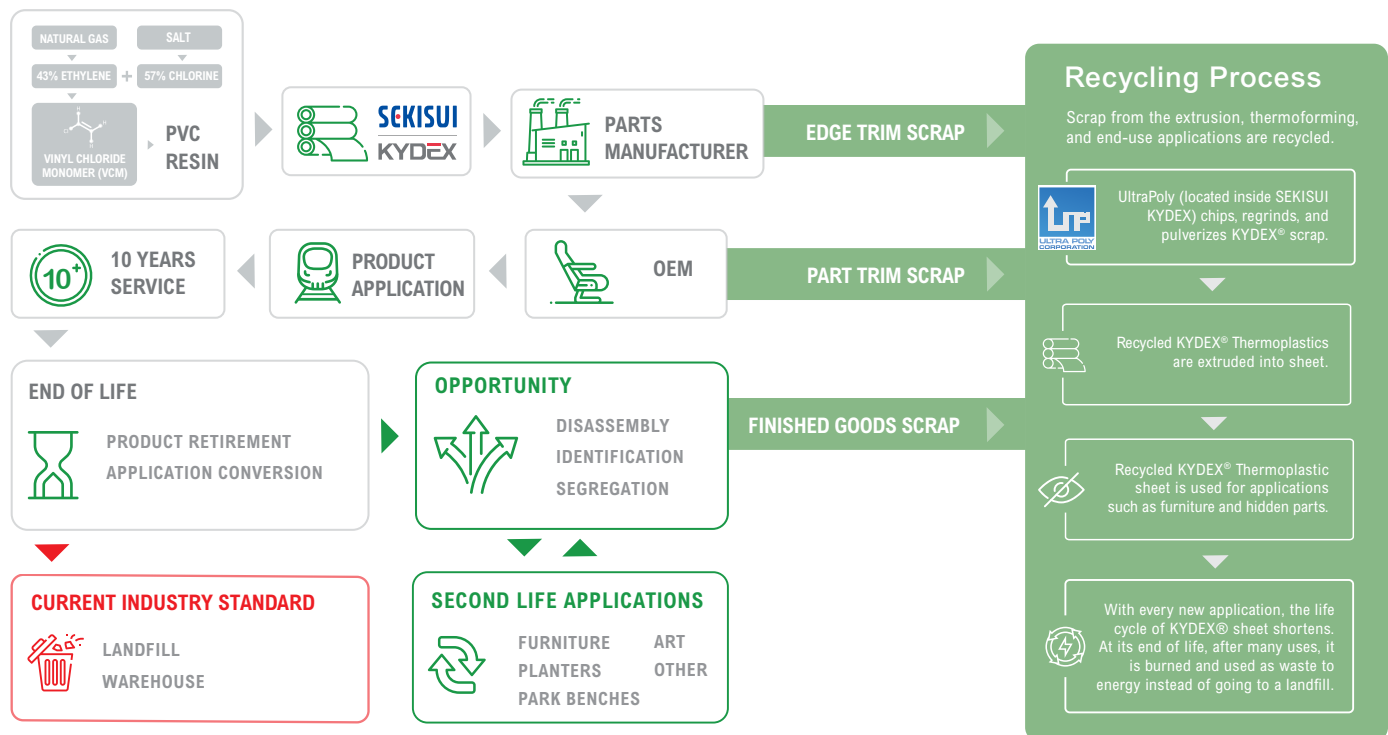
Ultra-Poly

From the beginning, SEKISUI KYDEX used a single in-house granulator to chip, regrind, and reuse scrap and edge trim material. We wanted to expand our recycling operations to accommodate a thermoplastic trim scrap buyback program, providing customers an avenue to recycle their materials rather than send them to landfill. Through partnership with Ultra-Poly, we were able to scale up our recycling programs with a 100,000 sq. ft. in-house processing space. This partnership led to recycling over 15 million pounds of PVC scrap material annually.

See this process in action here: <https://youtu.be/53DJQdhs3Dg>



KYDEX® Thermoplastics Recycling Process



OUR ACCOMPLISHMENTS

Recycling Infrastructures continued

Holland, MI Facility

Company Buybacks

At our Holland, MI facility, recycling buybacks are conducted directly with customers. After delivering product orders, the trucks are filled with customer edge trim material before returning to the SEKISUI KYDEX facility. When the trucks return, this scrap is fed into grinders located directly by the loading docks. This regrind is stored in boxes separated by customer and are held for 120 days. If the same customer places another order within this period, the regrind from their previous order is used in their product. If an order is not placed within 120 days, the regrind boxes is sold for use elsewhere.



Aircraft Interiors Recycling Association (AIRA)

Beyond recycling during the manufacturing process, the next step is to implement recycling streams for end-use materials. With SEKISUI KYDEX's support, AIRA began development of the next generation of the internal recycling system for Safran Seats' Great Britain location. To promote more efficient segregation and material packaging, collection bins were put on the production floor to move trim pieces to a compactor for efficient transport. The compactor can condense the trimmed plastics, allowing more material to be transferred to the recycler at one time. In addition to the carbon reduction from recycling thermoplastics, this process enhancement allows for carbon reduction within the collection process and the transportation of materials.



OUR ACCOMPLISHMENTS

SDG Week

Every year in August, SEKISUI KYDEX hosts an SDG Week to celebrate, educate, and engage employees in sustainability. Activities include recycling initiatives, nature improvements, and training on ways to reduce electricity and water consumption and minimize their carbon footprint. We focus on promoting the three R's (Reduce, Reuse, Recycle) with electronic equipment recycling for our employees, which averages approximately 1500 lbs. of recycled electronics every year. Our teams will also go out to highways, parks and beaches to support their local communities in cleaning up before the fall season. Throughout the week, employees also learn about different behaviors that can positively impact the environment such as carpooling, shutting off lights, and more. SDG Week is important for our company because it instills a work culture that values sustainability and supports our long-term initiatives.



Community Involvement

At SEKISUI KYDEX, we believe that every action, no matter how small, can have an impact. With our park, highway, and beach clean-ups, employees can make a tangible difference on an individual level.

AS9100 D & ISO 14001

SEKISUI KYDEX has developed and implemented an integrated Safety, Quality and Environmental Management System (SQEMS) to document the company's best business practices, better satisfy the requirements and expectations of its customers, enhance its environmental performance, support, and promote good health and safety practices and improve the overall management of the company.

SEKISUI KYDEX meets the requirements of the international standard AS9100 D. The system addresses the design, development, and production of KYDEX® products. It incorporates the process approach where consistent and predictable results are achieved more effectively and efficiently when activities are understood and managed as interrelated processes.

SEKISUI KYDEX also meets the requirements of the international standard ISO 14001. The system addresses the management of environmental aspects, compliance obligations, the actions to address risks and opportunities. The management of the interactive processes provides for the achievement of continual improvement and focus on efforts leading to the prevention of undesirable outcomes.



Nissan Leaf Vehicles

In October 2016, SEKISUI KYDEX purchased three Nissan Leaf electric vehicles for employee use. These vehicles are used for transportation between our North and South campuses and for shuttling visitors to and from our facilities. As of June 2022, these vehicles have been driven a total of almost 15,000 miles. On average, a new passenger non-electric vehicle gets 25.4 miles per gallon. Considering a gallon of gasoline typically emits 8,887 grams of CO₂ when consumed, our Leaf vehicles have prevented over 5 tons of CO₂ emissions.

OUR PROGRESS

The start of any sustainability strategy begins with the data, which is necessary for tracking current impact and future improvements. Using fiscal year 2021 as a starting point, the following data was collected as a baseline for SEKISUI KYDEX's impact. Through our strategic goals, the available data will become more detailed each year.



17,779 ^{METRIC TONS}
CO₂ EMISSIONS



4,280,175 ^{GAL}
WATER USE



32,043,805 ^{KWH}
ENERGY USE



91.52 ^{METRIC TONS}
WASTE TO ENERGY



**Pounds of
Product
Material
Recycled**

9,143,224 ^{LBS}
BLOOMSBURG

7,082,464 ^{LBS}
HOLLAND

16,225,688 ^{LBS}
TOTAL



\$126,683
**SPENT ON
COMMUNITY
ASSISTANCE**



9
**COMMUNITY
AGENCIES
HELPED**



27
**TREES SAVED
BY PAPER
SHREDDING**



62
**COMMUNITY
EVENTS
HELD**

OUR PRODUCTS

Thermoplastics make an immense contribution to environmental sustainability through their energy saving potential, intrinsic recyclability, and energy recovery options. At SEKISUI KYDEX, our products are designed with this sustainability in mind from the beginning. Our research and development team are innovating and exploring new options to improve lifecycle, recyclability, and the sourcing of raw materials. The thermoplastics we manufacture are primarily comprised of two types of polymers: polyvinyl chloride (PVC) and acrylonitrile butadiene styrene (ABS).

PVC

PVC, as a raw material, is energy efficient to process. More than half of the raw material used in production of resin is provided by salt. This means that PVC consumes proportionally less non-renewable energy resources compared to other common building materials.

PVC's main way into sustainability is its lifecycle properties. PVC's life expectancy is superior to that of comparable materials, such as fiberglass, which is hazardous to health, heavy, and hard to recycle. PVC has been proven to have durability in its application for 50-70 years. At SEKISUI KYDEX, we multiply the lifecycle of PVC through recycling for multiple applications, making thermoplastics a solution that spans hundreds of years: ultimately, this leads to less resource consumption and waste.

Additionally, PVC is light weight, resulting in less nonrenewable resources being expended during transportation. This is true not only for shipping the product to consumers, but over the product's lifetime when it is applied for use in a transportation vehicle. Because our material is engineered to be lightweight, when used in place of other materials, we can reduce approximately 62 tons of greenhouse gas emissions per 1kg of weight reduced. Furthermore, PVC is resistant to weathering, chemical attack, rotting, corrosion, shock, abrasion, and vermin.



ABS

Likewise, our ABS product line is similarly designed to be durable, stable, and easily recyclable. In fact, ABS is one of the key drivers for having multilayer extrusion capabilities. This process allows us to use recycled material in the substrate of the thermoplastic and reduce the amount of virgin material required, while still meeting regulatory and aesthetic requirements. To fill the recycled content funnel, we pick up trim material from customers within a given proximity while dropping off customer orders.

OUR RECYCLED PRODUCTS

KYDEX® RCL

In 2022, SEKISUI KYDEX introduced a new flight-ready recycled product line, KYDEX® RCL. The initial product launch featured KYDEX® 5555 RCL, utilizing recycled KYDEX® Thermoplastics. Because the recycled material is made from the KYDEX® 5555, it is specifically formulated to exceed low heat release requirements for aviation interiors.

This development is only a small step in the big changes required in the industries we serve. Developing infrastructures to collect, sort, and recycling materials along all stages of its life are key to providing recycled materials down the road. SEKISUI KYDEX is currently working with AIRA and customers to develop these infrastructures.



KYDEX® V103

KYDEX® V103 is a recycled grade of a proprietary thermoplastic sheet that is cost competitive with other grades of thermoplastic sheets while offering improved performance. Developed using recycled KYDEX® T, KYDEX® V103 is Underwriter's Laboratories, Inc® recognized Std 94 V-0, 5V. It has thermoforming cycle times equivalent to FR-ABS.



COLLABORATIVE INITIATIVES FOR A BETTER PLANET



FOUNDING MEMBER

Green Cabin Alliance (GCA) is a cross-industry group within the aircraft interiors supply chain and is leading discussions to address collaboration challenges and promote a more sustainable cabin interiors industry. Their core goals include increased transparency, building common language, and improving reporting of carbon footprint data throughout the industry. Fundamentally, the biggest question is “what does it mean?” Before you can solve a problem, you need to understand it. GCA is actively working to dissect and define sustainability in the aviation industry, which includes many subtopics including language around measuring and managing carbon emissions.



The Central Pennsylvania Advanced Manufacturing Partnership, branded as MADE In Central PA, is a network of over 25 manufacturing leaders, representing a cross-section of the industry from Pennsylvania's Central region, with support from the region's workforce, education, and economic development partners. The partnership was launched in January 2018, with several key community and government organizations committed to supporting the coordination and implementation of the Partnership's priorities. Increasing awareness of manufacturing career opportunities to students, parents, and educators has been a consistent topic of conversation within the partnership.



**United Way of Columbia
and Montour Counties**

SEKISUI KYDEX supports the United Way to make a broad reach of recovery possible. The United way distributes funds to community agencies right in our back yard when they need it, from a catastrophic event to everyday needs. This year, as you may expect, our community has been impacted by the pandemic with loss of jobs and housing and an increased need for resources such as food. In 2021, employees and the company were able to donate \$67,728 to the Columbia Montour County United Way and Greater Ottawa County United Way.

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