75 YEARS

1950-2025
CELEBRATING HOW FAR WE'VE COME

FPA
Flexible Packaging Association

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WELCOME TO

Celebrating 75 Years of Innovation, Growth, and Leadership

For 75 years, the Flexible Packaging Association has been at the heart of the flexible packaging industry, driving innovation, shaping public policy, and fostering collaboration across the supply chain. What began as a vision among industry pioneers has evolved into a dynamic force that continues to lead with resilience, ingenuity, and an unwavering commitment to progress.

This storybook is a tribute to the remarkable journey of our association and the industry it represents. Through challenges and triumphs, groundbreaking advancements, and a steadfast dedication to sustainability, we have built a legacy that stands as a testament to the power of collective ambition.

As we reflect on our history, we also look ahead to the future—one filled with new opportunities to push the boundaries of what's possible. Join us in celebrating the people, milestones, and innovations that have shaped the past 75 years and will continue to define the decades to come.

FPA
Flexible Packaging Association

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“As we look forward, I can already sense a strong and growing influence on both FPA and our entire industry. We hold an essential place in society, supporting our consumers every step of the way. Our success hinges on our collective strength to unite and push forward important initiatives that will protect our industry’s future. I wholeheartedly believe that we share a common purpose and are inspired by dedicated leaders who will continue to guide us on this journey to success.”

***William Jackson**, Ph.D., Former FPA Chair, FPA Board Member, and CTO Amcor Global Flexible Packaging, Amcor Flexibles*

50s

Even the most knowledgeable observer struggles to grasp how far our nation has come since July 19, 1950, when the National Flexible Packaging Association (NFPA) was founded. Harry Truman was president, and the U.S. was engaged in the Korean War. Less than a year earlier, the Soviet Union detonated its first atomic bomb, breaking America's nuclear monopoly. After World War II, the U.S. emerged as the world's strongest nation and economy. By 1950, American industry was growing, yet companies faced significant challenges in securing raw materials and accessing civilian markets.

World Events

Korean war begins and lasts until 1953. In 1951, President Harry Truman fired General Douglas MacArthur as commander in Korea.

1952: U.S. detonates the first hydrogen bomb.

1954:

- The Supreme Court, in Brown v. Board of Education of Topeka, Kansas, orders an end to school segregation.
- The Salk polio vaccine was introduced.

1959: Alaska and Hawaii become states.

The "Baby Boom" – The U.S. population reached 150 million, an increase of 14.5 percent since 1940 and expected to grow an additional 19 percent by 1960.

1953: Edmund Hillary and Tenzing Korkay reach the summit of Mount Everest.

1957: USSR orbits Sputnik, the first artificial Earth satellite.

One of the greatest challenges during the Association's early years was to be effective without violating the government's antitrust laws. The issue, common to all industrial organizations, concerned NFPA as it matured.

As the years passed, the NFPA's relationship with the government evolved into one based on cooperation and regulation. The NFPA continued to seek areas where voluntary cooperation could address industry-wide concerns without violating the letter or spirit of antitrust laws. In this way, the Association literally created its own mission, a task that continues today.

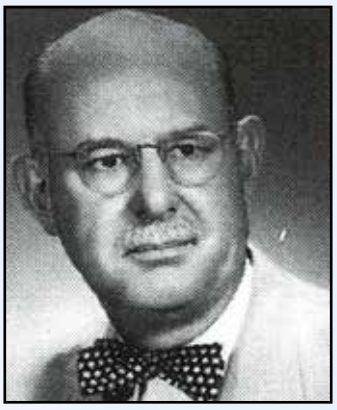
"The Dow Chemical Company's Sam Zutler, a long-time member who joined the Association in the mid-sixties, remembered that "we were constantly cautioned by legal that you must not do anything so that there is any hint of price collusion."

FPA Milestones

July 19, 1950: Recognizing a need for improved communication and cooperation between packaging manufacturers and suppliers, the National Flexible Packaging Association (NFPA) was incorporated in Chicago, IL, by Bagcraft Corporation's founder and first Chair, Albert A. Meister, Oneida Paper Products, R. E. Pentz, and Milprint's R. E. Hanson. Hanson was named NFPA's first President, and its offices were located in the home of executive secretary R. K. Vinson.

In addition to the founders' companies, Paramount Paper Products, Union Bag and Paper, American Paper Goods, Columbia Paper Products, and Comet Envelope and Paper Company also joined in the creation of NFPA.

Albert A. Meister



R. E. Hanson

Early 1951: John M. Cowan was appointed the Association's first Managing Director, and the office was moved to Chicago, IL. Having worked in the packaging industry for over twenty years, Cowen's experience was split between the Cellophane Division of DuPont and the Dobeckmun Company of Cleveland, OH.

John M. Cowan

September 1, 1951: The NFPA headquarters were moved from Chicago to Cleveland, Ohio. Cleveland was an ideal location for the newly formed group. The largest groups of NFPA members were in the metropolitan areas surrounding New York and Chicago, and Cleveland was midway between the two.

1951

September 12, 1951

- First Annual Meeting was held in New York City at the Hotel Astor.
- NFPA had more than 50 members, generating an annual volume of $150,000,000 in the flexible packaging field. By 1952, the membership increased by approximately 70 percent.
- James P. Duffy was officially elected as the NFPA's first-ever Chair and leader.

1951 Board of Directors

James P. Duffy, Union Bag & Paper Corporation

Associates (suppliers) are admitted to NFPA membership

NFPA Recommends Gauge Identification of Polyethylene Film

- **March 31, 1952:** At a meeting held in Atlantic City, the Association appointed the Technical Committee on Specification Packaging "to cooperate with the government in solving flexible barrier problems."
- John M. Cowan, NFPA's managing director, warned that polyethylene (PE) bags are too thin. The committee, in cooperation with The Society of the Plastics Industry, Inc., advised converters to identify polyethylene gauge from suppliers on every order and urged suppliers to include film gauges on all invoices and packages.
- During their annual meeting in New York, 60 converters unanimously supported the resolution, marking the first step toward voluntary polyethylene film standards.

1952

NFPA Collaborates with USDA Produce Prepackaging Studies

In the early 1950s, the Association combined efforts with the United Fresh Fruit and Vegetable Association and the U.S. Department of Agriculture (USDA) to measure the effect that prepackaging had on the sale of lettuce, the marketing of seedless grapes in cellophane bags, and the commercial possibilities for harvesting nearly ripe peaches, further ripening them under controlled temperature and humidity, and prepackaging them in consumer packages for immediate distribution.

During this time, the ongoing Korean conflict tempered the energy and prosperity of the post-World War II era. The military buildup in Korea created shortages of certain flexible materials for civilian use. NFPA monitored the availability of these materials and advised the industry accordingly. Each year, NFPA announced the projected capacity and availability of key materials while advising its members on how to remain financially healthy.

1956: NFPA initiated its inaugural The Packaging Awards (now Achievement Awards) competition in collaboration with the magazine *Paper, Film, and Foil Converter*. Six judges evaluated entries and chose the top packages across sixteen categories. The Packaging Machinery Manufacturers Institute (PMMI) showcased the winning designs at the inaugural Packaging Machinery and Materials Exposition in Cleveland.

1956

Quaker Oats Company's Aunt Jemima Corn Bread Mix package, produced by Reynolds Metals Co., received the President's Award for the best package.

1958

NFPA held its Annual Meeting in Boca Raton, FL, for the first time. This location was extremely popular and became a regular meeting site for the next 30 years. While much business was conducted at these Annual Meetings, they also provided an opportunity for competitors, customers, and suppliers to meet socially.

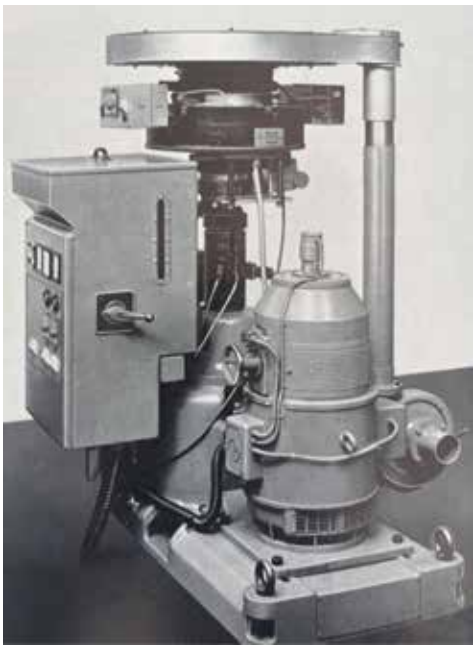
Industry Innovation

The 1950s marked a significant explosion in the plastic industry, often described as a “Gold Rush.” Plastic emerged as a superior material, revolutionizing the concept of safe, dry packaging solutions. As technology advanced, automated packaging lines spread across various industries. The introduction of computer-aided design, integrated circuits, and semiconductor technology significantly transformed production processes and machine capabilities. The launch of the first programmable logic controller (PLC) revolutionized packaging machinery, while robots and computers emerged as essential tools in manufacturing.

Simultaneously, consumer habits changed due to the “Baby Boomer” generation’s increased demand for convenience. Frozen foods, TV dinners, and boil-in-bag products gained popularity, with fast food outlets becoming commonplace. Microwave ovens became standard appliances, and aluminum cans replaced traditional tin and steel cans. The rise of petroleum-based plastics sparked the flexible packaging industry, making packaging design a crucial element in new product development. This trend continues to shape the industry today.

1950s Extrusion Practices

Initially, extruders were built vertically to save space, operating under the assumption that a vertical flow was the simplest method since the film needed to go upwards. Today, we recognize that the vertical positioning of extruders resulted in a loss of critical length or height for the film.



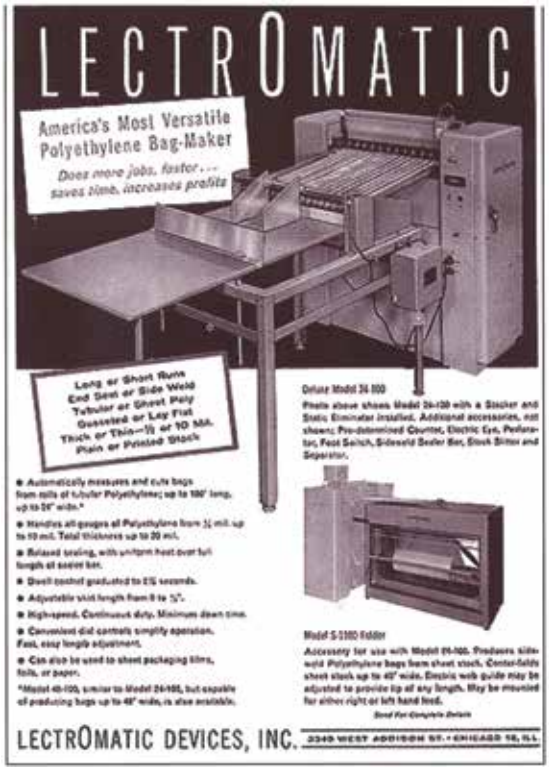
Reifenhäuser vertical extruder “SV 050.1” for film lines

Reifenhäuser’s first blown film lines with vertical extruder

Early 1950s: The first industrial vacuum bag packagers appeared in the 1940s but didn't become commercially widespread until the 1950s.

The development of catalysts that promoted polymerization led to increased commercialization of polyethylene. The demand for PE grew from 5 million pounds annually to 1.2 billion pounds annually by the end of 1960.

Photo courtesy of PMMI's "Pack to the Future"



1951: Campbell Wrapper introduced the first horizontal flow wrapper in the U.S. It was used worldwide to wrap candy, chocolates, crackers, cheese, baked goods, and other products.

Photo courtesy of PMMI's "Pack to the Future"

1952: Michigan State establishes the first Packaging School in its Forest Products department. In 1957, it became an independent school.

1954: Minigrip resealable bags were invented.

Photo courtesy of PMMI's "Pack to the Future"

1955: American chemist William R. Scholle invented the first commercial bag-in-box packaging system for transporting and dispensing battery acid. Scholle later teamed up with scientists from Purdue University to combine bag-in-box technology with Phil Nelson's work on aseptic storage. Their work paved the way for new food preservation and packaging systems. In 1991, Scholle was inducted into PMMI's Packaging Hall of Fame.

"Flexible packaging has really advanced the standard of living in the United States. Items can be grown in California and shipped to New York with a slight cost of distribution. With a return to crates or containers we couldn't afford to serve this large-scale distribution system. All the while, the cost of flexible packaging has done nothing but gone down."
***Roger Conant**, formerly with Jefferson Smurfit Corporation*

1956: Printpack acquired its first bag machine. John Samples, Printpack's first employee, stood by the machine in 1956 and later in 2022 when it was installed in the headquarter's lobby. This machine produced clear cellophane bags for the snack industry. At the time, the film wasn't printed; instead, a pressure-sensitive label was affixed to the bag for branding and ingredient information.

Photos courtesy of Printpack

1958: Solvent-based flexo inks are introduced for use on film.

1959: Rovema manufactured the first Vertical/Form/Fill/Seal machine with rotating belts in the market. In the early 1960s, this machine was used to package boil-in-bag rice.

Traveling sales case containing solvent-based flexo inks. Photo courtesy of Sun Chemical Corporation.

60s

The 1960s marked a period of transformation for the nation, the flexible packaging sector, and the NFPA. By the end of the decade, changes had occurred in membership, leadership, and even the NFPA logo. At the same time, American society began to focus on issues such as space exploration, environmental protection, and civil rights. These emerging concerns were reflected in NFPA initiatives. Unlike the technical emphasis of the 1950s, the Association's education and information programs shifted toward human factors, prioritizing topics like effective communication and employee relations safety.

World Events

1961: Construction of the Berlin Wall began.

1963: Martin Luther King, Jr., delivers his "I Have a Dream" speech at the March on Washington.

1968: Martin Luther King, Jr., is assassinated in Memphis, TN.

1969: Apollo 11 crew members become the first people to land and walk on the moon.

1963: President John F. Kennedy is assassinated by Lee Harvey Oswald in Dallas, TX.

1965: U.S. enters the Vietnam War.

1968: Democratic presidential candidate Robert F. Kennedy is assassinated in Los Angeles.


The New York Times

THOUSANDS IN LAST TRIBUTE TO KENNEDY; TWO KILLED WAITING FOR FUNERAL TRAIN

Suspect in Assassination of Dr. King Captured in London

> **Years ago, only one clear film could be used for packaging, cellophane. Then came polypropylene and polyethylene, then coatings and coextrusions. This allowed for the manufacturer of substrates that could deliver strength, protection, the ability to seal and clarity.**

***David McFarlane**, The Morrill Press and previous FPA Chair*

During the sixties, flexible packaging evolved rapidly, with plastic consumption by the industry growing at double-digit rates. Its processes and materials were in a state of constant evolution. The Dow Chemical Company's Sam Zutler told NFPA's western meeting in 1971 that in 1966, the industry had seen "for the first time new laminations involving polymer coated cellophane and glassine combined using polyethylene extrusions."

As the 1960s drew to a close, more NFPA members became involved in the plastics side of flexible packaging compared to paper. This increasingly broad product focus and diverse membership led to a clear evolution in NFPA programming. The information offered to NFPA members clearly centered on human factors like Title VII of the Civil Rights Act, labor arbitration, and union organizing campaigns. During a 1966 conference at Michigan State University, the topics presented included:

- Increased Profits Through Involvementation
- Listening is Good Business
- Effective Communications Must be Two-Way
- Imagination vs. Innovation
- Communications for Profit and Group Dynamics

The business climate also shifted during the 1960s, with regulation emerging as a new pressure on the industry. "We now face surveillance and must comply with the requirements of the Fair Labeling Act," Zutler wrote in *Good Packaging* at the dawn of the 1970s. "We can anticipate both state and national regulations on pollution control. I'm sure we will see additional legislation on litter and waste control. Whether we like it or not, we must accept that the government has, and will continue to have, a greater influence on our business operations." In the decades that followed, NFPA collaborated with the government on precisely these issues. As time went on, the Association became a powerful, united voice for its members in both federal agencies and state governments.

"We can anticipate both state and national regulations on pollution control. I'm sure we will see additional legislation on litter and waste control. Whether we like it or not, we must accept that the government has, and will continue to have, a greater influence on our business operations."

Regulation was just one of the new pressures facing the industry. In the first half of 1969, there were a record 2,815 corporate consolidations, an increase of 65 percent compared to the same period in 1968. Jan Meister, a former Chair of Bagcraft Corporation, shared her perspective on mergers: "The Association has likely been a catalyst for mergers due to the networking and friendships formed. The mergers are an inevitable outgrowth of capitalism, all supported by the relaxation of (antitrust) laws. Regarding global competition, they are probably a necessity."

1966: The NFPA logo was updated from its original circular design to an oval. The new logo was officially adopted at the 1966 Annual Meeting.

FPA Milestones 1960s 1966-68

The Laminated Foil Manufacturers Association, Industrial Bag and Cover Association, and the Waxed Paper Institute merge into NFPA.

1966: E. C. (Pete) Merkle became the Association's Managing Director, and John M. Cowan was named an NFPA consultant. Under Cowan's direction, converter membership had grown to 103, representing more than 75 percent of the industry's volume, and associate members numbered 42.

1968: Cowan was named a "Life Member" for his accomplished career as the NFPA's first Managing Director.

John M. Cowan

Industry Innovation

The 1960s were a pivotal era for the plastics packaging industry, as they laid the foundation for the modern packaging solutions we rely on today. Two key innovations—laminated and coextruded materials—marked significant milestones. As previous FPA Chair David McFarlane put it, “Years ago, only one clear film could be used for packaging, cellophane. Then came polypropylene and polyethylene, then coatings and coextrusions. This allowed for manufacturing substrates that could deliver strength, protection, the ability to seal, and clarity.”

Coextrusion made it possible for a single packaging material to combine the advantages of different film types, such as moisture resistance, oxygen barriers, printability, and easy sealing, resulting in lightweight, durable materials resistant to moisture and rough handling.

The innovations in blown film extrusion technology not only improved product safety and shelf life but also introduced a new era of convenience and flexibility in packaging.

1960s: Blown film and shrink film technology expanded. Initially, the design of blown film plants was purely functional, with no aesthetic considerations—performance and output were the primary concerns. At this time, only single-layer films were available. Multilayer barrier films, now common for protecting sensitive products, had not yet been developed.

- **From Glass and Metal to Plastic:** The market experienced a revolution as plastic packaging offered an alternative to traditional glass and metal containers. Plastic bags were a novel concept, completely transforming the packaging industry.
- **Protection Against Moisture:** Plastic films provided a new solution for moisture-sensitive products, enabling safe and dry packaging previously unattainable with other materials.

Reifenhäuser promoted the brand-new plastic bags as a “proof of concept”

Reifenhäuser blown film line from 1966 that is significantly faster and more prepared for higher output to meet the rapidly increasing market demand

Early 1960s: New ways and approaches had to be developed to achieve a relatively high orientation of the film within reasonable and workable extrusion conditions, yet without the need for expensive orientation equipment.

A system that integrated blown shrink film extrusion with a market-proven, high-efficiency shrink film oven was developed. The high-efficiency shrinkage oven consisted of a centrally located heating register above the shrink chamber to ensure a maximum supply of constant temperature, which is vital during shrink operations.

It wasn't only blown film extrusion that picked up speed in the 1960s, but also flat film extrusion. For example, the production of relatively simple flat bags was characterized by their particularly good sealability.

Conventional, manual filling via push-on spouts from a Reifenhäuser system at the customer ICI, England

1960s: Individually quick frozen vegetables (IQF) were introduced in flexible packages.

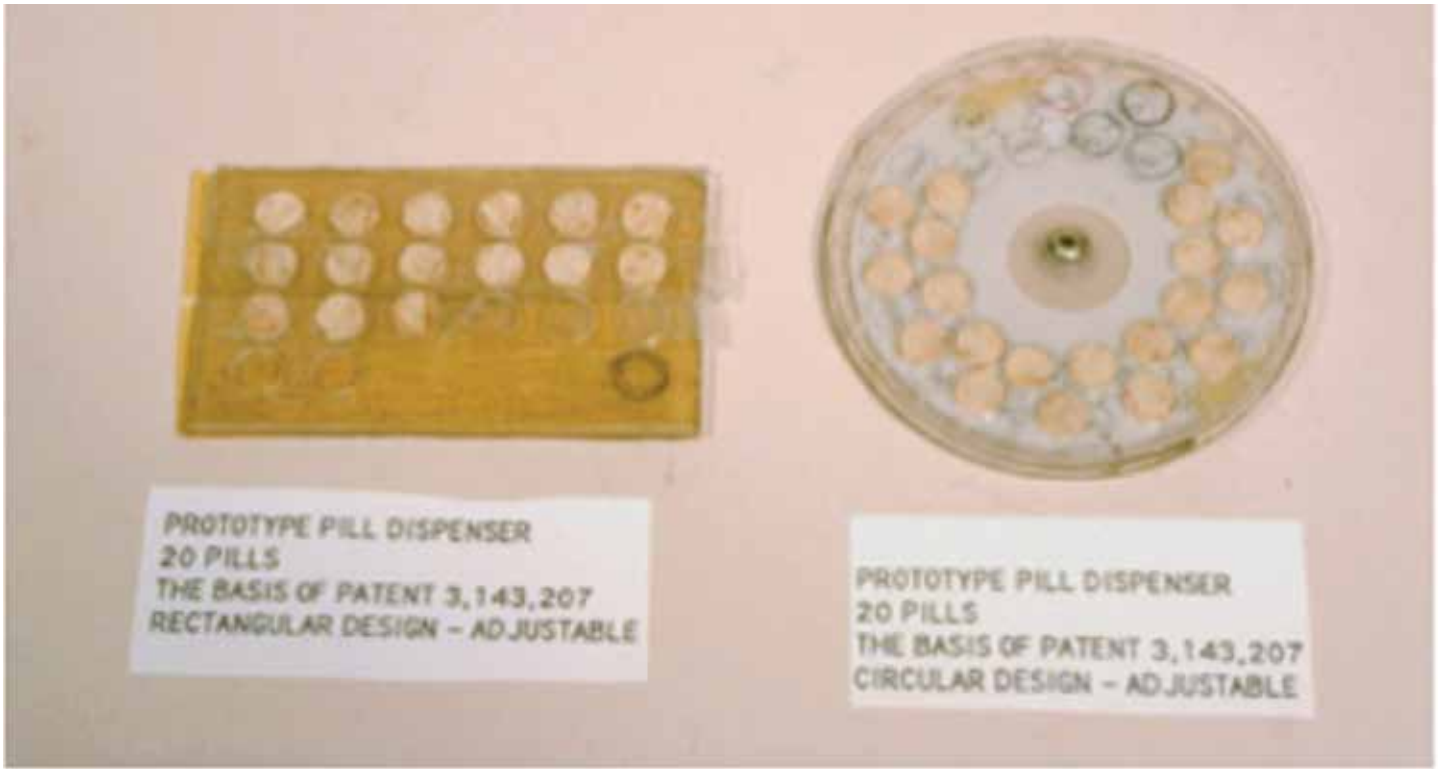
1960: The Rovema Vertical/Form/Fill/Seal machine was built to package boil-in-bag rice. In 1959, Rovema manufactured the first Vertical/Form/Fill/Seal machine with rotating belts in the market.

AMF Mark 50
Bread Bag

Reifenhäuser ad for the U.S. market:
"Don't wrap it or strap it… just shroud it…and shrink it…"

1962: Blister Packs were invented by David Wagner for his design of oral contraceptive packaging. When "the Pill" was first introduced in 1960, it was packaged in small glass bottles, similar to other pharmaceuticals.

Wagner and his wife, who had four children, wanted a memory-aid that would help indicate when the contraceptive should start being taken each month and a daily reminder. He designed the cases to be small enough to carry discreetly in a purse and have push through holes that indicated when a pill was taken. He was awarded a patent in 1964.



Wagner's prototypes for his patent application for the first blister packaging for oral contraceptives
Photo courtesy of the Smithsonian, National Museum of American History

1963: A small firm developed the AMF Mark 50 Bread Bagger, which transformed bread processing and shifted the baking industry's practices from roll-fed overwrapping to polyethylene bags for bread and bakery items.

1963: French inventor Louis Doyen invented the stand-up pouch. Doyen named and trademarked his invention, the Doypack. The stand-up pouch has become a popular flexible package that has continued to evolve with new materials, designs, retorts, and packaging equipment.

1963: Kellogg's Corn Flakes® launched a semi-automatic packaging line.

Photo courtesy of PMMI's "Pack to the Future"

1963: The U.S. Department of Defense (DOD) begins developing Meals Ready to Eat (MREs), a ration that would rely on modern food preparation and packaging technology to create a lighter replacement for C rations. Early prototypes used freeze-dried and dehydrated foods that required rehydration. Continued research led to the development of the first retort pouch, which became special issue MREs in 1981.

1965: Form/Fill/Seal machines that form a paper bag from a continuous roll, fill it with the proper amount of product, then seal the bag and cut it from the packaging roll in one process enter the market.

Photo courtesy of Totani America

1967: In the mid-1960s, Totani was approached by a major Japanese packaging manufacturer who wanted to develop pouches for a newly created technology by the United States Army. This new product was a flexible package, originally a two-layer polyethylene terephthalate (PET)/PE film and later a three-layer (PET/Aluminum Foil/PE) film, that could handle aseptic processing. This is commonly known now as a "retort pouch." In 1967, Totani developed the "H-510" pouch making machine to manufacture these retort pouches. In 1968, this machine was used to produce the first commercially available retort pouches. The "Bon Curry" product by Otsuka Foods Company of Japan then became the first retort food product in the world.

1968: Food storage bags, Ziploc®'s were first used.

1969: Polypack designs and builds the first bucket machine to shrink-wrap unstable products. The bucket machine proved to be a simple and effective way to convey products that would otherwise resist traveling in groups.

1969: Space Food Sticks were introduced to consumers in 1969.

Photo courtesy of General Mills Historical Archives

Leroy Doar from Clemson University's Packaging Science Program highlighted "that this Bagger and the introduction of individually quick frozen (IQF) vegetables greatly altered the composition of the NFPA membership during the decade. He recalls that in the early days, most members were "paper people." As the 1960s drew to a close, more and more NFPA members were involved with the plastics side of flexible packaging."

70s

"The birth of Earth Day in 1970 marked a new regulatory era for American industry," recalled Glenn Braswell, FPA president from 1986 to 1999. "This landmark event," Braswell said, "set up a whole new political, social, and legal system that required American businesses to accept greater environmental responsibility for their products and manufacturing operations." The first nationwide observance of Earth Day occurred on April 22, 1970, and its effects were felt throughout that decade, into the 1980s and the 1990s.

World Events

1970: The first Boeing 747 is introduced into commercial service.

1970: The first Earth Day is held in the United States on April 22nd.

1971: Intel Corporation introduces the first microprocessor.

1973: Oil Crisis.

1974: Richard Nixon resigns his presidency amid Watergate scandal.


NIXON RESIGNS
HE URGES A TIME OF 'HEALING';
FORD WILL TAKE OFFICE TODAY
'Sacrifice' Is Praised; Kissinger to Remain
The 37th President Is First to Quit Post

1975: Microsoft is founded by Bill Gates and Paul Allen.

1975: Vietnam War ends.

1977: Apple releases the first mass-produced home computer, Apple II.

1979: Egypt and Israel sign a formal treaty ending 30 years of hostility.

> **The birth of Earth Day in 1970 marked a new regulatory era for American industry. This landmark event set up a whole new political, social, and legal system that required American businesses to accept greater environmental responsibility for their products and manufacturing operations.**
>
> ***Glenn Braswell**, FPA President from 1986 to 1999*

1970: U.S. Environmental Protection Agency Established

The government's recognition of its mission to protect the environment was also increasing. The U.S. Environmental Protection Agency (EPA)was established in 1970 with the mandate to set and enforce standards for air and water quality, while working to reduce noise pollution, radiation hazards, and exposure to pesticides and other potentially toxic substances.

An environmentally conscious government, reflecting growing public awareness, would challenge American businesses to improve performance. NFPA was ready to meet this challenge, focusing on education to shape public perceptions and equip members as better industry advocates.

1973: Oil and Energy Crisis

In the early 1970s, a cut-off of oil shipments from Middle Eastern producers caused a nationwide energy crisis, with visible consequences like gasoline rationing and long service station lines. The flexible packaging industry faced similar challenges, as material availability became a concern again, reminiscent of the 1950s. The Association resumed monitoring raw material availability and projecting the supply of converted materials.

Despite these challenges, the flexible packaging industry continued to flourish. In the *NFPA Annual Report*, President Edward Shorkey reflected on the highs and lows of 1973:

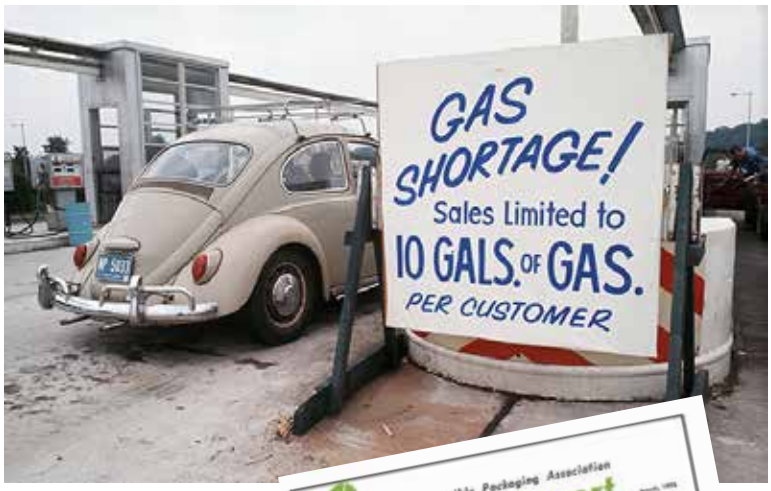


Photo courtesy of Owen Franken/Corbis Historical/ Getty Images


National Flexible Packaging Association
Annual Report
THE PRESIDENT'S MESSAGE

> *"1973 was a year of paradoxes and one we will not soon forget. While most, if not all, of our members reported a near-record year in sales and profits, they spent an inordinate amount of time searching for raw materials–paper, foil, film, resin, solvents, and all the other ingredients that comprise our final products."*

In addition to shortages of raw materials, the energy crisis also crippled plants because they lacked sufficient energy to operate. In 1974, President Shorkey summed up the challenges and frustrations that members were experiencing during the 1970s: "Raw materials are in shorter supply; energy, in terms of transportation, heating, and running our plants, is critically short."

1970s: NFPA Forms the Environmental Concerns Committee

Under the direction of NFPA's Executive Vice President, Ralph March, NFPA took steps to notify the government of the potential ramifications of shortages. A letter sent to the Commissioner of the Federal Energy Office stated the industry's concerns regarding the energy crisis and the consequences the industry would face if the petrochemical sector did not receive an adequate supply of petroleum feedstocks.

Acknowledging the power of a unified voice, the Association established a foundation to address increasingly important environmental issues. With public attention centered on recycling and the environmental impacts of nearly every type of product, the Association crafted a formal policy statement to guide the industry's response to these new pressures.

NFPA Environmental Concerns Committee Members


Sam Zutler, The Dow Chemical Company


S. J. Leeds, Cellu-Craft, Inc.


Ralph March, Boyertown Packaging Service Corporation


Edward Shorkey, Continental Can Company

In 1972, the "NFPA Statement on Ecology" declared:

Whereas, the National Flexible Packaging Association is committed to excellence and industry leadership in environmental improvement; and

Whereas, the Association and its member companies support federal standards for environmental quality and the reasonable uniform enforcement of these standards on both state and regional levels; and

Whereas, the Association and its members believe that satisfactory environmental conditions and products can be achieved only by the concerted action of the flexible packaging making and using industries and the public through its various governments;

Be It Therefore Resolved: That the Association and its both classes of members will, to the best of their ability conduct and support research relating to the environmentally sound production of our products and to the improved disposability or recyclability of them;

Further, the Association and its members will acquaint itself with developments in the compacting, recycling, and incineration industries and, where possible, support developments in those or other industries which would tend to lessen the overall solid waste burden;

Finally, the Association of itself and through the actions of its individual members will make known to concerned public current/ acts on our industry and its practices so as to encourage a full range or understanding and action on a given environmental subject.

Alongside "The NFPA Statement on Ecology," the Environmental Concerns Committee released an audio-visual presentation to help converters with flexible packaging solid waste disposal. They also published a pamphlet, "Flexible Packaging and Our Environment," to educate the public on the benefits of flexible packaging.

The Packaging Awards (now Achievement Awards) judging, 1970s

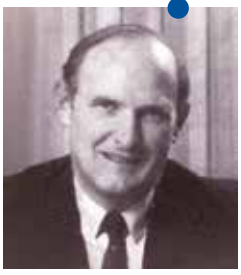
Jim Hummel, H & H Plastic Manufacturing Company and President Gerald Ford

FPA Milestones

1970s 1977

1970s: NFPA becomes the Flexible Packaging Association (FPA).

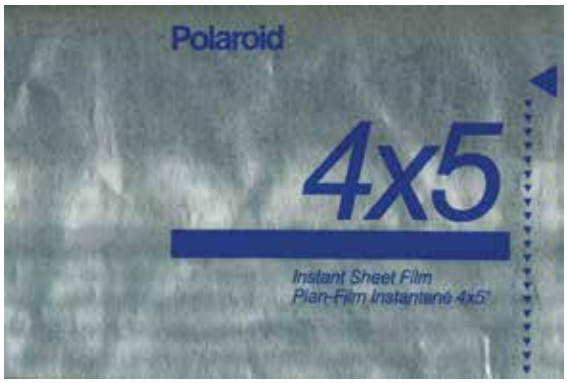
1977: Pete Merkle resigned as the Association's Managing Director. Richard Lillquist becomes FPA President.



Richard Lillquist

Industry Innovation

The 1970s witnessed several significant innovations in flexible packaging that transformed the industry. Major advancements included:



1972 flexible packaging produced by American Packaging Corporation

Barrier Films and Laminates: Advances in multilayer films and laminates enabled the creation of flexible packaging with improved barrier properties. These films provided superior protection against moisture, oxygen, and light, extending the shelf life of perishable products.

Retort Pouches: While retort pouches were first developed in the 1960s, they became more commonplace in the 1970s. Introduced as an alternative to metal cans and glass jars, retort pouches became a breakthrough in food packaging. These flexible, heat-resistant pouches could withstand high-temperature sterilization, allowing for the safe storage of ready-to-eat meals and processed foods.

Stand-up Pouches: The invention of stand-up pouches offered a convenient and visually appealing packaging solution. Their gusseted design allowed them to stand upright on shelves, enhancing product visibility and reducing storage space.

Improved Printing Technologies: The 1970s saw advancements in flexographic printing, enabling high-quality, colorful graphics on flexible packaging. This improved branding opportunities and helped attract consumers.

Reclosable Features: Innovations like zipper closures and resealable strips started gaining traction, providing consumers with convenience and the ability to preserve product freshness.

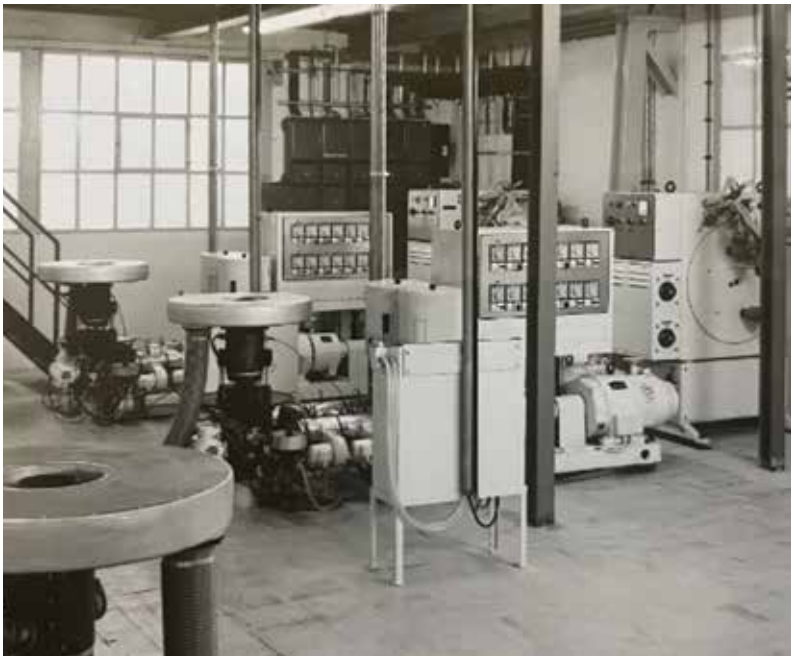
These innovations contributed to the widespread adoption of flexible packaging across various industries, including food, beverages, pharmaceuticals, and household products.

"In spite of the oil crisis, environmental discussions, and a general economic depression, the plastics converting industries, with a growth rate of more than 150% between 1966 and 1976, remained West Germany's most rapidly growing industrial sector. Nevertheless, the consumption of plastic materials and thus the industry depending on these plastic materials will keep on growing in the future."
– "Reifenhäuser News" in 1976

1970s: The automation of extrusion lines begins.

Reifenhäuser introduces the first Reifocol automatic control, microprocessor RMP 80, featuring operating and monitoring components. The initial advantages of this automation include a reduced start-up time, time savings in changing film dimensions, and the elimination of scrap.

1970s: The introduction of multilayer films, also known as coextrusion films, was a significant advancement in the packaging industry, as it enabled the extension of food shelf life, improved product protection, and reduced the need for preservatives. This technology has continued to evolve and is now a standard in many packaging applications.



Examples from Reifenhäuser's two-layer milk packaging film line

1970s Amstar was the first flexible packaging company to provide and use "portion controlled" packaging for the flexible market. Amstar partnered with Domino to create the very first single-portion packaging that allowed consumers to use the amount they needed and keep waste to a bare minimum.

1970s: Pioneers Hell and Crosfield introduced drum scanning technology, allowing converters to gain access to precise, high-quality image reproduction capabilities, setting a new standard for pre-press workflows. These advanced scanners provided unparalleled image quality, becoming indispensable for pre-press workflows. They enabled precise reproduction of photographic materials, critical for packaging artwork.

1970: Water-based inks are created.

Photo courtesy of AMGRAPH Packaging, Inc.

1971: Recycling symbol introduced. The symbol was created by 23-year-old student Gary Anderson as an entry for a graphic design competition organized by the Container Corporation of America. The Recycling Symbol is available for anyone to use, although product labeling laws limit its application use.

American Packaging Corporation's slitter machine cutting Ivory soap wrap

1972 flexible packaging produced by American Packaging Corporation

American Packaging Corporation's slitter machine cutting Cascade® detergent rollstock

1972: American Packaging Corporation's Columbus, Wisconsin location utilized its slitter machine to slit Cascade® detergent rollstock and Ivory soap wrap. Still used today, this specialized piece of equipment is designed to cut large rolls of flexible packaging materials, such as film, paper, or foil, into narrower, more manageable rolls.

1972: Faustel Laminator and Coater.

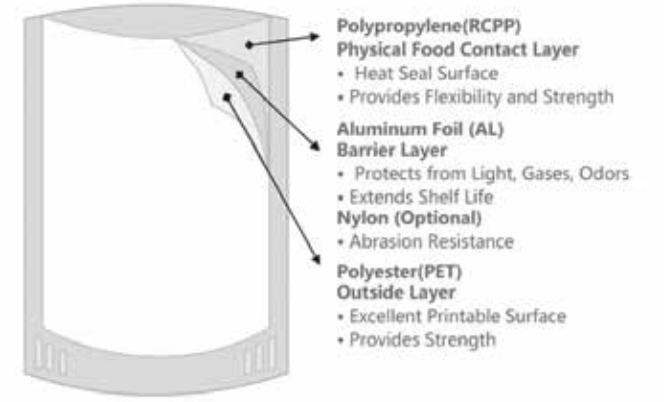
Photo courtesy of Poly Print, Inc.

1973: Pat and Bill Lancaster introduced the first stretch wrapping machines to unitize products on pallets, launching Lantech.

1974: DuPont introduced Cyrel® flexographic plates, the first photopolymer plate for flexographic printing which significantly improved durability and print consistency, setting a new standard in flexographic printing.

1975: Amstar's engineers worked to enhance packaging for the 1980s. Amstar provides DominAde with a more robust structure that not only protects the product but reduces machine sealing temperatures and allows for faster production speeds.

1978: Although the retort pouch was invented in the 1960s, the United States Army Natick R&D Command, Reynolds Metals Company, and Continental Flexible Packaging collaborated on an ongoing effort to enhance retort pouches, particularly MRE rations that were lightweight, had a long shelf life, and could be opened and consumed directly from the package when necessary.



Composition of laminated layers in a flexible retort pouch. Source: WikiCommon, Public Domain.

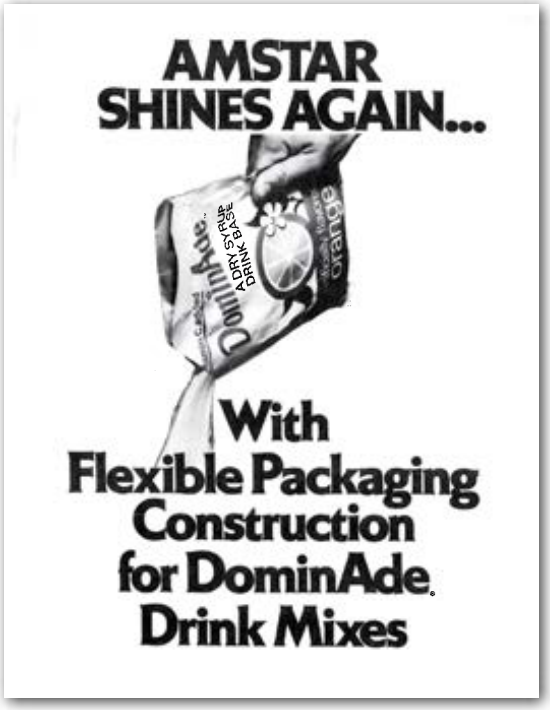


Photo courtesy of AMGRAPH Packaging, Inc.

MREs in retort pouches. Source: U.S. Army Natick Soldier Research, Development & Engineering Center, Public Domain.

1978: DOWLEX™ Polyethylene Resins – One of the first commercially successful LLDPE resins, the family of DOWLEX™ resins has been a multi-application workhorse for the flexible packaging industry for almost 50 years.

Photo courtesy of Dow

INDEVCO in Saudi Arabia circa 1970s

80s

Throughout the 1980s, as the flexible packaging industry experienced significant advancements—such as the introduction of coextrusion technology, expanded use of barrier films, and the growth of stand-up pouches—the FPA supported these developments by fostering collaboration among manufacturers, suppliers, and stakeholders.

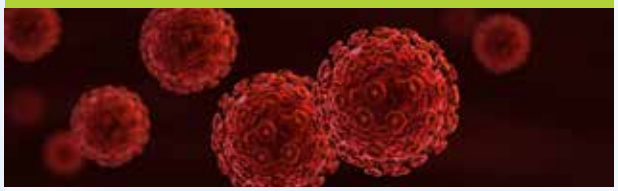
The FPA's enduring mission to support the growth and innovation of the flexible packaging industry adapted to evolving trends and challenges throughout the decade.

World Events

1981: IBM introduces the personal computer.

1981: Prince Charles marries Lady Diana Spencer.

1983: AIDS virus identified.



1986: Chernobyl, Ukraine nuclear power plant disaster.

1981: John Hinkley attempts to assassinate President Ronald Reagan.

1981: Sandra Day O'Connor named first woman justice on the Supreme Court.

1986: Space shuttle Challenger explodes during launch.

1989: Citizens tear down the Berlin Wall.

At a time when the packaging industry faced intense scrutiny over waste and sustainability, FPA stood on the front lines. While critics demanded drastic changes, FPA led the charge—advocating for responsible solutions, championing recycling, and working with policymakers. When the industry was under fire, FPA didn't back down; it stepped up, driving innovation and progress in flexible packaging.

***John Woolford, Jr.**, Hargro Flexible Packaging, interim FPA President, and former FPA Chair*

Introduced in the 1980s, Capri Sun utilized aluminum-laminated flexible pouches for their beverages, making them lightweight and portable

In 1981, General Mills received the first patent for a microwave popcorn bag, revolutionizing home snack preparation

FPA entered the 1980s with a new name, a new logo, and a much higher profile. Its new home in Washington, D.C., positioned the Association to influence new laws and regulations both nationally and at the state and local levels. New leaders also came to the front in 1986, when Glenn E. Braswell succeeded Richard Lillquist as President. Amid all these changes, the FPA identified three basic goals that would continue to guide all the work the Association did for its members.

1 Encourage maximum member participation.

It was vital for a united voice in the flexible packaging industry, especially in response to legislative changes in the 1980s.

In 1985, FPA established the "Web Society" to honor past active participants, initiated by Harold Shehan, Ralph March, Ernest Preston, and Robert Williams. Charter members were inducted at the Annual Meeting on March 21, 1985, in Boca Raton, FL.

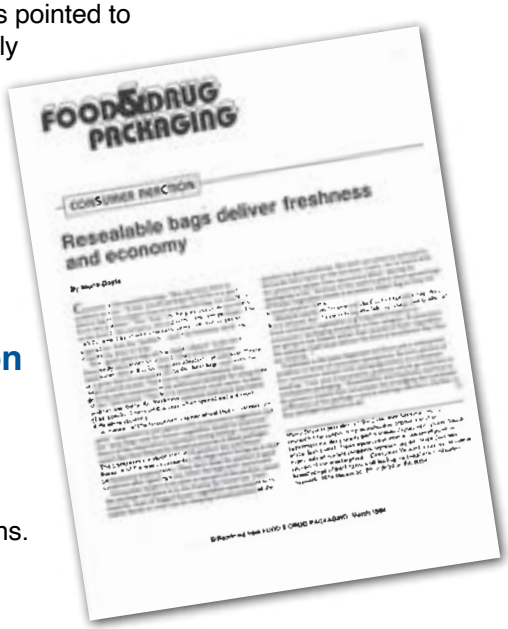
Left: Vice President George Bush addresses members at a Fall Executive Conference in 1983
Right: David McFarlane and Alexander Haig at an FPA conference

2 Promote the benefits and advantages of flexible packaging.

This promotion was essential due to scrutiny of packaging. Critics pointed to solid waste disposal issues and accused packaging of significantly contributing to the waste crisis. Flexible packaging presented a strong narrative, showcasing the industry's technological advancements in creating environmentally friendly, source-reduced packages along with significant lifestyle benefits for American consumers. Education of lawmakers and the public at large became essential for the survival of the industry.

3 Represent the flexible packaging industry before the government and influence legislation and regulations that affect our industry.

During the 1980s, many of the laws and regulations drafted attempted to address the issue of solid waste. They were often based on common perception rather than on fact. FPA played a crucial role in challenging and changing these laws and regulations.


FOOD & DRUG PACKAGING

CONSUMER REACTION

Resealable bags deliver freshness and economy

Photo courtesy of Sealstrip Corporation

"Dedicated participation on the part of the members is essential," said Mark Wygonik, FPA's former Director of Technology and Regulatory Affairs. "The FPA doesn't run presses or sell packaging, yet many of the regulations that we are involved with will affect the way that business is done. The only way that we can be successful is if the members participate with us."

One notable instance involved a regulation enacted in Suffolk County on New York's Long Island on March 29, 1988, banning non-degradable plastic food packaging at retail and prohibiting most PVC and all polystyrene packaging.

Lawsuit Against the Regulation

In August 1988, the FPA together with The Society of the Plastics Industry, Inc., Polystyrene Packaging Coalition, Dart Container Corporation of Pennsylvania, KAMA Corporation, and Lawrence Whitman and Company, Inc. filed suit arguing:

- The ban increased landfill waste and costs.
- Paper bags, exempt from the ban, weighed 3 to 5 times more than plastic and took up more landfill space.
- The ban was based on flawed assumptions, unfairly targeting plastic manufacturers.

Rick Thornburg, former FPA Director of Government Relations

Criticism of Biodegradability Test

FPA criticized the "standard" biodegradability test, stating that if the time for a material to compost didn't exceed 110% of the time for kraft paper, it was considered biodegradable.

Rick Thornburg, former Director of Government Relations at FPA, testified that comparisons between kraft strips and compost conditions lacked a rational basis. Municipal solid waste management did not heavily rely on composting.

Court Decision Lifted Plastic Ban

The court lifted the plastics ban in Suffolk County, citing the agency's improper negative declaration and the agency's failure to consider all relevant evidence. The decision was characterized as arbitrary and capricious.

Broader Impacts

The victory in Suffolk County prevented similar bans in other jurisdictions and encouraged more careful consideration of such statutes nationwide. FPA achieved similar victories across the country.

FPA continues to teach its members to navigate law and rulemaking systems to this day. Lessons learned in the regulatory and legislative arenas during the 1980s would serve the FPA and its members well as they entered the 1990s. The issues of clean air, water, solid waste reduction, recycling, and the environment continued to be deliberated throughout the 1990s.

"We offer members a springboard of legitimacy with several members of Congress. FPA walked a lot of companies through the door of Congress and taught them how to be effective with government officials. The Association provides a forum for under-educated [with regard to the government] business executives for dealing with the government and makes them realize that there are no dumb questions."
***John Woolford**, interim FPA President and former FPA Chair*

FPA Milestones

1981: FPA headquarters moved from Cleveland to Vermont Avenue, NW in downtown Washington, D.C. to be closer to decision-making politicians and other powerful associations.

June 1981: The Association published an informational pamphlet, "Packaging, Who Needs It?" The brochure outlined the general benefits of packaging, with a particular focus on flexible packaging. It was presented in a question-and-answer format and addressed questions such as:

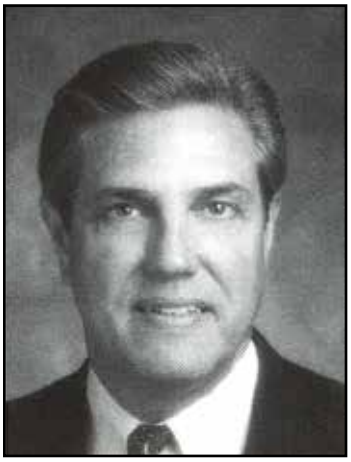
What would happen to America without packaging?

Does packaging waste energy?

Does packaging cause solid waste problems?

Is packaging an expensive luxury?

1986: Glenn E. Braswell becomes the FPA President.



Glenn E. Braswell

1981

1986

1985

1985: The Web Society is established to honor retired industry leaders for their years of service to the industry and the Association.

WEB SOCIETY FPA

1986: FPA forms The Plastic Grocery Sack Council. Led by Jeffrey Siebenaller, its main role was to facilitate supermarkets' move toward the plastic grocery sack.

The full-scale public relations campaign, "Check out the Sack. It's coming on Strong," emphasized benefits such as lower operating, labor, storage, and transportation costs, as well as superior convenience, strength, and carrying ease for the consumer. The public relations kits were targeted at 100 trade media outlets and 600 general consumer media outlets, as well as government officials.

FPA sponsored government relations conferences

1988: FPA sponsors the first government relations conference to help members successfully communicate with Congress.

Late 1980s: Flexible packaging is exempted from environmental legislation for recycling.

1988 | Late 1980s

Industry Innovation

Photo courtesy of American Packaging Corporation

The 1980s brought significant advancements in flexible packaging, fueled by consumer demands and technology. Integration with modified atmosphere packaging (MAP) enhanced shelf life of fresh produce, meats, and baked goods, which is crucial for maintaining freshness in global supply chains.

Coextrusion processes enabled the creation of multilayer films that combine materials for enhanced strength, clarity, and barrier protection, leading to cost-effective solutions. The rise of microwave ovens prompted the development of flexible microwaveable packaging capable of withstanding high temperatures, catering to the demand for convenience foods and ready-to-eat meals. Shrink and stretch films also became increasingly utilized for bundling and palletizing goods, enhancing load stability, and minimizing waste.

Rising environmental awareness sparked early research into recyclable and biodegradable films, laying the foundation for future sustainability in packaging. These innovations also paved the way for advancements in production quality and speed.

1980: PET plastic packaging for hot food becomes available.

1980: Sun Chemical Corporation introduces electron beam (EB) inks.

Photo courtesy of Sun Chemical Corporation

American Packaging Corporation rotogravure press printing Cascade® detergent in 1980

Early 1980s: The first 8-color CI press was installed in the United States in the early 1980s. The 8-color flexo press technology later became the standard for printing and offered a more cost-effective yet high quality option to compete with rotogravure printing. While rotogravure remains a viable technology today, the evolution of flexo technology, beginning with the wide-web 8-color press, established flexo as the preferred printing method for most flexible packaging converters from the 1980s onward.

Printpack's Founder and CEO, Erskine Love, and Dennis Love with the 8-color CI press. Photo courtesy of Printpack.

1982: Johnson & Johnson introduces first triple tamper-evident seals on a consumer product package after TYLENOL® Extra Strength Capsules are tampered with in the Chicago area.

Photo courtesy of PMMI's "Pack to the Future"

1980s: These Dr. Pepper® labels demonstrated how the introduction of inkjet technology for labels unlocked endless promotions and gaming opportunities for major brands. The randomization of the codes enabled the label image to be printed on a large flexo press while allowing each label to feature a unique code or number for promotions or games.

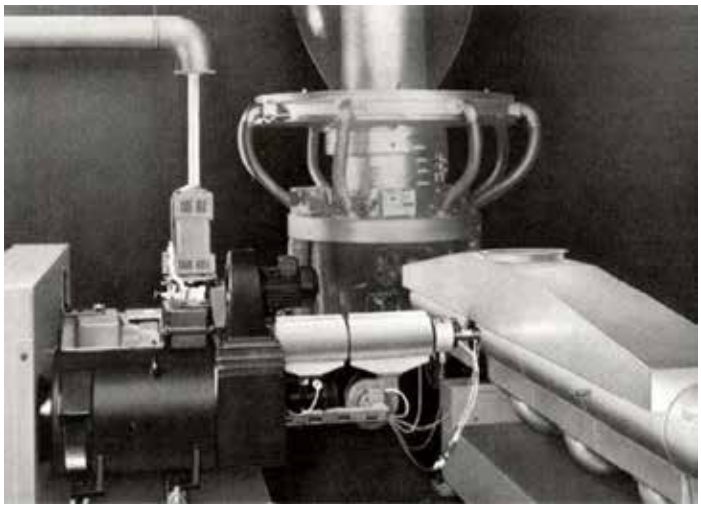
Photo courtesy of Printpack

1980s Metalizer. Photo courtesy of Printpack.

1980s: The development of metalized oriented polypropylene (OPP) became a standardized structure for salted snacks in the 70s and 80s, allowing for extended shelf life for products with high oil content that needed oxygen and moisture barrier.

In the 1980s, Lay's® potato chips began using metalized film, which continues to be their primary structure today. Photo courtesy of Printpack.

1981: Fres-co System USA, Inc. launches its first retail flexible coffee package, the Vacuum Brick.



Reifenhäuser develops first “refeeding extruder” for a blown film line

1983: The multilayer films were further developed using an upstream distribution block and a spiral mandrel distribution system, which ensured a uniform melt flow for all layers. As environmental awareness grew and the need to reduce production waste became more apparent, recycling extruders gained importance.

Recycling extruders enabled the grinding, melting, and reintroduction of edge trims, off-spec batches, and other waste back into the production process, often without the material having to leave the facility. This not only contributed to cost efficiency but was also a step towards more sustainable production practices, as less waste had to be sent to landfills or recycling facilities.

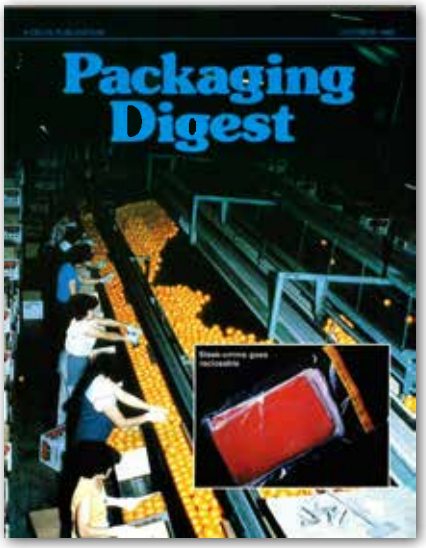


Photo courtesy of Sealstrip Corporation

1983: The Sealstrip easy open and easy reseal innovation significantly impacted the frozen meat industry by introducing resealable bags, enhancing consumer convenience, boosting labor productivity by 35%, reducing material costs, and improving product shelf life, thus providing a competitive edge and setting new packaging standards.

1983: Amstar utilizes its web offset printing to deliver superior quality for short-run quantities, alongside low upfront tooling costs, providing Concord Foods the competitive edge they sought.


Topping off with quality graphics

Concord Foods' printing runs are relatively short. But it wanted the best possible appearance for a line of pouched toppings. The answer: web offset.

Potato topping
Salad topping
Imitation Bacon Bits
Reddy Glaze
Coleslaw mix
Hollandaise sauce mix

Salad topping

Photo courtesy of AMGRAPH Packaging, Inc.

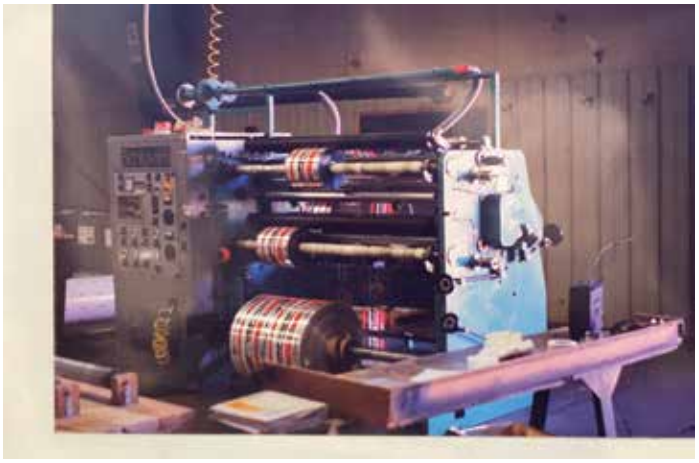
New automatic controlled chill roll film line from Reifenhäuser

1983: Advances in automation and computer-aided process control led to more consistent and higher quality products. Sensors and control technology enabled more precise control of film thickness and material distribution.

1984: Ohio Gravure Technologies launched digital engraving machines for gravure cylinders. It revolutionized gravure printing with precise, efficient cylinder engraving directly from digital data.

Photo courtesy of eProductivity Software

Comexi Group showcases its Flexo Queen Printing Machine at DRUPA 1986



1989 Schiavi Slitter. Photo courtesy of Poly Print, Inc.

1989: The Fres-co Industrial Bag became the flexible replacement for rigid packages such as fiber drums, plastic drums, poly bag-in-box, or other bags such as kraft paper, kraft paper poly bags or polywoven bags, designed for dry products.

American Packaging Corporation facility in 1982

1980s: Extrusion lamination was a significant advancement for the flexible packaging industry, allowing two films to be laminated together while adding bulk to the packaging. This innovation provided a more cost-effective solution compared to a lamination with a similar total gauge, while also delivering improved puncture resistance and a reduced tendency to tear upon opening.

Extrusion laminator. Photo courtesy of Printpack.

1980s-1990s: Color management systems standardized color reproduction across devices and workflows, ensuring consistency in flexible packaging outputs, thereby maintaining brand identity in flexible packaging.

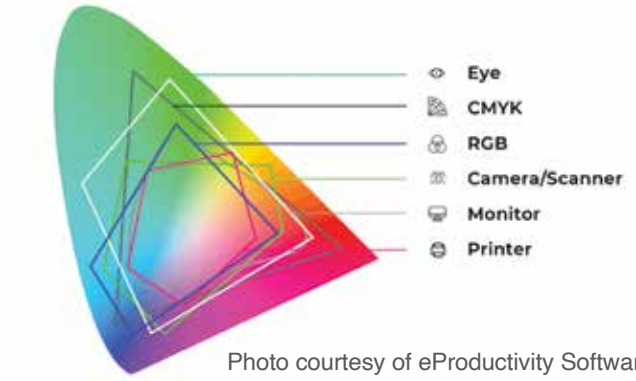


Photo courtesy of eProductivity Software

90s

World Events

1990: Germany is reunited.

1991: The Persian Gulf War begins and ends in less than 3 months.

1997: Scottish researchers clone a sheep named “Dolly.”

1998: John Glenn returns to space at age 77.

1991: USSR is formally dissolved.

1994: A major earthquake strikes Los Angeles.

1997: The Kosovo Conflict breaks out as the North Atlantic Treaty Organization (NATO) initiates a campaign of air strikes against the Federal Republic of Yugoslavia.

1998: The U.S. House of Representatives votes to impeach President Bill Clinton.

1999: U.S. Women’s soccer team wins the World Cup before over 90,000 spectators at the Rose Bowl.

> **One of the greatest successes of FPA during the 1990s was the work they did to protect the industry from unfair and unrealistic regulations. This work ultimately saved the industry hundreds of millions of dollars.**
>
> ***Gary D. McDaniel**, Smurfit Flexible Packaging and Former FPA Chair*

As FPA and the country entered the 1990s, a revolution in information exchange began. Faxes, modems, and email became routine tools for conducting business. FPA had always focused on providing information to its members, but during the 1990s, the audience for these services and the information conveyed grew dramatically, along with the media used for information delivery.

The Association not only offered comprehensive and complex information about technology, industry statistics, trends, laws, and regulations to its members but also delivered information to legislators, regulators, educators, and the general public.

January 1991: FPA's Chairperson's Advisory Council acknowledged the need for more detailed information on industry statistics and trends, appointing Bret Biggers as the FPA's Director of Statistics. Bret later served as FPA's Director of Business and Economic Research.

1991: FPA publishes the first *State of the U.S. Flexible Packaging Industry Report*. Biggers initiated the report, which became the definitive source for flexible packaging professionals. It examines future trends, aids budget planning, and serves as a current and historical data reference.


Flexible Packaging Association

State of the Industry Report

By Glenn E. Braswell
Annual Meeting
March 14, 1991
The Registry Resort
Naples, Florida

1000 Vermont Avenue, NW
Suite 500
Washington, DC 20005

1994: FPA developed the first source reduction logo: *Source Reduction, Less Waste in the First Place®*. Working with Baltimore-based designer, Charles Frank, FPA developed the logo with a diminishing dot pattern "to convey the minimization of waste achieved through source reduction."

The logo is available to all members at no charge and can be used on any type of non-specific promotional materials.

source reduction
less waste in the *first* place.®

1991 1994

FPA Milestones

1993

1993: FPA's Flexible Packaging Educational Foundation is formed.

Solid waste legislation remained dynamic in the 1990s. Misconceptions about solid waste and source reduction were not exclusive to government officials; the general public also needed information. From 1993 to 1998, FPA provided information about source reduction and flexible packaging to the nation's educators.

Dr. Robert Testin from Clemson University and Dr. William Rathje from the University of Arizona conducted workshops titled "The Science of Packaging: Beyond Store Shelves and Landfills" for teachers across various cities. The workshop reached thousands of students, receiving rave reviews, with all respondents stating they gained a better understanding of packaging issues and would recommend it to colleagues. Many educators requested the FPA to offer the workshop again the next year.

Each educator left the workshop with a complete set of lesson plans that could be implemented in the classroom. Lesson plans were so popular among educators that, at one point, there was a 1,000 person-waiting list.


Dr. William Rathje


Dr. Robert Testin

1999: FPA launched an improved, comprehensive website under the direction of Susan Dorn, FPA's Director of Public Relations. FPA President Braswell stated that Karen Malling Vasquez, the project's creative leader, and Michael Flanigan, who oversaw its technical aspects, "did a tremendous job."

April 1999: The *Flexible Packaging: The Official Magazine for the Flexible Packaging Association* debuted. The magazine was produced as a joint venture between FPA and Independent Publishing Company.

June 1999: FPA was given the "APEX 99 Award for Publication Excellence" in the category of special reports for the *1998 State of the U.S. Flexible Packaging Industry Report.*

1999

1990

1991

Environmental Legislative and Regulation Milestones

Throughout the 1990s, environmental legislation and regulation were still a significant concern to the flexible packaging industry. Representatives from the Association and the industry worked to provide regulators with information to assure that whatever rules were adopted would carry out the intent of the law, without stifling the ability to do business.

1990: The concept of extended producer responsibility (EPR) was first formally introduced by Thomas Lindhqvist in a 1990 report to the Swedish Ministry of the Environment.

1991: Germany became the first country to establish a countrywide law to put the "producer pays" concept of EPR into practice, focusing on packaging. Manufacturers registered with the first producer responsibility organization (PRO), the nonprofit Duales System Deutschland GmbH, to set up a system for collecting, sorting, and recycling packaging after consumers were done with it.

1990: Clean Air Act Amendments identified 189 Hazardous Air Pollutants (HAPS) and instructed EPA to set emissions standards for each of them. EPA was also instructed to establish categories of similar types of "major sources" and establish Maximum Achievable Control Technologies (MACTs) for each.

Senator Steve Symms addresses FPA about the Clean Air Reauthorization Act

1992: Senator Max Baucus (D-MT) introduced the first bill in the United States that, if it had passed, would have directed the EPA to explore the principles of EPR. The U.S. Federal Trade Commission (FTC) issues the Green Guides, which are designed to assist marketers avoid making environmental health claims that mislead consumers.

1994: The European Parliament and the Council of the European Union adopt Directive 94/62/EC on Packaging and Packaging Waste, acting as a broad set of regulations and guidelines covering packaging throughout its entire lifecycle—from design concept to end-of-life disposal. Simultaneously, The Organization for Economic Cooperation and Development's (OECD) Pollution Prevention and Control Group begins work on EPR policy on behalf of its member countries.

1995: The Packaging Recovery Organization Europe formed as an umbrella PRO organization to manage the Green Dot Program as more European Countries established EPR programs. Japan becomes the first Asian nation to implement an EPR program following the passage of the Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging.

1992

1995

1994

1994: The FPA convened a "MACT Task Group" and began collaborating with the EPA to develop the standard. For the first time, the FPA had the opportunity to work with the EPA on rule development before it was even published in the Federal Register. The Task Group:

- Provided information about processes, substrates, and technology used industry wide.
- Voiced concerns regarding the application of a universal standard or single level of emissions control for such a varied group.
- Worked as a team with the EPA to develop feasible regulations.

FPA's MACT Task Group

Thomas E. Hogue

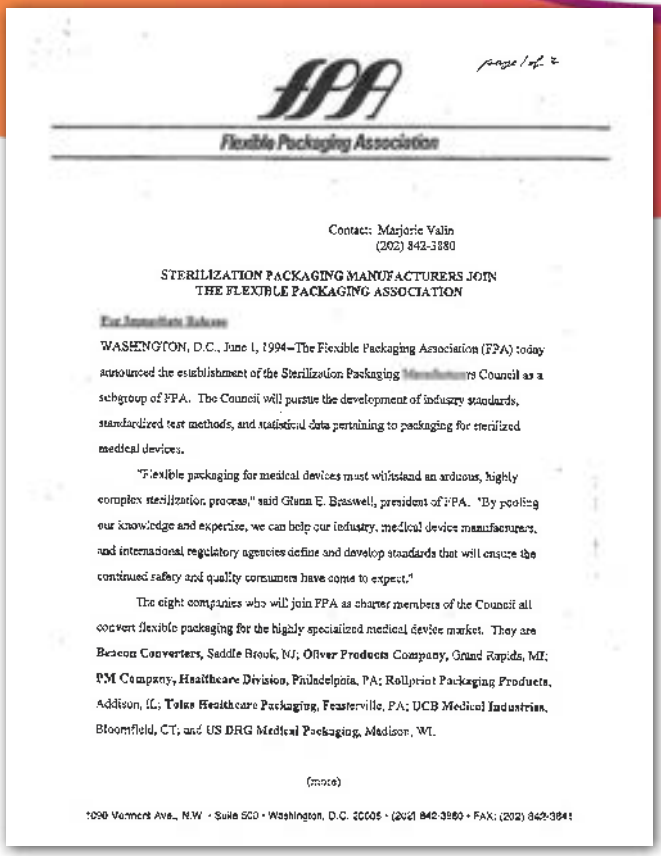
Malcolm MacArthur

Jeffrey E. Lammers

The Sterilization Packaging Manufacturers Council (SPMC)

The Sterilization Packaging Manufacturers Council (SPMC) of the Flexible Packaging Association was formed in June 1994 to develop sterile packaging standards and reproducible test methods that could improve the safety of medical device packaging.

A press release by the FPA announcing the formation of the SPMC quoted Bill Daly, Chair of the Council and President & CEO of Beacon Converters, Inc. as saying, “Standards must reflect the highly technical nature of packaging requirements for medical devices,” and “we look to share the industry’s knowledge with customer groups and government officials to fashion the best possible results for consumers.”



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Flexible Packaging Association

Contact: Marjorie Valin
(202) 842-3880

STERILIZATION PACKAGING MANUFACTURERS JOIN
THE FLEXIBLE PACKAGING ASSOCIATION

For Immediate Release

WASHINGTON, D.C., June 1, 1994—The Flexible Packaging Association (FPA) today announced the establishment of the Sterilization Packaging [redacted]rs Council as a subgroup of FPA. The Council will pursue the development of industry standards, standardized test methods, and statistical data pertaining to packaging for sterilized medical devices.

"Flexible packaging for medical devices must withstand an arduous, highly complex sterilization process," said Glenn E. Braswell, president of FPA. "By pooling our knowledge and expertise, we can help our industry, medical device manufacturers, and international regulatory agencies define and develop standards that will ensure the continued safety and quality consumers have come to expect."

The eight companies who will join FPA as charter members of the Council all convert flexible packaging for the highly specialized medical device market. They are Beacon Converters, Saddle Brook, NJ; Oliver Products Company, Grand Rapids, MI; PM Company, Healthcare Division, Philadelphia, PA; Rollprint Packaging Products, Addison, IL; Tolas Healthcare Packaging, Feasterville, PA; UCB Medical Industries, Bloomfield, CT; and US DRG Medical Packaging, Madison, WI.

(more)

1090 Vermont Ave., N.W. • Suite 500 • Washington, D.C. 20005 • (202) 842-3880 • FAX: (202) 842-3841

Marie Tkacik, director of Product Development and Optimization at Beacon Converters, Inc., received ASTM’s Merit Award on April 19, 2023, in Denver, Colorado. Tkacik chaired SPMC’s Technical Committee for over 15 years and served as a moderator for SPMC-sponsored webinars.

Membership in the SPMC was open to FPA member companies whose primary activity was the conversion of raw materials into flexible packaging or packaging components for medical devices.

Shortly after its founding, SPMC developed its first standard for medical packaging peel strength. This standard was later incorporated into ASTM F88 Standard Test Method for Seal Strength of Flexible Barrier Materials. By 1998, SPMC had published *Standards and Test Methods*, a printed manual which contained nine standards.

During the 2000s, the SPMC contributed to the industry by collaborating with other standards setting organizations. Several of SPMC’s standards formed the basis for eventual ASTM standards. In 2006, members of the Council performed an intra-laboratory study for ASTM F88 and published an article about the study titled “A Round-Robin Approach to Seal Strength” in Pharmaceutical and Medical Packaging News magazine.

Dhuanne Dodrill, SPMC Chair and PAXXUS, Inc. President & CEO celebrates Sterile Packaging Day 2024 at MD&M West in Anaheim, California

In 2008, the Council developed a searchable online database of its Frequently Asked Questions (FAQs) to help users find key guidance on everything from package development to validation. The FAQs quickly became the most frequently visited section of SPMC's website. The resource continues to serve thousands of professionals yearly.

Ten years later, the Council's technical committee began developing white papers to help packaging engineers and others with common sterile packaging challenges. As of 2024, six white papers have been written and made available for download on SPMC's website.

On March 10, 2021, the SPMC celebrated its first Sterile Packaging Day, an event founded by the Council to celebrate the medical packaging industry and raise awareness for the critical role sterile packaging plays in everyone's health and well-being. The celebration was held online and coincided with the initial launch of the first nationwide COVID-19 vaccination rollout. Sterile Packaging Day has become a yearly event now celebrated in-person at MD&M West in Anaheim, California, and online on LinkedIn.

SPMC®

75 YEARS

Industry Innovation

The 1990s marked a transformative decade for the flexible packaging industry, driven by significant innovations that redefined how products were packaged and delivered. Advancements in materials science, such as the development of multilayer films and high barrier laminates, enabled packaging to become lighter, more durable, and better at preserving product freshness.

This period also saw the rise of consumer-focused designs, including resealable pouches and easy-open features, catering to a growing demand for convenience and sustainability. As manufacturers embraced these breakthroughs, flexible packaging emerged as a dynamic solution across industries, from food and beverages to pharmaceuticals, reshaping the global market landscape.

1990s: Flexible standup pouches establish a strong market presence.

1990s: Modified atmosphere packages lead to greater shelf life and freshness for fresh-cut produce.

Advanced Automation & Process Control

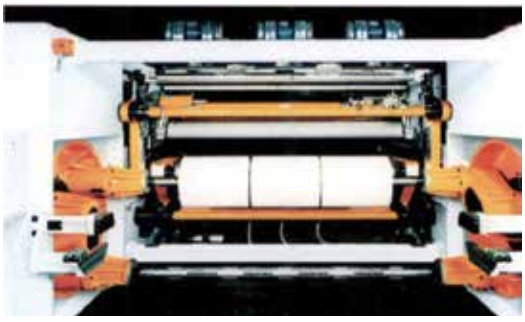
In the evolution of blown film lines, the industry moved away from rotating mechanisms to a stationary setup that utilized collapsing frames, also known as “turner bars” or “collapsing bars.” These turner bars became a step towards modern technology in the industry.

The use of turner bars has been instrumental in streamlining the production process, making it more efficient and contributing to the high quality film that the industry demands today.

The 1990s also brought advancements in automation and process control, leading to higher efficiency and better product quality with newer generations of rotary arm winders launching. A special computer program was developed for controlling the winder. This made it possible to enter winding tension curves and store them as “standard settings.”

By the 1990s, the digital revolution was accelerating, with tools like EFI Radius ERP systems and PrintFlow scheduling software streamlining operations throughout the flexible packaging supply chain. Technologies such as digital Computer-to-Plate (CtP) systems, including DuPont’s Cyrel® and Color Management Systems, standardized pre-press workflows, ensuring consistency and efficiency.

First example from Reifenhäuser’s Turner Abars



High performance MIDES series rotary arm winder from Reifenhäuser

The 1990s also witnessed a greater use of multilayer coextrusion processes to enhance the functionality of food packaging. The advancement of coextrusion lines enabled the combination of various materials, optimizing the barrier properties and mechanical strength of the packaging.

1990s: Computer-to-Plate (CtP) technology was introduced. Digital imaging on flexographic plates replaced traditional film workflows, with Cyrel® plates leading the way. This increased efficiency and accuracy, reducing production lead times and costs.

1990s: EFI introduced digital front-end (DFE) workflow systems for printers, enhancing pre-press and job management. This improved integration between pre-press and production workflows.

1990s: ERP and scheduling tools revolutionized operations with solutions such as Radius ERP and PrintFlow by integrating financial, operational, and production data.

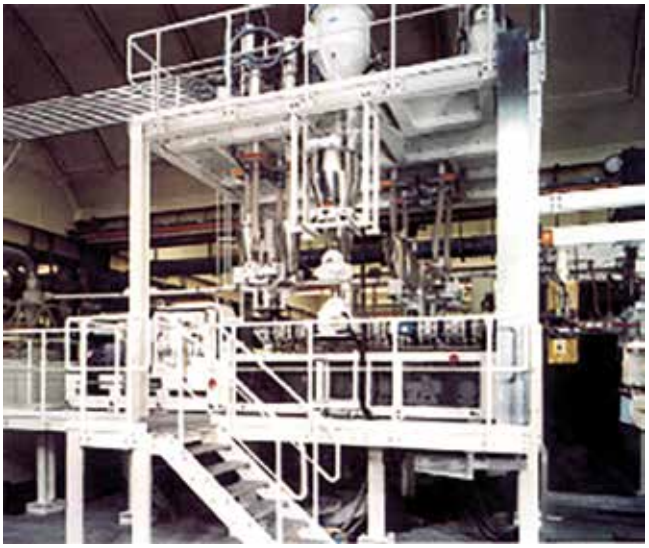
1990s: Printpack, a winner of the FPA Flexible Packaging Achievement Awards Competition, showcased innovations that highlight the potential of flexible packaging. Their Caesar's antifog coating ensured product visibility in the refrigerator section, while Healthy Choice® utilized microwavable film technology, unlocking further opportunities for flexible packaging solutions.

Photo courtesy of Printpack

Photo courtesy of AMGRAPH Packaging, Inc.

1991: AMGRAPH Packaging, Inc. revolutionized the term "quick to market" with film printing. The implementation of EB technology enabled AMGRAPH to produce pre-laminated film-based rollstock that can be surface printed in short order, thus reducing turnaround times for customers.

Poly Print, Inc.'s first press installation, the CI section of a Schiavi Padini wide web printing press in 1992.
Photo courtesy of Poly Print, Inc.


Reifenhäuser's REIfill direct extrusion line with "Reitruder" twin-screw extruder to produce filled multilayer sheet, thermoforming sheet, and cast film

1993: INSITE™ Technology – the landmark metallocene catalyst technology that helped create some of Dow's most popular products of the late 20th century, including AFFINITY™ Polyolefin Plastomers, VERSIFY™ Elastomers, and ELITE™ Enhanced Polyethylene Resins.

Photo courtesy of Dow

Photo courtesy of Printpack featuring flexible packaging with metalized film

Photo courtesy of General Mills Historical Archives

2000s

World Events

2001: On September 11th, Nineteen Al-Qaeda terrorists hijack four planes, crashing two into the twin towers of the World Trade Center in New York City, the third plane into the Pentagon in Washington, D.C., while the fourth plane is downed on the outskirts of Stonycreek Township, Pennsylvania. 2,996 people, including 2,977 victims and 19 hijackers, died in the attacks.

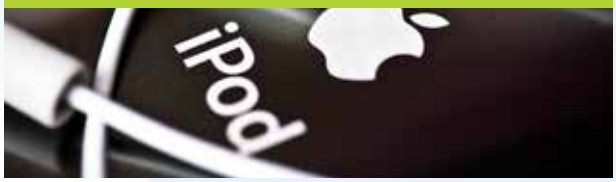
2004: Boston Red Sox wins the World Series for the first time since 1918, ending the Curse of the Bambino.

2006: Twitter is launched.

2007: First iPhone is introduced.

iPhone

2001: Steve Jobs introduces the first iPod.



2004: Facebook is formed by Mark Zuckerberg, Andrew McCollum, Eduardo Saverin, Dustin Moskovitz, and Chris Hughes.

2004: Boxing Day Tsunami occurs in the Indian Ocean, leading to the deaths of 230,000.

2005:YouTube is founded by Jawed Karim, Chad Hurley and Steve Chen.

2007: Nancy Pelosi becomes the first female Speaker of the United States House of Representatives.

2008: Barack Obama is elected the first African-American President of the United States.

> **FPA's strength and effectiveness stem directly from its members and their unwavering support for the association. They recognize the value of a collective voice, and regardless of economic conditions, they never question the importance of their participation. The industry continually strives to significantly reduce global food waste, resulting in decreased water use, lower greenhouse gas emissions, and less food in landfills. These contributions to climate change solutions are essential for society to understand.**
>
> ***Marla Donahue**, Former President & CEO, Flexible Packaging Association*

At the turn of the 21st century, concerns about plastic pollution, climate change, and excessive waste led to a growing demand for sustainable alternatives, causing the push for more sustainable product packaging to gain significant traction, although it was still in its early stages compared to today. This decade laid the groundwork for the modern sustainable packaging movement, as growing consumer awareness, corporate responsibility, and government policies began shaping industry practices.

While large consumer packaged goods (CPGs) companies started setting environmental goals to reduce waste and incorporate more recycled materials into their packaging, they faced challenges – sustainable packaging materials were often pricier than traditional plastics, recycling and composting consumer education was limited, leading to contamination in waste streams, and greenwashing posed a significant issue as companies made misleading claims about the sustainability of their packaging.

While sustainable packaging was not yet commonplace, the early 2000s witnessed significant strides toward its adoption. The groundwork established in this decade—bioplastics, corporate responsibility, regulatory shifts, and consumer demand—would pave the way for rapid advancements in the 2010s and beyond.

2000: Marla Donahue becomes FPA's President & CEO.

Marla Donahue

2000: Joyce Dickerson of RJR Packaging becomes the first woman FPA Chair.

Joyce Dickerson

2000

FPA Milestones

2001

2001: FPA moves its location from Washington, D.C., to Linthicum, MD

2004

2004: FPA Introduces the Student Flexible Packaging Design Challenge

The Student Flexible Packaging Design Challenge recognizes innovative flexible packaging solutions created by students. This competition offers packaging students a valuable opportunity to apply their classroom knowledge in developing real-world flexible packaging solutions, while contributing to the growth of the fastest-evolving sector within the packaging industry.

Walmart's Sustainable Packaging Scorecard

In 2006, Walmart made a groundbreaking announcement that significantly influenced the packaging industry: the creation of its Packaging Sustainability Scorecard. This tool was designed to assess the environmental impact of a product's packaging and drive reductions in packaging waste. It marked the first effort of its kind by a major retailer to hold their suppliers accountable for the sustainability of their packaging practices.

2006

The development of the scorecard was led by Walmart's Packaging Sustainable Value Network (SVN), which included over 200 employees from Walmart, brand owners and their packaging supply chains, as well as representatives from government agencies, non-governmental organizations, and academic institutions.

When launched company-wide in 2008, the scorecard's purpose was to quantify the environmental impact of packaging by providing measurable data on factors such as material usage, packaging formats, energy consumption, greenhouse gas emissions, and product-to-packaging ratios. Key metrics included lightweighting, energy efficiency, and material innovation. Walmart's aim was to evaluate, score, improve, and transparently report packaging sustainability progress. The scorecard allowed for direct comparisons between materials and packaging alternatives, foreshadowing today's much wider use of Life Cycle Assessments (LCAs) for packaging.

This initiative was transformative for the packaging industry. It introduced a numeric, standardized evaluation system for Walmart's suppliers, backing up environmental and sustainability claims with verifiable data. It also laid the groundwork for packaging improvements and provided a framework for communicating these enhancements to consumers. This shift meant that claims about packaging sustainability could be validated with concrete evidence from the scorecard.

For flexible packaging, the scorecard underscored the advantages of lightweight materials over heavier alternatives and sparked the shift from multi-layer to more sustainable mono-layer flexible packaging structures. More broadly, it marked the transition from a focus solely on mechanical design to an integrated approach that emphasized sustainability throughout the entire packaging development process. This shift had a profound impact on the industry, influencing modern packaging design practices.

Today, the principles behind the original Packaging Sustainability Scorecard have evolved into Walmart's broader Sustainability Index, continuing the retailer's commitment to improving the environmental footprint of its packaging and fostering a more sustainable supply chain.

The information was provided via an interview with Ron Sasine, adviser to Kearney's Product Excellence and Renewal Lab and former senior director of packaging at Walmart.

Industry Innovation

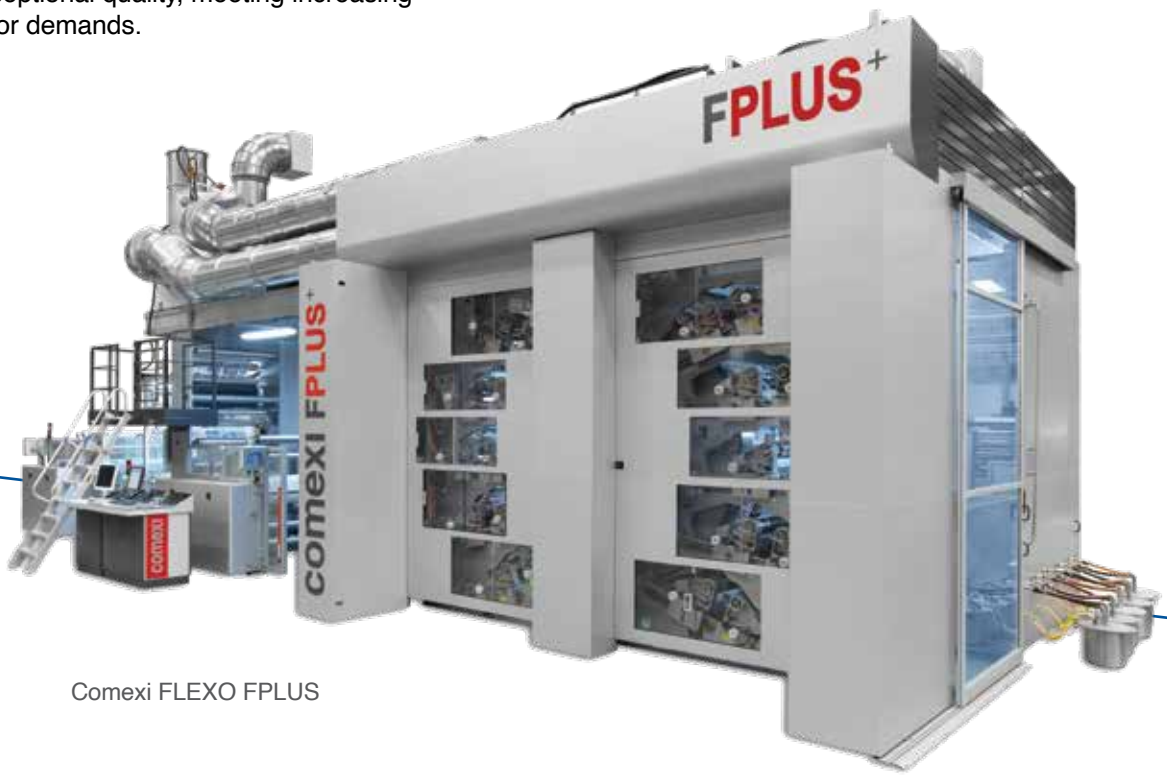
The 2000–2009 decade was a period of rapid innovation in flexible packaging, driven by advancements in materials science, sustainability efforts, and the growing demand for convenience. These innovations redefined flexible packaging, making it more consumer-friendly, environmentally responsible, and technologically advanced.

- High-barrier films saw significant improvements, such as ethylene vinyl alcohol and metalized films.
- Stand-up pouches gained advanced functionalities, such as spouts for liquids, zipper closures and sliders, and degassing valves.
- Intelligent packaging technologies were incorporated to actively preserve or monitor the condition of products.
- Microwavable pouches and steamer bags became increasingly popular with materials developed to withstand heating and releasing steam safely.
- The sustainability movement gained traction, leading to the introduction of biodegradable and compostable flexible packaging materials and thinner, stronger films to reduce material usage and transportation costs.
- Digital printing technology made its way into flexible packaging, allowing for shorter production runs, mass customization, and faster time-to-market.
- Security features such as holographic designs, QR codes, and tamper-evident seals were introduced to combat counterfeiting in food, pharmaceuticals, and luxury goods.

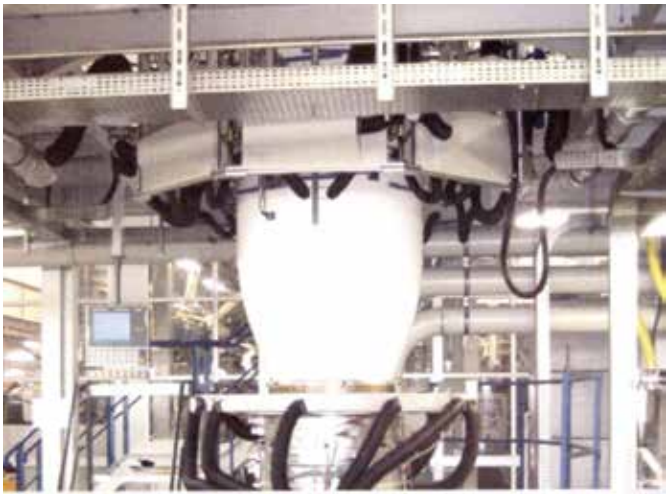
Thermoforming sheet line for processing of PLA-based bio raw materials in 2007. Photo courtesy of Reifenhäuser.

2007: High-definition flexographic plates (HD Flexo) improved resolution and print consistency to near-offset quality. This technology facilitated “offset-like” exceptional quality, meeting increasing color demands.

2000s-2010s: Web inspection and defect detection systems became critical, providing real-time monitoring of print quality using cameras and algorithms.



Comexi FLEXO FPLUS



3-layer blown film of bio raw materials primarily used for ordinary shopping bags or compostable garbage bags in 2007. Photo courtesy of Reifenhäuser.

The Dial® Liquid Soap Refill Stand-up Pouch enabled a significant reduction in rigid packaging by providing a refill pouch for liquid soap that would otherwise be sold in a rigid bottle, allowing consumers to reuse their rigid bottles with this refill package.

Photo courtesy of Printpack, winners of the 2008-2009 Silver FPA Flexible Packaging Achievement Award for environmental and sustainable achievement

2010s

World Events

2010: The Burj Khalifa in Dubai becomes the tallest structure in the world, standing at 829.8 m (2,722 ft).

2010: The iPad is introduced.

2011: World population reaches 7 billion.

2012: Skydiver Felix Baumgartner becomes the first person to break the sound barrier without a vehicle.

2016: Donald Trump wins the 2016 presidential election, in an upset against Hillary Clinton, the first woman to be nominated by a major party.

2018: The U.S.-China Trade War escalated between the two largest economies, impacting global trade and economics.

> **The word 'change' has been essential for the growth and resilience of both FPA and its members. Sustainability is increasingly becoming a focus, presenting an exciting opportunity for end users to meet customer demand for sustainable packaging. While there are challenges, including the costs involved, the path towards sustainable practices is evolving positively, paving the way for innovative solutions and gradual progress in this important area.**
>
> ***Fredy Steng**, Former Director of Sales, Strategic Accounts, Berry Global and Former Member of FPA's Chairperson's Advisory Council*

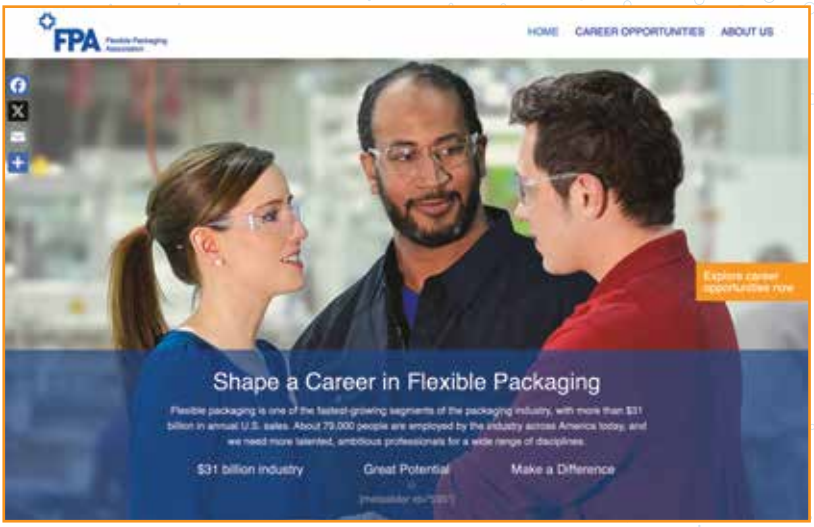
In the 2010s, sustainable packaging evolved from a niche issue to a widespread movement. Consumers became more vocal about reducing plastic waste, governments enacted stricter regulations, and corporations invested heavily in eco-friendly packaging solutions. By the mid-2010s, plastic pollution, especially in oceans, emerged as a global crisis, with campaigns like the "Plastic Free" movement and initiatives such as The Ocean Project gaining worldwide attention. Several cities banned plastic bags, straws, and other disposable plastics, replacing them with renewable and reusable alternatives.

The push for post-consumer recycled (PCR) content in packaging became widespread, and biodegradable and compostable materials such as polylactic acid (PLA), polyhydroxyalkanoate (PHA), and paper-based alternatives gained traction, especially in food packaging. Many multinational companies announced their brand commitment to sustainability and continued moving toward a "less is more" packaging strategy to reduce excess materials. This included e-commerce companies like Amazon streamlining their packaging to eliminate unnecessary plastic.

While recycling infrastructure and greenwashing challenges remained, the decade saw real progress in reducing plastic waste, embracing recycled and alternative materials, and shifting toward a circular economy model. By the end of the decade, sustainability was no longer just a trend—it had become a corporate and consumer expectation.

2014: FPA moves its location from Linthicum, MD, to Annapolis, MD.

2015: FPA launches FlexPackCareers.org.



2014 2015

FPA Milestones

2015: FPA unveils its refreshed logo and tagline designed to reflect the association's core values and longstanding mission as the industry's leading authority. With a focus on government and issue management, industry research and data, and leadership, FPA is committed to promoting and protecting the flexible packaging industry. The bold, modern block letters of the new logo symbolize the strength of both the industry and the association, while the dynamic "spark" element represents the heart of a vibrant collective. This spark embodies FPA's mission to connect knowledge, people, resources, and ideas, driving the growth and innovation of the flexible packaging sector.

FPA Flexible Packaging Association

Connecting. Advancing. Leading.

2016: Alison Keane becomes FPA's President & CEO.

Alison Keane

2016: FPA establishes its new advocacy program, with staff tracking 140 bills related to materials management, EPR, and packaging. By 2024, that number increased by an extraordinary 266% to 512 bills.

2018: FPA releases the Flexible Packaging Sustainability Study: *Perspectives on the Meaning of Sustainability in Flexible Packaging.*

2018: FPA publishes "*A Holistic View of the Role of Flexible Packaging in a Sustainable World*" report.

2016

2018

2018: FPA launches its Flexible Packaging Market Tracker with data from Euromonitor International.

Comexi APC 2

2018: FPA launches PerfectPackaging.org.

PERFECT PACKAGING

During the 2010s, the FPA played a significant role in promoting the benefits of flexible packaging while addressing sustainability concerns. As consumer demand for eco-friendly packaging grew, the FPA worked with industry leaders to improve recyclability, reduce material waste, and advocate for policies that supported innovation in sustainable flexible packaging.

FPA Initiates Research to Support and Promote the Sustainability Benefits of Flexible Packaging

FPA's new President & CEO, Alison Keane, took the lead in promoting the sustainability benefits of flexible packaging, emphasizing the advantages over rigid packaging. In 2018, the association commissioned a study to explore how flexible packaging lends itself to brand owners' ability to establish a reputation for environmental stewardship. Using study results, FPA developed consumer and brand owner infographics and a sustainability outreach and consumer conversations e-book to help communicate the findings to the industry.

Also, in 2018, the report "A Holistic View of the Role of Flexible Packaging in a Sustainable World" was published. It focused on the sustainability benefits of flexible packaging and provided foresight into its future sustainability implications. Several educational materials, including a fact sheet, infographic, and numerous life cycle assessment case studies, were developed to support the report.

The FPA worked with industry coalitions, such as the Sustainable Packaging Coalition (SPC) and How2Recycle, to develop clearer labeling, promote store drop-off recycling programs, and encourage brands to adopt recyclable, compostable, or bio-based flexible packaging. It also supported efforts to develop advanced recycling technologies that could process multi-layered materials.

FPA Addresses Workforce Development

Flexible packaging continues to be one of the fastest-growing segments in the packaging industry, generating over $42 billion in annual sales in the U.S. With around 83,000 people employed across the country, workforce development remains a key challenge for the industry. To address this, the FPA launched FlexPackCareers.org, an innovative career website that highlights the wide range of career opportunities available with FPA members nationwide. The user-friendly platform allows job seekers to search for opportunities by location or company name and provides direct links to FPA member websites and their career pages (when available).

"Take pride in our industry. Speak out in support of it. Care for the individuals in this field who rely on us for their livelihoods—both employees and their families. Recognize the men and women in the plants who make it all come together every day."
*– **Stan Bikulege**, Chair & CEO, Novolex*

Advocating for Industry-Friendly Policies

The FPA advocated for policies that favored the industry and lobbied against bans on plastic packaging, promoting instead EPR programs that encouraged companies to invest in recycling solutions. It collaborated with the U.S. EPA and other regulatory bodies to develop strategies for reducing packaging waste, ensuring that the industry's interests were considered.

2002: Packaging EPR arrives in North America with the province of Ontario passing legislation to implement a shared responsibility program.

2011: AMERIPEN is founded as the only material-inclusive organization focused on U.S. public policy for the entire packaging industry.

2012: British Columbia passes legislation to implement the first full producer responsibility program for packaging EPR in North America.

2017: Florida becomes the first state in the country to exempt chemical recycling from solid waste regulations and ensure it would be regulated as manufacturing.

2019: The Product Stewardship Institute and FPA publish "Shared Elements of EPR Legislation for Packaging," which serves as the basis for FPA's EPR advocacy.

FPA Engages on Tariff and Duty Issues

Since 2017, FPA has actively engaged with the U.S. federal government on tariff and duty issues, advocating for policies that support the industry.

Section 232 Tariffs

2017: President Trump directed Commerce Secretary Wilbur Ross to self-initiate investigations regarding whether steel and aluminum imports pose a threat to U.S. national security under Section 232 of the Trade Expansion Act of 1962. FPA submitted comments emphasizing the insufficient domestic production capacity for foil used in packaging.

February 2018: The U.S. Department of Commerce (DOC) released a report stating that imports threaten U.S. national security.

March 2018: President Trump announced a 10% aluminum tariff for national security. China retaliated with tariffs on aluminum waste, disrupting U.S. recycling. Canada enacted tariffs on certain steel and aluminum. The European Union (EU) imposed retaliatory tariffs on significant U.S. goods.

May 2019: The U.S. lifted Section 232 tariffs on Canada and Mexico.

2020: President Trump expanded tariffs on steel and aluminum derivative products.

"The impact of FPA on improving the quality of legislation and preventing the passage of bills that would have significant negative unintended consequences is profound. It's amazing to see how this industry has expanded over the last 75 years and how it has positively affected countless lives, including all the employees we represent and all the consumers who benefit from the packaging we provide every single day."
*– **Russell Grissett**, President Sonoco Flexibles and Thermoforming and Current FPA Chair*

2021: President Biden continued President Trump's tariff scheme on aluminum foil. Biden encouraged dialogue with the EU to support the struggling domestic steel and aluminum industries.

December 2022: The World Trade Organization (WTO) ruled that the U.S. Section 232 tariff scheme was inconsistent with WTO rules. The Biden Administration responded by appealing to the WTO's Appellate Body, which the U.S. had rendered defunct.

October 2023: The FPA raised transparency concerns about how the Bureau of Industry and Security approves or denies Section 232 exclusions.

Section 301 Tariffs

2017: President Trump directed U.S. Trade Representative (USTR) Robert Lighthizer to initiate an investigation of China under Section 301 of the Trade Act of 1974.

2018: After the USTR investigation, President Trump imposed tariffs on over $350 billion in Chinese goods, including aluminum foil at 7.5% to 25%. China retaliated with tariffs on American products goods.

Ongoing Industry Engagement: FPA remained engaged through the Americans for Free Trade Coalition. The coalition highlighted industry concerns throughout both the Trump and Biden administrations.

Antidumping Countervailing Duties

2016: The DOC received a petition from the Aluminum Association's Trade Enforcement Working Group to impose anti-dumping and countervailing duties on Chinese aluminum foil.

2017: FPA hired Mowry & Grimson PLLC to represent its newly launched Coalition for Aluminum Foil Security before the DOC.

2018: The DOC issued antidumping and countervailing duty orders on Chinese foil used in flexible packaging.

2020: The Aluminum Association petitioned the U.S. government to investigate aluminum foil imports from Armenia, Brazil, Oman, Russia, and Turkey.

2021: Antidumping orders were enforced on these countries.

2022: The DOC launched circumvention inquiries into aluminum foil imports completed in South Korea and Thailand using Chinese inputs.

2023: The DOC issued final affirmative determinations and established new orders, with Mowry & Grimson PLLC again representing the Coalition for Aluminum Foil Security.

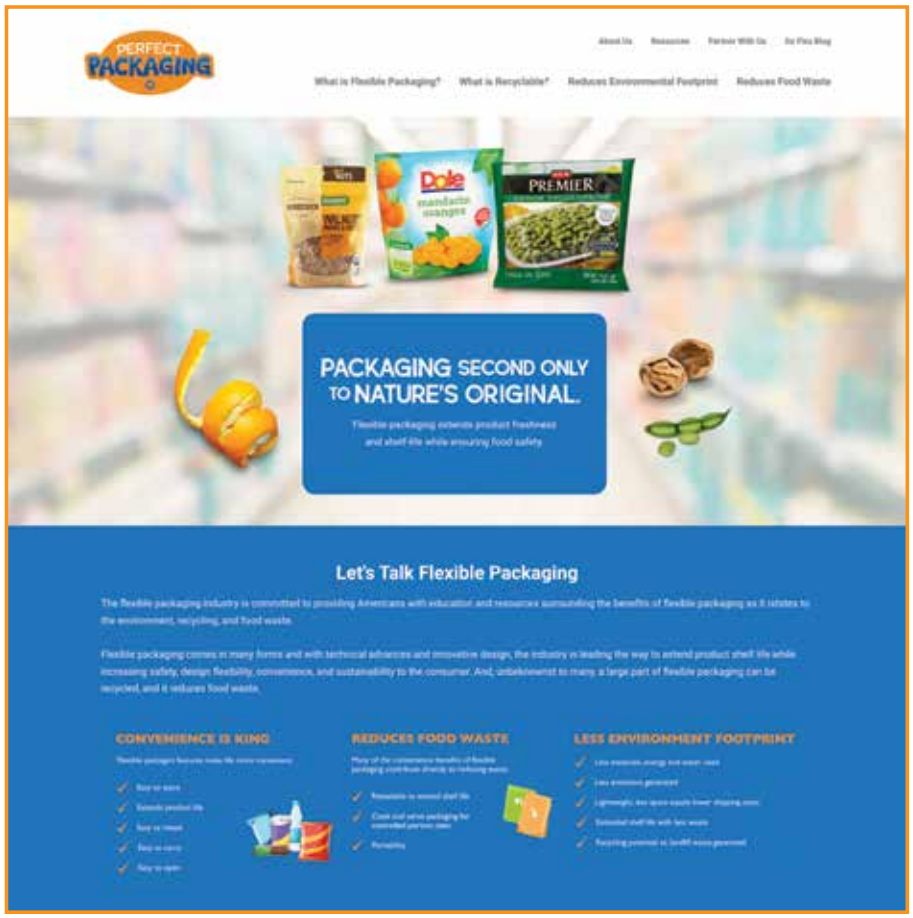
"It has been a privilege to be a part of the FPA and an honor to serve on the board of directors. My time with the executive committee, and ultimately as board chair, has been invaluable, allowing me to both lead and listen to my colleagues in the industry. As FPA membership continues to grow, I am pleased to see how successfully we have repositioned unfavorable legislation to better serve consumers, brand owners, and association members."
*– **William Jackson, Ph.D.**, Former FPA Chair, FPA Board Member, and CTO Amcor Global Flexible Packaging, Amcor Flexibles*

FPA Launches Its Flexible Packaging Market Tracker

In 2018, in collaboration with Euromonitor International, FPA developed the Flexible Packaging Market Tracker—a powerful tool designed exclusively for FPA members. This comprehensive resource covers 20 key flexible packaging markets around the world, offering valuable insights into market dynamics, trends, and global expansion opportunities.

The Market Tracker is a customizable research tool that enhances the FPA website. It enables FPA member users to track and compare flexible packaging markets globally, providing essential data to help them better understand market conditions, prioritize strategic initiatives, build business cases, and seize international growth opportunities. In addition to offering detailed information on flexible packaging materials and markets, the tool also covers non-flexible packaging sectors, giving members a broader view of the global packaging landscape.

By leveraging the Market Tracker, FPA members can identify prospects for new packaging innovations, explore areas with high growth potential, and gain a deeper understanding of global packaging trends. The tool draws insights directly from Euromonitor's Passport database—a proprietary system that delivers comprehensive data on industries, economies, and consumer behavior worldwide. Updated annually, the Market Tracker empowers members to analyze market context and pinpoint emerging trends to drive informed business decisions.



Public Awareness and Consumer Education

The 2018 initiative on flexible packaging's environmental benefits led to the launch of our microsite, PerfectPackaging.org. Developed by FPA, this site promotes flexible packaging to consumers and policymakers, sharing data on food waste, e-commerce, recyclability, and correcting misinformation about plastic packaging. FPA collaborated with TerraCycle to create a U.S. zip code locator for the nearest drop-off points for bags and films. Additionally, FPA supported the Wrap Recycling Action Program (WRAP), boosting store drop-off locations for plastic films.

Industry Innovation

The 2010s saw transformative innovations in flexible packaging, driven by sustainability efforts, continued consumer demand for convenience, and technological advancements.

The push for eco-friendly solutions led to the development of recyclable mono-material films (e.g., all-polyethylene or all-polypropylene structures) and compostable films made from bio-based materials like PLA and starch blends. Brands increasingly adopted flexible packaging with lower carbon footprints to meet environmental regulations and consumer expectations.

Packaging continued to advance to meet consumer demands for convenience, including peel-and-seal closures for easy opening and resealing, spouted pouches, and microwaveable steam-release valves. Retort pouches (used for ready-to-eat meals) and aseptic flexible packaging (used for long-life beverages and soups) saw widespread adoption due to their durability, lightweight nature, and ability to preserve products without refrigeration. Advances in clear barrier films allowed consumers to see the product while maintaining protection, boosting trust and shelf appeal for items like snacks and fresh produce.

As online shopping boomed, brands developed flexible packaging optimized for e-commerce, focusing on tamper evidence, durability, and lightweight design to minimize shipping costs.

2010s: Multi-color process printing expanded gamut printing (CMYK + OG/V) to reduce reliance on spot colors. It greatly improved efficiency while maintaining brand consistency in flexible packaging.

2010s: 3-layer blown film of bio raw materials primarily used for ordinary shopping bags or compostable garbage bags.

2010s: Digital printing technologies (e.g., HP Indigo) enabled very short runs, market testing, versioning, and high-quality output.

Photo courtesy of eProductivity Software

Photo courtesy of eProductivity Software

Photo courtesy of Printpack

2010: Originally packaged in a thin shrink film within an outer carton, General Mills Totino's™ transitioned to a more sustainable product by eliminating both the inner wrap and cardboard, replacing them with a lamination. This change in format reduced its overall carbon footprint, and this format is still sold today.

2010s: Innovations in air pollution control equipment enhance the consumer experience. The flexible packaging industry, along with state and federal regulators, support the development of volatile organic compound (VOC) control to reduce emissions from industrial facilities. VOCs react with nitrogen oxides from industrial activities, forming harmful ozone and smog, particularly affecting plant operators.



Ship & Shore Environmental, Inc. older generation of RTOs. Photos courtesy of Ship & Shore Environmental, Inc.

Early emission control technologies were inefficient and expensive, requiring significant natural gas. Since the 1980s, regenerative thermal oxidizer (RTO) technology has improved, achieving 99% destruction efficiency and up to 97% thermal efficiency. This advancement lowers costs for environmental stewardship in the flexible packaging industry, along with potential incentives for Ship & Shore Environmental, Inc. RTOs.

Ship & Shore Environmental, Inc. Current Designs. Photos courtesy of Ship & Shore Environmental, Inc.

2017 Silver Achievement Award Winner, Printpack's Lonza HTH Pool Chemicals Showpack, replaced the previous carton format. The new package provided better protection in outdoor environments where strong sunlight or rain could damage the carton. The package also represented a significant reduction in carbon footprint by switching from cardboard to a flexible stand-up pouch.

Oben Group opened a new biaxially oriented polyamide film (BOPA) plant in Peru in 2011. BOPA films are characterized by their excellent barrier to gases, aggressive liquids, and aromas, as well as their chemical resistance, puncture resistance, and resistance to high and low temperatures. They are mainly used in the packaging of cheeses, sausages, seafood, and meat, vacuum and reportable packaging, the pharmaceutical industry, and the production of helium balloons, among other uses. Photos courtesy of Oben Group.

2013: Kashi®, a Kellogg's company, launched the first cereal in a resealable, reusable stand-up pouch.

Photo courtesy of Kellogg's Historical Archives

2014: Fresh-Lock® launched Child-Guard® Track & Slider technology, which for the first time enabled child-resistant reclosability on flexible packaging. This innovation enabled many rigid products to transition to flexible ones.

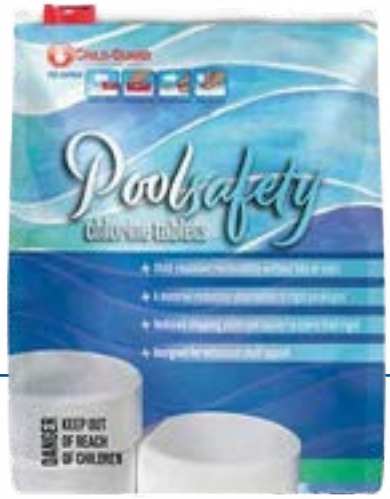


Photo courtesy of Fresh-Lock®

2014: RETAIN™ Polymer Modifier – a milestone product in the advancement of recycling, RETAIN™ polymers allow scrap films containing ethylene vinyl alcohol (EVOH) or nylon to be recycled into new films without sacrificing physical or optical properties. This technology is just one example of Dow's on-going commitment to circularity and Design for Recyclability.

Photo courtesy of Dow

Retain
polymer modifier by DOW

Photo courtesy of Sonoco Flexible Packaging

2015: Sonoco Flexible Packaging was recognized with a Gold Achievement Award from the FPA for its high-performance film laminate contributions to the Daisy® Sour Cream squeezable pouch. Introduced in February 2015 and still available nationwide today, the proprietary pouch design was an inverted, wedge-shaped pouch with a flip-top dispensing closure featuring a SimpliSqueeze® valve and tamper-evident pull ring. It provides an easy-to-use, easy-to-dispense, mess-free, recloseable package.

2015: INNATE™ Precision Packaging Resins
An ever-growing family of innovative resins proving to be a multi-faceted and multi-application group of resins. They offer an outstanding balance of stiffness/toughness balance and can promote material substitution for mono-material packaging, be used for downgauged flexible packaging.

Photo courtesy of Dow

2015: Integrated Plastic Packaging (IPP) launched stand-up pouches.

Photo courtesy of Fres-co System USA, Inc.

2016: The Fres-co Barrel Pouch became the flexible replacement for bottles and cans.

2017: Officials from the FPA staff and Ohio legislators toured Ampacet Corporation's plant and Ideation Center in Heath, Ohio, where they learned about extrusion processes and the end markets for Ampacet's masterbatch and additive solutions.

Photo courtesy of Fres-co System USA, Inc.

2018: The Fres-co Powder Bag became the flexible replacement for rigid packages such as fiber drums, plastic drums, poly bag-in-box, or other bags such as kraft paper, kraft paper poly bags, or polywoven bags, specifically engineered for powders.

2019: Integrated Plastic Packaging (IPP) launched flat-bottom pouches.

2019: Hershey's revolutionary stand-up pouches produced on a Vertical/Form/Fill/Seal (VFFS) machine represent a unique innovation that allows the pouch to stand independently, as opposed to the traditional pillow pouch style. The combination of machine development and film development made this product cost-effective, and it is now being used widely by other CPGs.

Photos courtesy of Printpack

2020s

World Events

2020: The COVID-19 pandemic, which began late in the prior year, spreads from China to the vast majority of the world's inhabited areas, infecting at least 81 million and killing at least 1.8 million people in its first year.

2021: The COVID-19 pandemic continues, infecting more than 220 million and killing at least 3.6 million people in its second year. The true totals of infected and dead are estimated to be much higher.

2022: United Kingdom's Queen Elizabeth II dies at the age of 96 and is succeeded by King Charles III.

2021: Joe Biden is inaugurated as President of the United States. Kamala Harris, sworn in as vice president, becomes the first woman, first African American and first Asian American to be vice president.

2022: Ketanji Brown Jackson becomes the first black woman on the U.S. Supreme Court.

2022: OpenAI launches ChatGPT, an AI chatbot.

2024: Donald Trump, with his running mate JD Vance, is elected President of the United States for a second non-consecutive term. He is the first candidate to do so since Grover Cleveland in 1892 and only the second in American history.

Our industry embraces challenges that present opportunities for growth, especially in sustainability. Through education, innovation, and empowering today's youth in decision-making roles, we can achieve remarkable success together. The FPA is poised to continue being 'the voice of the industry,' and it should enhance this voice to ensure it resonates clearly both within and outside its circles.

***George Thibeault, Jr.**, Business Development Manager – Confectionery, Consumer Packaging, TC Transcontinental Packaging and Former FPA Chair*

As we entered the 2020s, the flexible packaging industry experienced significant innovations driven by sustainability, convenience, and technological advancements. However, nothing prepared us for what we would soon face: the COVID-19 pandemic. COVID-19 profoundly impacted flexible packaging innovations, accelerating trends in hygiene, sustainability, and e-commerce. The industry came together, demonstrating resilience, innovation, and collaboration to meet the urgent demands of consumers, healthcare providers, and supply chains. The flexible packaging sector not only united but also emerged stronger and more innovative after the pandemic. The crisis led to faster advancements in sustainable packaging, smart technologies, and supply chain resilience, ensuring the industry remains adaptable to future global challenges.

FPA Milestones

2020: FPA launches its magazine, FlexPack VOICE®.

2020: FPA releases "*A Flexible Packaging Path to a Circular Economy: Flexible Packaging Sustainability Roadmap*" report.

2020: FPA launches its Emerging Leadership Council (ELC).

EMERGING LEADERSHIP COUNCIL

2021: FPA releases the "*Sustainability Life Cycle and Economic Impacts of Flexible Packaging in E-commerce*" report.

2020 2021 2024 2025

2024: FPA launches FlexPAC™, the federal political action committee (PAC) for the flexible packaging industry. FlexPAC™ is a bi-partisan PAC and funded by voluntary personal contributions of FPA members and supports candidates for political office who understand and support the broad array of issues facing the packaging industry. In its inaugural year, FlexPAC raised nearly $50,000 from over 40 executives employed by 24 FPA member companies.

FLEX PAC™
Flexible Packaging Association
Political Action Committee

2024: Dan Felton becomes FPA's President & CEO.

Dan Felton

2025: FPA celebrates 200 members

COVID-19 Pandemic

In 2020, the world faced an unprecedented pandemic with the outbreak of COVID-19, which began in December 2019 in Wuhan, China. The virus spread rapidly across Asia and globally, prompting the World Health Organization (WHO) to declare it a pandemic in March 2020. The crisis persisted for two years, causing severe social and economic disruption, including widespread supply chain shortages and food scarcity.

In response to the pandemic, FPA successfully petitioned the Trump Administration and Congress to designate the flexible packaging industry as an Essential Critical Infrastructure Workforce. As a vital partner to the food, health, and medical sectors, flexible packaging manufacturers played a crucial role in maintaining the supply chain and addressing consumer needs during the pandemic. Many FPA members adapted their manufacturing operations

to meet the surge in demand for food, health, hygiene, and medical supplies. Additionally, numerous companies repurposed or expanded resources to produce personal protective equipment and supplies for medical professionals, first responders, and frontline workers.

Early in the pandemic, FPA worked closely with congressional leaders and other trade associations on a series of relief packages designed to provide essential resources and guidance for the public health response, stabilize markets, support businesses, and offer provisions for workers impacted by the outbreak.

FPA also collaborated with individual states to ensure clarity for the workforce and facilities navigating the often-conflicting guidance from federal, state, and local authorities. To address these discrepancies, FPA sent a letter to the National Governors Association urging states to recognize the federal designation of essential critical infrastructure for our workforce. FPA also called for greater alignment of shelter-in-place executive orders and social distancing mandates to provide consistency and clarity for our members.

"The FPA will continue to serve as a guiding light and voice for our industry. It is a place where we can seek guidance and collaborative support on the factors that strengthen our industry—including our workforce—and enhance our business success. They are vital in helping us collectively navigate a dynamic and increasingly complex business landscape. We achieve greater effectiveness when we work together."
*– **Peter Schottland**, Executive Chair, American Packaging Corporation and Former FPA Chair*

FPA Launches Its Magazine, FlexPack VOICE®

In partnership with the YGS Group (York, PA), in 2020 FPA publishes a new dynamic print magazine, FlexPack VOICE®, that features the latest Association news, industry updates—including supply chain developments—and highlights member achievements in sustainable flexible packaging and technical innovations. The magazine covers key areas such as product protection, e-commerce, food waste reduction, medical safety, and more.

Each issue is anchored by five core sections:

- **Advocacy Corner:** Offers insights into FPA's advocacy efforts at the federal and state levels, ensuring the Association's voice is heard and that we are advancing members' interests.
- **FlexAppeal®:** Showcases the unique benefits of flexible packaging and its role in various industries.
- **FlexForward®:** Highlights industry breakthroughs, emerging trends, and technological advancements shaping the future of flexible packaging.
- **FlexFocus®:** Features individual achievements by FPA members in the field of flexible packaging, celebrating their contributions to innovation and sustainability.
- **Above & Beyond:** Spotlights members who are making a positive impact in their communities and recognizes their industry awards.

To complement the print publication, a dedicated microsite, FlexPackVoice.com, was also launched. This platform offers digital versions of the magazine, exclusive articles, breaking news (curated from the FPA e-newsletter), expanded coverage of select articles, multimedia content (including video and audio), additional photo galleries that enrich the FlexAppeal® section, a calendar of key upcoming events, and a live social media feed.

Together, the magazine and microsite provide FPA members with an integrated, multi-channel experience to stay informed, engaged, and connected within the flexible packaging industry. The print and digital magazine is currently distributed to over 4,700 subscribers, with that number steadily increasing. Additionally, the microsite attracts an average of 1,160 visitors each month, with a consistent upward trend.

"The future of flexible packaging is shaped by key trends, particularly sustainability. With rising environmental concerns, there is a strong demand for more sustainable packaging solutions, leading to recyclable materials and innovative designs that reduce waste and promote a circular economy. FPA will lead discussions and share information on flexible packaging, connecting individuals to advance disruptive innovations for a healthier planet."
*– **Laetitia Sanchez**, Marketing Director, Amcor Flexibles Latin America*

Flexible Packaging Association Launches Emerging Leadership Council (ELC)

In 2020, FPA also announced the formation and launch of its Emerging Leadership Council (ELC), a group of dynamic professionals with fewer than five years of experience in the flexible packaging industry. The ELC's mission is to foster a network of future leaders who will address key challenges and opportunities that shape the long-term growth of the U.S. flexible packaging sector.

With the goal to drive innovation and sustainable practices within the industry, the Council's strategy include:

- Advocacy in Sustainability: Championing the flexible packaging industry by collaborating with lawmakers and promoting responsible packaging solutions that align with circular economy principles.
- Education: Developing resources to empower FPA member companies to effectively educate communities and families on the benefits of flexible packaging.
- Recruitment & Leadership Development: Attracting, retaining, and nurturing the next generation of leaders in the flexible packaging industry.

The ELC has taken a very tactical approach to meeting these goals through strong overall leadership complemented by three committees – Advocacy, Education, and Recruitment and Leadership Development.

Among the ELC's early initiatives was the creation of a video series exploring the industry's response to the COVID-19 pandemic, sustainability in packaging, and the importance of workforce development. Other excellent output from the committees has included public policy fact sheets, infographics and videos; packaging facility site visits; Washington, D.C. legislative fly-ins; a "Let's Talk Flexible Packaging" consumer education campaign; revitalization of FPA's student summer internship program; a "Come Grow With Us" campaign to attract new talent to our industry; and the FlexPack Crash Course at PACK EXPO International, an educational event tailored for newcomers to the flexible packaging industry.

FPA's ongoing focus on recruitment and retention in the industry led to coordinating the FlexPack Crash Course at PACK EXPO International during the last two occasions it took place in Chicago. This crash course targets individuals new to the industry or those hired within the last five years, providing a broad overview of the supply chain, from raw materials to finished packages.

These initiatives exemplify the ELC's continued commitment to driving innovation, sustainability, and leadership within the flexible packaging sector.

Advancing Regulations

The flexible packaging industry remains focused on its advocacy on sustainability, regulatory engagement, and promoting its benefits. Efforts include supporting recycling infrastructure, advocating for EPR policies, and pushing for regulatory clarity on recycled materials in food packaging. Industry groups are engaging with lawmakers on per- and polyfluoroalkyl substances (PFAS) restrictions, chemical recycling, and fair EPR fees while emphasizing flexible packaging's role in reducing carbon footprints and food waste. Collaboration with organizations like The Recycling Partnership and the U.S. Plastics Pact are furthering circular economy goals, while innovations in materials and design reinforce the sector's economic and environmental value.

"The success of FPA is rooted in the collaboration and camaraderie of its members. Even as competitors, we come together to support the collective good. I see a future where we achieve even greater innovation in sustainable solutions. The next generation of packaging could allow us to give back more to the planet than we take, ultimately leading to carbon-negative products."
*– **Kathy Bolhous**, Chair & CEO, Charter Next Generation and Former FPA Chair*

- **2021:** Maine and Oregon pass the first statewide EPR laws in the United States.
- **2022:** California and Colorado pass EPR laws. The Circular Action Alliance (CAA) was founded by 18 producers representing the food, beverage, consumer goods, and retail industries as the first packaging producer responsibility organization (PRO) in the United States. The DOC self-initiates antidumping and countervailing duty cases on foil imports from South Korea and Thailand.
- **2023:** The DOC finalizes and imposes antidumping and countervailing duties on aluminum imports from South Korea and Thailand over the objections of FPA's Coalition for Foil Security.
- **2024:** The FPA launches its political action committee – FlexPAC™, to support industry champions on Capitol Hill. Minnesota passes the first FPA-supported EPR law. FPA President & CEO Dan Felton (then head of AMERIPEN) testifies at the first Congressional EPR hearing at the U.S. Senate Environment and Public Works Committee. Wyoming becomes the 25th state to proactively protect advanced recycling as a valid form of manufacturing.

FPA Prevails in an Ever-Changing Industry Landscape

When the FPA held its inaugural meeting at the Hotel Astor in 1951, the Association had approximately 50 members. Fast forward almost 75 years and membership has grown to 200—a remarkable 300% increase. In terms of annual sales volume, the industry reported **$150 million in 1951**, compared to **$42.9 billion in 2023**, marking an astounding **28,500%** growth.

The composition of the membership has evolved over the years as well. In the 1950s, members primarily manufactured paper-based packaging. However, in the early 1960s, with innovations such as the AMF Mark 50 Bread Bagger and individually quick frozen (IQF) vegetables, the flexible packaging industry pivoted toward plastic packaging. Today, with increasing environmental regulations and a focus on sustainability, the industry is shifting towards mono-layer polyethylene structures, biodegradable and compostable biofilms, and incorporating post-consumer recycled (PCR) content.

"Engagement with FPA has led to valuable interactions with competitors, all aimed at enhancing the overall packaging industry. Meaningful friendships have developed with colleagues, all while upholding ethical and legal standards. The 75-year legacy of the association highlights its pivotal role and significance in the industry."
*– **Joyce Dickerson**, Retired Director of R&D, RJR Packaging (Packaging Division of RJ Reynolds Tobacco Company) and Former FPA Chair*

Since 2000, the flexible packaging industry has seen significant consolidation through mergers and acquisitions, leading to a transformation in the FPA's membership. Out of the **125 members in 2000**, many have been acquired and integrated into the current membership base. Despite ongoing consolidation, FPA has continued to grow. In 2022, we celebrated reaching **150 members**, and just three years later, in 2025, we proudly achieved the milestone of **200 member companies**. Our members now span six categories: Converter, Associate, International, Academic, Media, and our newest category, Supporting, which includes non-manufacturers involved in the industry.

Industry Innovation

In the first half of the 2020s, the flexible packaging industry continued to move toward global sustainability goals. Manufacturers increasingly adopted recyclable mono-materials and compostable films to reduce environmental impact and transitioned to materials with higher PCR content, such as PE and PET.

Advances in digital printing have enabled high-quality, customizable packaging solutions, allowing brands to execute targeted marketing campaigns and limited-edition designs efficiently. The integration of smart packaging (QR codes and near-field communication (NFC) technology) has provided consumers with interactive experiences, such as accessing product information or verifying authenticity. Enhanced labeling and tracking systems have also provided consumers with detailed information about product origin and handling, fostering trust and compliance with regulatory standards.

2021 FPA Flexible Packaging Highest Achievement Award Winner
American Packaging Corporation's Crunch Pak's® Toy Story Lunch Kitz

2020: R-Cycle, a digital product passport system designed to improve the traceability and recyclability of plastic packaging and products, paves the way for plastic products into a functioning circular economy.

2021: **REVOLOOP™ Recycled Plastics Resins** – Dow's next step in the circularity journey offers an assortment of high-quality, PCR-rich, fully formulated, single-pellet resin grades for numerous flexible and rigid packaging applications.

Photo courtesy of Reifenhäuser

Photo courtesy of Dow

Revoloop™
recycled plastics resins by DOW

2021: Known as one of the most significant product advancements in the industry was the transition from oriented polypropylene (OPP) lamination to all polyethylene to meet store drop-off eligibility. This marked a substantial shift for General Mills and showcased that such changes are achievable for major brands to support the necessary infrastructure for recycling flexible materials packaging.

Photo courtesy of Printpack

2021: The Fujifilm J Press FP790 is the pinnacle of advanced water-based digital inkjet printing technology. This state-of-the-art machine combines efficiency, precision, and unparalleled quality to meet the needs and high market demands of the packaging industry. With a focus on both high-quality print and adhering to the regulatory requirements of the food packaging industry, the J Press FP790 stands as a testament to Fujifilm's commitment to innovation and excellence in the world of flexible packaging print technology.

Photo courtesy of Fujifilm

2022: Reifenhäuser develops an advanced extrusion technology, EVO Fusion, enabling the direct processing of 100% recycled materials into new blown films without the need for energy-intensive pelletizing.

Photo courtesy of Reifenhäuser

2022: Fluff, film snippets, and various types of production waste and PCR material can be directly processed into functional films for uses such as trash bags or mailing bags.

2022: The Reifenhäuser Value Sheet Inline system is introduced. It is an advanced extrusion line designed to produce high-quality thermoformable films that are directly integrated with thermoforming machines. This inline configuration streamlines the production process, enhancing both efficiency and product quality.

Photos courtesy of Reifenhäuser

Photo courtesy of Integrated Plastics Packaging

2023: Integrated Plastics Packaging (IPP) developed barrier paper-based laminates and incorporated laser scoring technology to enhance user convenience. By integrating advanced laser scoring and high-end coatings, IPP improves the user experience and product appeal.

2023: Amcor's LifeSpan® Copper Based Film is a smart packaging that increases product shelf life by up to 250%. This laminated film contains copper microparticles that inhibit the development of microorganisms inside the packaging and commonly used in meat, fish, seafood, and dairy applications.

Photo courtesy of Amcor

Photo courtesy of Amcor

2024: Printpack introduces compostable packaging for the sustainably conscious consumer. The Off the Eaten Path® industrially compostable bag incorporated compostable inks and laminate that reduced the "noisiness" of prior iterations using compostable films.

Photo courtesy of Printpack

2024: The Fres-co EZHANDLE™ became the flexible replacement for buckets and pails.

Photo courtesy of Fres-co System USA, Inc.

2024: Amcor launches Nescafé® Gold Blend, a fully recyclable paper refill pack.

Photo courtesy of Amcor

2024: Davide Rossello, Head of Competence Center and Process Manager Gravure at BOBST (right), and Mohamed Timol, Reifenhäuser expert for machine-direction orientation (MDO) processes (left), presents the printed and world's first 18-micrometer thin MDO-PE film.

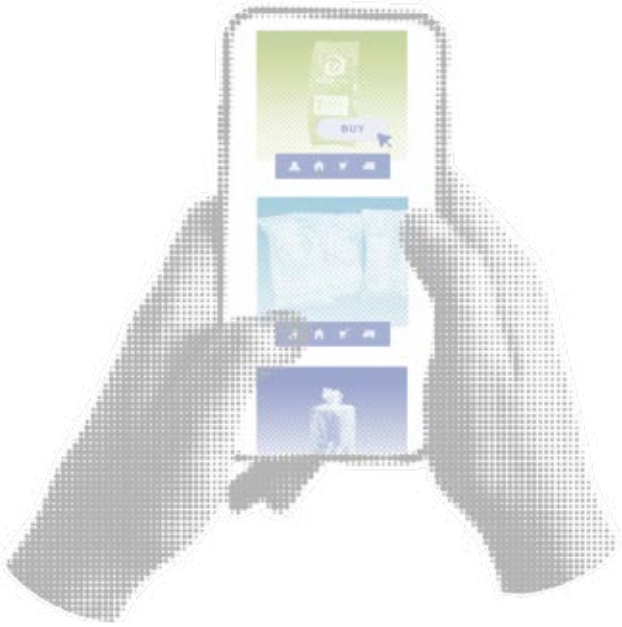
Photo courtesy of Reifenhäuser

The Future is Bright

As FPA reaches its next major milestone, the future of both the organization and the flexible packaging industry is bright. We have every reason to believe that the dramatic industry growth we have seen over the past decades will continue well into the next decade and beyond. But with that growth will come continued focus by some who view packaging as waste, leading us to double down on our public policy advocacy efforts like we did in the 1980s and 1990s, and more recently in the 2020s, to safeguard our industry's growth. While packaging EPR legislation will remain a key focus, we will also address a wide range of other public policy issues impacting our industry, including advancements in recycling technologies, PCR content laws, labeling requirements, and proposed bans on chemicals and ingredients in packaging. The sheer volume of legislative proposals on these issues in the U.S. in recent years has been unprecedented, and this trend is expected to continue.

FPA will also stay at the forefront of industry relevance, continually developing and sharing valuable data and market insights to educate both the flexible packaging sector and external stakeholders. We will also work to expand the association's influence and foster collaboration across the entire supply chain to maximize our collective impact and extol the values of flexible packaging.

Despite the challenges posed by evolving laws and regulation, FPA and the flexible packaging industry are both poised for continued growth. Innovations and technical advances will continue to drive progress, helping to close the circularity loop and further enhance the sustainability of flexible packaging.



Acknowledgements

The FPA expresses its gratitude to the following individuals for taking the time to share their thoughts and memories about the Association.

Stan Bikulege, Chair & CEO, Novolex

Kathy Bolhous, Chair & CEO, Charter Next Generation (CNG)

Joyce Dickerson, Retired Director of R&D, RJR Packaging

Marla Donahue, Former President & CEO, Flexible Packaging Association

Russell Grissett, President, Sonoco Flexibles and Thermoforming

William Jackson, Ph.D., Chief Technology Officer, Amcor Global Flexible Packaging, Amcor Flexibles

Alison Keane, Former President & CEO, Flexible Packaging Association

Jimmy Love III, Chair & CEO, Printpack

Laetitia Sanchez, Marketing Director, Amcor Flexibles Latin America

Peter Schottland, Executive Chair, American Packaging Corporation

Fredy Steng, Former Director of Sales, Strategic Accounts, Berry Global

George Thibeault, Jr., Business Development Manager – Confectionery, Consumer Packaging, TC Transcontinental Packaging

We extend our gratitude to the member companies that generously provided content for this storybook highlighting major industry innovations over the past 75 years.

Amcor Flexibles

American Packaging Corporation

AMGRAPH Packaging, Inc.

Ampacet Corporation

Comexi North America, Inc.

Dow

DuPont

eProductivity Software

General Mills Historical Archives

Fresh-Lock®

Fres-co System USA, Inc.

FUJIFILM North America Corporation

INDEVCO Packaging Solutions

Integrated Plastics Corporation

Kellogg's Historical Archives

Max Katz Bag Company, Inc.

NOVA Chemicals, Inc.

Oben US, LLC

PMMI Media Group

Poly Print, Inc.

PPC Flex

Printpack

Reifenhäuser Inc.

Sealstrip Corporation

Ship & Shore Environmental, Inc.

Sonoco Flexible Packaging

Sterilization Packaging Manufacturers Council (SPMC)

Sun Chemical Corporation

Totani America

Ron Sasine, Advisor to Kearney's Product Excellence and Renewal Lab and former Senior Director of Packaging at Walmart

Your contribution has been invaluable in bringing this story to life, and we are grateful for your support.

The State of Maryland

Governor of the State of Maryland, to

FLEXIBLE PACKAGING ASSOCIATION
75TH ANNIVERSARY

, Greetings:

Be it Known: Because of your demonstration of high integrity and ability, meriting our great trust and respect, we are most pleased to award you the

Governor's Citation

in appreciation of your outstanding services to the citizens of this State

Given Under My Hand and the Great Seal of the State of Maryland, this 1st day of January Two Thousand and twenty-five

Governor

Anna Miller
Lt. Governor

Susan C. Lee
Secretary of State

Thank You to Our Past Chairs

2023-2024: **William (Bill) Jackson**, **Ph.D.**, Amcor Flexibles

2021-2022: **Kathy Bolhous**, Charter Next Generation

2019-2020: **Curt Begle**, Berry Global

2018: **David Staker**, Plastic Packaging Technologies, LLC

2017: **Rob Tiede**, Sonoco Flexible Packaging

2016: **Stan Bikulege**, Novolex

2015: **Ken Swanson**, Liqui-Box Corporation

2013-2014: **Tom Cochran**, Amcor Flexibles

2012: **James A. Mize**, Sealed Air Corporation

2011: **William Burke**, Nordenia USA

2010: **John Baumann**, Ampac Packaging LLC

2009: **James E. Love, III**, Printpack Inc.

2008: **George Thibeault, Jr.**, Constantia Hueck Foils LLC

2007: **Ilene Gordon**, Alcan Packaging

2006: **Peter Schottland**, American Packaging Corporation

2005: **James E. Love, III**, Printpack Inc.

2004: **George Thibeault, Jr.**, Hueck Foils, L.L.C.

2003: **Jack E. Knott**, Pliant Corporation

2002: **Leonard R. Byrne**, Sealed Air Corporation, Cryovac Division

2001: **Joseph S. Doyle**, The Interflex Group, Inc.

2000: **Joyce H. Dickerson**, RJR Packaging

1999: **Jeffrey E. Lammers**, Duralam, Inc.

1998: **Gary D. McDaniel**, Smurfit Flexible Packaging

1997: **David P. Gnau**, Cadillac Products, Inc.

1996: **David H. Hofman**, Graphic Packaging Corporation

1995: **Tom Bryce**, Bryce Corporation

1994: **James R. Ball**, Cello Bag Company, Inc.

1993: **Dennis M. Love**, Printpack Inc.

1992: **Michael McNamara**, Automated Packaging Systems, Inc.

1991: **Jerry West**, The Archer Company

1990: **John Woolford, Jr.**, Hargro Flexible Packaging

1989: **G. Jerry Mitchell**, Atlanta Film Converting Company, Inc.

1988: **Andrew S. Levy**, Kleartone Inc.

1987: **David McFarlane**, The Morrill Press

1986: **Richard C. Buell, Jr.**, Reynolds Aluminum

1985: **James Trousdale**, The Louisville Foil Laminating Company, Inc.

1984: **William Westerman**, Cellu-Craft Inc.

1983: **Frank Heckrodt**, Presto Products, Inc.

1982: **David Peake**, Printpack Inc.

1981: **Francis McDermott**, Ludlow Corporation

1980: **Richard Holder**, Reynolds Metals Company

1979: **C.R. Stanley**, American Can Company

1978: **James A. Hummel**, H & H Plastic Manufacturing Company

1977: **Stan Manne**, Arvey Corporation

1976: **William F. Collins**, Rexham Corporation

1975: **James Anwyll, Jr.**, Ludlow Corporation

1974: **Ralph N. March**, Boyertown Packaging Service Corporation

1973: **Edward S. Shorkey**, Continental Can Company

1972: **Robert J. Williams**, Cadillac Products, Inc.

1971: **Sam H. Zutler**, The Dow Chemical Company

1970: **D. A. Ruch**, Chase Bag Company

1969: **William Dodenhoff**, Mobil Chemical Company

1968: **Frank Hanis**, Milprint, Inc.

1967: **Arthur E. Gerken**, H.P. Smith Paper Company

1966: **Milton Bennett**, Cellu-Craft Products Corp.

1965: **F.W. Kiendl**, Arkell and Smiths

1964: **Arthur D. Hoeppner**, Milprint, Inc.

1963: **John V. Shea**, Spencer Packaging

1962: **Edward F. Burke**, Cellu-Craft Products Corp.

1961: **Harold N. Brush**, Munson Bag Co.

1960: **E.S. Elgin**, Chase Bag Co.

1959: **David McKay, Jr.**, Central States Paper & Bag Co.

1958: **T.J. Norman, Jr.**, Package Products Co.

1957: **Samuel Leeds**, Cellu-Craft Products Corp.

1956: **M. P. Williams**, Cadillac Products

1955: **Theodor Isen**, Paramount Packaging Corporation

1954: **Robert Jones**, Dobeckmun Company

1953: **Fred Hinkle**, Shellmar-Betner Div. of Continental Can Co.

1952: **James Duffy**, Union Bag & Paper Corporation

“FPA and the flexible packaging industry are well positioned for sustained growth, driven by continuous innovation and technical advancements that enhance sustainability. As a leader in industry relevance, FPA will continue to advocate on behalf of the industry and develop and share valuable market insights and data, educating both the flexible packaging sector and external stakeholders. Through strengthened collaboration across the supply chain, we will amplify FPA’s influence, maximize our collective impact and champion the benefits of flexible packaging.”

***Dan Felton**, President & CEO, Flexible Packaging Association*

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FPA
Flexible Packaging Association