Research

Plastics and the Economy

FRED ASHTON | JUNE 25, 2025

Executive Summary

- While there is much discussion of domestic and international efforts to curb plastics waste, many proposals involve a top-down approach that restricts plastics production while placing little focus on market-driven recycling technologies or the potential economic impact.
- Because of plastics' strength, versatility, formability, and cost-effectiveness, they are used worldwide for everything from packaging to motor vehicle parts, construction, and even medical equipment.
- This research analyzes both U.S. and global plastics production and applications, as well as the industry's formidable U.S. employment, gross output, trade, and use in the supply chain.

Introduction

The quandary of dealing with plastics waste continues to frustrate domestic policymakers, international organizations, and underdeveloped countries. Plastics' lack of biodegradability paired with ever-increasing global demand for plastics products impacts landfills, environmental health, groundwater, soil, and beyond. Poorer economies tend to bear the brunt of the plastics waste predicament, since they are least able to have strong waste infrastructure and are the final destination for plastics exports from developed nations. While improving re-use and recyclability potential makes sense from both an economic and environmental perspective, lofty domestic and international efforts to curb plastics production and waste often give little focus on the potential for economic disruption or the downstream effects throughout the supply chain.

Plastics, widely used in both commercial and industrial settings, play an essential role in the

daily work and personal lives of tens of millions of Americans. The strength, versatility, formability, and cost-effectiveness of plastics make them an ideal option for packaging, motor vehicle parts, construction, and even medical equipment.

The plastics industry produced $358 billion in gross output in 2023, employed more than 660,000 workers, paid over $46 billion in wages, and had 13,500 establishments sprawled across 49 states, the District of Columbia, and Puerto Rico.

Nearly 460 million metric tons of plastics were used globally, with China and the United States being the largest consumers, using a combined 178 million metric tons.

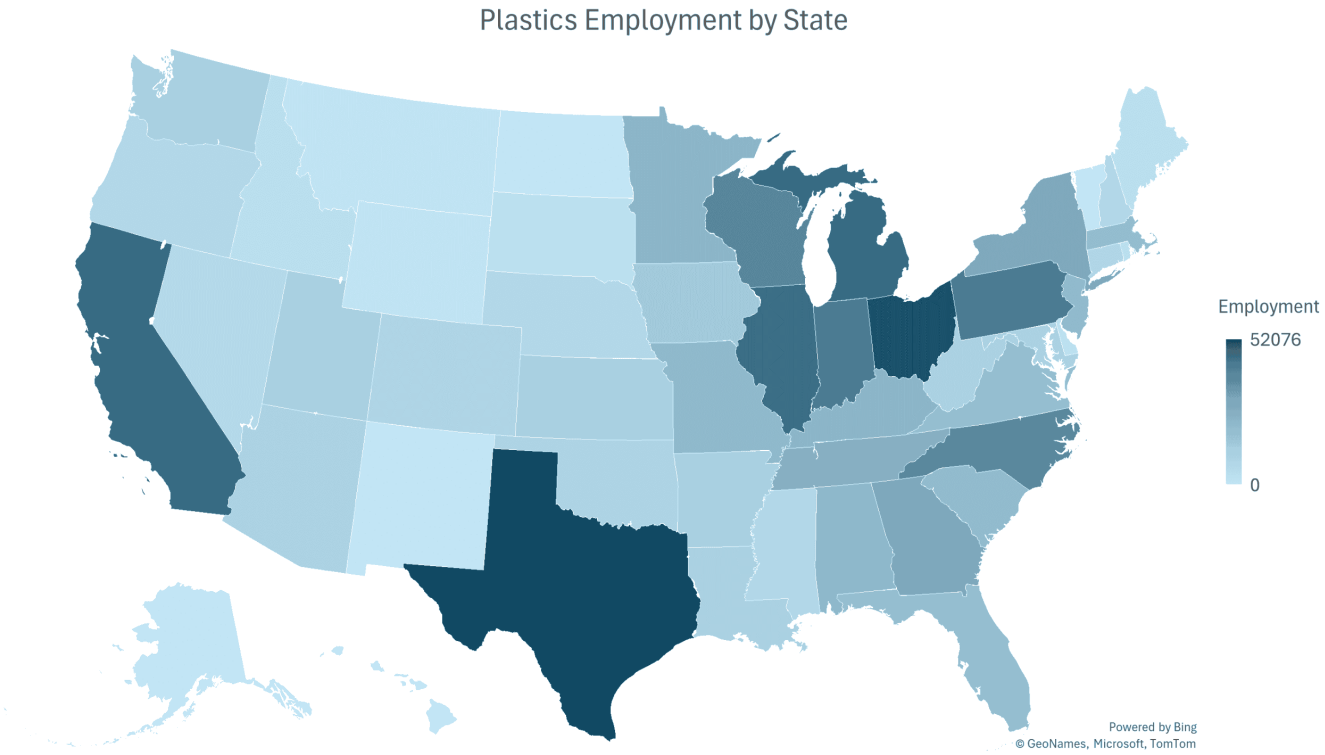
This research walks through U.S. and global plastics production and use, including the scope of the industry, its total trade value, and its prominence in practically every aspect of the worldwide economy to answer the question: Just how important are plastics?

Plastics' Economic Reach by the Numbers

Domestic

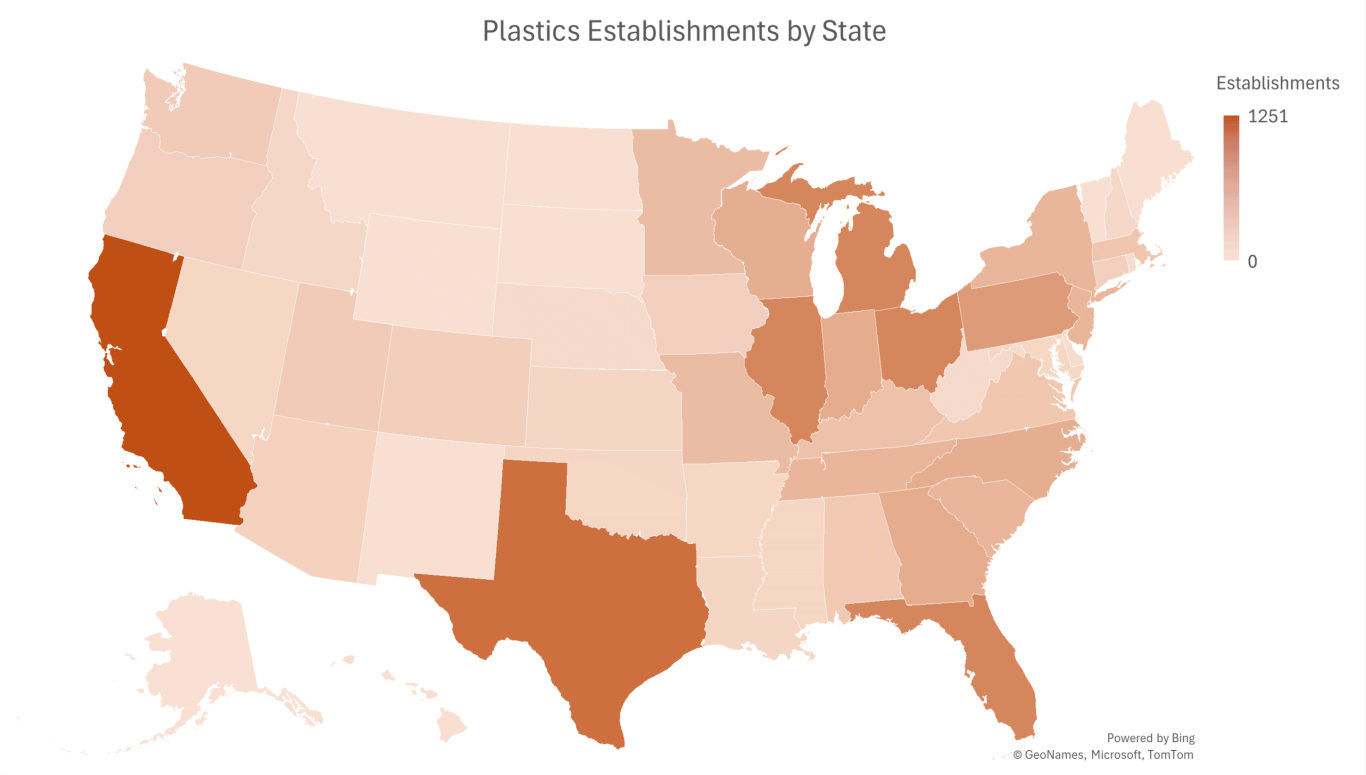
The plastics industry is a vital component of the economic engine driving the economy of the United States.

The plastics industry employed more than 660,000 workers in 2023 and paid over $46 billion in wages, according to the Bureau of Labor Statistics. Industry employment spanned 45 states and Puerto Rico with employment in Texas, Ohio, California, Michigan, and Illinois home to roughly one-third of the industry's employees.



*Source: Bureau of Labor Statistics *Quarterly Census of Employment and Wages*; note: some state data withheld due to agency disclosure policy; author's calculations*

The physical presence of more than 13,500 plastics industry establishments sprawled across 49 states, the District of Columbia, and Puerto Rico. California was home to 1,251 establishments while Texas had nearly 1,000.



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages; note: some state data withheld due to agency disclosure policy; author's calculations

Plastic manufacturers produced $358 billion of gross output in 2023, according to the Bureau of Economic Analysis. Gross output increased by 26.6 percent between 2017 and 2023.

Gross Output of Plastic Manufacturing Industry (Bil.US$)

NAICS Code	Industry Description	2017	2018	2019	2020	2021	2022	2023
325211	Plastics material and resin manufacturing	88.7	95.7	83.7	77.0	99.0	109.3	109.7
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	39.2	41.1	40.1	40.0	44.0	48.4	47.6
32612	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	18.8	21.3	20.9	19.8	25.0	27.5	27.0
32613	Laminated plastics plate, sheet (except packaging), and shape manufacturing	4.5	4.2	4.0	3.7	4.0	4.4	4.4
32614	Polystyrene foam product manufacturing	9.9	9.1	9.6	8.7	10.2	11.3	11.1
32615	Urethane and other foam product (except polystyrene) manufacturing	10.9	11.6	11.7	11.5	12.9	14.2	14.0
32616	Plastics bottle manufacturing	11.1	11.9	12.0	12.2	14.4	15.9	15.6
32619	Other plastics product manufacturing	99.6	107.0	106.8	101.3	118.9	130.8	128.6
	Total	**282.7**	**301.9**	**288.8**	**274.2**	**328.4**	**361.8**	**358.0**

*Source: U.S. Bureau of Economic Analysis, "U.Gross Output by Industry – Detail Level"

AAF analysis using the Bureau of Economic Analysis' 2017 Input-Output tables found that $334.9 billion of plastics were used as an intermediate input in production. A breakdown by

type of plastics as an intermediate input – goods used in the production process – can be found in the table below.

Type of Plastic Intermediate Input	Mil. US$
Plastics material and resin manufacturing	$89,397
Plastics packaging materials and unlaminated film and sheet manufacturing	$43,619
Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	$22,458
Laminated plastics plate, sheet (except packaging), and shape manufacturing	$5,152
Polystyrene foam product manufacturing	$12,064
Urethane and other foam product (except polystyrene) manufacturing	$16,261
Plastics bottle manufacturing	$14,848
Other plastics product manufacturing	$131,115
Total	**$334,914**

**Source: Bureau of Economic Analysis* Input-Output The Use of Commodities by Industry – Detail *2017; author's calculations*

The manufacturing sector was the largest consumer of plastics as an intermediate input, using $195 billion, or 58 percent. A breakdown of total plastics use by major industry can be found below.

Use of Plastics Commodities by Industry

Industry	Mil. US$	% of Total
Manufacturing	$195,537	58.4%
Construction	$39,777	11.9%
Wholesale Trade	$21,926	6.5%
Health Care And Social Assistance	$16,815	5.0%
Government	$9,824	2.9%
Retail Trade	$9,471	2.8%
Accommodation And Food Services	$8,941	2.7%
Professional And Technical Services	$8,614	2.6%
Information	$6,485	1.9%
Other Services, Except Government	$4,640	1.4%
Transportation and Warehousing	$4,510	1.3%
Administrative And Waste Services	$3,218	1.0%
Real Estate And Rental And Leasing	$1,774	0.5%
Mining, Quarrying, and Oil and Gas Extraction	$1,181	0.4%
Agriculture, Forestry, Fishing and Hunting	$798	0.2%
Finance And Insurance	$539	0.2%
Educational Services	$392	0.1%
Arts, Entertainment, And Recreation	$347	0.1%
Management Of Companies And Entreprises	$98	0.0%
Utilities	$27	0.0%
Total	**$334,914**	

**Source: Bureau of Economic Analysis Input-Output The Use of Commodities by Industry – Detail 2017; author's calculations*

Economy-wide, plastics represented 2.3 percent of total intermediate inputs. A breakdown can be found in the following table.

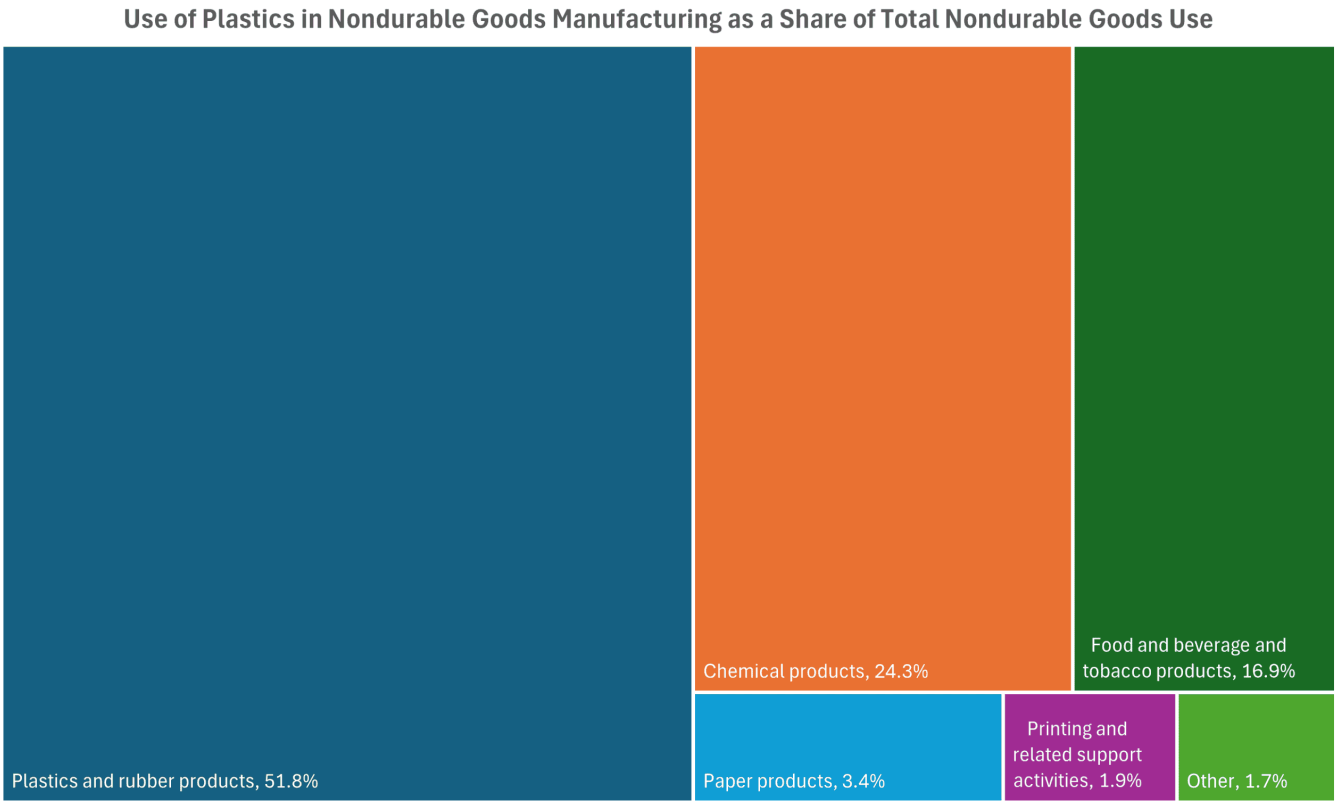
Industry	Plastics (Mil.US$)	Total Intermediate Inputs (Mil.US$)	Plastics Share (%)
Manufacturing	$195,537	$3,566,874	5.5%
Construction	$39,777	$737,747	5.4%
Wholesale Trade	$21,926	$877,732	2.5%
Accommodation And Food Services	$8,941	$483,049	1.9%
Health Care And Social Assistance	$16,815	$915,524	1.8%
Other Services, Except Government	$4,640	$275,716	1.7%
Retail Trade	$9,471	$668,020	1.4%
Professional And Technical Services	$8,614	$743,399	1.2%
Information	$6,485	$753,282	0.9%
Transportation and Warehousing	$4,510	$591,449	0.8%
Government	$9,824	$1,291,737	0.8%
Administrative And Waste Services	$3,218	$452,330	0.7%
Mining, Quarrying, and Oil and Gas Extraction	$1,181	$195,472	0.6%
Educational Services	$392	$111,882	0.4%
Agriculture, Forestry, Fishing and Hunting	$798	$272,071	0.3%
Arts, Entertainment, And Recreation	$347	$138,743	0.3%
Real Estate And Rental And Leasing	$1,774	$1,122,370	0.2%
Management Of Companies And Entreprises	$98	$198,490	0.0%
Finance And Insurance	$539	$1,299,724	0.0%
Utilities	$27	$160,407	0.0%
Total	**$334,914**	**$14,856,018**	**2.3%**

**Source: Bureau of Economic Analysis* Input-Output The Use of Commodities by Industry – Detail *2017; author's calculations*

Manufacturing Sector Use

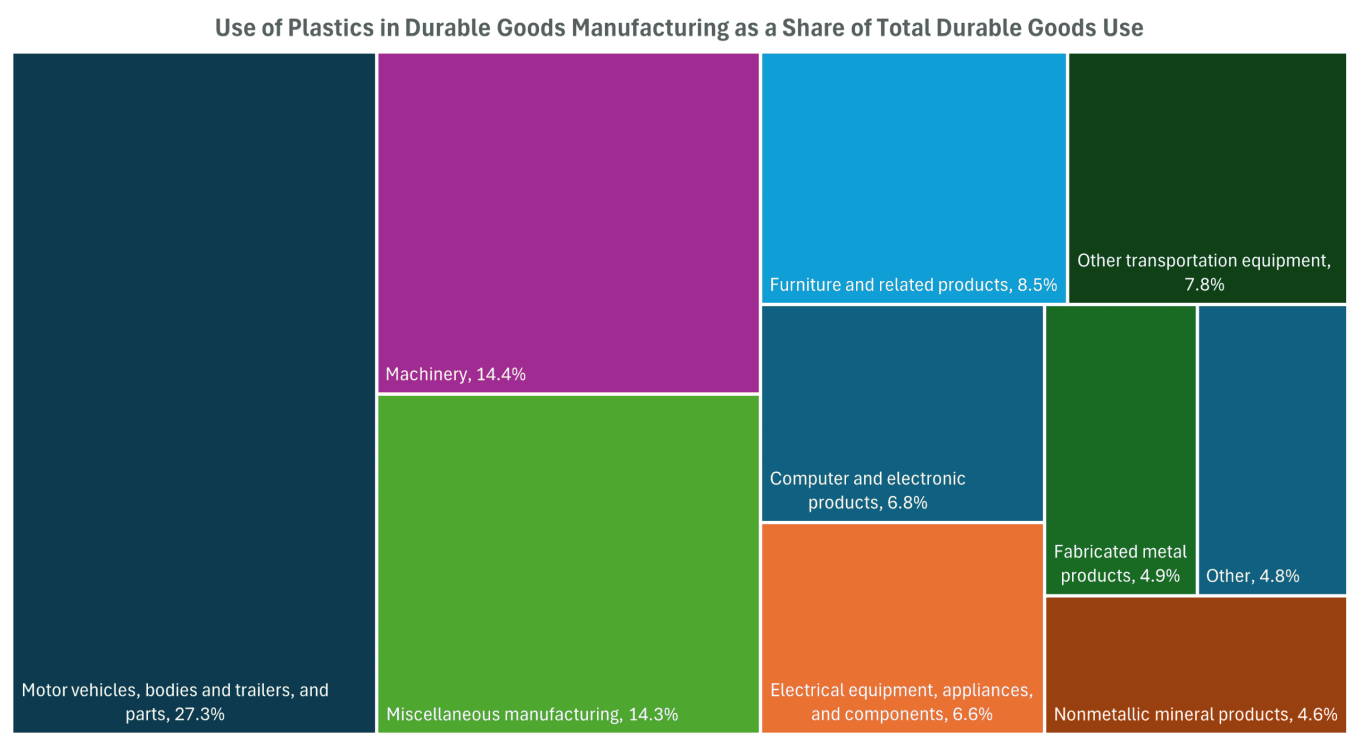
A detailed look at the manufacturing sector showed that nondurable goods manufacturing consumed 41.5 percent of plastics while durable goods manufacturing consumed nearly 17 percent.

Plastics and rubber products manufacturing and chemical products manufacturing used 51.8 percent and 24.3 percent of the plastics used in nondurable goods manufacturing, respectively.



*Source: Bureau of Economic Analysis *Input-Output The Use of Commodities by Industry – Detail 2017; author's calculations*

Motor vehicles, bodies and trailers, and parts manufacturing used 27.3 percent of plastics used in durable goods manufacturing, while machinery manufacturing used 14.4 percent.



*Source: Bureau of Economic Analysis *Input-Output The Use of Commodities by Industry – Detail* 2017; author's calculations*

A more detailed breakdown shows the type of plastics used as an intermediate input across 37 manufacturing industry groups.

Type of Plastics as an Intermediate Input (Mil. US$)

Manufacturing Industry (Mil. US$)	Plastics material and resin manufacturing	Plastics packaging materials and unlaminated film and sheet manufacturing	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	Laminated plastics plate, sheet (except packaging), and shape manufacturing
Aerospace product and parts manufacturing	$0	$17	$0	$14
Agricultural implement manufacturing	$0	$0	$0	$12
All other transportation equipment manufacturing	$235	$749	$319	$103
Apparel and leather and allied products	$28	$8	$8	$3
Automobile manufacturing	$0	$42	$9	$4
Basic chemical manufacturing	$220	$198	$1,357	$0
Beverage manufacturing	$0	$39	$0	$0
Communications equipment manufacturing	$15	$80	$1	$0
Computer and peripheral equipment manufacturing	$0	$21	$42	$0
Construction machinery manufacturing	$0	$61	$0	$6
Electrical equipment, appliances, and components	$1,343	$1,122	$137	$102
Fabricated metal products	$680	$831	$197	$362
Food manufacturing	$558	$4,447	$81	$20
Furniture and related products	$451	$312	$22	$725
Heavy duty truck manufacturing	$1	$129	$4	$2
Iron and steel mills and manufacturing from purchased steel	$5	$191	$0	$0
Light truck and utility vehicle manufacturing	$0	$764	$192	$71
Medical equipment and supplies manufacturing	$1,508	$854	$90	$163
Mining and oil and gas field machinery manufacturing	$0	$54	$13	$9
Motor vehicle body, trailer, and parts manufacturing	$2,655	$1,688	$236	$114
Navigational, measuring, electromedical, and control instruments manufacturing	$91	$1,354	$169	$226
Nonferrous metal production and processing and foundries	$13	$105	$20	$0
Nonmetallic mineral products	$1,464	$640	$12	$8
Other chemical manufacturing	$7,250	$445	$376	$12
Other computer and electronic product manufacturing	$7	$11	$2	$2
Other machinery	$286	$1,726	$290	$260
Other miscellaneous manufacturing	$965	$903	$135	$91
Paper products	$1,582	$2,471	$171	$110
Petroleum and coal products	$0	$104	$51	$0
Pharmaceutical and medicine manufacturing	$0	$54	$0	$0
Plastics and rubber products	$53,780	$9,347	$1,663	$1,044
Printing and related support activities	$0	$1,676	$416	$4
Resin, rubber, and artificial fibers manufacturing	$13,449	$137	$120	$10
Semiconductor and other electronic component manufacturing	$151	$439	$42	$19
Textile mills and textile product mills	$1,388	$218	$20	$21
Tobacco manufacturing	$1	$0	$0	$78
Wood products	$968	$151	$305	$8
Total	**$89,094**	**$31,388**	**$6,500**	**$3,603**

cont.

Type of Plastics as an Intermediate Input (Mil. US$)

Manufacturing Industry (Mil. US$)	Polystyrene foam product manufacturing	Urethane and other foam product (except polystyrene) manufacturing	Plastics bottle manufacturing	Other plastics product manufacturing	Total
Aerospace product and parts manufacturing	$0	$0	$0	$2,793	**$2,824**
Agricultural implement manufacturing	$0	$0	$0	$503	**$515**
All other transportation equipment manufacturing	$0	$0	$0	$154	**$1,560**
Apparel and leather and allied products	$3	$7	$0	$23	**$80**
Automobile manufacturing	$13	$68	$0	$408	**$544**
Basic chemical manufacturing	$1	$0	$21	$121	**$1,918**
Beverage manufacturing	$1	$0	$4,462	$690	**$5,192**
Communications equipment manufacturing	$0	$13	$0	$101	**$210**
Computer and peripheral equipment manufacturing	$0	$0	$0	$64	**$127**
Construction machinery manufacturing	$0	$0	$0	$220	**$287**
Electrical equipment, appliances, and components	$3	$4	$0	$1,015	**$3,726**
Fabricated metal products	$15	$24	$1	$644	**$2,754**
Food manufacturing	$87	$43	$5,968	$6,950	**$18,154**
Furniture and related products	$0	$2,421	$0	$874	**$4,805**
Heavy duty truck manufacturing	$2	$5	$0	$228	**$371**
Iron and steel mills and manufacturing from purchased steel	$0	$0	$0	$124	**$320**
Light truck and utility vehicle manufacturing	$154	$421	$0	$1,109	**$2,711**
Medical equipment and supplies manufacturing	$14	$54	$0	$2,206	**$4,889**
Mining and oil and gas field machinery manufacturing	$3	$5	$0	$211	**$295**
Motor vehicle body, trailer, and parts manufacturing	$17	$996	$0	$6,095	**$11,801**
Navigational, measuring, electromedical, and control instruments manufacturing	$0	$7	$0	$624	**$2,471**
Nonferrous metal production and processing and foundries	$0	$0	$0	$39	**$177**
Nonmetallic mineral products	$0	$0	$4	$473	**$2,601**
Other chemical manufacturing	$204	$0	$2,908	$4,614	**$15,809**
Other computer and electronic product manufacturing	$0	$0	$0	$136	**$158**
Other machinery	$9	$9	$0	$4,462	**$7,042**
Other miscellaneous manufacturing	$3	$6	$0	$1,106	**$3,209**
Paper products	$8	$16	$52	$276	**$4,686**
Petroleum and coal products	$23	$0	$163	$261	**$602**
Pharmaceutical and medicine manufacturing	$439	$10	$168	$766	**$1,437**
Plastics and rubber products	$38	$370	$26	$5,817	**$72,085**
Printing and related support activities	$0	$0	$0	$534	**$2,630**
Resin, rubber, and artificial fibers manufacturing	$0	$0	$0	$921	**$14,637**
Semiconductor and other electronic component manufacturing	$0	$2	$0	$221	**$874**
Textile mills and textile product mills	$0	$55	$0	$14	**$1,716**
Tobacco manufacturing	$0	$0	$0	$22	**$101**
Wood products	$0	$37	$0	$750	**$2,219**
Total	**$1,037**	**$4,573**	**$13,773**	**$45,569**	**$195,537**

**Source: Bureau of Economic Analysis Input-Output The Use of Commodities by Industry – Detail 2017; author's calculations*

An AAF analysis of 232 detailed manufacturing industries showed that plastics as a share of total intermediate inputs was greater than or equal to 10 percent in 40 sub-industries and 25 percent in 12 sub-industries. Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing was the industry most reliant on plastics, accounting for 67 percent of total intermediate inputs. The top 10 most intense users can be found below.

Industry	Plastics (Mil. US$)	Total Intermediate Inputs (Mil. US$)	Plastics Share (%)
Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	$8,225	$12,198	67.4%
Plastics packaging materials and unlaminated film and sheet manufacturing	$17,477	$27,720	63.0%
Plastics bottle manufacturing	$4,829	$7,802	61.9%
Ophthalmic goods manufacturing	$1,321	$2,465	53.6%
Other plastics product manufacturing	$33,938	$67,072	50.6%
Laminated plastics plate, sheet (except packaging), and shape manufacturing	$1,266	$2,612	48.5%
Polystyrene foam product manufacturing	$3,208	$7,152	44.9%
Coffee and tea manufacturing	$3,604	$10,425	34.6%
Manufacturing and reproducing magnetic and optical media	$132	$482	27.4%
Other furniture related product manufacturing	$1,803	$6,904	26.1%
Total	**$75,803**	**$144,832**	**52.3%**

**Source: Bureau of Economic Analysis Input-Output The Use of Commodities by Industry – Detail 2017; author's calculations*

Construction Industry

Behind the manufacturing industry, the construction sector was the second-largest user of plastics products as an intermediate input in production, consuming $39.8 billion. AAF analysis found that the nonresidential and residential maintenance and repair sub-sectors were the heaviest users of plastics, representing 9.1 percent and 7.7 percent of total intermediate inputs, respectively.

Industry	Plastics (Mil. US$)	Total Intermediate Inputs (Mil. US$)	Plastics Share (%)
Nonresidential maintenance and repair	$9,023	$98,982	9.1%
Residential maintenance and repair	$2,799	$36,118	7.7%
Single-family residential structures	$8,401	$118,749	7.1%
Power and communication structures	$1,788	$32,647	5.5%
Office and commercial structures	$4,039	$79,023	5.1%
Other residential structures	$7,095	$141,915	5.0%
Health care structures	$749	$15,711	4.8%
Other nonresidential structures	$1,933	$48,243	4.0%
Multifamily residential structures	$1,198	$34,123	3.5%
Manufacturing structures	$668	$27,220	2.5%
Transportation structures and highways and streets	$1,544	$63,781	2.4%
Educational and vocational structures	$540	$41,235	1.3%
Total	**$39,777**	**$737,747**	**5.4%**

**Source: Bureau of Economic Analysis Input-Output The Use of Commodities by Industry – Detail 2017; author's calculations*

A further breakdown shows the type of plastics used as an intermediate input across various construction industry groups.

Construction Industry (Mil. US$)	Type of Plastics as an Intermediate Input (Mil. US$)			
	Plastics material and resin manufacturing	Plastics packaging materials and unlaminated film and sheet manufacturing	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	Laminated plastics plate, sheet (except packaging), and shape manufacturing
Education, hospital, and health structures	$0	$58	$144	$0
Maintenance and repair construction	$0		$1,944	$0
Office and commercial structures	$0	$85	$1,239	$0
Other nonresidential structures	$0	$121	$755	$0
Other residential construction	$0	$934	$1,392	$0
Power and communication structures	$0	$108	$534	$0
Single-family residential structures	$0	$172	$1,561	$0
Transportation structures and highways and streets	$0	$71	$555	$0
Total	**$0**	**$1,681**	**$8,124**	**$0**

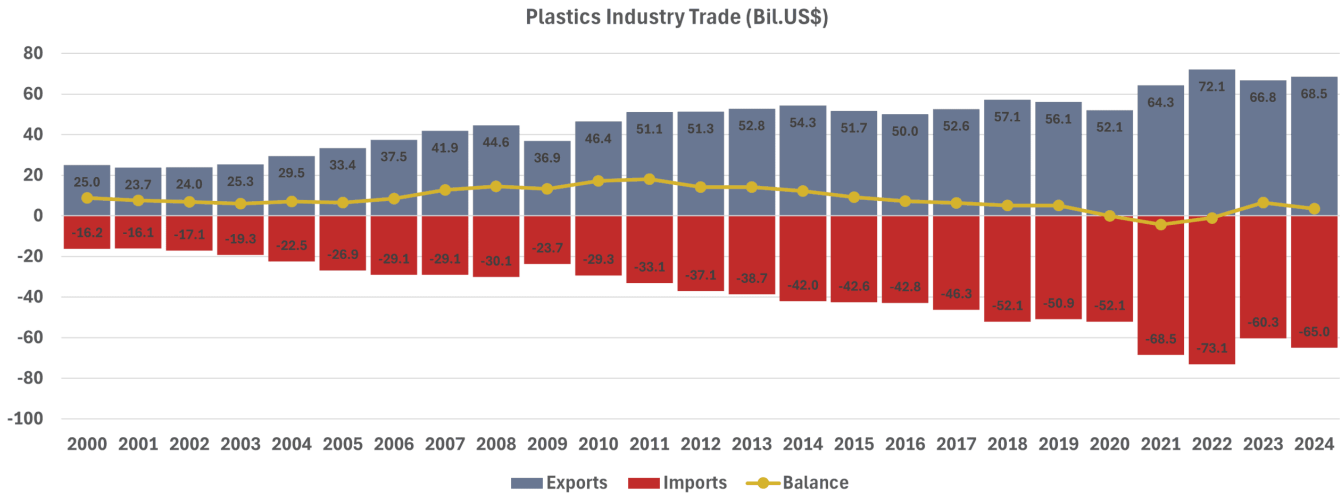
cont.

Construction Industry (Mil. US$)	Type of Plastics as an Intermediate Input (Mil. US$)				
	Polystyrene foam product manufacturing	Urethane and other foam product (except polystyrene) manufacturing	Plastics bottle manufacturing	Other plastics product manufacturing	**Total**
Education, hospital, and health structures	$7	$3	$0	$1,077	**$1,289**
Maintenance and repair construction	$377	$787	$3	$8,579	**$11,822**
Office and commercial structures	$612	$22	$0	$2,081	**$4,039**
Other nonresidential structures	$324	$161	$0	$1,240	**$2,601**
Other residential construction	$343	$745	$0	$4,879	**$8,293**
Power and communication structures	$113	$216	$0	$817	**$1,788**
Single-family residential structures	$388	$71	$0	$6,209	**$8,401**
Transportation structures and highways and streets	$45	$105	$0	$768	**$1,544**
Total	**$2,209**	**$2,110**	**$3**	**$25,650**	**$39,777**

**Source: Bureau of Economic Analysis* Input-Output The Use of Commodities by Industry – Detail *2017; author's calculations*

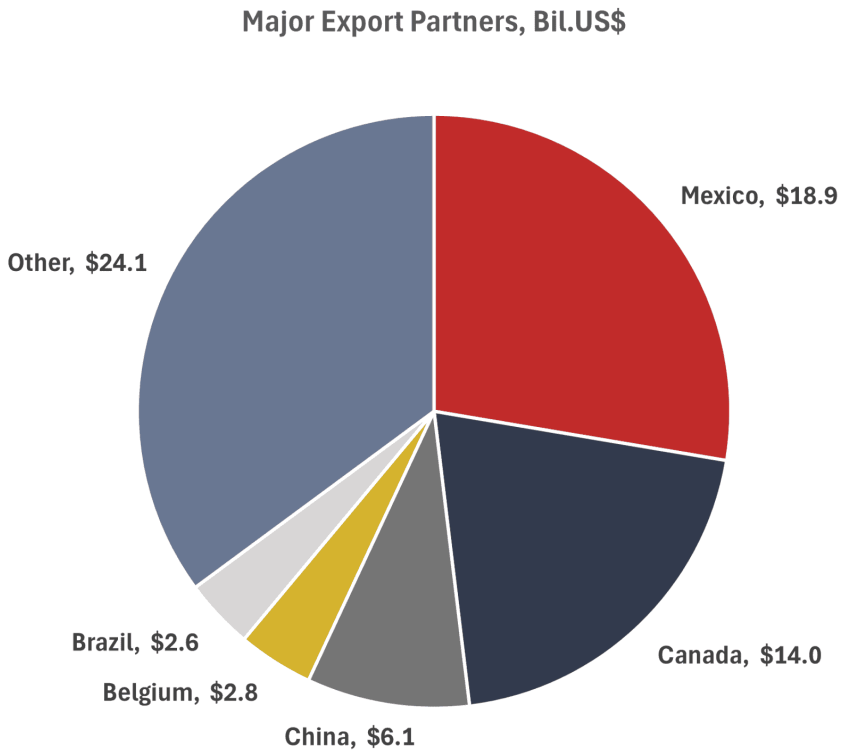
International

The plastics industry is a net exporter of goods, meaning the industry exports more than it imports. In 2024, the United States exported $68.5 billion of plastics goods and imported $65.0 billion.



*Source: *U.S. Trade and Tariff Data USITC*

Mexico and Canada were among the largest export destinations with exports of $18.9 billion and $14.0 billion, respectively. These two countries accounted for nearly half of all plastics industry exports.



*Source: *U.S. Trade and Tariff Data USITC*

China dominated the global use of plastics according to the most recent data from the OECD, consuming more than 94 million metric tons, or 20.3 percent. The United States was the world's second-largest user of plastics, consuming 84 million metric tons, or 18.3 percent.

Global Plastics Use by Geography, 2019 (Mil.Metric Tons)	Mil. Metric Tons	% of Total
OECD		
OECD America		
United States	84.306	18.3%
Canada	7.539	1.6%
Other OECD America	13.123	2.9%
European Union countries in OECD	63.673	13.8%
Non-European Union countries in OECD Europe	21.371	4.6%
Australia and New Zealand	4.385	1.0%
OECD Asia	18.207	4.0%
Latin America	22.863	5.0%
European Union non-OECD countries	3.322	0.7%
Other non-OECD Eurasia	20.954	4.6%
Middle East and North Africa	21.170	4.6%
Other Africa	17.852	3.9%
China	94.006	20.4%
India	29.333	6.4%
Other Asia	37.641	8.2%
Total	**459.746**	

**Source: OECD Plastics Use in 2019*

Globally, plastics are predominantly used for packaging. Data from the OECD showed that 142.6 million metric tons of plastics were used for packaging, representing more than 30 percent of total plastics use.

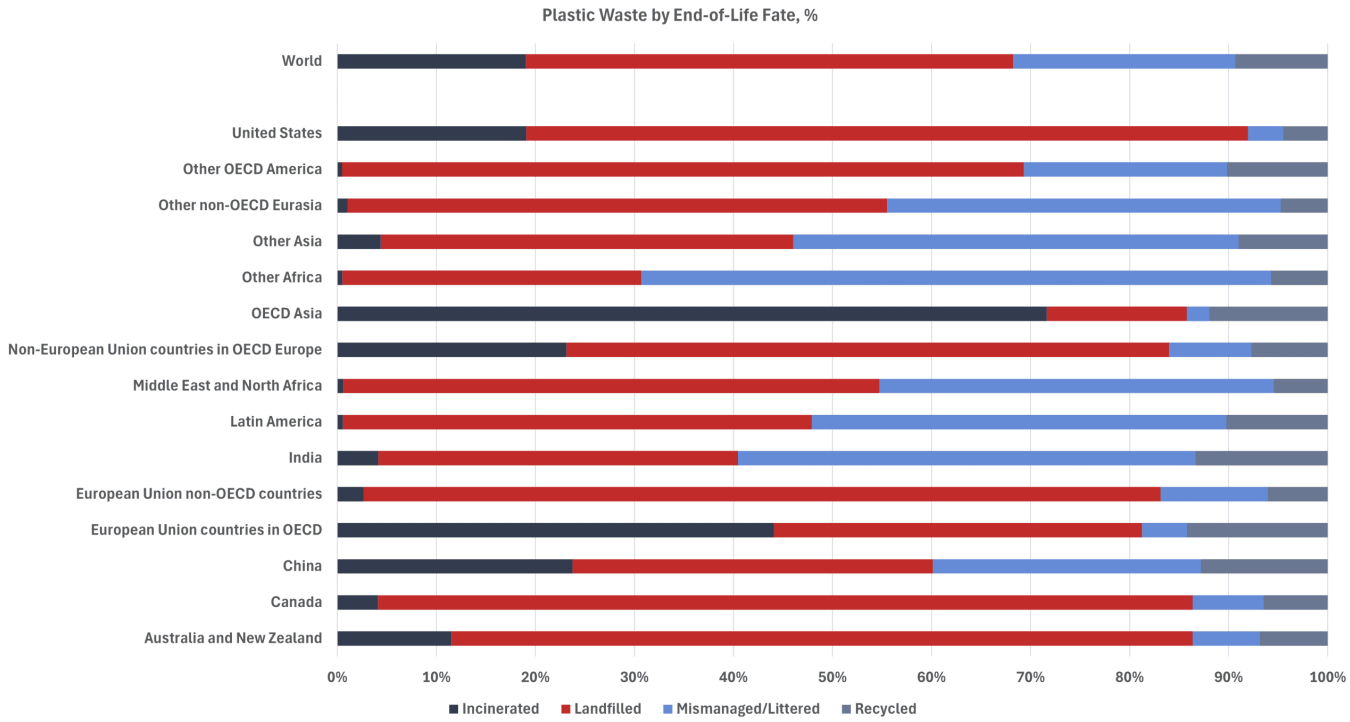
Global Plastics Use by Application, 2019

Use	Mil. Metric Tons	% of Total
Packaging	142.599	31.0%
Building & construction	76.893	16.7%
Other	66.315	14.4%
Transportation	62.165	13.5%
other	54.431	11.8%
tires	7.734	1.7%
Consumer & institutional Products	46.662	10.1%
Textile sector	43.875	9.5%
clothing	28.759	6.3%
others	15.116	3.3%
Electrical/electronics	17.305	3.8%
Industrial/machinery	2.683	0.6%
Road marking	0.682	0.1%
Marine coatings	0.541	0.1%
Personal care products	0.027	0.0%
Total	**459.747**	

**Source: OECD Plastics Use in 2019*

Plastics Waste

The Organisation for Economic Co-operation and Development (OECD) estimated that 9 percent of the 353 million metric tons of plastics waste was recycled in 2019. Meanwhile, 49 percent of plastics waste ended up in landfills, 22 percent was either mismanaged – plastics waste that is not properly disposed of and can end up in uncontrolled dump sites – or littered, and the remaining 19 percent was incinerated. In the United States, only 4 percent of plastics waste was recycled while 73 percent ended up in landfills.



Source: OECD Plastic Waste – Estimations from 1990 to 2019; author's calculations

Plastics leakage – the amount of plastics waste that inadvertently enters the environment – is another area of concern. The OECD estimated that 22 million metric tons of plastics leaked into the environment in 2019.

Global Plastics Leakage, 2019 (Mil.Metric Tons)	Macroplastics	Microplastics	Total
OECD			
OECD America			
United States	0.561	0.390	0.951
Canada	0.107	0.033	0.140
Other OECD America	0.558	0.074	0.632
European Union countries in OECD	0.551	0.281	0.832
Non-European Union countries in OECD Europe	0.323	0.075	0.398
Australia and New Zealand	0.031	0.017	0.048
OECD Asia	0.090	0.077	0.167
Latin America	1.817	0.176	1.993
European Union non-OECD countries	0.068	0.017	0.086
Other non-OECD Eurasia	1.396	0.112	1.508
Middle East and North Africa	1.405	0.182	1.587
Other Africa	3.277	0.188	3.465
China	4.384	0.493	4.876
India	1.943	0.262	2.206
Other Asia	2.930	0.305	3.235
Total	**19.440**	**2.684**	**22.124**

**Source: OECD Plastic Leakage 2019*

Domestic policymakers and international organizations have proposed several solutions to curb the harmful environmental and human health risks posed by plastics pollution.

Efforts to Curb Plastics Waste

Domestic and International Response

Domestic production of plastics products and plastics material and resin has increased nearly 36 percent and 19 percent since 1990, respectively. The increased production and use of plastics, specifically single-use plastics, has prompted several state and local governments to implement regulations to curb the resulting plastics waste. States and municipalities across the country have imposed taxes on single-use plastic bags while 10 states, including California, Connecticut, and New York, have banned them outright.

Internationally, the United Nations Environment Assembly is negotiating a legally binding treaty focused on ending plastics pollution. The latest proposal from the UN includes measures to reduce primary plastics production and regulate chemicals used in plastics. In response to the potential UN agreement, industry groups have warned that proposals limiting plastics production could harm innovation and "result in the production and use of less environmentally friendly alternatives." Instead, these industry groups have advocated

for an approach focused on preventing plastics waste, and private-sector recycling programs.

A reduction in plastics products would significantly curb the $358 billion U.S. plastics industry and ripple through the supply chain.

Market-Driven Advanced Recycling

Although industry groups and individual plastics manufacturers have largely pushed back against efforts to curb plastics production, they have promoted advanced recycling measures to offset the potential environmental and health impacts of increased waste.

Advanced recycling technology breaks down plastics to their molecular level which can then become raw materials used in future plastics or other production. Moreover, these processes allow for a wider variety of products to be recycled.

Analysis by McKinsey noted that while advanced recycling is currently at limited scale and requires the development of new technologies and waste collection, companies are working to make these plans possible.

Plastics producers have both a financial and reputational incentive to continue investing in advanced recycling technologies. The ability to recycle plastics into usable materials can reduce costs and, perhaps, make their brands more appealing to consumers. This market-driven approach would expand commercial opportunities for both recycling and production whereas the UN proposal would reduce production.

Conclusion

Dealing with plastics waste continues to frustrate domestic policymakers and international organizations. Industry-led advancements in recycling technologies promise to create commercial opportunities and avoid top-down efforts to reduce plastics waste through production curbs that fail to consider the potential economic impact.

Any domestic or international policy changes that impact the production of plastics would cause significant manufacturing and supply chain disruption to the $358 billion U.S. plastics industry that employs more than 660,000 workers with establishments that spanned 49 states, the District of Columbia, and Puerto Rico.