#### North American New Capacity Projects since 2016 – Containerboard

Nearly 2 million tons of new containerboard capacity projects have been completed or are slated to come online in 2023, excluding machine/mill conversions. Pratt Industries accounts for nearly half the total

		<b>Net New Capacity</b>	1
Company / Location	Timing	(000 tons)	Description
Pratt Industries - Henderson, KY	Q4 2023	540	\$465 million new single-machine recycled containerboard mill.  Corrugated converting plant (requiring additional investment)  would start up by 2026
Atlantic Packaging - Whitby, ON	1Q/2023	400	New lightweight recycled containerboard machine adjacent to machine converted to same grades in 2013
Hood Container - St. Francisville, LA	2021	Undisclosed	\$50 million investment for efficiency upgrade/capacity expansion
Green Bay Packaging - Green Bay, WI	1Q/2021	445	New 685,000 ton capacity machine to replace 240,000 ton machine
WestRock - Florence, SC	2H/2020	30	New 710,000 ton machine replacing three older machines
Pratt Ind Wapakoneta, OH	4Q/2019	400	New single machine containerboard mill
Hood Container - St. Francisville, LA	2Q/2018	120	Installed a modern press section on the mill's large H1 paper machine and adding a recycling plant
Net New Capacity  Speculative	•	1,935	
Empire Recycled Fiber - Dayton, OH	2025	350	Ongoing effort to site a recycled fiber processing facility, originally planned as a recycled pulp mill in PA, shifted to containerboard in 2021 and to OH site in 2022
Crossroads Paper - Salt Lake City, UT	TBD	340	\$320 million anticipated investment to construct greenfield site in Salt Lake City area. Cellmark to sell Mill's containerboard.  Project still seeking a site as of early 2023
<b>Speculative Net New Capacity</b>	•	690	

Note: Excludes grade conversion projects

# North American New Capacity Projects since 2016 – Tissue (1 of 2)

1.5 million tons of new tissue capacity projects have been completed or are slated to come on line by 2024, excluding machine/mill conversions

Net New Capacity	
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Company / Location	Timing	(000 tons)	Description
Kruger - Sherbrooke, QC	2024	66	\$275 million investment in new light dry crepe machine and two additional converting lines
Georgia Pacific - Green Bay, WI	1H/2024	~75	\$500 million investment in new TAD machine and converting at Broadway mill in Green Bay
First Quality - TBD	3Q/2023	70	In July 2020, announced the Anderson 2022 machine (see below) and additional TAD machine and converting equipment at unspecified location with anticipated completion 12 months after the Anderson machine
Irving - Macon, GA	2022	83	\$400 million investment in second TAD machine at site and additional converting equipment
First Quality - Anderson, SC	3Q/2022	70	Fifth TAD machine at the mill and additional converting equipment
Kruger - Sherbrooke, QC	1Q/2021	77	\$436 million new TAD machine and converting equipment
Kimberly Clark - Mobile, AL	2020	22	\$100 million investment in AFH mill, including anticipated
Georgia Pacific - Naheola, AL	2020	9	New tissue machine to replace two older machines
Sofidel - Inola, OK	4Q/2020	120	\$360 million new mill with two Toscotec tissue machines and integrated converting
First Quality - Lock Haven, PA	1Q/2020	70	Third TAD machine at the mill
Georgia Pacific - Palatka, FL	2019	80	\$400 million spend for new TAD machine, converting equipment and related infrastructure
Irving - Macon, GA	2019	82	New mill with Valmet Advantage 200 TAD machine

Note: Excludes grade conversion projects

# North American New Capacity Projects since 2016 – Tissue (2 of 2)

1.5 million tons of new tissue capacity projects have been completed or are slated to come on line by 2024, excluding machine/mill conversions

Net New Capacity
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Company / Location	Timing	(000 tons)	Description
Clearwater Paper - Shelby, NC	1Q/2019	70	New Valmet Advantage 200 NTT tissue PM
Sofidel - Circleville, OH	Oct. 2018	140	\$400 million new mill with two NTT machines and ten converting lines
First Quality - Anderson, SC	2Q/2018	70	Fourth TAD machine at the mill
Little Rapids - Shawano, WI	2H/2017	12	Machine upgrade
Kruger - Crabtree, QC	3Q/2017	22	\$55 million to add new paper machine
Orchids Paper - Barnwell, SC	2Q/2017	35	New 100% QRT machine
Resolute Forest Products -	1Q/2017	66	\$270 million new machine
St. Croix - Baileyville, ME	Aug-16	132	2 machines
First Quality - Anderson, SC	May-16	70	Third TAD machine at the mill
Von Drehle - Natchez, MS	Mar-16	35	NTT machine
Net New Capacity		1,476	

Note: Excludes grade conversion projects

# North American New Capacity Projects since 2016 – Paperboard

Graphic Packaging completed a 500,000 ton coated recycled board machine at its Kalamazoo, MI mill in 2022. It plans a 550,000 ton new single machine mill in Waco, TX. The net capacity impact of these projects is much smaller due to offsetting closures of less efficient mills

		Net New Capacity	
Company / Location	Timing	(000 tons)	Description
Graphic Packaging - Waco, TX	Early 2026	200	\$1 billion investment in new 550,000 coated recycled board
			(CRB) machine, enabling closure of three other mills in IA, OH and ON
Graphic Packaging -	1Q/2022	125	\$600 million "transformational investment" in new CRB
Kalamazoo, MI			machine with 500,000 ton capacity. New machine enabled
			_closure of mill in Battle Creek, MI and machine at Kalamazoo
Net New Capacity		325	

Note: Excludes grade conversion projects

#### North American New Capacity Projects since 2016 – Pulp

#### New pulp projects are focusing on recycled or non-wood fibers

		<b>Net New Capacity</b>	
Company / Location	Timing	(000 metric tons)	Description
Total Fiber Recovery - Chesapeake, VA	4Q/2023	240	\$80 million to establish its first recycled pulp production facility
ND Paper - Old Town, ME	Apr-21	73	Added a recycled brown pulp line at its operating unbleached kraft pulp (UKP) mill, which ND Paper restarted on UKP in 2019
Genera - Vonore, TN	2020	36	\$118 million to produce sustainable agricultural fiber products including market pulp and thermoformed fiber products
Net New Capacity  Speculative		349	
Red Leaf Pulp - Regina, SK	4Q/2024	182	Wheat straw fiber pulp mill to be constructed at estimated cost of \$286 million (as of June 2021)
Celadon - TBD	TBD	TBD	Backed by Kamine Development Corporation Sustainable Infrastructure (KDC), Celeadon has made siting announcements for recycled pulp mills in Savannah, GA (11/21) and Chesapeake, VA (1/22) but subsequent progress unclear. Savannah project (Phase 1 of 2) anticipated at \$155 million investment for 450,000 tons of output. \$267 million investment targeted for Chesapeake, capacity not stated
<u>Idle/Shut</u>			
Columbia Pulp - Lyons Ferry, WA	Oct-19	142	Wheat straw based pulp mill. Idle since Feb. 22 after initial operation from Oct. 2019 - April 2020 and restart in July 2021

Note: Excludes grade conversion projects