Domestic Recycled Paper Capacity Increases - Updated
May 14, 2021

On January 1, 2018, the Chinese government’s import ban on mixed paper went into effect. Three years later, that country’s ban on all wastepaper imports, including corrugated boxes, went into effect. China was not the major end market for America’s recycled paper. At the peak of recycled paper exports, U.S. mills still bought 60 percent of America’s wastepaper. However, Chinese mills were an important end market, especially for residential mixed paper.

When the bans were announced in 2017, North American paper mills saw an opportunity. They are meeting the challenge with dramatic increases in recycled paper capacity. When NERC first published this list in November, 2018, it included new capacity at 17 mills, of which three projects were completed. This latest update includes new capacity projects at 30 mills, of which 15 have been completed. Whether or not all of the new capacity is built depends on overall economic circumstances and demand for the final products.

The majority of new capacity increases are for mills producing linerboard and corrugated medium. They will use old corrugated containers (OCC), often called “cardboard boxes”, as their primary feedstock. They are unlikely to use mixed paper unless their stock preparation system allows for its use. Nonetheless, about half of these mills plan to use some mixed paper. Several plan to consume significant amounts of residential mixed paper (RMP) which is collected at curbsides throughout the country.

The list of additional North American recycled paper capacity includes several totally new paper mills. Most of the new capacity, however, is occurring at existing or closed mills. In some cases, the mill is adding new capacity. In other cases, it is converting an existing papermaking machine to produce different end products (e.g. from making newsprint to packaging). The list also includes two new mills that will be using recycled feedstock other than OCC and RMP. One is designed to produce paper pulp and plastic pellets using beverage cartons and aseptic packages as its primary feedstock. The other will use food contaminated paper from commercial sources.

Capacity projections are based on the expanded or new mill running at full capacity. Normally this takes several years after a new machine or mill opens as the manufacturer finds customers for its products. Existing mills that are being expanded or replaced have the advantage of an existing customer base. Announcement of a new mill does not guarantee it will be built. One planned conversion is now on hold.

Sources include the Fibre Box Association, articles in Resource Recycling, Paperstock Reports, Recycling Today, Scrap Magazine, Waste 360 and Waste Dive along with company press releases, local or national newspaper articles. Resource Recycling Magazine publishes a map with detail on 18 of these facilities. See https://resource-recycling.com/recycling/2019/08/27/these-projects-are-boosting-domestic-capacity-for-recycled-paper.
Each facility is listed by name, location, whether new or converted, projected final production capacity in either tons per year (TPY), metric tonnes per year (MTPY) or tons per day (TPY), depending on the source, raw material feedstock and projected opening. Data is often incomplete because the individual companies determine what information they will release. This list will be updated as new capacity is announced or new information received.

If you have any questions about facilities on this list, please contact Chaz Miller, Chair, NERC-NEWMOA Regional Recycling Markets Committee, chazmiller9@gmail.com, 301-346-6507.

**Completed**

*Midwest Paper Group*
- Combined Locks, Wisconsin
- Conversion of coated paper to packaging
- 400,000 TPY
- OCC, double-lined preconsumer kraft and mixed paper
- 2018

*Packaging Corporation of America*
- DeRidder, Louisiana
- Conversion of newsprint to linerboard and corrugated medium
- 150,000 TPY
- OCC
- 2018

*Hood Container*
- St. Francisville, Louisiana
- “New recycling plant”
- 120,000 TPY
- OCC
- 2018

*Copamex*
- Anahuac, Mexico
- Convert existing graphic paper to recycled containerboard
- 220,000 TPY
- OCC, RMP
- 2019

*Pratt Industries*
- Wapakoneta, Ohio
- New
- 360,000 MPTY recycled corrugated packaging
- OCC, RMP, double-lined kraft
- 2019
**Bio Pappel/McKinley Paper Co**
- Port Angeles, Washington
- Converted closed graphic paper mill
- 250,000 TPY containerboard
- OCC, mixed paper
- 2020

**Port Townsend Paper**
- Port Townsend, Washington
- Existing mill makes 325,000 tons per year of kraft linerboard, corrugated medium, kraft converting paper and kraft pulp
- Expanding OCC capacity from 400 to 750 TPD
- 2020

**International Paper**
- Riverdale, Alabama
- Conversion to linerboard and containerboard using some OCC
- 450,000 TPY
- OCC
- 2020

**Packaging Corporation of America**
- Wallula, Washington
- Conversion of fine paper to linerboard
- 350,000 TPY
- OCC
- 2020

**Green Bay Packaging**
- Green Bay, Wisconsin
- New mill replacing smaller existing mill
- 685,000 TPY containerboard
- OCC, RMP
- Spring 2021

**Grupo Gondi**
- Monterey, Mexico
- New containerboard
- 441,000 TPY
- OCC
- 2021

**Georgia Pacific Juno Technology**
- Toledo, Oregon
- New
- 300 TPD containerboard
- Commercial waste from restaurants, airports, sports arenas, schools, etc.
- 2021
Nine Dragons*
- Fairmont, West Virginia
- New mill increase production capacity to 220,000 TPY and ship recycled pulp to China*
- Existing mill uses sorted office paper, newsprint, and other grades
- OCC
- 2020

Nine Dragons*
- Biron, Wisconsin
- Converted existing machine to produce corrugated medium and linerboard along with new production of recycled pulp
- 250,000+ TPY linerboard and corrugated medium*
- New 400,000 TPY recycled pulp line primarily for export to China*
- OCC, mixed paper
- 2020 existing machine converted to recycled linerboard and corrugated medium
- 2021 recycled pulp capacity

Nine Dragons*
- Rumford, Maine
- New recycled pulp facility at existing mill.
- 200,000 TPY pulp for export*
- OCC
- 2021

*NOTE: Nine Dragons 2021 total U.S. recycled fiber capacity of 569,000 tons
- 269,000 tons packaging and 313,000 tons of recycled pulp

Announced Not Yet Open

Nine Dragons
- Old Town, Maine
- Convert existing machine to produce 200 TPD/70,000 TPY unbleached recycled pulp*
- OCC
- 2021

Global Win/Shanying; Phoenix Paper
- Wickliffe, Ballard County, Kentucky
- New mill will produce recycled pulp for export to China. This facility joins the conversion of a closed coated paper mill to kraft pulp and packaging using virgin raw material. Total output 700,000 TPY
- Began production of bleached virgin hardwood pulp on May 23, 2019
- OCC, RMP
- Third quarter 2021 for recycled pulp mill

Total Recycle Fiber
- Chesapeake, Virginia
- New mill
- 203,000 MTPY dry recycled pulp
- 231,000 MTPY: 90% RMP/OCC, 5% non-paper contaminants, 6% non-pulpable paper
- Fourth quarter 2021
**Norpac**
- Longview, Washington
- Converting existing production capacity to now make linerboard, corrugated medium, bags and specialty Kraft papers
- 400,000 TPY OCC and mixed paper
- 2022

**Crossroads Paper**
- Salt Lake City, Utah
- New facility to make containerboard for corrugated boxes
- 350,000 TPY of “packaging paper” production
- 380,000 TPY OCC and mixed paper
- 2022

**Kamine/Celadon**
- Tampa, Florida
- New facility to make 400,000 TPY of recycled pulp
- OCC and RMP
- 2022

**Sonoco**
- Hartsville South Carolina & Wisconsin Rapids, Wisconsin
- Conversion at Hartsville and increased capacity at Wisconsin Rapids to produce uncoated recycled paperboard. Note: these conversions displace an equal amount of capacity that will be closed at other facilities
- OCC and mixed paper
- 2022

**CorrVentures**
- Albany, New York (Rensselaer County)
- New mill built on site of existing facility
- 300,000 TPY 100% recycled lightweight containerboard; 70% linerboard and 30% corrugating medium
- OCC, RMP (330,000 TPY consumed – the mill expects mixed paper will be 13 - 22 percent consumption)
- First quarter 2022

**Ecomelida**
- Orangeburg County, South Carolina
- New
- Process food and beverage cartons including aseptic packages and paper mill pulp byproducts into 72,000 MTPY plastic pellets and 36,000 MTPY paper pulp for export to China
- Fourth quarter, 2020 plastic pellets, First quarter, 2022, paper pulp

**Graphics Paper, Inc.**
- Kalamazoo, Michigan
- New facility to make 500,000 TPY of coated recycled paperboard. Note: this facility displaces an equal amount of capacity that will be closed at other facilities.
- First quarter 2022
Atlantic Packaging Products
- Whitby, Ontario
- 400,000 MTPY corrugated medium and linerboard
- OCC and RMP
- First quarter 2022

Empire Recycled Fiber
- Fairless Hills, Pennsylvania
- New facility to make 440,000 TPY of recycled paper pulp
- 505,000 TPY of OCC and mixed paper as feedstock with 70 percent OCC and 30 percent mixed paper
- Second quarter 2022

Cascades
- Hanover, Virginia
- Convert closed recycled newsprint mill to recycled lightweight linerboard and corrugated medium
- 400,000 MTPY
- OCC, RMP
- Fourth quarter 2022

Domtar
- Kingsport, Tennessee
- Conversion of existing printed paper mill to packaging grades
- 600,000 TPY of recycled-content linerboard and corrugated medium
- 660,000 TPY of OCC and mixed paper
- First quarter 2023

Pratt Industries announced two new mills relying on OCC and mixed paper will be built by 2026. No locations were announced.

Projects on Hold

Verso Corporation
- Duluth, Minnesota
- Addition of new recycled packaging capacity at mill previously only making virgin graphics paper
- OCC
- 90,000 TPY recycled packaging paper

Conclusion

The total new capacity that this information reflects the potential for more than 6.0 million TPY of new OCC and mixed paper consuming capacity and more than 1 million TPY of recycled pulp.