

C&D Materials Management Program Update

MassDEP SWAC Meeting

Via Zoom Webinar

June 22, 2023



C&D MINIMUM PERFORMANCE STANDARD (MPS)

C&D Minimum Performance Standard

Goals and Objectives

Simply put...

Ensure that every ton of C&D debris is processed at an MPS-compliant facility

- Level the playing field for all facilities
- Recover maximum value from recyclable/re-usable materials
- Separate all waste ban materials
- Minimize tonnage sent for disposal – “Reduce Leakage”

Launched MPS 1/01/2020

C&D MPS Performance Criteria

- C&D MPS performance criteria:
 1. Achieve a 15% Process Separation Rate (PSR) minimum threshold;
 2. Demonstrate that all banned materials are separated to the greatest extent possible.
- Failure to satisfy either performance criterion constitutes a failure to comply with Waste Ban Regs and Waste Ban Compliance Plan
 - Cannot dispose or arrange for disposal of any C&D materials

Note: The MPS performance criteria are not applicable to a C&D Transfer Station that operates as follows:

- Transfers all C&D materials to an MPS-compliant facility for further processing
- Separates clean gypsum wallboard and Zero-Tolerance waste ban items **prior to transfer [emphasis added]**

CY2022 C&D Facility MPS Compliance

18 C&D Processors

- 9 facilities MPS compliant
- 9 facilities Conditionally MPS compliant
 - 6 failed to meet 15% PSR
 - 2 optimizing new process lines
 - 1 lost supply of source separated ABC after change of ownership
 - 3 impacted by wood market disruption
 - 5 failed to recycle/divert clean gypsum wallboard
 - 2 overlap with above for failure to meet 15% PSR
 - 4 reported separating and storing CGW onsite

11 C&D Transfer Stations

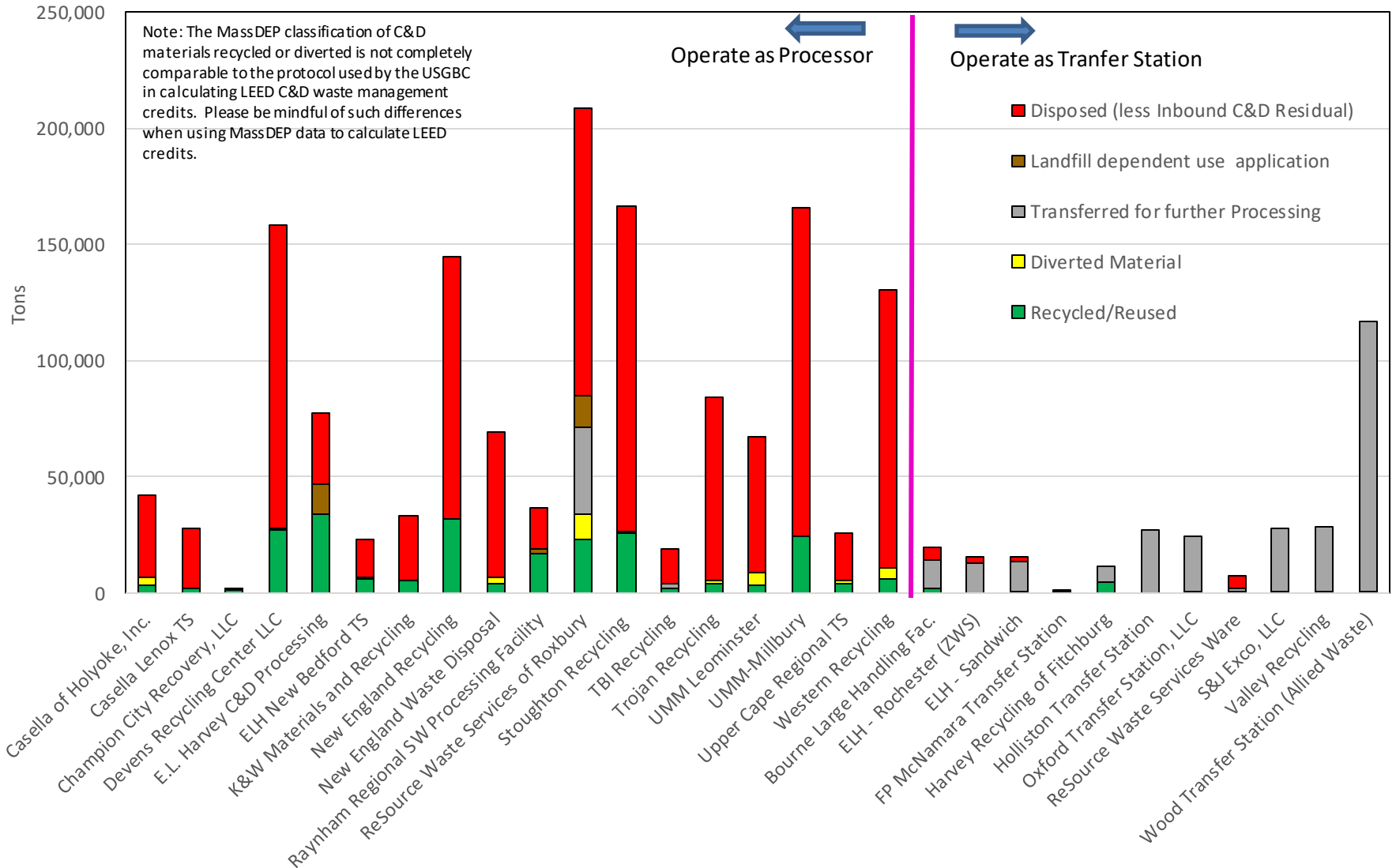
- 5 facilities MPS compliant
- 6 facilities MPS compliance could not be confirmed
 - did not report separating any clean gypsum wallboard prior to transferring unprocessed and partially processed C&D materials for further processing
 - MassDEP conducting follow-up inspections

CY2022 C&D Facility MPS Compliance Status Report (May 2023)

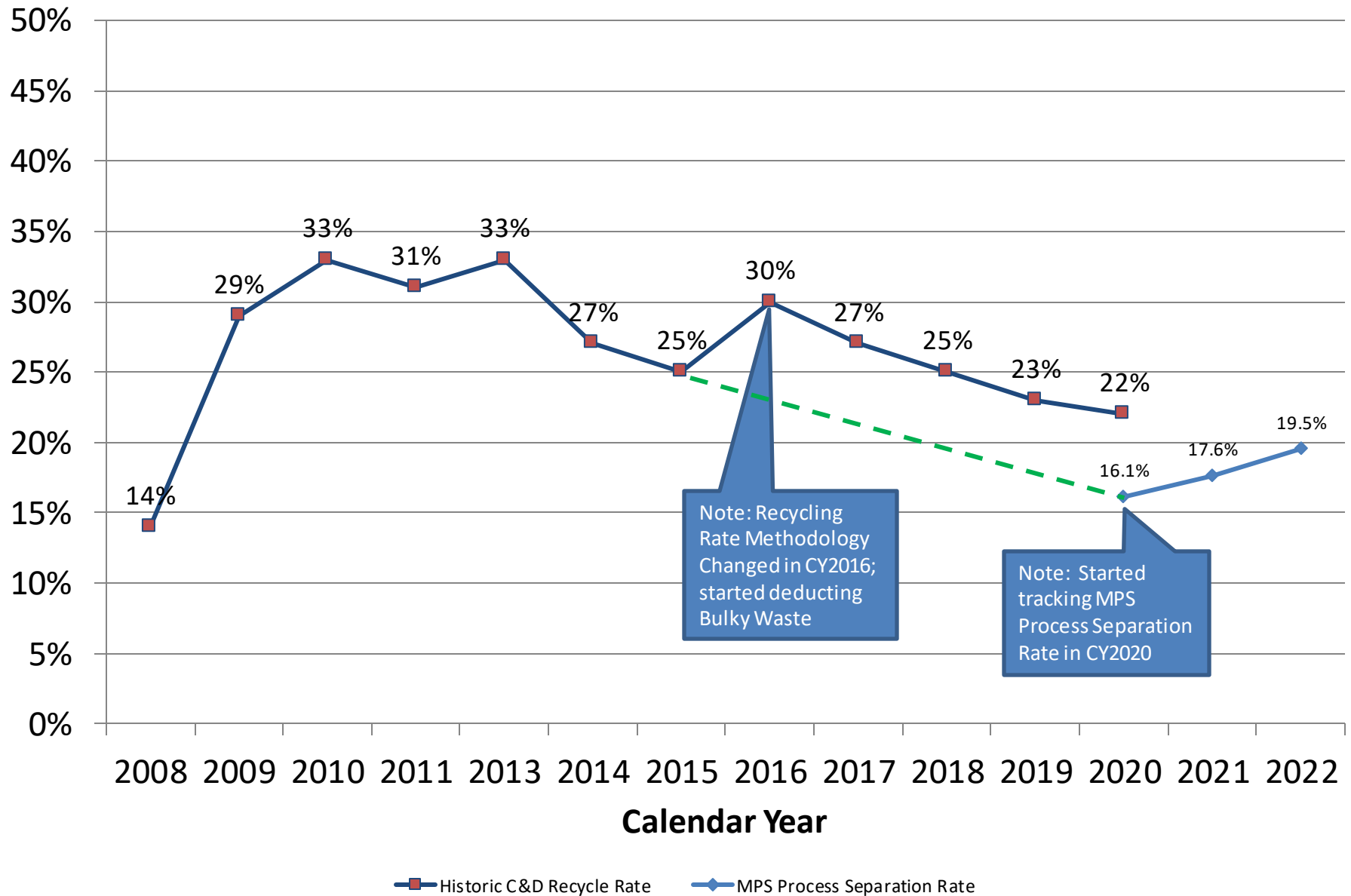
<https://www.mass.gov/doc/status-of-facility-compliance-with-cd-minimum-performance-standard-may-2023/download>

- Massachusetts C&D Handling Facilities - Disposition of C&D Materials Handled by Facility in 2022*

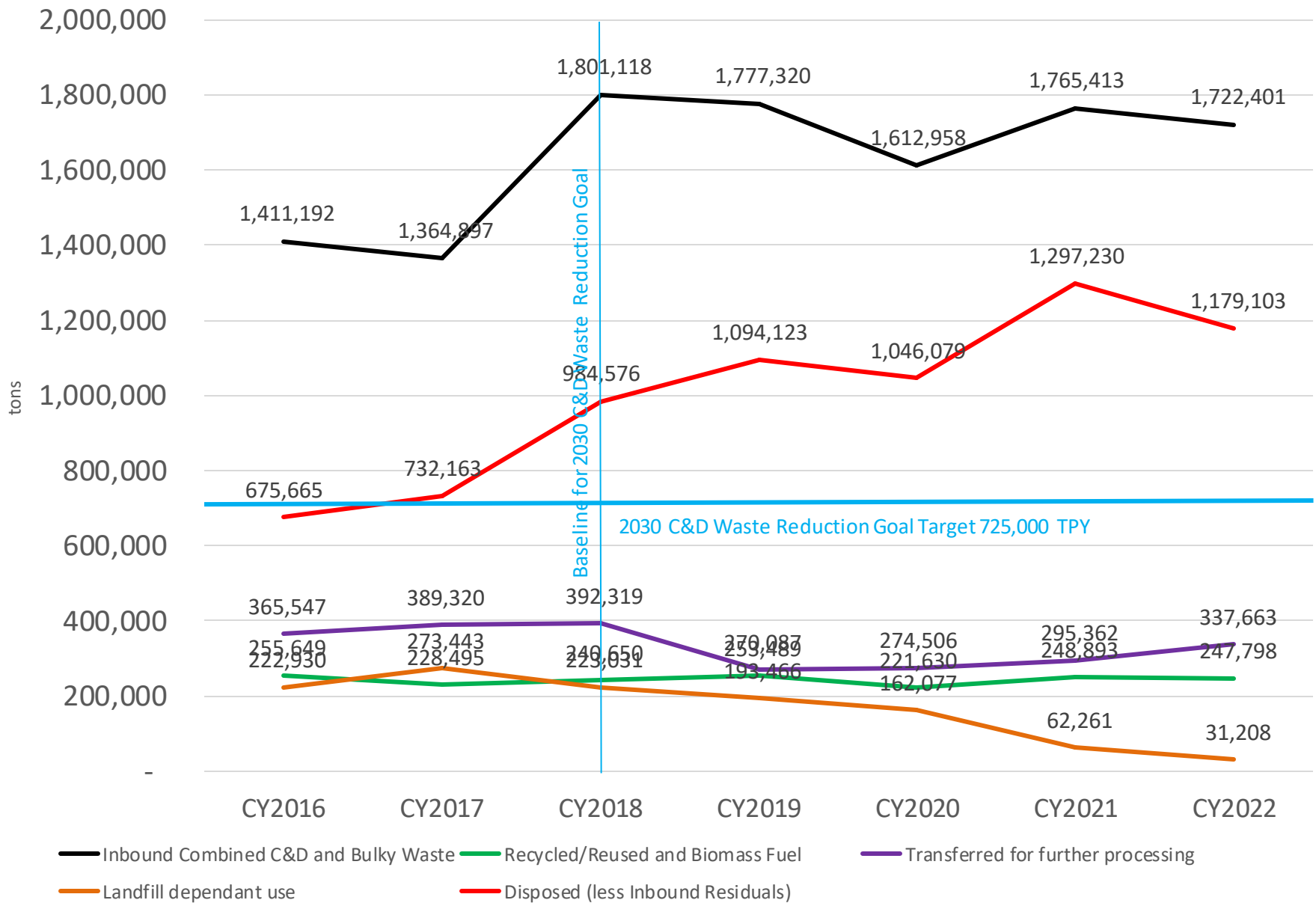
*Quantities are "as reported" to MassDEP in CY2022 C&D Annual Facility Reports



C&D Industry Recycle Rate/Process Separation Rate Trend Chart



Trend Plot of Outbound/Inbound C&D Materials vs. 2030 Waste Reduction Goal

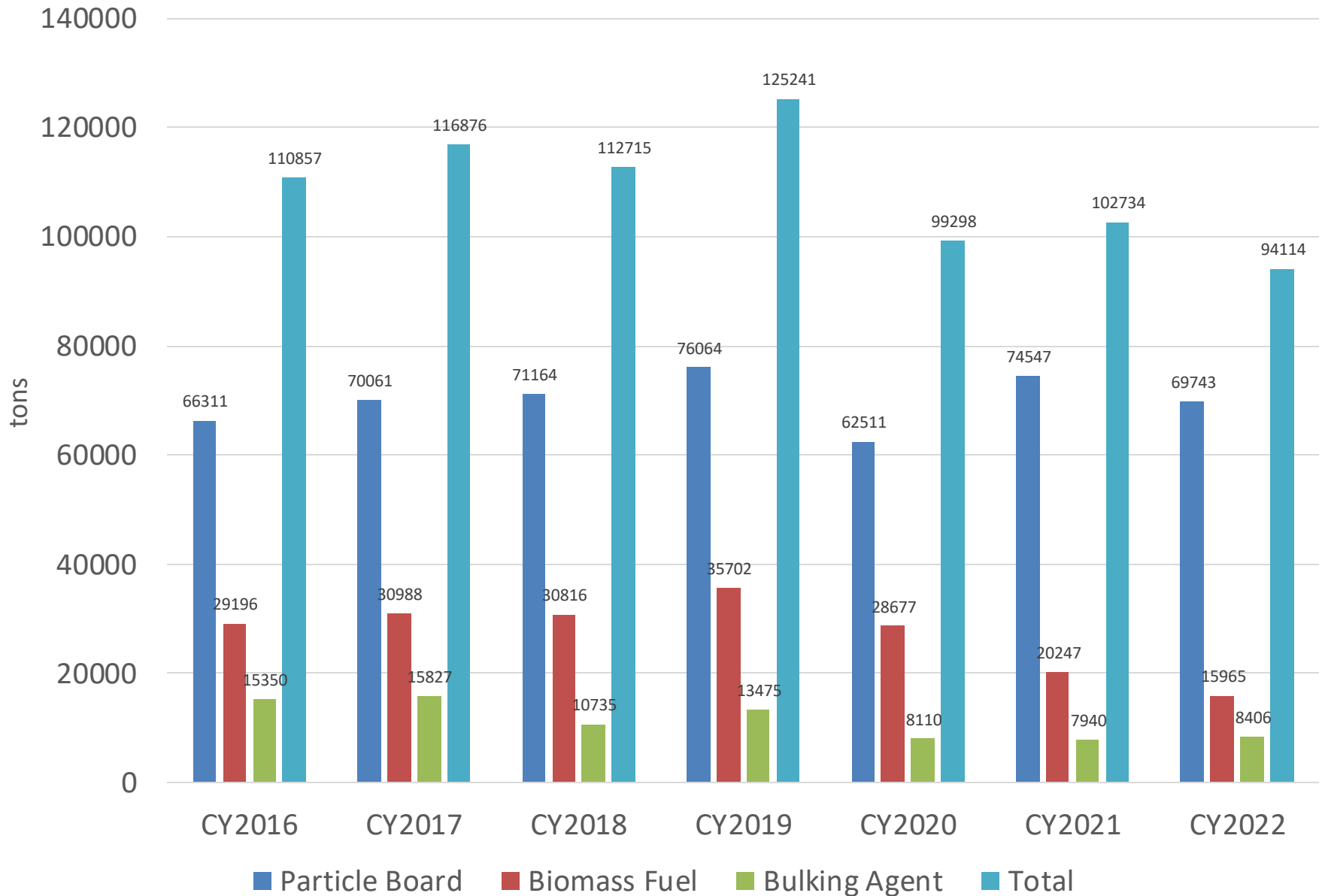


WOOD MARKETS

CY2022 C&D Wood Market Disruption

- PRE-Greenleaf, Plainfield, CT (Biomass Boiler)
 - Major outlet for “A-wood” produced in MA
 - Turbine failure caused unscheduled shutdown (5/27/2022)
 - Turbine Repair completed early March 2023
 - Resumed full operation late March 2023
- Impact on C&D Program
 - Affected 5 C&D Handling facilities (2 owners)
 - MassDEP issued temporary waste ban waivers
 - Allowed disposal of limited quantities of wood
 - Required maximum use of existing markets and continual search for new markets

Wood Products Trend Chart 2016-2022





- 20th year of recycling C&D wood chip (2 million tons)
- Particle board production tracks construction market activity
- Currently operating at full capacity; purchase of recycled wood chip has not slowed down despite logistical challenges (e.g., trucking)
- Tafisa reports a decline in the product quality of the feedstock (e.g., excessive ferrous and nonferrous metal content); attributed to staff turnover due to vertical integration of regional C&D industry
- Improved feedstock quality translates to increased capacity at end-market

PLAINFIELD RENEWABLE ENERGY

- Fully operational since late March-2023
- Expect to run continuously until scheduled 2-week maintenance shut-down (October-2023)
- Future looks good – PRE has changed its mix and increased C&D wood chip by about 10% (40:60 blend of green wood chip to C&D wood chip)

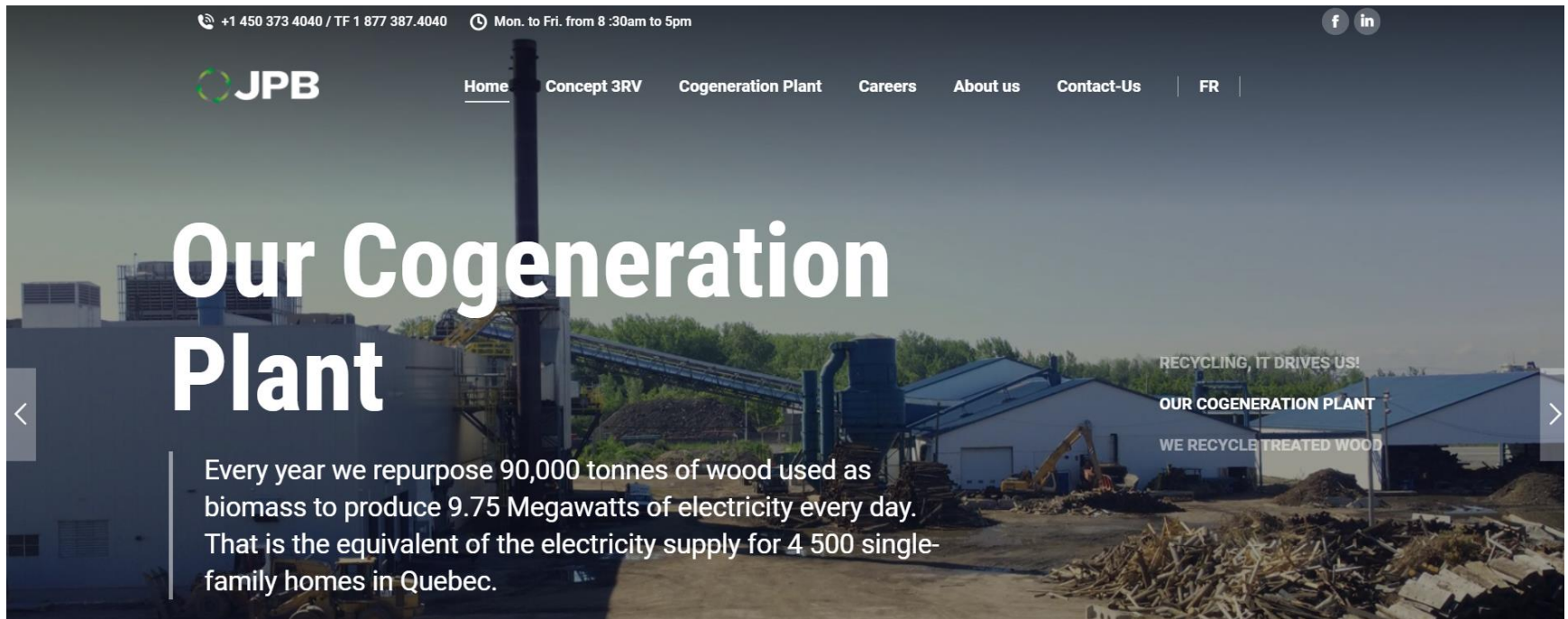


<https://greenleaf-power.com/plainfield/>



- Tred'si specializes in processing treated wood (e.g., railroad ties, utilities poles, etc.)
- Preference for longer poles
- Transportation and logistics can be challenging
- Trying to increase capacity for product brought in by rail





- JPB is another outlet for wood in Québec, a large cogen plant in Salaberry-de-Valleyfield
- Repurposes 90,000 TPY of wood as biomass fuel
- Not currently used by Massachusetts C&D processors

C&D Program Resources

The following resources can be found on the MassDEP C&D materials management webpage: <https://www.mass.gov/lists/managing-construction-demolition-cd-wastes>

- C&D Action Plan (March-2023 Update): <https://www.mass.gov/doc/cd-action-plan/download>
- Minimum Performance Standard for C&D Handling Facilities: <https://www.mass.gov/doc/minimum-performance-standard-for-construction-demolition-handling-facilities/download>
- C&D MPS Q&A Guidance: <https://www.mass.gov/doc/frequently-asked-questions-faq-minimum-performance-standard-for-cd-handling-facilities/download>
- Status of Facility Compliance with MPS (May 2023): <https://www.mass.gov/doc/status-of-facility-compliance-with-cd-minimum-performance-standard-may-2023/download>
- C&D handling facilities: disposition of materials handled (CY2022): <https://www.mass.gov/doc/2022-annual-cd-report-data-summary/download>
- MassDEP Construction & Demolition Subcommittee webpage: <https://www.mass.gov/service-details/massdep-construction-demolition-subcommittee>

For More Information:

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