FACILITY CASE STUDY
JLG MCB TRUE ZERO WASTE
1000236682
1 JLG DRIVE
MCCONNELLSBURG, PA, USA

TRUE

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1 JLG DRIVE – TRUE GOLD ZERO WASTE CERTIFIED FACILITY

CERTIFICATION LEVEL: GOLD

DIVERSION RATE UPON CERTIFICATION: 91.4%

FACILITY LOCATION: MCCONNELLSBURG, PA, USA

TYPE OF FACILITY: MANUFACTURING

FACILITY OPERATIONS: FABRICATION, WELDING, PAINTING, MACHINING, ASSEMBLING

WEBSITES:

WWW.OSHKOSHCORP.COM

WWW.JLG.COM



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WHY ZERO WASTE?

As an Oshkosh company, we continue to lead the way in making innovative products that meet our customers' needs for energy-efficient solutions while reducing impact on the environment.

Oshkosh Manufacturing and JLG Industries "seek to reduce our environmental impact in every phase of operations", starting at fabrication of parts, painting and assembling heavy duty machines.

Key motivations included meeting the Oshkosh goal of 90% diverted from landfill by 2030. 1 JLG Drive has met this goal by diverting over 91%.

TRUE Zero Waste certifications are used to drive a sustainable culture and improved partnerships with customers and suppliers. These certifications help improve sustainability scores and provides more proof of Oshkosh and JLG being the best.

By engaging engineering, product management and compliance stakeholders early and consistently, these sessions support more sustainable product outcomes while maintaining regulatory compliance and performance expectations. This initiative reflects our proactive approach to sustainability, ensuring environmental considerations are addressed upstream in product design rather than downstream as corrective actions.

One way we're reducing waste is through Total Resource Use and Efficiency (TRUE) certification of our facilities. TRUE projects aim to divert all solid waste from landfill, incineration and the environment. We currently have 10 TRUE certified facilities, two of which (IMT® and Sunnyside) completed certification in 2025:

VOCATIONAL

- Platinum — Dodge Center, MN
- Gold — IMT®, IA
- Gold — Riceville, IA
- Gold — Lakeville, MN
- Gold — Neenah, WI

ACCESS

- Gold — Sunnyside, PA
- Gold — 253 Success Drive, PA
- Silver — Hykes Road, PA

TRANSPORT

- Silver — North Plant, WI
- Silver — Harrison Street, WI

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BIGGEST WINS

Reuse

- CHEP reusable containers avoided 1.4 million pounds of disposable containers in 2025 at 1 JLG Drive

Recycle

- New cardboard compactor for larger boxes the standard balers could not safely handle for recycling.

Training

- New hire orientation training emphasizes zero waste training and waste separation, ensuring all new team members are aware of best practices.





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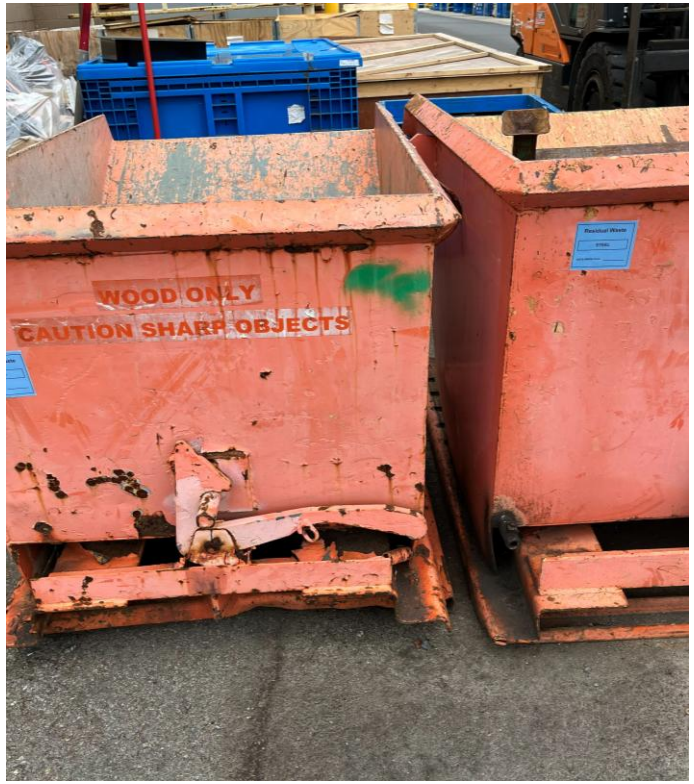
CREDIT CATEGORY: REDESIGN

BEST PRACTICES

- Trash cans and outdoor hoppers are the correct size for the purpose of collection and transportation through the facility.
- They are conveniently near sites of generation to make waste separation and disposal as easy as possible.

CHALLENGES & OPPORTUNITIES

- Keeping sticker labels on long standing containers is a challenge that is being address by adding permanent labels e.g. spray painted, permanent signs, and/or metal tags.
- Future projects of color-coding the collection hoppers is being considered.



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CREDIT CATEGORY: REDUCE

BEST PRACTICES

- JLG strives to reduce the amount of packaging used for shipping large parts for machines. Metal racking help with this overall waste reduction goal.

- Large heavy parts are shipped on reusable metal racks, saving multiple large pallets, strapping/banding material and space for shipping.





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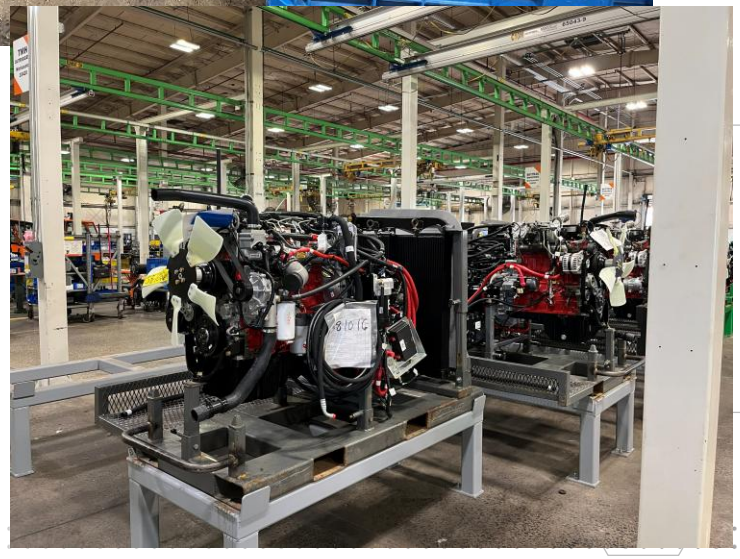
CREDIT CATEGORY: REUSE

BEST PRACTICES

- CHEP containers are used to package parts from the manufacturers instead of cardboard boxes and 1-time use packing material (Styrofoam packing peanuts, crinkle paper, etc.)
- Large frame parts are able to ship upright and in more ergonomic way to pickup and load onto welding machines.
- Small parts stay organized and grouped together or “kitted” to speed up the final assembly process.







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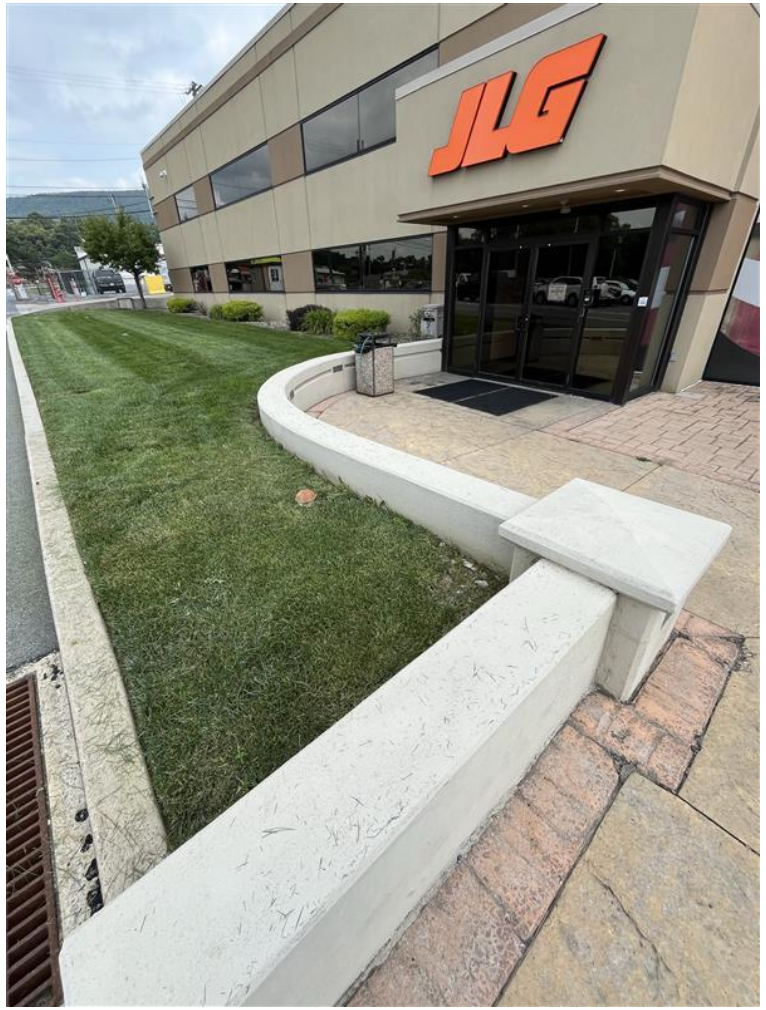
CREDIT CATEGORY: COMPOST (RE-EARTH)

BEST PRACTICES

- The grass clippings are left in place for grasscycling

CHALLENGES & OPPORTUNITIES

- Currently 1 JLG Drive does not compost food waste from break rooms. Collecting and composting waste food from Team Members is an opportunity to improve our diversion rate.



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CREDIT CATEGORY: RECYCLE

BEST PRACTICES

- We recycle and track where our materials go. We have great relationships with our local vendors and know where our materials end for final disposal destination.
- New cardboard compactor for larger boxes the standard balers could not safely handle for recycling. Larger boxes were either put into trash compactors or into open top rolloffs prior to the new cardboard compactor.

CHALLENGES & OPPORTUNITIES

- Local culture does not fully embrace single stream recycling, feeling it is easier and cheaper to put everything together in the trash. We are working through changing that thought process of Team Members and encourage more recycling opportunities.



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CREDIT CATEGORY: ZERO WASTE REPORTING

BEST PRACTICES

- Diversion and financial data is tracked and reviewed with leadership monthly.

CHALLENGES & OPPORTUNITIES

- The Warm model is outdated, and the Excel download was not user friendly.

Weavers Sanitation - Wood Waste						1 RO MWF, 2 RO TF						
1 JLG Drive - # of rolloffs	25	26	26	24	26	21	19	20	18	18		
Weight in Tons	90	93	93	86	93	75	68	72	64	64		
Weight in Pounds	179,000	186,160	186,160	171,840	186,160	150,360	136,040	143,200	128,880	128,880	1,983,320	991.66
Weavers Costs	452.00	$ 13,297.00	$ 11,040.90	$ 12,057.10	$ 11,549.00	$ 9,259.00	$ 9,618.00	$ 9,717.00	$ 8,310.00	$ 8,376.00	$ 126,168.00	
Industrial Pallet Corp (IPC) - Wood Waste												
1 JLG Drive - # of pallets	2989	2360	2368	2135	1678	1,885	2246	1665	1771	1891		
Weight in pounds	119,560	94,400	94,720	85,400	67,120	75,400	89,840	66,600	70,840	75,640	1,064,200	532.10
IPC Rebate	(800.00)	$ (600.00)	$ (600.00)	$ (600.00)	$ (500.00)	$ (500.00)	$ (600.00)	$ (600.00)	$ (500.00)	$ (500.00)	$ (7,200.00)	
Weavers/LSG Trucking/Noble Environmental - in Tons												
Noble Environmental - Trash	3.45	3.12	4.04	3.39	4.12	2.64	0	2.34	3.23	2.39		
Noble Environmental - Trash	4.59	3.45	3.48	2.17	1.78	2.3		2.52	2.63	1.74		
Noble Environmental - Trash	2.9	2.52	3.22		3.35	3.05		2.86		3.18		
Noble Environmental - Trash	3.04		3.33							2.53		
LSG Trash Total	13.98	9.09	14.07	5.56	9.25	7.99	0	7.72	5.86	9.84	96	
LSG Trash Total	27960	18180	28140	11120	18500	15980	0	15440	11720	19680	191,180	
Noble Environmental - Trash Costs	078.60	$ 1,461.30	$ 2,084.90	$ 953.20	$ 1,472.50	$ 1,384.30	$ -	$ 1,567.00	$ 960.20	$ 1,788.80	$ 15,706.90	
Waste Management in tons												
Trash O/T (9-05496-72006)	15.65	19.89	22.6	22.23	22.33	18.43	17.45	16.29	13.68	11.06		
Comp - E/R (9-05901-62007)	25.31	19.42	21.78	19.63	17.83	16.65	21.73	19.1	19.44	17.37		
General Plant Trash	**40.96**	**39.31**	**44.38**	**41.86**	**40.16**	**35.08**	**39.18**	**35.39**	**33.12**	**28.43**	461	
General Plant Trash	**81,920**	**78,620**	**88,760**	**83,720**	**80,320**	**70,160**	**78,360**	**70,780**	**66,240**	**56,860**	921,200	
Oil Absorb Rags Red Can (9-09368-82001)	2.41	0	0	0	3.68	0	0	1.73	0	0		
Oil Absorbent Drums (9-09368-82001)	0	0	0	5.33	0	0	0	0	0	0		
Oil Absorbents	**2.41**	**0**	**0**	**5.33**	**3.68**	**0**	**0**	**1.73**	**0**	**0**		
Oil Absorbents	**4,820**	**0**	**0**	**10,660**	**7,360**	**0**	**0**	**3,460**	**0**	**0**		
Paint Filter 40YD (9-05497-62007)	4.29	4.5	3.64	4.68	6.02	5.67	4.44	4.76	4.15	3.42	59.06	
Paint and Washer Filters	**8,580**	**9,000**	**7,280**	**9,360**	**12,040**	**11,340**	**8,880**	**9,520**	**8,300**	**6,840**		
Rotoblast Std (9-09368-92009)	10.38	0	8.26	9.0	0	8.9	9.86	0	9.47	0	78.29	
Rotoblast	**20,760**	**0**	**16,520**	**18,000**	**0**	**17,800**	**19,720**	**0**	**18,940**	**0**		
Trash O/T (9-05496-72006)	218.30	$ 3,792.94	$ 4,117.94	$ 3,473.17	$ 2,726.64	$ 3,202.79	$ 1,758.12	$ 3,782.46	$ 3,122.63	$ 2,754.01	$ 40,462.01	
Comp - E/R (9-05901-62007)	837.08	$ 3,864.27	$ 4,153.22	$ 4,344.10	$ 3,739.22	$ 3,575.31	$ 4,590.57	$ 4,406.26	$ 3,939.22	$ 4,573.72	$ 49,369.89	
WM - Oil Absorbant Rolloff (9-09368-82001)	578.66	$ 110.12	$ 110.12	$ 110.12	$ 700.77	$ 110.12	$ 110.12	$ 533.77	$ 118.62	$ 118.62	$ 2,815.06	
Paint Filter 40YD (9-05497-62007)	525.51	$ 1,577.65	$ 1,479.49	$ 1,624.20	$ 2,158.56	$ 1,734.94	$ 1,592.81	$ 1,627.96	$ 1,585.50	$ 1,450.34	$ 20,308.68	
Rotoblast Std (9-09368-92009)	037.11	$ -	$ 1,826.84	$ 1,977.83	$ -	$ 1,957.85	$ 2,076.58	$ -	$ 2,039.58	$ -	$ 16,202.00	
Waste Management - Total Costs	**196.66**	**$ 9,344.98**	**$ 11,687.61**	**$ 11,529.42**	**$ 9,325.19**	**$ 10,581.01**	**$ 10,128.20**	**$ 10,350.45**	**$ 10,785.55**	**$ 8,896.69**	**$ 129,157.64**	

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CREDIT CATEGORY: DIVERSION (MIN 90%)

Total diversion:	16415401.9
Total non-diversion:	1545823.0
Grand total weight:	17961224.9
Diversion rate:	91.4%

BEST PRACTICES

- Diversion data is collected monthly in spreadsheets that are shared and reviewed with leadership. The diversion rate for 1 JLG Drive is the at 91.4%.
- Tracking this data has shown over 1.6 million pounds of metal being recycled in 2025.
- Additional tracking of diversion of reusing empty drums and reusable cups shed new light on diversion weights and how we can use that data tracking at other locations.



CHALLENGES & OPPORTUNITIES

- Our goal is to increase our diversion rate this year.
- Diversion outlets for some waste streams has not been cost effective especially with rising fuel costs, but we continue to search for new outlets, materials and engineering solutions to eliminate waste.

Reused Empty Drums	2304.0	4944.0	3984.0	3456.0	4896.0	1824.0	5040.0	2976.0	2832.0	5280.0	5040.0	2880.0	45456.0
Reusable Cups	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	5716.7	68599.9

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CREDIT CATEGORY: ZERO WASTE PURCHASING

CHALLENGES & OPPORTUNITIES

EPP policy

- Environmental has the opportunity to work with GPSC to develop an Environmental Preferred Purchasing (EPP) policy. This policy would include preferences for sustainably produced paper and wood products, identify EPP items in purchasing catalogs and track EPP purchases.



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CREDIT CATEGORY: LEADERSHIP

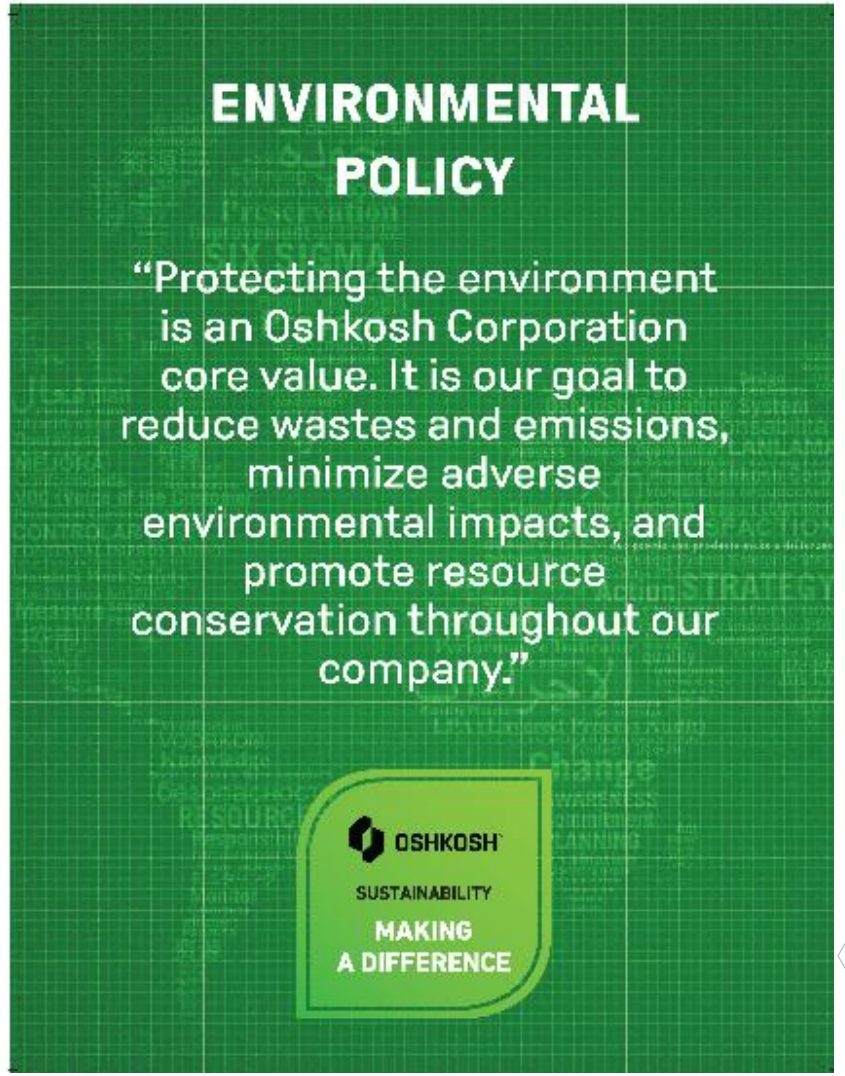
BEST PRACTICES

Bi-weekly, the environmental leaders from Oshkosh Segments meet to discuss best practices, new regulations and risks, and highlights of projects going on throughout each Oshkosh Segment.

The KPI metrics are reviewed and discussed monthly with the Oshkosh Vice President – Chief Risk and Sustainability Officer.

CHALLENGES AND OPPORTUNITIES

Oshkosh Corporate is creating a “working group” for people from different segments to help each other with TRUE certifications and working on identifying and setting better goals.



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CREDIT CATEGORY: TRAINING

BEST PRACTICES

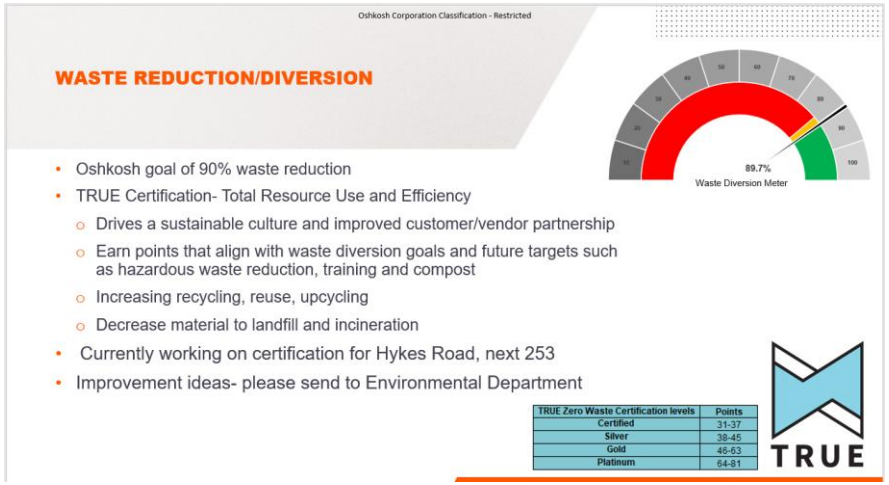
Orientation Training

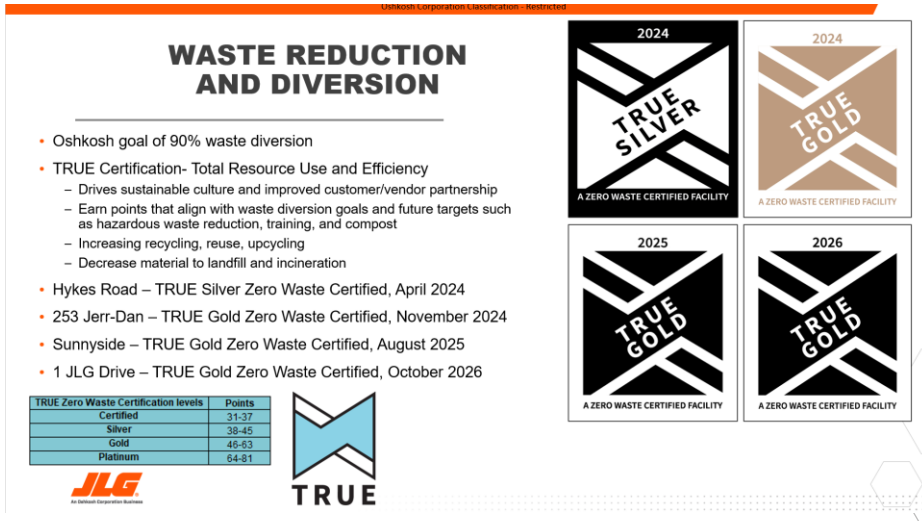
- Zero Waste has been incorporated more into New Hire Orientation training for production and annual supervisor training. This provides examples and encourages all Team Members to bring ideas to the Environmental Team.

CHALLENGES & OPPORTUNITIES

Orientation/Purchasing Training

- We can improve training to include all new team members for the office, purchasing and admin roles, not just production team members.





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CREDIT CATEGORY: ZERO WASTE ANALYSIS

BEST PRACTICES

- Most of the larger items and waste streams for diversion are well known by Team Members – cardboard, wood, scrap metal

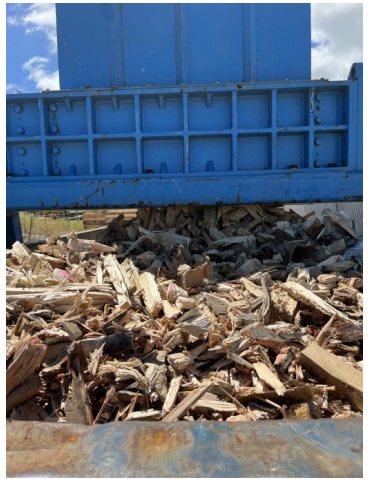
CHALLENGES & OPPORTUNITIES

Waste and Recycling Audits

- Our challenge was the timing of the waste and recycling audit, and the mindset of having to sort through food waste, and finding Team Members willing to help sort through trash









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CREDIT CATEGORY: UPSTREAM MANAGEMENT

BEST PRACTICES

- All Oshkosh suppliers must adhere to Supplier Standards Guide. This guide includes specific packaging instructions for shipping parts to Oshkosh and JLG facilities. It lists preferred, accepted and not-allowed packaging materials.



EXPENDABLE PACKAGING MATERIALS

When expendable packaging must be used, these are the materials that are preferred and non-preferred by Oshkosh. This list is not all-inclusive and is not limited to only the listed materials.



Preferred packaging materials:

- Air cushioning bags
- Biodegradable bubble wrap
- Cellulosic paper
- Molded fiberboard/paperboard
- Polyethylene

Preferred exterior packaging materials:

- Banding - Plastic or non-metallic is preferred. Metal banding may be used heavy products, with approval. Cross banding is required for heavy parts shipping directly on a pallet
- Corrugated cartons
- Pallet (in standard sizes)
- Wooden crates

Plastic Material Requirements

- All plastic bags used for shipping must be clear. Tinted/Foil bags may be used only when damage from light may occur or for Electrostatic Discharge (ESD) protection. Parts may be requested to be bagged in specific quantities and bag sizes within a master carton, this information would show on the purchase order.
- Clear stretch or shrink wrap that is Plastic #4 LDPE (Low Density Polyethylene) shall be used. Tinted stretch or shrink wrap should only be used if the part requires a tinted material to sustain the product quality

Unallowed Packaging materials

- Loose fill (packing peanuts)
- Foam-in-place (Allowed at Aftermarket locations only)
- Starch-based packaging materials
- Rice paper (yellow corrugated)
- VCI Materials
- Metal Clamps
- Staples
- Nails in wood crates, screws are preferred

Oshkosh does not require, and our Suppliers are completely free to choose where they procure their packaging

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CREDIT CATEGORY: HAZARDOUS WASTE PREVENTION



BEST PRACTICES

Collection of Universal Waste from employees

- We have annual Team Member e-waste collection days in April to celebrate Earth Day. Team Members look forward to these collection days. Most will save up their old/busted/outdated electronics just for these collection days.
- Team Members receive waste training twice per year, and in new hire orientation. The frequency help ensure that people receive the training at least once per year, and the importance of recognizing the differences between the waste streams we generate.
- Aerosol cans are now collected as universal waste, as opposed to puncturing and having hazardous waste paint and scrap metal.





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CREDIT CATEGORY: CLOSED LOOP SYSTEM

BEST PRACTICES

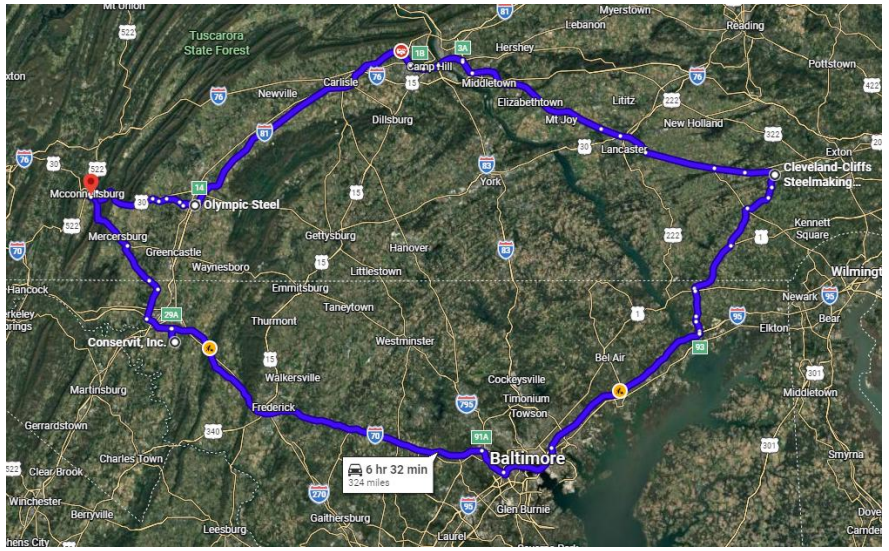
Local Markets

- It was enlightening to see how closed loop our metal recycling truly can be. We mapped out some of the metal scrap to recycler to forge and supplier.

CHALLENGES & OPPORTUNITIES

Office Paper

- We will make sure office paper is added to our future EPP policy so purchasing knows it is preferred to order 30% post consumer recycled office paper; the training will include local site admins who order office supplies.



Map of local steel market- 1 JLG Drive to Conservit in Hagerstown, MD to Cleveland Cliffs in Coatesville, PA to Olympic Steel in Chambersburg, PA to 1 JLG Drive

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CREDIT CATEGORY: INNOVATION

CHALLENGES & OPPORTUNITIES

- Additional Upcycling opportunities are already in the works to use scrap metal for small projects around the facility. This includes a new drip catch basin and cover at the diesel fuel pumps.

UPCYCLING



Scrap metal diamond plate was used to make a cover over the hopper for metal shavings from a CNC machine. This cover helps contain the metal shavings and preventing them from bouncing out to the floor. This helps with clean up of the area and ensuring most of the metal shavings make it to the recycling rolloff. This also helps prevent other trash material being put into the hopper.



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“Achieving TRUE Zero Waste Gold Certification at 1 JLG Drive is an exciting milestone in our sustainability journey. As the fourth Access Segment facility to earn TRUE certification, joining Hykes Road, 253 Jerr Dan, and Sunnyside, this achievement reflects our team's continued dedication to reducing waste, maximizing recycling, and driving environmental excellence across JLG operations.”

Jason Grentus, Sr. Environmental Manager



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ZERO WASTE IS OUR MISSION

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