



GREEN EFFICIENCY
GOOD FOR THE ENVIRONMENT
EASY ON THE BUDGET >>>>>>

**POWERING A NEW GENERATION OF MACHINES THAT REDUCE YOUR
CARBON FOOTPRINT, OPERATING COSTS, AND DOWNTIME.**

DO YOU LIKE FREE MONEY?

The government now has federally funded programs through the Inflation Reduction Act (IRA) to help your business.

The IRA has opened these opportunities for businesses to receive money for the authorized use of the following grants.

Greenhouse Gas Reduction Fund

\$27 billion to establish a new Greenhouse Gas Reduction (GHG) Fund to rapidly deploy low-and zero-emission technologies.

Grants to Reduce Air Pollution at Ports (\$3 billion)

\$3 billion towards the purchase and installation of zero-emission equipment at ports or near port goods movement facilities.

EPA Diesel Emission & Reduction Act (\$150 million)

Prioritizes replacing diesel powered equipment with all-electric powered equipment, including the cost of infrastructure upgrades.



Who can help me?

- **SENNEBOGEN** has successfully worked with grant writers to help customers receive funding.
- Reach out to our sales team and we can help you with all your grant writing needs.

sales@sennebogenllc.com

HOW DOES IT WORK?

SENNEBOGEN's eGreen machines have been proven to reduce operating costs as much as 50%, when compared to the same machines powered by diesel. Available from the factory on any SENNEBOGEN purpose-built material handler. **Customers have three options to choose from:**



OPTION 1

FULLY ELECTRIC MOTORS

With lower vibration and less heat to wear on the machine, the electric motor allows for considerably longer service intervals in comparison to a diesel motor. The electrically-driven machines are always ready for operation since ambient temperatures have no effect on the performance of the electric motor. Engine, oil, and filter changes are all eliminated, as is maintenance on the diesel engine.

OPTION 2

ELECTRIC POWERED WITH DIESEL PONY MOTOR

The advantages of electric drive are widely known, but the next notable feature of this unit is more of a surprise. When it's time to move, the operator simply removes the plug and starts the diesel powerpack that's built into the machine's counterweight, then switches the motor to diesel mode. Now the material handler is ready to roll.

OPTION 3

BATTERY POWERED (6 hrs of working, charge 2 hrs, 3 additional hrs of working)

The battery-powered material handler runs on 100% certified green electricity and saves up to 125 tons of CO₂ emissions per year in two-shift operation. When charging, excess power is fed to simultaneously recharge the batteries.



WHY ELECTRIC?

Cost Comparison Between Electric Motor and Diesel Engine

Model	Engine Power	Energy Consumption	Energy Cost per Working Hour
840E Diesel	317HP	5.00 GHP	\$23.75
840E Electric	225KW	117.0 KWh	\$5.27

Service Costs of HRS	250	500	1,000	2,000	4,000
840E Diesel	\$3,107.87	\$1,566.92	\$3,085.50	\$5,368.36	\$12,939.05
840E Electric	\$3,107.87	\$0.00	\$1,259.97	\$3,542.84	\$10,700.62

Energy & Service Cost	4,000
840E Diesel	\$128,853.94
840E Electric	\$40,931.26

Total Savings = \$87,922.68
Percent Savings = 68.2%



WHAT ADVANTAGES MAKE SENNEBOGEN STAND OUT VS. THE COMPETITION?

We are the only manufacturer that remains hydraulic over hydraulically controlled. Because we remain hydraulically controlled, you can troubleshoot the SENNEBOGEN machine without the need for a dealer technician to plug in a laptop and program proprietary sensors to get your machine back to work.

We simply remove the diesel engine, tank, and aftertreatment system. Then we replace it with an electric motor and control panel.

In order to better support our customers and standardize components between our electric and diesel material handler, we incorporate a transfer box between the electric motor and pump that increases RPM from 1800 to 2000, allowing us to use the exact same hydraulic pump.

Our unique design integrates a transformer and rectifier in the control panel which converts 24v AC to 24v DC, which is the same control voltage as all diesel machines. Because our electric machines use the same control voltage as our diesel machines, we can utilize the same solenoids, coils, and other electric components. This makes our electric material handlers very easy to service and support.

Our competitors use 110V AC as control voltage forcing a customer to stock parts for an electric machine and diesel machine as well as call out an electrician in addition to a hydraulic technician for troubleshooting.

Owning a SENNEBOGEN electric material handler also gives you an advantage in your community. By owning an electric material handler your community will see your business as forward-thinking and environmentally friendly. This will demonstrate positive leadership in your area of business but, more importantly, your community.

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OPTION 2

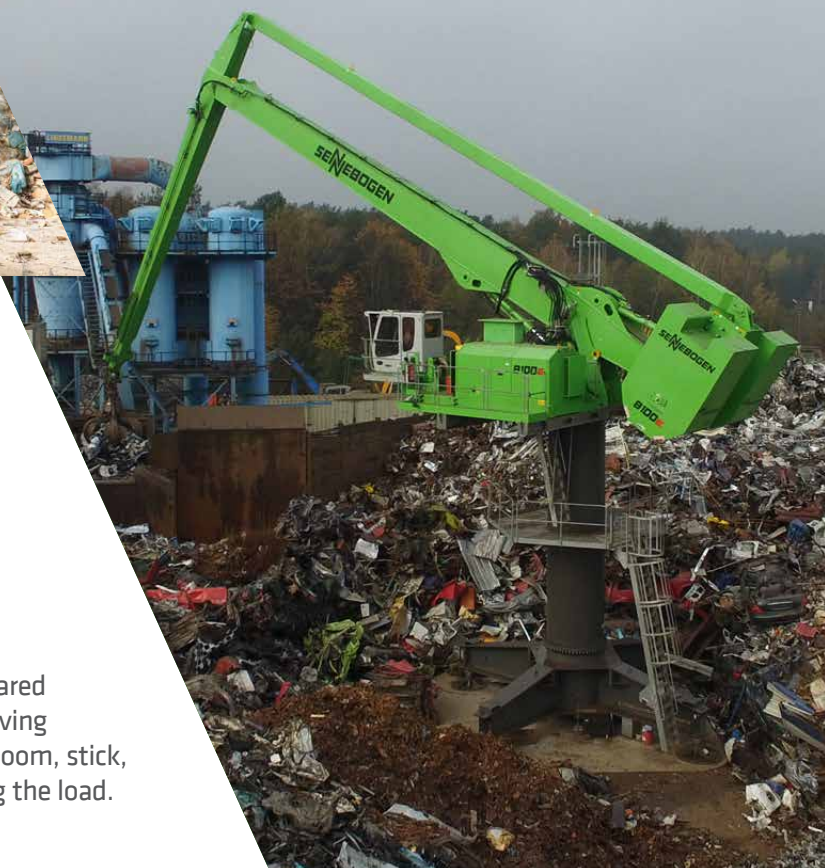
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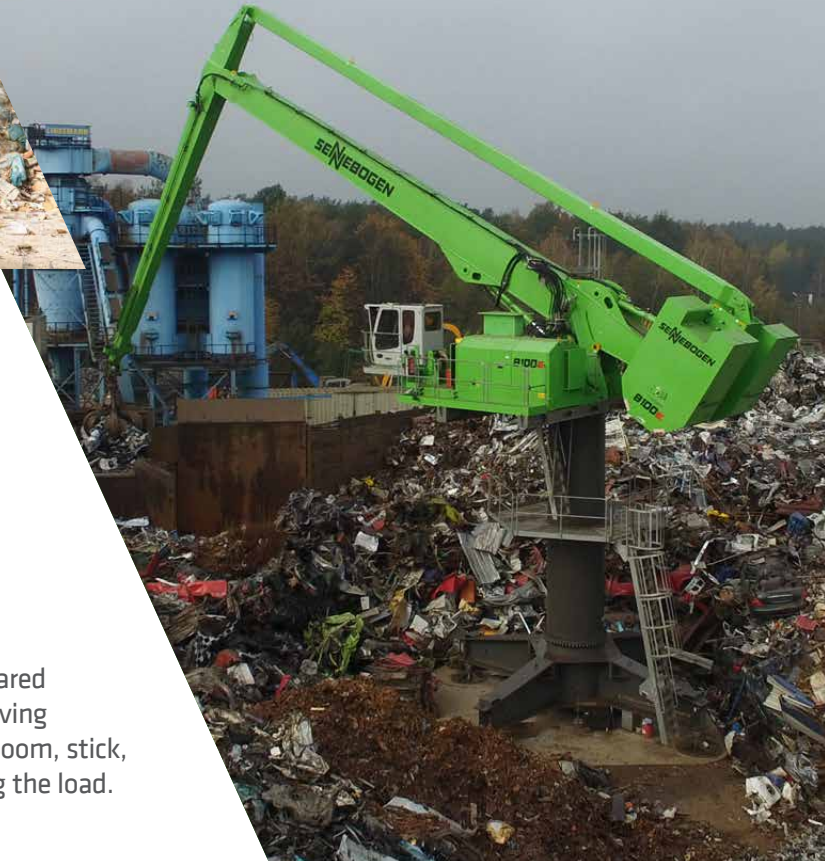
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BEYOND THE MACHINE

WE ARE ON A MISSION to maximize your uptime and reduce your total cost of ownership.



PEOPLE

Expert application support
Innovative financing



PARTS

Local in-stock parts
Prepackaged service kits



SERVICE

Factory-trained technicians
Free technical training

You trust SENNEBOGEN for industry-leading productivity, safety, and efficiency.
Now think “beyond the machine” with lifelong SENNEBOGEN support.

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