

COVER STORY

Unafraid to take the lead

John Shegerian and the executive team at ERI, Fresno, California, prioritize innovation and exploration.

By DeAnne Toto



John Shegerian, ERI executive chairman and co-founder, at the company's Fresno, California, processing facility. Photos by Mark Jansen Photography

Being the first and being the best are two of the main objectives John Shegerian has for ERI, the electronics recycling company he co-founded with his wife, Tammy Shegerian; Kevin J. Dillon; and Aaron Blum.

"What we've created here is a culture of innovation and pioneering," Shegerian says of ERI.

That pioneering philosophy can be seen in a number of innovations ERI has embarked on over the last 16 years since its founding, which include partnering with Staples to develop electronics recycling services, collaborating with the City of New York Department of Sanitation to launch ecycleNYC, adopting the Basel Action Network's (BAN)'s EarthEye tracking system and integrating artificial intelligence (AI) and robotics into its recycling facilities.

BUYING IN

ERI wasn't always a leader in the electronics recycling sector. The company, which Blum originally founded in 2002 under another name in San Diego, initially struggled to turn a profit. In 2004, Blum approached his friend John Shegerian for help restructuring. "It was a great idea, but it was not making money," Shegerian says of the original company.

Shegerian, who describes himself as a "serial entrepreneur," had recently sold his previous company, FinancialAid.com, and was looking for a new challenge. It was at that point that the Shegerians and Dillon joined the business.

One of the first things the new ownership team did was relocate operations to Fresno in 2005. "Fresno is in the dead center of the state," he says of the company's location. "It also was a smart choice from a logistics standpoint," Shegerian says, noting the area's agricultural prominence. "Trucks go out filled with produce and come back empty," which creates backhaul opportunities for ERI.

The company has grown significantly since then, expanding to eight processing locations, adding information technology asset disposition (ITAD) capabilities, forging partnerships with LS-Nikko Copper and Alcoa and providing cyber insurance assistance to customers through CyberPolicy, San Francisco.



SCALING UP

In 2007, ERI added its second recycling facility in Holliston, Massachusetts. The following year, the company opened four additional facilities in Sumner, Washington; Aurora, Colorado; Flower Mound, Texas; and Plainfield, Indiana.

ERI also began providing ITAD services in 2008. Today, that segment accounts for 70 percent of ERI's business, while end-of-life recycling equals 30 percent, Shegerian says.

The company's Fresno, Holliston, Plainfield and Flower Mound facilities are equipped with proprietary electronics recycling shredders. The reason for the proprietary shredders, Shegerian says, is because the commercially available shredders the company looked at had pluses and minuses. "We decided to create one that had more pluses and less minuses. Electronics are changing by nature, therefore we needed to develop state-of-the-art technology that can adapt to new products as well as handle our growth and processing capacity."

Shegerian credits Tammy with the innovation that ERI has been able to achieve in this area. She oversees and manages the day-to-day operations.

He adds that while perfect technology doesn't exist, after designing the shredders in-house, "it became very obvious that we created something that no one else in the world had created."

Its shredders help create the "cleanest commodities in metals, plastics and other items," Shegerian says, making ERI "a leading brand in this space."

That cleanliness attracted the attention of copper smelting company LS-Nikko Copper, headquartered in Seoul, South Korea, and aluminum recycler and producer Alcoa, headquartered in Pittsburgh, at a time when ERI was looking for a strategic investment that would provide the growth capital it needed.

In 2010, LS-Nikko Copper increased its minority investment position in ERI. Alcoa also took a minor equity stake in ERI in 2011. In addition to investing money with ERI, these partnerships have resulted in stronger end markets for the recyclables generated at ERI's electronics recycling facilities.

Under the terms of the agreements, Shegerian says, LS-Nikko gets as much of ERI's copper as it wants, and Alcoa helps find the best homes for the aluminum ERI recovers.

Additionally, LS-Nikko and Alcoa each have a position on ERI's board of directors.

The support of the two companies has been "immeasurable in terms of helping us succeed," Shegerian says.

Despite this support, Shegerian says commodity markets remain "challenging." Global trade disputes and China's evolving scrap import policies have introduced more uncertainty to secondary commodity markets, he says. "Even our partners don't see the normal guideposts they saw years ago."

However, Shegerian says he supports China's efforts to control the garbage entering its country as "recyclables," though it has forced ERI to explore secondary and tertiary options for the plastics generated by its shredding operations.

He hasn't ruled out further processing the plastics ERI recovers in-house. "We are constantly doing R&D on plastic pelletizing," Shegerian says. "We likely will add that one day. There is no such thing as automatic pilot here."

ERI supplies a number of original equipment manufacturers (OEMs) that it processes material for with raw materials recovered from its operations, he says, helping its customers close the loop in their supply chains.

EXPANDING SERVICE OPTIONS

ERI's innovation is not limited to designing its own shredding equipment. The company also has formed a number of partnerships with retailers, the first of which was an in-store take-back system with Best Buy in 2007. That was followed by providing electronics recycling services to Staples stores in 2009 and to Staples Technology Solutions customers in 2014.

Through the Staples Technology Solutions program, customers can select from 10 Technology Recycling Kit box sizes that range from small (measuring 9 inches high by 5 inches wide by 3 inches deep) to full pallet (measuring 41 inches high by 33 inches wide by 32 inches deep). The price of the kit includes the container, prepaid address labels, delivery, pickup and recycling.

Shegerian says the Staples Technology Solutions program has become a very successful program for ERI and Staples.

ERI AT A GLANCE

Leadership team

Executive Chairman and co-founder John S. Shegerian; President, CEO and co-founder Tammy Shegerian; Chief Marketing Officer, Chief Sales Officer and co-founder Kevin J. Dillon; Chief Compliance Officer, Chief Operating Officer and co-founder Aaron Blum; General Counsel Tyler Browning; Chief Technology Officer Rich Calzada; Director of Human Resources Carol DeBellis; and Chief of Staff Linda Ramos

Locations

ERI's headquarters and a recycling facility are in Fresno, California, with additional recycling facilities in Sumner, Washington; Aurora, Colorado; Flower Mound, Texas; Plainfield, Indiana; Badin, North Carolina; Holliston, Massachusetts; and Lincoln Park, New Jersey. The company has branch offices in Raleigh, North Carolina, and New York.

No. of employees

approximately 1,000

Equipment

ERI has proprietary shredders in the company's Fresno, Holliston, Plainfield and Flower Mound facilities; downstream separation technology; data overwriting software; and the proprietary TrackTech system to track assets as they move through the company's facilities and provide reporting to clients.

Services provided

ERI offers electronics and information technology asset disposition (ITAD), data destruction, electronics recycling, remarketing, logistics, recycling kits and specialty programs.

Certifications

R2 (Responsible Recycling Practices), e-Stewards and National Association for Information Destruction (NAID) AAA Certification for physical destruction and sanitization of computer media, ISO 14001, ISO 9001 and OHSAS 18001

Website

<https://eridirect.com>

"Retailers are painted with a broad brush, but [they] all are culturally different with different missions and different goals from our perspective," Shegerian says. "We like creating customized and innovative solutions for our clients."

ERI also has partnered with two of the largest cities in the U.S.—New York and Los Angeles—to collect and recycle electronics generated by residents.

In 2013, the company collaborated with the City of New York Department of Sanitation on ecycleNYC. As of October, ERI says it has recycled more than 20 million pounds of electronics collected in the city.

ERI and New York City officials describe the program as being "fully funded by electronics manufacturers and free for New York City taxpayers and participating residential buildings."

In addition to permanent electronics scrap collection sites, called Household Special Waste Sites, in each of New York City's five boroughs, ecycleNYC serves residential buildings of 10 or more units that have registered with the program.

In October 2016, New York City and ERI introduced a pilot project in the borough of Staten Island providing curbside pickup of electronics. In the fall of 2017, that program expanded to include North Brooklyn and may roll out to other parts of the city over the next two years.

ERI says its suite of New York City collection programs has collected more than 29 million pounds in five years and provides an opportunity for all New Yorkers to properly recycle their electronics. The ecycleNYC and curbside programs are directly serving more than 3.1 million New Yorkers at their homes.

LA Sanitation and ERI launched the city of Los Angeles' Electronics Recycling Mail Back Program in May of 2017. That program aims to make electronics recycling more convenient for LA residents by offering another recycling option to the free drop-off locations at the city's S.A.F.E. Collection Centers, which ERI has been managing since 2007. The program uses specially designed boxes, available in multiple sizes, that can be purchased at <http://lasan.eridirect.com>.

The New York and LA programs combined with ERI's other clients, which include environmental services companies, OEMs, local and state governments, nonprofits and Fortune 500 corporate clients, have resulted in ERI processing in excess of 300 million pounds of electronics annually. Shegerian says the company's total processing capacity across its facilities is 1 billion pounds of electronics annually.

An international reach

Earlier this year, Fresno, California-based ERI announced its partnership with EnviroServe, which ERI describes as an "environmentally safe and secure recycling leader" in the Middle East, Africa and Caucasus (MEAC) region. The collaboration provides a global solution for customers of both companies.

Through the partnership, EnviroServe provides services to ERI's clients in the MEAC region, and ERI provides services to EnviroServe's customers in North America.

John Shegerian, ERI co-founder and executive chairman, says, "By creating this relationship, we are demonstrating our commitment to the expansion of ERI's global network and our passion for working with like-minded organizations abroad. In EnviroServe, we've found a partner that shares our mission to provide groundbreaking, environmentally responsible solutions to electronic recycling and data destruction needs all over the world. Our customers can now breathe easier knowing that our partner EnviroServe brings the same level of care and commitment to doing things the right way as we do in North America."

Shegerian says ERI will have representatives at EnviroServe locations, including at the company's headquarters in Dubai, United Arab Emirates, and that EnviroServe representatives will also be placed at ERI's facilities across America.

"As a partner to share the responsibility of providing electronic recycling and secure data destruction services in the United States, ERI is a perfect fit," says Stuart Fleming, CEO of EnviroServe. "Like us, ERI is committed to innovation and serving the needs of regional and global customers in an ever-evolving landscape. We are excited to partner with them as we jointly develop new ways to lead our industry to meet the pressing ITAD and data destruction needs of businesses all over the world."

EMPLOYING TECHNOLOGY

ERI is growing at a rate of 10 to 15 percent per year, Shegerian says. To increase its sorting accuracy as its processing volume increases and to free up its employees to perform ITAD and data wiping services, ERI is planning to embark on another first before the end of 2018. The company is installing AI and robotic sorting technology at its Fresno plant, which would make it the first electronics recycler in the world to do so.

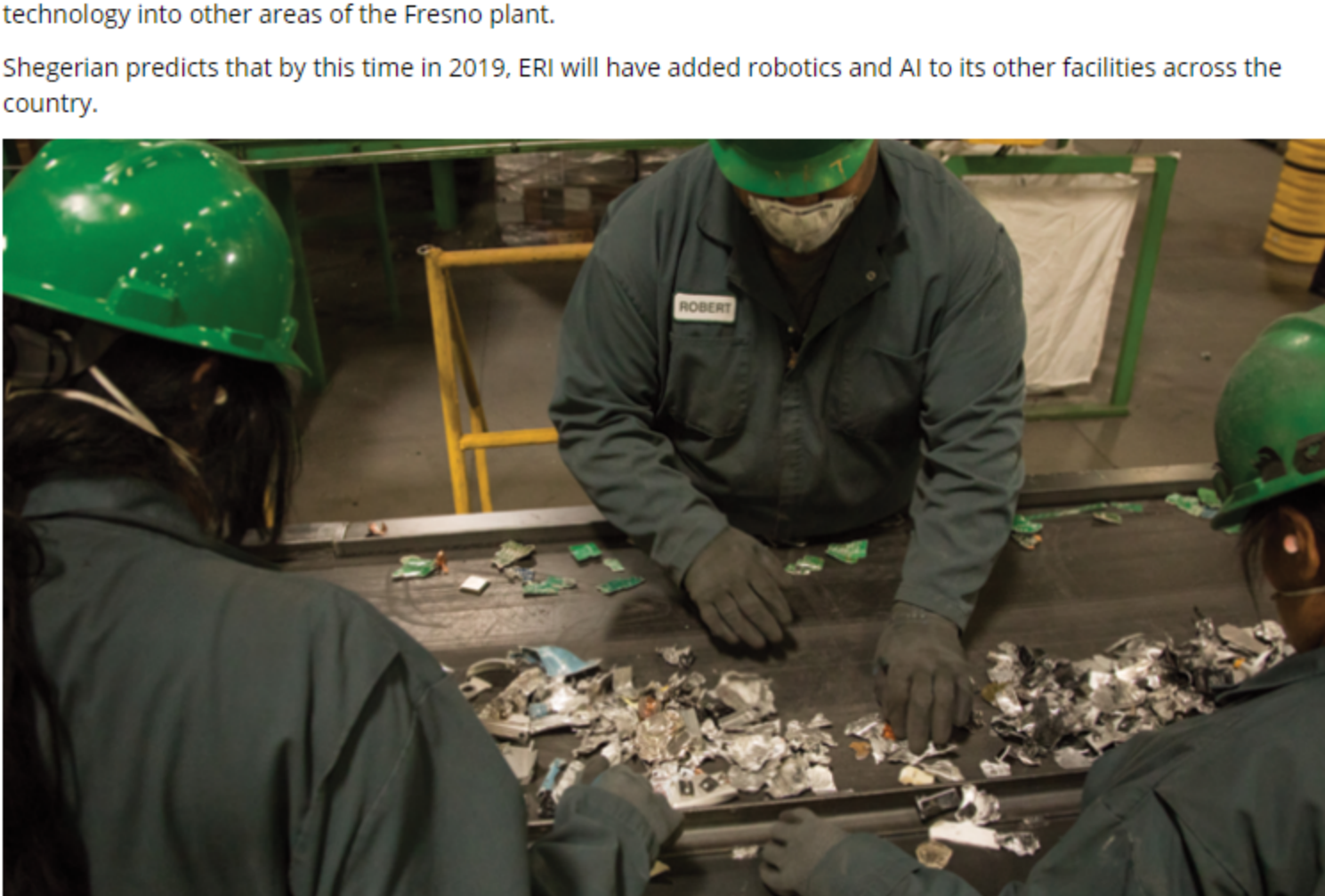
"Everything goes into Fresno first," Shegerian says of processing technology upgrades ERI introduces. "We tinker with it and perfect it. Then, when we're happy with it, we implement these solutions into our other facilities."

The AI and robotic system will be integrated into the sorting process to target and separate printed circuit boards (PCBs), aluminum, copper, stainless steel, plastic and other commodities.

"We are already successfully running the [AI] technology and, when the robots are installed, they will have a head start," he says.

He adds that ERI sees an expanded role for AI at its facilities beyond robotic sorting and is working to integrate the technology into other areas of the Fresno plant.

Shegerian predicts that by this time in 2019, ERI will have added robotics and AI to its other facilities across the country.



Photos by Mark Jansen Photography

SEEKING TRANSPARENCY

The visibility AI will provide into ERI's processing operations mirrors the transparency the company strives to provide clients.

"We strive to exhibit the most radical transparency of any recycling company in this sector in the world," Shegerian says. "We host over 100 in-person audits a year at our facilities by our clients and certifying bodies. And our downstream is the most collapsed and transparent that has ever been achieved in our industry because two of our minority strategic investors (LS-Nikko Copper and Alcoa) take much of our shredded commodities for beneficial reuse. This allows us to be right in the middle of the circular economy while transparently accounting where all our commodities go."

ERI also has developed an online asset tracking system, MyTrackTech, which enables its clients to track their devices from initial shipment down to the part, unit and commodity levels.

MyTrackTech is the customer-facing component of TrackTech, ERI's internal asset tracking system. In 2016, ERI's ERP system was integrated into TrackTech, allowing the company to provide what it says is a seamless reporting and invoicing platform.

The desire for transparency also led ERI to adopt EarthEye, which is designed to offer real-time logistics monitoring of end-of-life electronics. (See "Deploying trackers," starting on page 74, for more information.)

"When you know you are doing things the right way, there is nothing to be afraid of," Shegerian says of adopting EarthEye. "It was the right thing to do."

For Shegerian and the team at ERI, the right thing to do likely will include innovations that are yet to come.

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