

INSIDE:

The volume turns down on copper scrap....p. 44

North America's largest MRFs.....p. 58

Plastics recyclers get on the same page.....p. 90

THE BUSINESS MAGAZINE FOR RECYCLING PROFESSIONALS / SEPTEMBER 2015 / www.RecyclingToday.com



HGHER

SUPPLY-CHAIN SERVICES INC., LOMBARD, ILLINOIS, GOES BEYOND ELECTRONICS RECYCLING TO OFFER ITS CLIENTS SUPPLY CHAIN MANAGEMENT SOLUTIONS.

ade Lee, president and CEO of Lombard, Illinois-based Supply-Chain Services Inc. (SSI), seeks to provide her clients with services that offer more value than electronics recycling alone can provide, as reflected in her company's name and its diverse menu of services.

Founded in 1997 as Supply Service International, Lee says she changed the company's name in 2004 to better communicate her goal of growing SSI into a fullservice supply chain management company. SSI offers IT (information technology) asset recovery, refurbishing and remarketing; parts harvesting and fulfillment; IT inventory management; data wiping; hard drive destruction; electronics recycling; staging; imaging; and logistics management services to a roster of business-to-business clients primarily.

The devices that SSI handles for its clients are as diverse as the company's range of services and include all types of electronics with a plug or batteries, from IT equipment, including laptops, networking equipment and enterprise storage equipment, to mobile devices to office imaging systems to industrial electronics to medical, lab and testing equipment, Lee says.

"At a time when materials prices and equipment resale values are in a downward trend, it is important that service providers expand to more value-added services beyond recycling and ITAD (information technology asset disposition) services," Lee says. "SSI also provides services in the forward and reverse supply chain management arena, where our strengths of precision and accuracy are highly sought after by customers. SSI also possesses exceptional analytical skills and complex project execution capacities

that are also highly appreciated by customers. These multidimensional service capabilities help SSI withstand tough economic and market conditions," she adds.

COMPANY VALUES

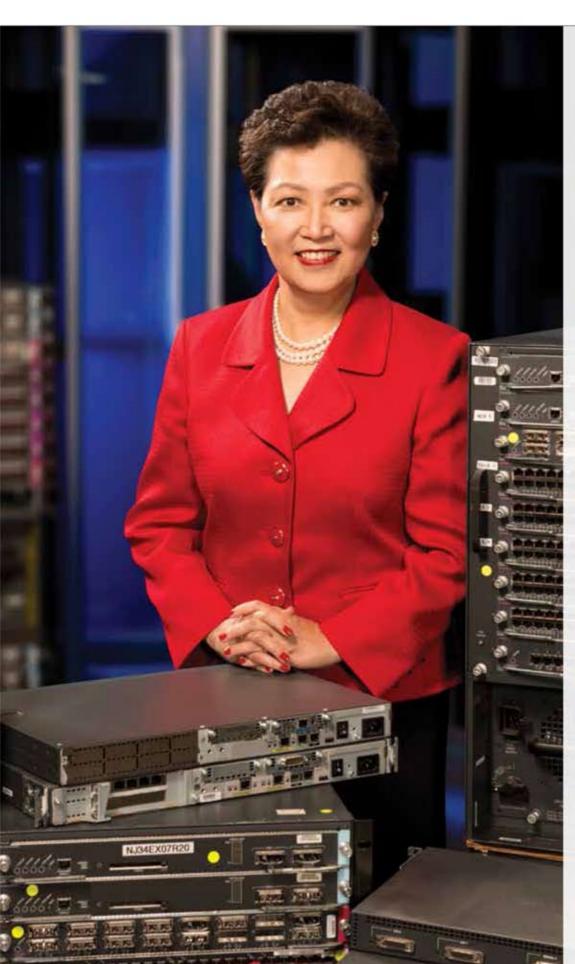
In addition to providing SSI's clients with value-added services, SSI prizes two qualities that Lee says are integral to SSI's operations—integrity and accuracy.

She says integrity is "the most important virtue in doing business."

Lee adds, "Although in the recycling industry where integrity may not always help win business, we have found out that corporate customers will eventually realize who can truly meet their demands after trying a different breed of peers."

SSI demonstrates the qualities of integrity and accuracy in various ways at the customer and downstream partner levels, Lee says.

"SSI provides recycling ser-



AT A GLANCE

SUPPLY-CHAIN SERVICES INC.

President & CEO:

Jade Lee (pictured at left)

Location:

headquartered in Lombard, Illinois, with a second location in Plano, Texas

Equipment:

a shredder to process hard drives, software to manage and perform a number of operations, an automated horizontal baler, numerous forklift trucks, a scissor lift, a fleet of trackers and straight trucks with lift gates and more than 40 semitrailers

Services:

IT asset recovery, refurbishing and remarketing; parts harvesting and fulfillment; IT inventory management; data wiping; hard drive destruction; electronics recycling; and national logistics management

Certifications:

ISO 14001 and 9001, OHSAS 18001, Responsible Recycling Practices/Recycling Industry Operating Standard (R2/RIOS) and National Association for Information Destruction (NAID) AAA certification for plant-based computer hard drive sanitization with endorsements for plant-based physical hard drive destruction, electronic media and nonpaper media





The highly trained staff at Lombard, Illinois-based Supply-Chain Services specializes in providing parts harvesting, inventory and fulfillment services to global original equipment manufacturers that are among the company's customers.

vices to major electronics OEMs (original equipment manufacturers) for their own branded products that are either off-lease or defective equipment," she explains. "OEMs usually have strict requirements and prohibit service providers from reselling whole or partial equipment, circuit boards with proprietary chips, parts and accessories," Lee adds.

She says SSI has a reputation among the OEM community "for its high integrity in protecting OEM customers' equipment by performing in-depth demanufacturing and recycling services and generating detailed and accurate reports."

Lee says SSI also is known in the material processing community for its well-sorted, well-labeled and well-packaged secondary materials and for providing accurate weights. "Our packaging lists to downstream partners clearly itemize each pallet's gross, tare and net weight for them to verify when unloading," she says. "Some told us that SSI's unique method actually helped enhance their processes.

"It is truly gratifying to hear comments like this," Lee adds.

The company's dedication to accuracy also can be seen in the detailed analytical reports that it customizes for its corporate clients. Lee says, "Our database software

know-how as well as the holistic yet thorough strategic thinking capabilities on supply chain management processes and compliance intricacies also have enabled us to help our OEM and enterprise customers develop mission-critical database software that even their corporate IT departments were unable to do."

Accuracy is particularly important in the area of data destruction management, and SSI relies on what Lee describes as "stringent procedures" to ensure it meets its customers' expectations in this area.

"SSI's experience in this critical area has resulted in quite a few large on-site data sanitation/data collection and asset recovery projects ranging from one to five days per project, in addition to large quantities of hard drive destruction at our plants," she says.

Roughly 80 percent of the hard drives SSI processes through its ITAD operations are overwritten, while the remainder are physically destroyed via shredding. "Before shredding, circuit boards will be removed first so there are no focus materials (materials that could contain high levels of environmental toxins) in the shredded material," Lee says.

Given the high percentage of hard drives that are destined for the reuse mar-

ket through SSI, data destruction is a primary service the company offers. SSI has a two-story enclosure at its Lombard plant that is dedicated to this operation. "This building is equipped with IT hardware, data sanitization software (the default is three wipes), data destruction verification hardware and software, barcode scanners, inventory racking systems and an inventory management database," Lee says.

Hard drives are one of the few materials that find their way into the shredder at SSI. As the company handles large commercial and industrial equipment, it relies on demanufacturing instead, which can yield better material value, Lee says. This work is performed at customized workstations that operations associates helped to design.

"We have a detailed demanufacturing process that generates over 50 different types of material categories, including circuit boards, ferrous metal, nonferrous metal, plastic, cable, etc.," Lee says. "As our deman associates are well-trained, the segregation of materials is clean and accurate."

She says each Gaylord, skid and bale is labeled with the material and grade, gross/tare weight and a bar code. "We weigh every empty Gaylord and skid, which is very rare in the industry, according to our downstream partners. However, this exem-



How about
Ticketing,
ATM'S,
Install & Training,
Service,
Excellent Support,
Inventory,
Shipping,
Mobile Solutions
... & much more?



Call (877) 897-8422 and Schedule a domo to experience first hund why Schapflight is the Right Choice for all your Scrap Software needs!

www.ScrapRight.com (877) 897-6422

INCREASING OVERSIGHT

Jade Lee, president and CEO of Supply-Chain Services Inc. (SSI), Lombard, Illinois, says oversight continues to be missing from the electronics recycling landscape, despite the establishment of certification programs and state extended producer responsibility (EPR) laws aimed at manufacturers of electronic devices.

"Oversight is an important issue that needs to be addressed in the recycling industry," she says. "Lack of oversight by government authorities, certification management organizations and customers creates unfair competition."

Lee says news of fraudulent practices by certified recyclers illustrates the importance of oversight. "Both R2 (Responsible Recycling Practices) and e-Stewards certification programs have several hundreds of certified recyclers. It is quite difficult for customers to discern truly good ones from the crowd."

She recalls when customers used to perform on-site audits before contracting with service providers. "Nowadays, most customers simply rely on the two certification programs to do the auditing job and just choose service providers based on price," Lee says.

Lee, who was among the stakeholders who worked to develop the original R2 Standard, says she has been working with SERI (Sustainable Electronics Recycling International), the Boulder, Colorado-based housing body for the R2 Standard, about introducing an unannounced audit program similar to that used by the National Association for Information Destruction (NAID), through which SSI is certified for plant-based computer hard drive sanitization and for plant-based physical hard drive, electronic media and nonpaper media destruction.

"As NAID has its own trained auditors, it is feasible for NAID to perform unannounced audits directly of service providers," Lee says.

SERI began witness audits earlier this spring with the goal of ensuring "consistency and accuracy among the CBs' (certification bodies') auditors and to identify areas where more training or guidance is needed for auditors and/or recyclers," the nonprofit says.

Witness audits occur during regularly scheduled R2 audits. According to SERI, "An assessor representing SERI will follow the auditor or auditor team to evaluate their understanding of the R2 Standard and associated guidance, as well as to assess the implementation of the R2 Standard by the recycler."

Lee says she hopes this step of auditing auditors will help to address those CBs that have gained a bad reputation for their practices related to R2 audits.

SERI also has announced "spot audits," which initially will focus on R2 certified recyclers that are subjects of "serious" complaints.

According to SERI, "The CB will be asked to conduct the initial investigation and, if warranted, suspend or even revoke the certificate of the company in question. SERI may choose to participate in the initial investigation audit or conduct a follow-up spot audit, depending on the circumstances of each case. The spot audits will be conducted on very short—or no—notice in order to gain a truer picture of the company's 'business as usual' operations."

SERI says it will expand its spot audits to include random visits to R2 certified facilities. "This will help identify areas where additional training may be needed and also identify recyclers/refurbishers who may be taking shortcuts between regularly scheduled audits," the nonprofit says. "The ultimate goal of spot audits is to remove bad actors from the R2 certification program, protect the integrity of the program and protect the reputation of R2 certified companies who work hard to conform to the R2 Standard's requirements."

plifies the meticulous operations that SSI's management has put in place."

SSI's emphasis on accuracy and accountability also are visible in its asset recovery management area, which is equipped with conveyor systems; testing stations for PCs, servers and networking equipment; refurbish stations; and bar code scanners. "Every computer is equipped with database software to record each step of the process so we can provide buyers with detailed lists to optimize recovery value and provide corporate customers with detailed and transparent settlement reports," Lee says.

She adds, "With our detailed and rigorous process of recording, inspection, testing, refurbishing and data destruction, our corporate customers are able to maximize the residual value of their off-lease or used equipment because buyers compete to pay higher amounts for quality, transparent and trustworthy products."

Items that have been processed through SSI's asset recovery management service are sold to audited used equipment wholesalers and refurbishers and directly to end users, such as schools, businesses and nonprofits. Lee adds, "As we service OEM customers, they sometimes have certain requirements regarding where and whom we can sell to."

STRATEGIC THINKING

While SSI's attention to detail and array of value-added services are undeniable factors in the company's success, Lee also gives credit to the management team at SSI, whose innovative thinking and experience "have positioned SSI as a company that customers can entrust with any type of complex programs and projects," she says.

"What makes SSI stand out in the industry, first and foremost, is SSI management's strategic thinking abilities," Lee adds. This skill, she says, "empowers SSI to discuss strategic vision with corporate customers' top management and deliver the complex goals and objectives that they desire."

Lee adds, "Our corporate customers often comment that this level of sophistication and solution execution is a major differentiator that SSI possesses."

The more complex the job, the better in SSI's eyes because that's where the company truly excels. "SSI has the passion to be of service to the most

CONTINUED ON PAGE 115

Sending an Employee Into a Baler to Clear a Jam is The Most Dangerous Job in The Recycling Business*

CB&E's FREE JAM TWO-RAM™ is THE SOLUTION



EMPLOYEES ARE KEPT OUT OF THE BALER



Catawba Baler & Equipment

800.728.1405 Watch The Free Jam Video At: www.CBEbaler.com

ational Safety & Health Administration (OSHA) reports over 40 recycling baler fatalities and 70 serious injuries since 1990

[&]quot;CB&E's Free Jum Two Ram Bater is designed to clear jams quickly and without the need to send an employee into the bater to do so, improper use of the machine or rare instances may require a manual jum clearing method. Always follow approved OSHA/ANSI safety standards when operating or entaring any balling machine.





616-325-2019

RECYCLING MARKETPLACE

METAL SORTING Books & Magnets



Purchase on our web site: www.recyclecat.com

SOFTWARE





ISSUES WITH EPR

State extended producer responsibility (EPR) programs mandating the recycling of certain electronic devices at the expense of electronics manufacturers require more oversight, says Jade Lee, president and CEO of Lombard, Illinois-based Supply-Chain Services Inc. (SSI), a provider of ITAD (information technology asset disposition) and related services.

"Dealing with fraudulent weight reporting (i.e., ghost or air weight), has been the pain point of many state agencies, OEMs (original equipment manufacturers) and collectors," Lee says.

This lack of oversight infrastructure is a major reason for the failure of EPR systems, she says, and why many good recyclers exited this segment of the business.

To help address this concern, Lee has developed a Collection Site Weight Verification Form. Collection sites would submit this form to the state authority, noting the number of truckloads collected and how full those loads were. Calculations are based on the assumption that 65 to 70 percent of the items collected are TVs and monitors.

While Lee recognizes that the form will not completely eliminate fraudulent weight reporting, she says it could minimize the practice.

"As SSI possesses high-level abilities in database software development, it is my wish that SSI's concept can be realized in cooperation with a leading e-waste data clearing organization," Lee says, referring to the Electronics Recycling Coordination Clearinghouse (ERCC), which is administered by the National Center for Electronics Recycling (NCER), Parkersburg, West Virginia, and Northeast Recycling Council, Brattleboro, Vermont.

stringent and demanding customers—providing more complex and well-executed solutions to meet their demands."

Lee adds, "Customers' demands have also propelled us toward continual improvement, which results in continual growth."

CONTINUAL IMPROVEMENT

SSI relies on management systems and its ISO 14001 (environmental management) and 9001 (quality management), R2/ RIOS (Responsible Recycling Practices/ Recycling Industry Operating Standard) and National Association for Information Destruction (NAID) AAA certifications to help ensure the company delivers a consistent level of service to its clients.

"SSI was certified to ISO 14001 and 9001 way back in 2004 ahead of many peers," Lee says.

While these certifications help to attract corporate customers, she says the intrinsic benefits of SSI's certifications extend beyond that, helping to transform the mentality and vision of SSI's staff. Lee says, "Pursuit of excellence' has become the cornerstone of SSI's business philosophy."

"Everyone who visits SSI, including

corporate customers, the U.S. EPA (Environmental Protection Agency), auditors, consultants and peers, can tell this passion and determination through our well-organized operations," she says, adding that she often hears that SSI is one of the most efficient and organized facilities they've seen.

Regarding SSI's future, Lee says, "Continual development in innovative technologies and enhancement in operational excellence are our goals. As the business environment and customers' strategies are constantly evolving, it is imperative that we need to continuously broaden our strategic vision, expand technology know-how and enhance mission-critical capabilities across multiple industries in order to provide customers with the right solutions that meet their current and future needs."

The author is managing editor of *Recycling* Today and can be contacted via email at dtoto@gie.net.



THE IMPORTANCE OF AUDITS

Visit www.RecyclingToday.com/ rto915-supply-chain-servicesprofile.aspx to learn why SSI conducts onsite audits of its downstream vendors.