

sustainability report

CLOVERIMAGING.COM



CLOVER IMAGING GROUP
Sustainable Innovation —



a letter from our ceo

On behalf of Clover Imaging, it is my pleasure to present to you our 9th annual Sustainability Report.

Over the years, as our company has grown, so has our commitment to sustainability. The Clover we know today has expanded from a single facility in Ottawa, IL, to facilities throughout the world. We continue to develop as a company and deepen our understanding of sustainability and its impact on our long-term success. While we still have much to learn and achieve, our commitment to sustainable business practices remains strong.

You can read in this report about our achievements in 2017, which include increased efficiency in packaging, research and development initiatives, and continued participation in the PrintReleaf program which has resulted in the planting of over 150,000 new trees.

Our initiatives for 2018, already underway, include a full review of the social and environmental performance of our suppliers. In addition, we are building solutions that work for our customers. Customers want products to be green, affordable and of high quality. Today's customers care about the social and environmental footprint companies leave on the world and seek companies who develop products with a commitment towards positively impacting society and the environment. It is our goal in 2018 to further our efforts in meeting these customer expectations whether in our collections, packaging, remanufacturing or distribution areas. We look forward to continually improving our objectives towards greater sustainability while being mindful of the inevitable trail we leave behind us.

Clover's Sustainability Report is our opportunity to share with you the work we do to fulfill our purpose - to provide a quality product, at a reasonable price to consumers, while acting responsibly as a global manufacturer and citizen.

A handwritten signature in dark ink that reads "George Milton". The signature is fluid and cursive, with the first name "George" and last name "Milton" clearly legible.

George Milton
CEO | Clover Technologies Group, LLC

global collections

Toner, Ink & Parts

2017 Calendar Year



44,496,932
units



5,339,635
pounds



3,708,078
units



444,970
pounds



environmental certifications

ISO 14001:2004 and ISO 14001:2015

ISO 50001:2011

EPA WasteWise Partner

R2:2013

Nordic Ecolabel

Blue Angel - RAL UZ-55

DIN Freecolor Biobased H1/H2

transportation & logistics

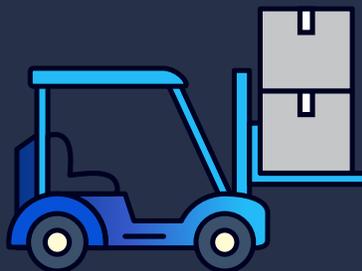
Clover Transportation and Logistics continues to develop ways to limit our carbon footprint and environmental impact through improved processes and increased use of lower emission transportation means.

In 2017 Clover began a new initiative to lower the number of boxes shipped by employing smarter packaging and increased cube utilization. Through improved packaging of small parcel packages and maximization of parcel cube space Clover was able to reduce overall package shipments per order by 15.9%.

Clover continued to drive packaging changes for over the road and truckload shipments. These changes allowed for greater use of cubic capacity and more efficient pallet space utilization, resulting in more shipments per truck and fewer shipments overall.

IN 2017

15.9%



**Reduction in packaging
per shipment.**



transportation & logistics

Centrally aligned distribution centers in high usage areas were used to complement our existing network resulting in less over the road miles for customer deliveries for all Clover locations. This new Distribution Center strategy manifested itself with a net reduction of miles per customer delivery. Shorter deliveries translated to reduced fuel emissions and lower fossil fuel consumption.

In 2017 Clover continued to drive transit business to energy efficient rail shipments. Incorporating more rail loads for longer hauls elevated Clover's rail usage to all-time company highs and lowered overall over-the-road miles per shipment.

In 2018 Clover continues to work with vendors and customers to enhance deliveries and pickups in order to maximize space utilization and reduce the overall number of trips.



Shorter deliveries result in reduced fuel emissions and lower fossil fuel consumption.



distribution

Clover continues to enhance its distribution network through upgraded systems and expanded service areas. Our systems continue to provide value added customer experience through unique packing lists and labeling that specifies instructional information specific to the end user. We have expanded our network to include two new distribution centers. Our facilities are ISO certified, ensuring consistent quality and processing amongst all of our buildings. All centers are equipped with WMS technology, used to help track order movement from entry to delivery.

This system utilizes cubic information to ensure that we are using the right size boxes for shipments and reducing waste and packing material in every carton. These centers are active participants in the reusing, reducing, and recycling initiatives instituted by Clover.



These initiatives include the reuse of packaging material, recycling of plastic and corrugate, and reduction of landfill waste through facility recycling efforts. Our associates take this to the next level by bringing in their recyclable ink and toner cartridges, as well as recycling their food containers, aluminum cans and plastic bottles.

research & development

2017 has been a year filled with challenges and opportunities for Clover's Automation Engineering Department. The introduction of new technologies by the OEM's and the product quality enhancements through Automation and Robotics has resulted in a 20% increase in machine orders for the Automation Team. Both Automation teams in Ottawa, Illinois and Van Nuys, California have been working with the Quality, Research & Development, and Production Teams in order to meet Clover's cost and waste reduction initiatives by introducing highly engineered solutions into Clover's manufacturing process.



Robotic Automation

Clover's engineering team launched new cartridge splitting processes utilizing contoured blades coupled with specialized CNC machinery in order to create a low waste/high yield remanufacturing process.



Industry Challenges

Internally pulled seals have been in use by the OEM this past year. This new method of pulling the seal has led us to develop machines and processes that re-apply the OEM seals in order to keep our products IP cleared and cost effective.

While developing processes for the newly introduced SKU's the Automation Teams have further refined existing manufacturing lines to increase yields and efficiencies as well as reduce the need for rework. One of these continued improvement activities, is the large-scale implementation of automated sealing blade installation machines to make the sealing blade application more repeatable.

These automation activities have helped Clover reduce waste and rework, and has made us one of the only companies with a remanufactured solution for the newest cartridges on the market.

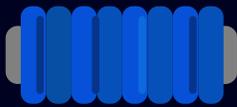
IP & packaging

intellectual property

Clover's patented technologies improve print quality and promote resource efficiency. Clover's intellectual property portfolio now consists of 71 issued patents and 29 patents pending (U.S. and foreign).

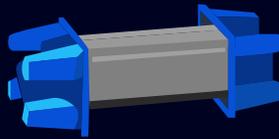
In 2017 Clover filed 12 new patent applications and obtained 13 new patents. These patents and new applications illustrate Clover's ongoing commitment to offer innovative high-quality products while reducing waste, as the technological advances they describe promote the efficient use of resources by facilitating the reuse of existing components during manufacturing operations.

packaging | salvaged and reused



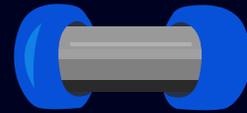
1,188,985

Cartridge Shipping
Protectors



377,970

Molded Pulp
End Caps



31,685

Simpak
End Caps

PrintReleaf™

This Eco-Services program integrates seamlessly with CIG's Axess Managed Print Services to offer our dealers and their clients the opportunity to offset their paper footprint and contribute to global reforestation efforts on a monthly basis by planting a tree for every 8,333 pages printed.



40,611,555
PRINTED PAGES

2015



4,974
PLANTED TREES



448,327,132
PRINTED PAGES

2016



53,808
PLANTED TREES



1,279,225,288
PRINTED PAGES

TODAY



153,513
PLANTED TREES



printreleaf™



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