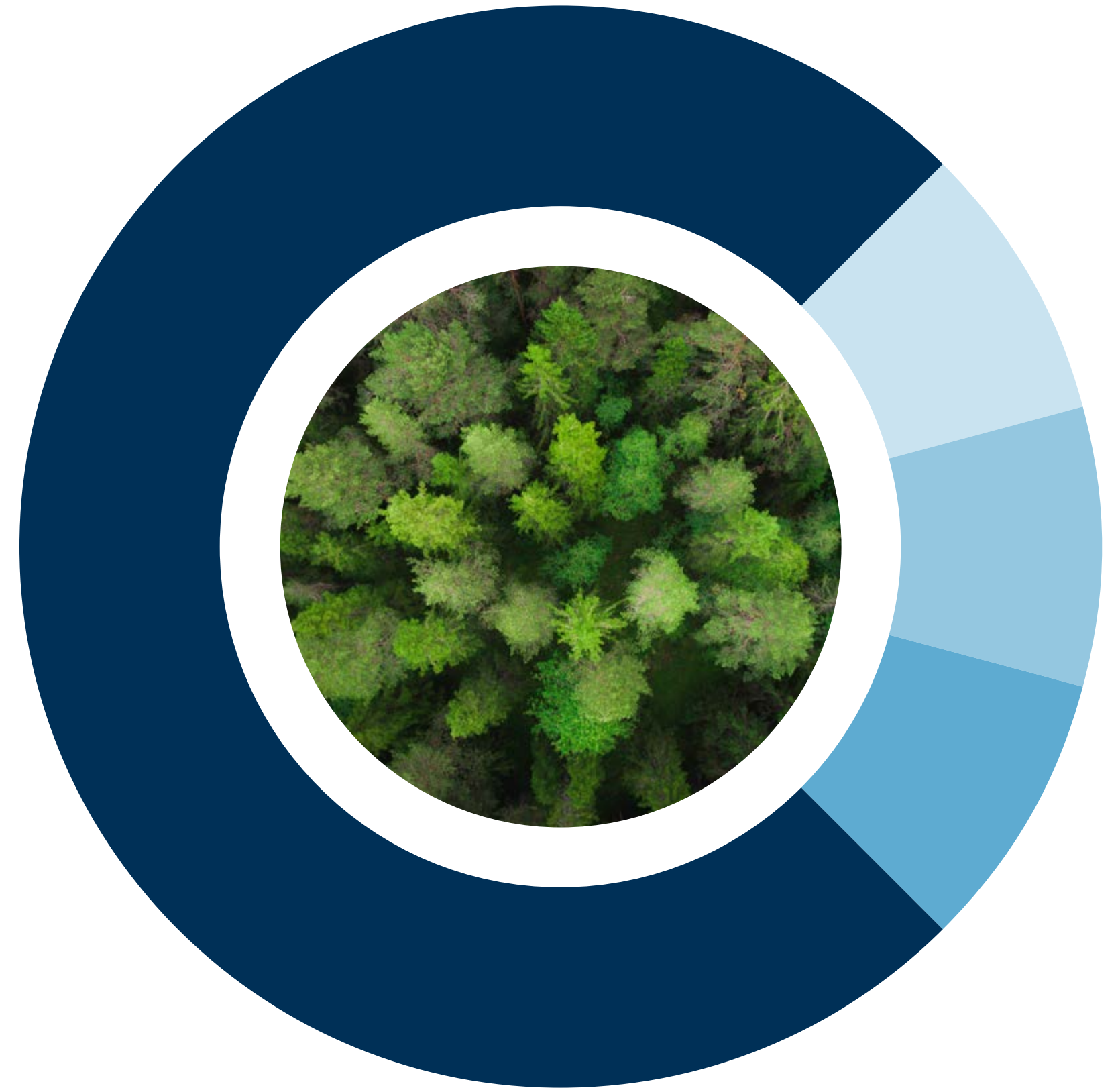




Accelerating a Circular Future

Closed Loop Partners
2022 Impact Report



Letter From Our CEO

2022 was a pivotal year for Closed Loop Partners. As our firm reaches nearly a decade of work to build a waste-free future, we saw the transition to the circular economy reach another inflection point, proving its key role in a more resilient, prosperous society.

Global Challenges Made the Case for Circularity

The challenging macroeconomic, geopolitical and environmental conditions of the last twelve months made a strong case for the circular economy. Fluctuating commodity prices, coupled with supply chain disruptions and record-breaking climate disasters lifted the hood on legacy systems weighed down by overproduction, a lack of transparency, and high costs of extraction and landfilling. Opportunities to disrupt the status quo with resource optimization and increased innovation are proving more critical than ever.

This year, more cross-sector partnerships and commitments toward circularity were formed, including the Ellen MacArthur Foundation's 2022 Global Commitment uniting more than 500 organizations behind a common vision of a circular economy for plastics. More policies and roadmaps to support circular business models were created in places like New York City, California, London, France, Brazil and Singapore, propelling the circular economy toward its projected \$4.5 trillion in global economic value by 2030. The Inflation Reduction Act, the most sweeping collection of U.S. climate change-related programs in decades, injected \$350 billion in dedicated climate capital into the economy. With 70% of greenhouse gas emissions associated with the handling and use of materials, policies like this have sweeping implications for the transition to circularity.

Investing, Innovating, Building

Amidst these tailwinds, Closed Loop Partners saw unprecedented growth, with assets up more than 30% year over year, including the final close of our Closed Loop Leadership Fund, welcoming institutional investors KIRKBI, funds and accounts managed by BlackRock, and Realdania's mission-driven investment arm alongside investments from leading global corporations, donor advised funds and global family offices. Our Closed Loop Ventures Group doubled down on portfolio growth, seeing the uptick in circular solutions across industries including renewable energy, water and logistics. Our Closed Loop Infrastructure Group continued to make significant strides across its funds, and established the Closed Loop Local Recycling Fund with PepsiCo to help close the gap in recycling access. Today, we are operating with over \$500 million in assets under management across venture capital, growth equity, buyout private equity and catalytic capital.

Alongside our investment firm, Closed Loop Partners' innovation center, the Center for the Circular Economy gained momentum since its launch five years ago. The NextGen Consortium welcomed PepsiCo as a partner alongside existing partners including Starbucks, McDonald's and Coca-Cola. The Consortium to Reinvent the Retail Bag released groundbreaking insights from its multi-retailer reusable bag pilots with CVS Health, Target and Walmart, while the Composting Consortium began its work to pave a path forward for a more resilient composting industry in the U.S.

The year closed out with a major milestone for Closed Loop Partners: the launch of Circular Services, in partnership with Brookfield Renewable, marking our entrance into materials management operations. Circular Services further evolves Closed Loop Partners' mission to advance the circular economy on the ground, with the new company transforming materials supply chains and accelerating circular business models by keeping more materials in play—including packaging, food waste, electronics and

textiles. At Closed Loop Partners, we innovate, invest and build to accelerate the transition to a circular economy.

Where We Are Headed

After nearly a decade of hard work and progress toward creating a waste-free world, Closed Loop Partners is proud to stand alongside our portfolio companies, partners and a team dedicated to building a future where nothing is wasted—and everything is a resource to be built upon. Together, we have kept 4.8 million tons of materials in circulation and avoided 10.1 million tonnes of greenhouse gas emissions to date, and we are only getting started.

We celebrate this incredible progress and recognize that there is still much work to be done to achieve a truly circular economy. It will take the collective efforts of businesses, policymakers, local communities, consumers, NGOs and more to create the necessary policies, infrastructure and incentives to drive systemic change. Alongside our partners, we remain confident that the circular economy is not only a key solution to the critical environmental challenges facing our planet, but one of the most significant economic opportunities of our lifetime.

We are grateful for the support of our partners and look forward to continuing to work together to build a more sustainable, circular, prosperous and equitable future.



Thank you,
Ron Gonen
Founder & CEO
Closed Loop Partners

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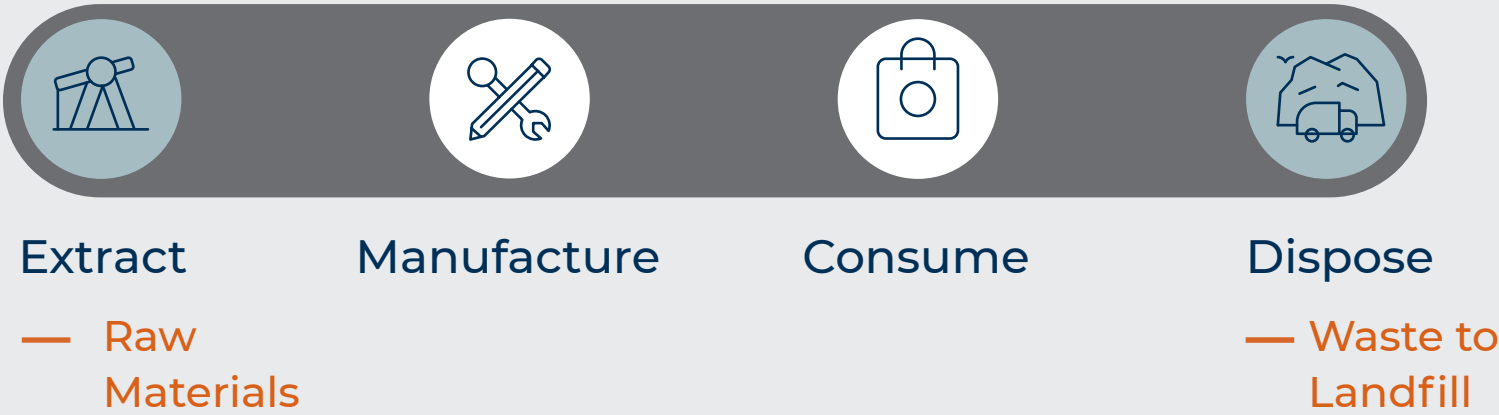
The Closed Loop Partners Story

Our origins and path forward, toward
building the circular economy

The Transition Away From Take-Make-Waste

Since the first industrial revolution, the take-make-waste system has made economic growth dependent on extracting resources and disposing those same resources into landfills or nature—wasting economic value and damaging ecosystems and communities in the process.

Linear Economy



2B+
tons¹
of resources are thrown
away

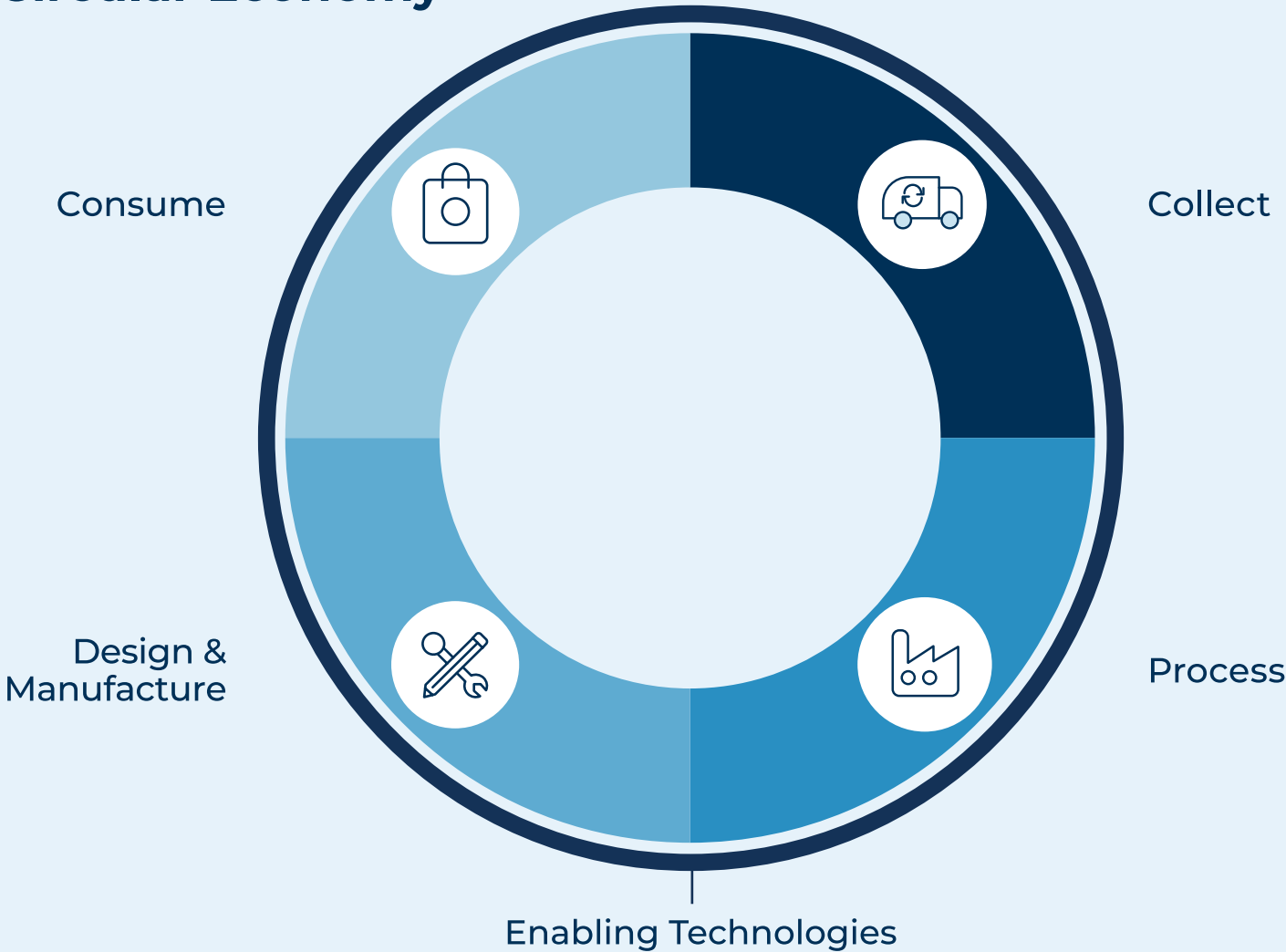


1.7
earths²
We use 70%³ more resources
than the earth can regenerate
every year. At this rate, we
could need 4 earths by 2050⁴

Advancing a Circular Economy

Closed Loop Partners aims to advance the transition to a circular economy, a balanced system based on resilient profitability, where economic growth is decoupled from the extraction and landfilling of natural resources. It is a fundamental shift in how we produce and consume, channeling the elegance of nature—where nothing is wasted, and everything is a resource.

Circular Economy



70%³
of all global emissions are related to material handling and use, which can be mitigated through transitioning to the circular economy

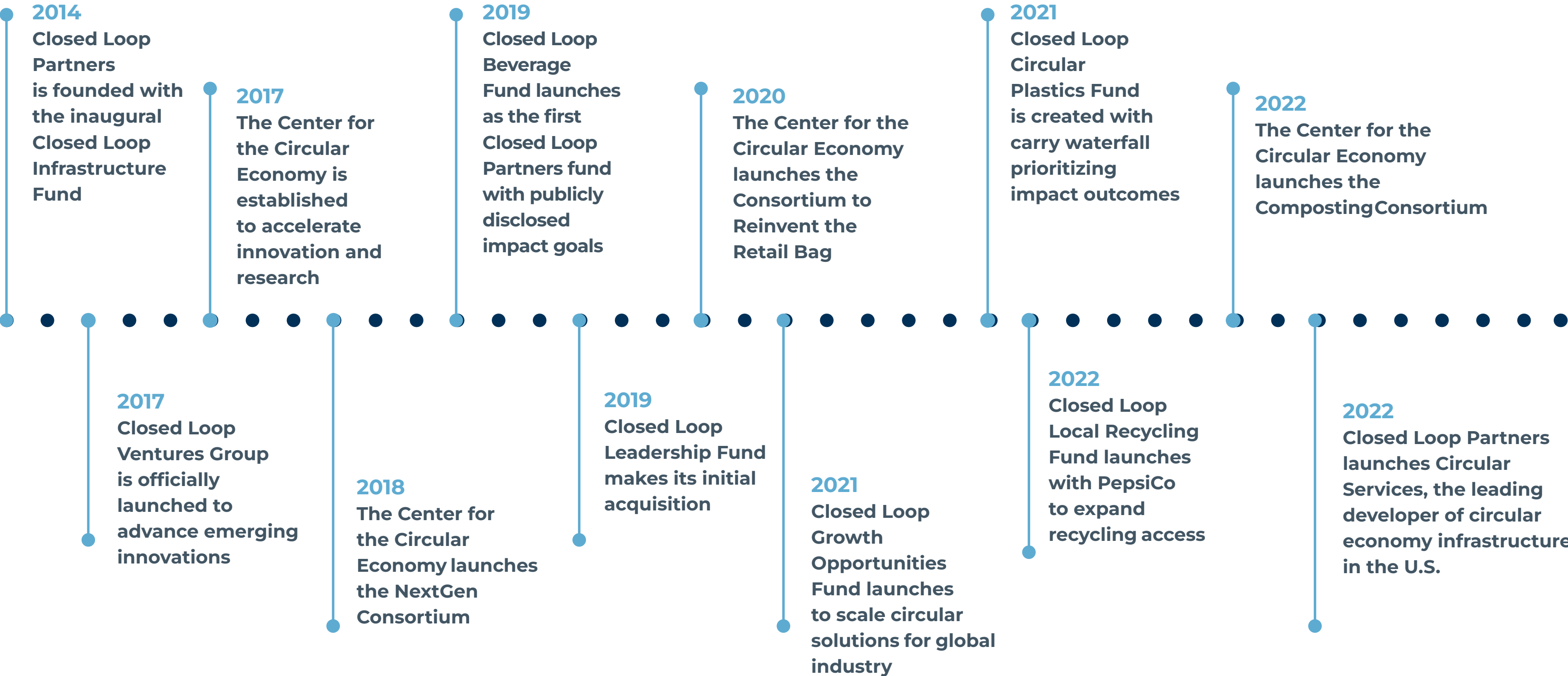


\$4.5 trillion
The circular economy represents \$4.5 trillion⁵ of global economic value by 2030

Our Journey Over the Years

Closed Loop Partners was founded in 2014, as the opportunity to advance the circular economy began to emerge in North America. As more companies were committing to keep materials in circulation, new business models, cross-sector partnerships and appropriate infrastructure were needed to do so.

Nearly a decade later, Closed Loop Partners continues to be at the forefront of building these circular systems, helping lead the transition by advancing and investing in new solutions that disrupt the status quo, infuse circularity into legacy supply chains and bolster the underpinning infrastructure.



Our Approach to Accelerating the Circular Economy Today

We innovate, invest and build to optimize supply chains, advance natural resource efficiency and drive economic value with our corporate, institutional and family office partners.



2022 Snapshot

Our investments in the circular economy progress a new economic model focused on a profitable and sustainable future. By reducing our dependence on the extraction of finite natural resources, and minimizing waste at end-of-life, we keep valuable materials in circulation and reduce greenhouse gas emissions.

\$530M+

Assets under management

65+


Investments made to date

3

Industry Consortia

50+


Global corporations actively engaged across the firm




Global Reach

WITH AN OPERATIONAL FOCUS IN THE U.S.


PORTFOLIO COMPANIES IN 4 CONTINENTS, 9 COUNTRIES, AND 22 U.S. STATES




4.8M tons of materials kept in circulation





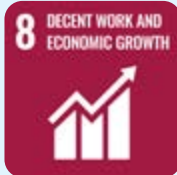
10.1M tonnes of greenhouse gas emissions avoided



Regions of Influence



Our firmwide investments contribute primarily to the UN Sustainable Development Goal 12:



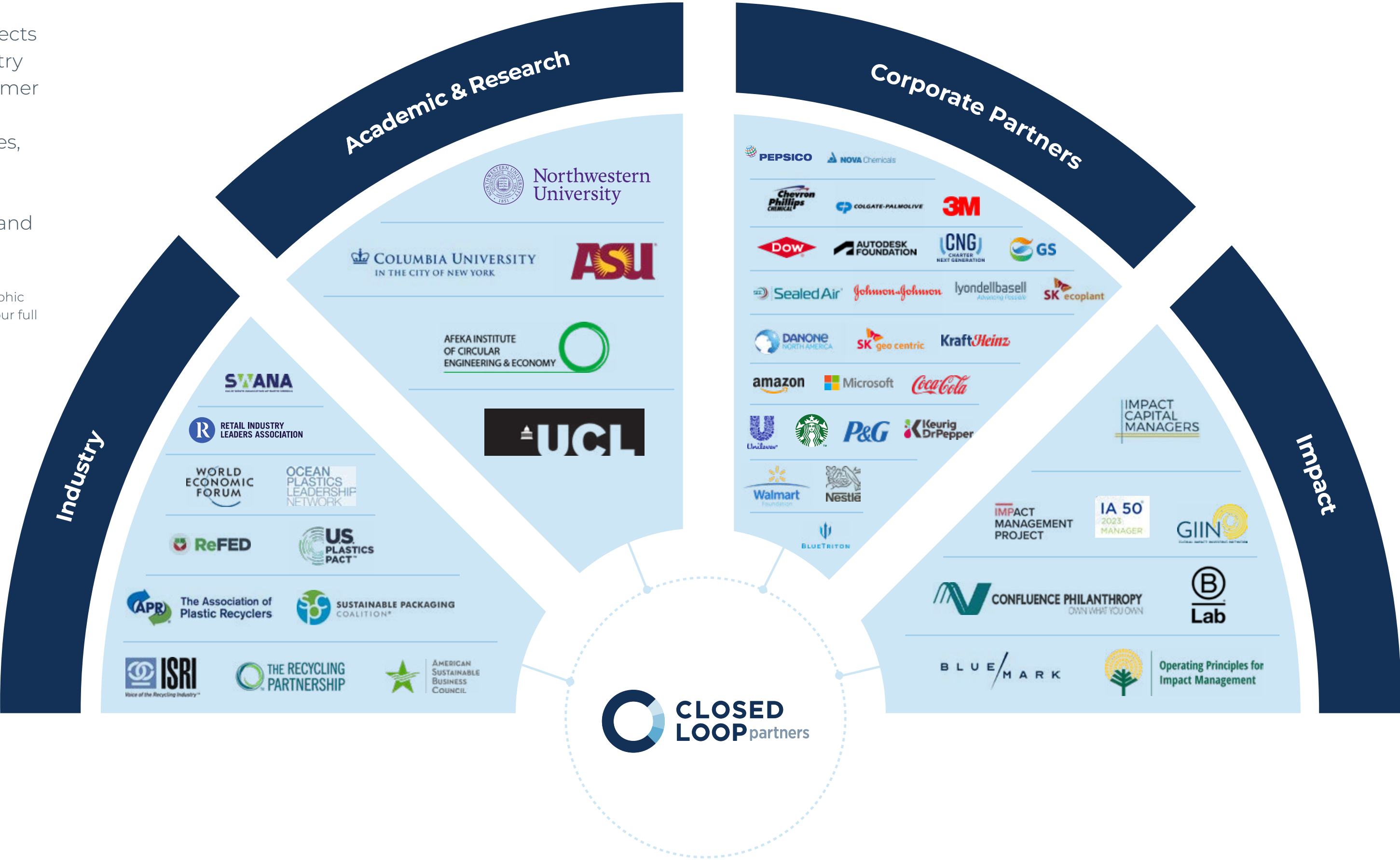
Our work across our funds also benefits the following SDGs:

Through our portfolio companies and broader network, we impact all 17 SDGs.

Our Ecosystem of Partners

The firm has built an ecosystem that connects entrepreneurs, industry experts, global consumer goods companies, technology companies, material science companies, retailers, financial institutions and municipalities.

Note: Logos featured in this graphic are a representative sample of our full ecosystem of partners.



Emerging Impact Areas in the Circular Economy

Localization

The transition to a sustainable circular economy will require a transition to more localized supply chains, reducing the costs and emissions associated with transportation and multiple “hand-offs.”

Building modular solutions, favoring on-site processing and keeping looped materials as local or regional as possible will help accelerate circularity in line with broader economic and climate goals.

Food Solutions

24%⁶ of food in the U.S. ends up in landfills, or is otherwise disposed of—an economic dead end, and a social and environmental risk.

Amidst an increasingly urgent climate crisis, and growing inequity in food distribution, finding circular solutions to reduce food waste and handle organic matter at end-of-life is now a top priority for investors and community organizations.

Renewables Circularity

As the renewable energy space grows, it is increasingly important to keep the components used to develop these solutions out of landfills, where they decompose and emit greenhouse gas emissions—contributing to the very problem that renewable energy aims to solve.

Circular economy solutions for the renewable energy space are helping bring precious metals and other valuable materials back into supply chains to create more renewable energy infrastructure and build a more resilient industry.

Our Impact

How we measure and manage our impact

“Closed Loop Partners has been a pioneer in driving positive impact through its investments in solutions that advance the circular economy. We are proud to have Closed Loop Partners as part of our community of Certified B Corporations, meeting higher standards of social and environmental impact that have been built to last.”

— **BART HOULAHAN, CO-FOUNDER OF
B LAB AT B CORPORATION**



Foundations of Our Impact Strategy

Closed Loop Partners builds our impact frameworks to reflect industry standards. We believe that accountability for positive and potential negative impact comes with increased harmonization and standardization, as well as regulatory support. As the impact space rapidly changes, we continue to align with best practices and evolve our systems to be at the forefront of impact management and measurement.

STANDARDIZATION

As the impact space advances towards standardization, we will continue partnering with organizations that help accelerate impact standardization in the industry. To date, our processes are aligned with leading industry frameworks.

VERIFICATION

To date, Closed Loop Partners has been through six external verifications, from internal ESG practices to greenhouse gas accounting and alignment to impact principles.

TRANSPARENCY

As a signatory of the Impact Principles, we demonstrate our commitment to, and implementation of, a global standard for managing investments for impact.

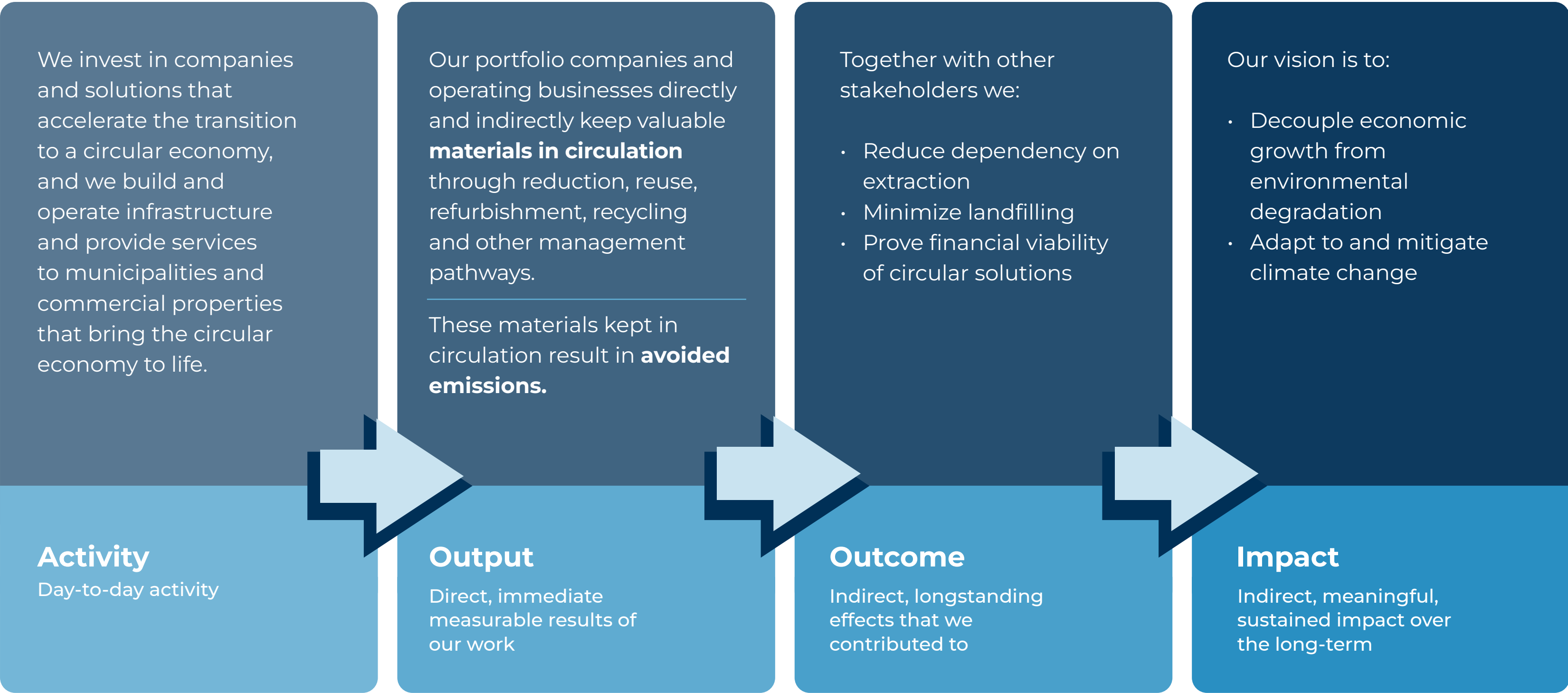
Our impact methodology was featured in educational materials by UN SDG Impact.

“Leading impact investors like Closed Loop Partners recognize the importance of adopting and aligning to market standards for impact management and reporting, as well as seeking third-party verification. These activities are key to scaling the impact investing industry with integrity, and we at BlueMark commend the firm for setting an example of what it means to be transparent and accountable for impact.”

– CHRISTINA LEIJONHUFVUD, CEO OF BLUEMARK

How We Drive Change

Our theory of change explains how our day-to-day activities as a firm are expected to lead to specific outputs, outcomes and eventually to greater impact. By investing in solutions that accelerate the transition to the circular economy, we contribute to a more regenerative, sustainable economic system for the future.



Our Progress to Date Across Core Impact KPIs

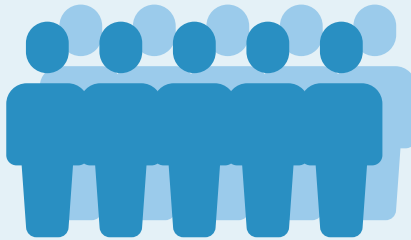


4.8 Million
tons

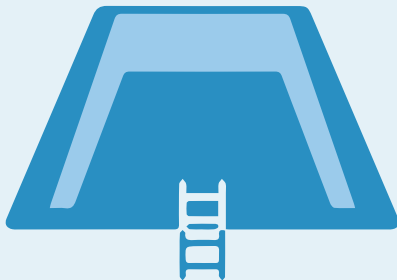
of materials kept in
circulation

THIS IS EQUIVALENT TO

Annual waste of
15 Million
people



OR



12,000
Olympic swimming pools
worth of materials



10.1 Million
tonnes

of greenhouse gas emissions
avoided

THIS IS EQUIVALENT TO

2 Million

Gasoline-powered passenger
vehicles driven for one year



OR



Carbon sequestered by
12 Million
acres of U.S. forest in
one year

Impact Frameworks in Practice

At Closed Loop Partners, we measure and manage our impact across four universal steps, integrating a variety of industry standards and frameworks.

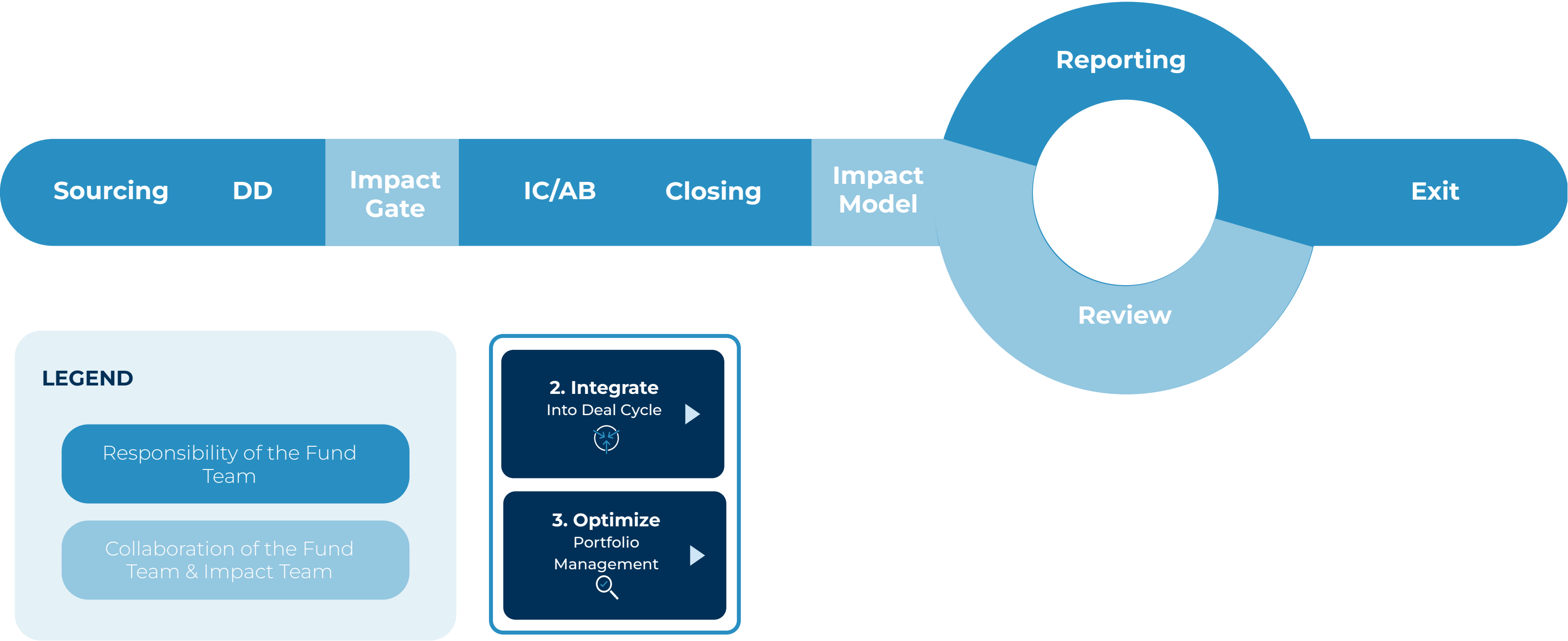


Four universal steps developed by UN Development Programme (UNDP) and Duke University

How We Operationalize






The impact assessment of pipeline and portfolio consists of both one-time per deal activities and continuous ongoing activities. Outlined within steps two and three of the four universal steps, coherent processes and tools are in place to integrate impact considerations at each stage of the investment process across the portfolio, grounded in a standardized set of impact indicators. This begins with an initial sourcing screen, where the fund's investment team ensures alignment with the impact thesis of the fund. This then continues to the due diligence

process and ends with an impact gate. This is where the fund's investment team and impact team collaborate and analyze collected information. Upon closing, the fund's investment team prepares an impact model to tie the portfolio company's unit economics to Closed Loop Partners' core KPIs, which then allows for monitoring of impact performance across the portfolio, as well as comparing variation across investments. The whole process is schematically outlined below.



Layers of Impact Measurement & Management Infrastructure

Similar to the financial accounting process, there are multiple layers of infrastructure needed to sustain effective impact measurement and management processes.

FUNCTION	ORGANIZATION	WHY THESE ARE CRITICAL TO OUR IMPACT WORK
Definitions		As a GIIN member, we support the development of industry-wide impact measurement and management standards. We are committed to contributing to the GIIN's work as an organization, and to deepening our own practice and understanding of impact management best practices. Closed Loop Partners became a GIIN member in 2021.
Principles		As a Signatory to the Impact Principles, we share in the collective commitment to ensure that impact management practices are purposefully integrated throughout the lifecycle of each investment, within each of our funds. Closed Loop Partners became a signatory in 2020.
Standards		We use the SASB materiality map to help identify sustainability information that may have financial implications. Industry Note: SASB materials were transitioned to the ISSB in 2022.
Metrics		A combined use of IRIS+ and the Five Dimensions of Impact enables core concepts and a structure for measuring and understanding our impact. Closed Loop Partners implemented the GIIN IRIS+ framework in 2018.
Verification		We engaged BlueMark as our external and independent verifier to validate our impact mandate and alignment with industry standards. Closed Loop Partners and the Closed Loop Leadership Fund underwent their first verification in 2020. Closed Loop Partners is committed to periodic methodology verifications in alignment with the Operating Principles for Impact Management.

Adjusted from 'Impact Measurement and Management' class at Duke's Fuqua School of Business

Investment

VENTURE CAPITAL
GROWTH EQUITY
BUYOUT PRIVATE EQUITY
CATALYTIC CAPITAL

Investment is a critical driver for accelerating the circular economy, encouraging innovation and enabling transformative companies to bring their solutions to scale.

VENTURE CAPITAL

Closed Loop Ventures Group

Accelerating Breakthrough Innovations for the Circular Economy

About Our Ventures Group

\$72M
assets under
management across
two funds

31
companies invested
in to date

4,000+
investable pipeline
opportunities
reviewed since 2017

WHAT’S THE CHALLENGE?

As the transition from a linear economic model to a circular one accelerates, new solutions and technologies are on the rise with many inspiring founders stepping up to the challenge of transforming legacy systems. However, this transformation takes talent, capital, industry and a network of support to move the needle.

HOW ARE WE SOLVING IT?

The Closed Loop Ventures Group deploys early-stage capital into companies, partnering with founders and companies who rethink how products are designed, manufactured, consumed and recovered, with the shared vision of reimagining supply chains and eliminating waste. We provide capital, connections to the broader Closed Loop Partners ecosystem, amplification and acceleration of these breakthrough technologies, and support for incredible founders.

HOW WE ALIGN WITH THE UN SUSTAINABLE DEVELOPMENT GOALS



CONTRIBUTES TO
SOLUTIONS

BENEFITS
STAKEHOLDERS

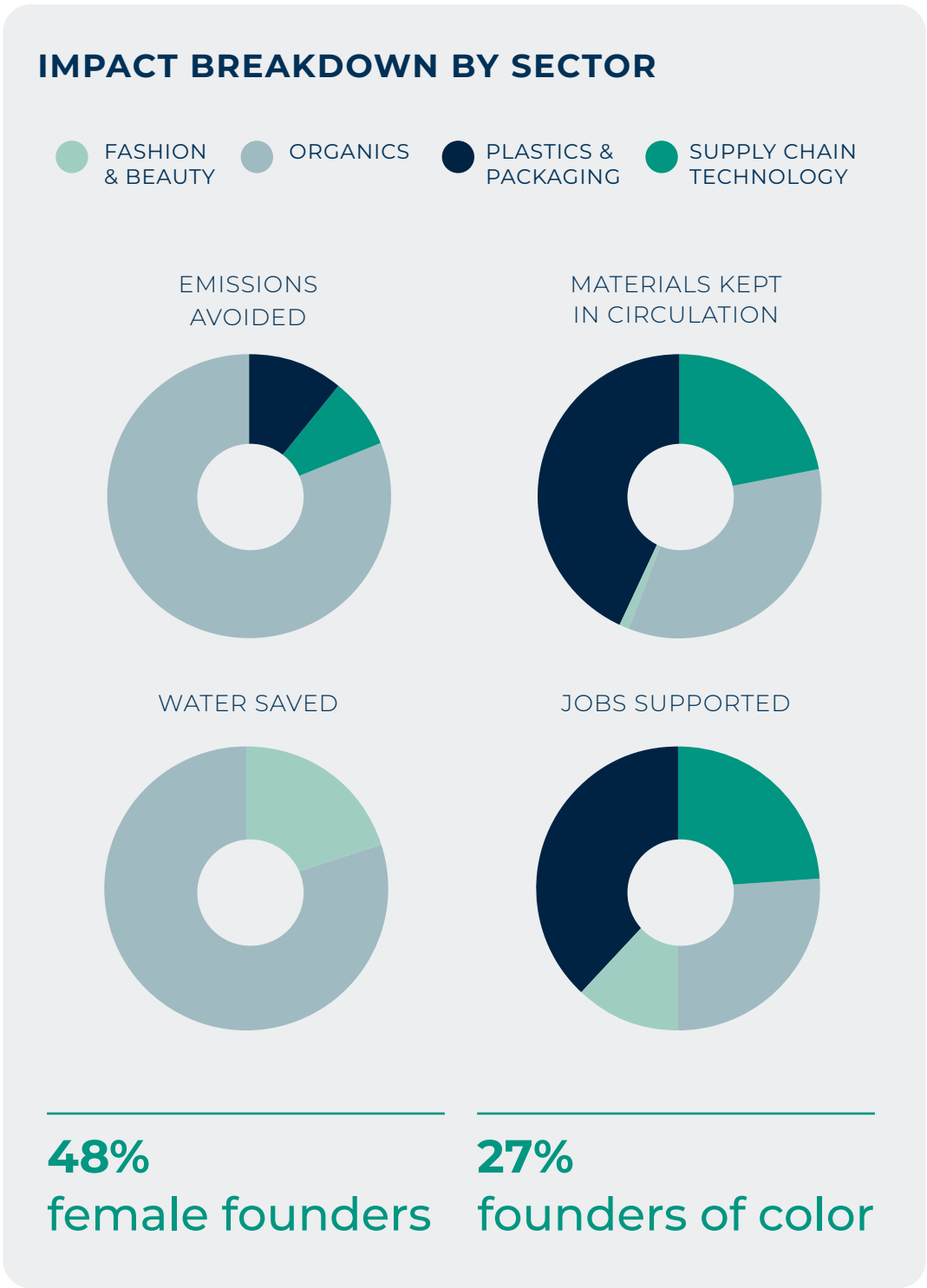
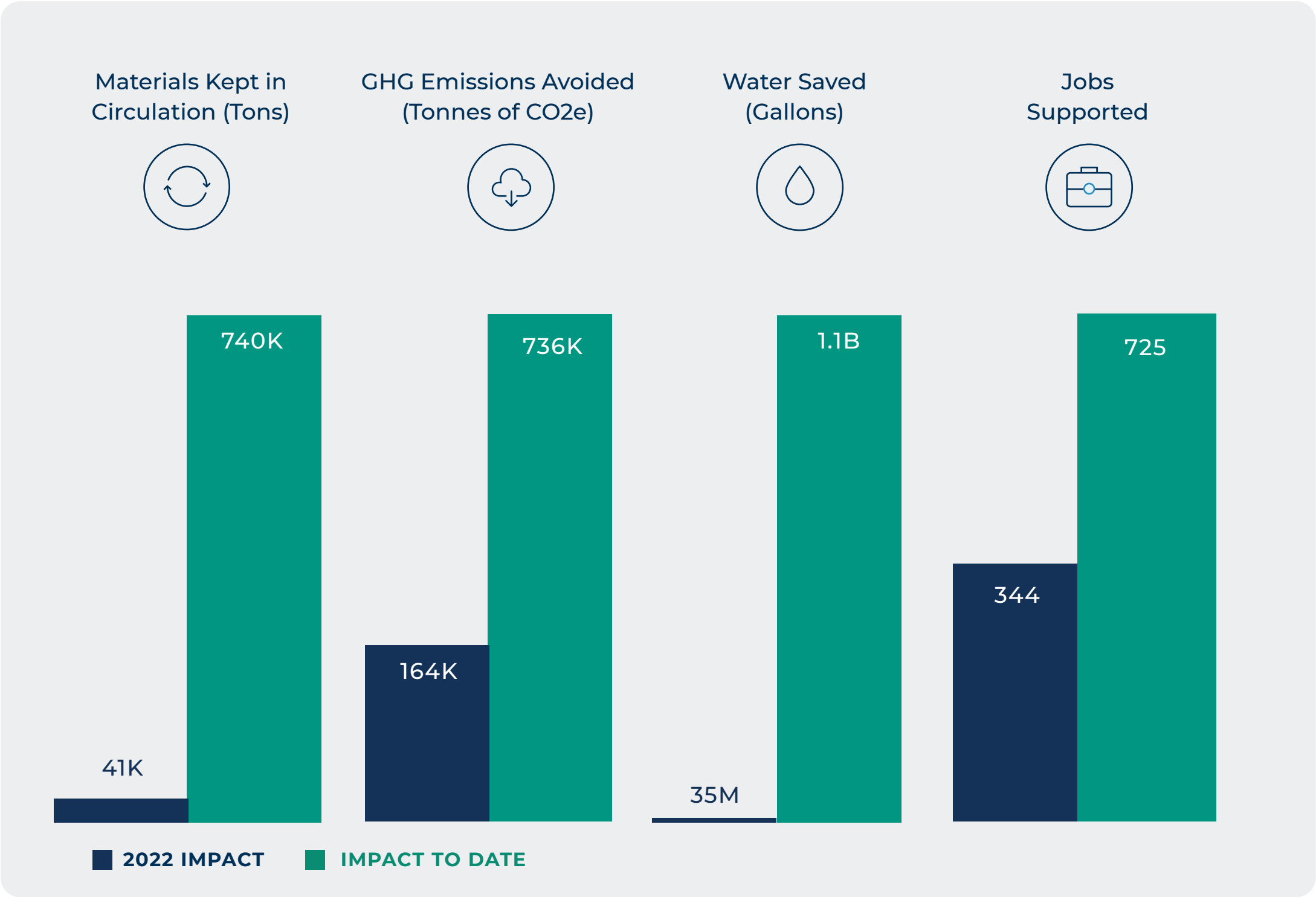
ACTS TO AVOID
HARM



VENTURE
CAPITAL

Our Impact by the Numbers

By investing across the plastics & packaging, fashion & beauty, organics and supply chain technology sectors, the Closed Loop Ventures Group advances positive social and environmental outcomes, while seeking to deliver market leading financial returns for investors.



VENTURE
CAPITAL

Capital Deployed Across Sectors

**SUPPLY CHAIN
TECHNOLOGY**
9%

Easy Aerial
CoLoadX
Fillogic
Partsimony
SOLARCYCLE
TradeLanes

**PLASTICS &
PACKAGING**
21%

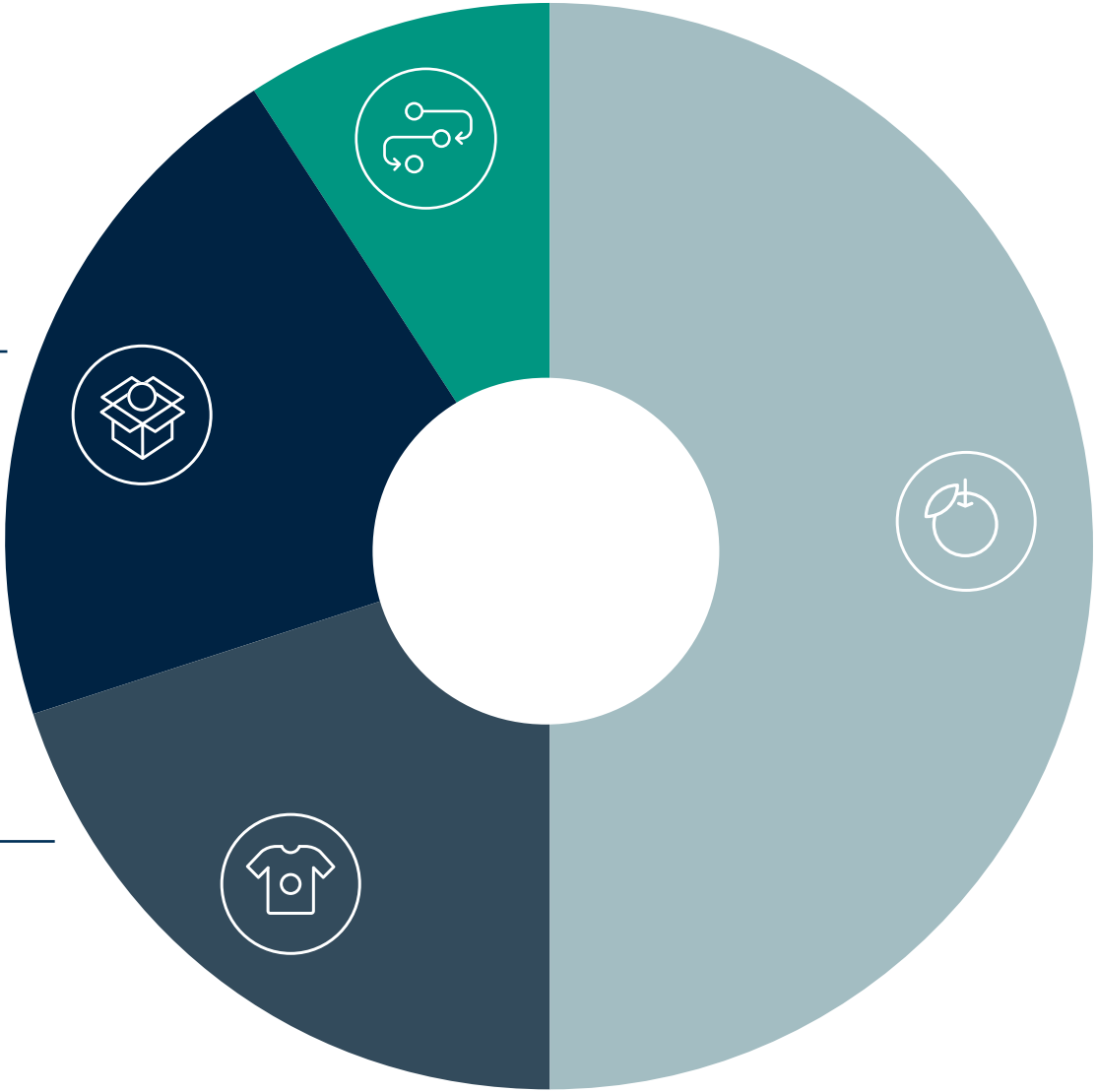
AMP Robotics
Algramo

**FASHION &
BEAUTY**
20%

Algaeing
By Rotation
DAI
Dimpora
Evrnu
For Days
Rebundle
Retrievr
Thrilling

ORGANICS
50%

Ansa
Accelerated Filtration
HomeBiogas
Mori
Natural Machines
Rebound Technologies
Thrive Lot
ucrop.it



VENTURE
CAPITAL

Fillogic

Breaking Down Silos in Supply Chains

Fillogic, the leading platform for localized logistics, converts existing, under-utilized spaces in shopping malls into mid-mile distribution and reverse logistics centers.

The COVID pandemic accelerated the growth of e-commerce, and in its wake, return rates soared to over 20%. Retail supply chains, already brittle and bogged down by overproduction, were unable to handle the spike. Now, up to 40% of products can sit in distribution centers for long periods of time, and often end up as waste when they eventually go unsold. Networks, technology and infrastructure need to change quickly, but it's never been more expensive to do so.

Fillogic breaks down silos and brings items closer to consumers, reducing transport emissions, using smaller warehouse spaces more efficiently and maximizing the useful life of retail products. Ultimately, they enable the transition from long, disaggregated,

unidirectional networks of spread-out distribution centers to localized hubs that can get products back on shelves quicker, resulting in fewer returned products ending up in landfill.

Since Closed Loop Ventures Group's initial investment in early 2022, Fillogic has demonstrated significant growth and traction, continuing to add retail partners in the past year. Their three core assets—a connected technology platform, a national network of tech-enabled micrologistics hubs and their transportation marketplace—work together to help retailers more efficiently move goods through their network.

The team announced a partnership with Recurate, a technology provider who powers resale for retailers, to support the in-warehouse preparation to make products available for resale. The team also announced a partnership with Narvar, a leader in post-purchase customer experience, to help retailers expedite product returns. As the team onboards new retailers and carriers, they continue to gain significant traction for expansion into the new year—addressing one of today's most pressing opportunities.



Bill Thayer
Founder & CEO

18 tons
materials kept in circulation
through returned garments
restocked instead of landfilled

65 tonnes of CO2e
emissions avoided
through avoided use of distribution
centers, resold garments and
reduced transportation

Statistics for 2022 reporting period

VENTURE CAPITAL

Rebundle

Reimagining Waste-Free Systems for Hair Extensions

Rebundle is a fully circular solution: they offer the first U.S.-made plant-based hair extensions that are better for scalp health and the environment—replacing toxins and plastic used in plastic synthetic hair today.

Plastic synthetic hair is traditionally made from hard-to-recycle plastics, such as PVC and polypropylene, treated with toxic additives for performance like flame retardancy and neon coloring. In addition to the waste challenge of these materials, they pose health challenges to wearers, with one in three women experiencing scalp irritation and itching as a result.

Rebundle's fully circular solution is a departure from

synthetic products, enabling a fully circular solution through either composting or anaerobic digestion. To help address the circularity challenges of existing products, they also take back synthetic hair after use to find optimal end-of-life recycling or composite end-markets.

As of November 2022, Rebundle raised \$2.1M, and has since run a successful beta that sold out in hours, incorporating feedback into a refined and relaunched product in Q4 2022. To support their continued growth, they have also built out their manufacturing facility in St. Louis, MO.

Rebundle brings the circular economy to the forefront of an enormous and often overlooked hair extensions market. They are changing a \$2B+ market with limited customer choice, and no circular alternatives by offering an alternative, produced from upcycled banana fiber feedstock, that is significantly healthier for the environment and the wearer.



Ciara Imani May
Founder & CEO

2 tons
materials kept in circulation
as a result of replacing plastic
synthetic hair with banana fiber

3 tonnes of CO2e
emissions avoided
due to avoided plastic
manufacturing

Statistics for 2022 reporting period

VENTURE
CAPITAL

SOLARCYCLE

Bringing Renewable Energy into the Circular Economy

Founded by experts in solar technology, recycling and sustainability to build the circular economy for solar and renewables, SOLARCYCLE is the industry leader providing solar panel recycling solutions to commercial and residential solar companies.

As the renewable energy transition continues to accelerate, the cumulative mass of solar photovoltaic modules is projected to approach 80M tons by 2050, exceeding 10% of global e-waste annually (Heath 2020). Yet of those produced, only 10% of solar panels are recycled in the U.S. (MIT Tech Review), and they can be hazardous in landfills, creating a dilemma for end-of-life recovery of these valuable materials.

SOLARCYCLE offers asset owners a low-cost, comprehensive solution for retiring solar panels and repurposing them for new uses. Their unique technology can extract 95% of valuable materials such as silver, silicon, glass, copper and aluminum and return them back to the supply chain.

Having launched in early 2022 with a robust team, SOLARCYCLE has already made significant progress. In less than a year, they raised a \$6.6M seed round to accelerate the build-out of their recycling facility which is currently running in Odessa, TX.

Today, the company continues to revolutionize the way solar panels are managed. Instead of treating used panels as waste, they see used panels as essential feedstock sources for new manufactured panels and products—an essential step to perpetuate the growth and long-term sustainability of renewable energy generation.



Suvi Sharma
Co-Founder & CEO

INDUSTRY STATISTICS

50%
of a solar panel's value
is contained within the silver, copper
and silicon⁷

200-300 million
panels anticipated to reach end-
of-life every year by 2030, creating
a large opportunity for material
recovery⁷

VENTURE CAPITAL

Accelerated Filtration

Advancing Water Reuse

Accelerated Filtration contributes to the circular economy of water. The water filtration company has a unique, self-cleaning technology that filters water for industrial and municipal customers in food and beverage, mining, chemicals, pharma, waste management and the oil & gas sectors.

Most of the groundwater we pump today is used by farmers to irrigate agricultural land and industries to manufacture the goods we consume. But with the rates of production and consumption fueling today's linear economy, wastewater treatment is more important than ever. Driven by both increasing scarcity of clean water and the ever-increasing cost of wastewater

disposal, net zero discharge and 100% water reuse in industry is a critical and growing issue.

Accelerated Filtration is focused primarily on customers with high suspended solids, and applications with oil and grease loadings. They deliver packaged turn-key filtration solutions for the continuous and consistent removal of fine suspended solids in water streams to reduce operational exposure.

Closed Loop Ventures Group led a \$1.5M Pre-Seed round in 2022, recognizing the critical need to expand the list of materials associated with the circular economy to include one that is arguably one of the most valuable: water. This has since allowed Accelerated Filtration to hire a phenomenal team, develop their first prototypes and generate their first purchase orders in less than a year. Accelerated Filtration continues to enable zero-discharge manufacturing and allow manufacturers to utilize a broader range of input water sources, creating a path forward for more efficient water reuse across industries.



Scott Burr
President

INDUSTRY STATISTICS

44%
reported reduction in production capacity for businesses as a result of insufficient supplies of water, creating an opportunity for water reuse⁸

69%
publicly listed companies reported exposure to water risks⁸

GROWTH EQUITY

Closed Loop Growth Opportunities Fund

Scaling Circular Solutions for Global Industry

GROWTH
EQUITY

About Our Growth Opportunities Fund

\$250M
target fund size

770+
deals reviewed across
sectors

Focus Areas Include

-  Circular Fashion
-  Materials Innovations
-  Supply Chain Tech
-  Food & Agtech

WHAT’S THE CHALLENGE?

Many global industries are in a moment of disruption, with supply chain pressures, shifting consumer values and technology driving new levels of transparency and regulatory expectations. The need for circular solutions that can infuse efficiency, resiliency and sustainability into legacy systems has never been greater. To make this possible, new solutions need to be scaled to meet the demand, size and reach of the largest corporations in the world.

HOW ARE WE SOLVING IT?

The Closed Loop Growth Opportunities Fund scales circular solutions to meet the needs of global industry. The fund team combines deep industry expertise with a broad pipeline of innovation and technology to enable meaningful growth. The Growth Opportunities Fund seeks growth equity investments in companies with proven use cases, science or technology that can be scaled to advance circular fashion, materials innovation, supply chain tech and food & agtech.



**HOW WE ALIGN
WITH THE UN
SUSTAINABLE
DEVELOPMENT
GOALS**

CONTRIBUTES TO
SOLUTIONS

BENEFITS
STAKEHOLDERS

ACTS TO AVOID
HARM



ABC Categorization Framework by IMP

GROWTH EQUITY

Browzwear

Advancing Circular Supply Chains for Fashion

By creating 3D digital samples that replace the need for physical clothing samples, Browzwear reduces greenhouse gas emissions associated with handling physical products between multiple stakeholders and regions across the supply chain.

The fashion industry is a major contributor of waste globally, accounting for an estimated 6-8% of global landfill⁹, 10% of greenhouse gas emissions and 20% of water waste¹⁰. Creating a less wasteful fashion industry begins with more circular solutions across the supply chain—beginning as early as the design phase. Browzwear's SaaS Technology Platform helps address the waste challenge by replacing the need for physical clothing samples with 3D digital clothing samples, while improving efficiency and reducing costs.

Browzwear is growing quickly as consumer and

regulatory pressure drives up demand for the transformation of the fashion sector. In 2022, in addition to their core product—which exists at the early stage of the fashion value chain, beginning in design through merchandising and production—the company has been busy developing complementary adjacent offerings. These include augmented reality for better fit technologies, raw materials libraries, virtual showroom and e-commerce solutions and more. In addition, the company has been growing with the addition of high-caliber new talent across all areas.

Ultimately, Browzwear's 3D digital samples reduce greenhouse gas emissions and water use associated with raw material development and dye processes, reduce greenhouse gas emissions associated with handling physical samples across the supply chain, and reduce excess materials produced that end up in landfill.

As the company offers a faster, more efficient and less expensive path forward for the sector, they are identified as a global leader poised for growth, working with some of the largest brands in the world to offer a less wasteful process in the design and manufacture of apparel.



Avihay Feld
Co-founder & CEO

14,000 tons
materials kept in circulation
as a result of avoided manufacturing
of physical samples

457,000 tonnes of CO2e
emissions avoided
as a result of eliminated
manufacturing, transportation and
packaging

Statistics for 2022 reporting period

BUYOUT PRIVATE EQUITY

Closed Loop Leadership Fund

Acquiring and Growing Platforms That Scale Circular Production

BUYOUT
PRIVATE
EQUITY

About Our Leadership Fund

~\$200M
capital
committed

5
companies invested
in to date

\$500M+
investable pipeline

WHAT’S THE CHALLENGE?

The demand for recycled materials and sustainable supply chains is accelerating as companies and cities advance their commitments toward zero waste and climate resiliency.

HOW ARE WE SOLVING IT?

The Closed Loop Leadership Fund captures this market opportunity by acquiring, growing and investing in companies, platforms and enabling technologies primarily across packaging, organics, electronics and apparel to develop, grow and modernize circular supply chains and recycling and reuse infrastructure.



HOW WE ALIGN
WITH THE UN
SUSTAINABLE
DEVELOPMENT
GOALS

CONTRIBUTES TO
SOLUTIONS

BENEFITS
STAKEHOLDERS

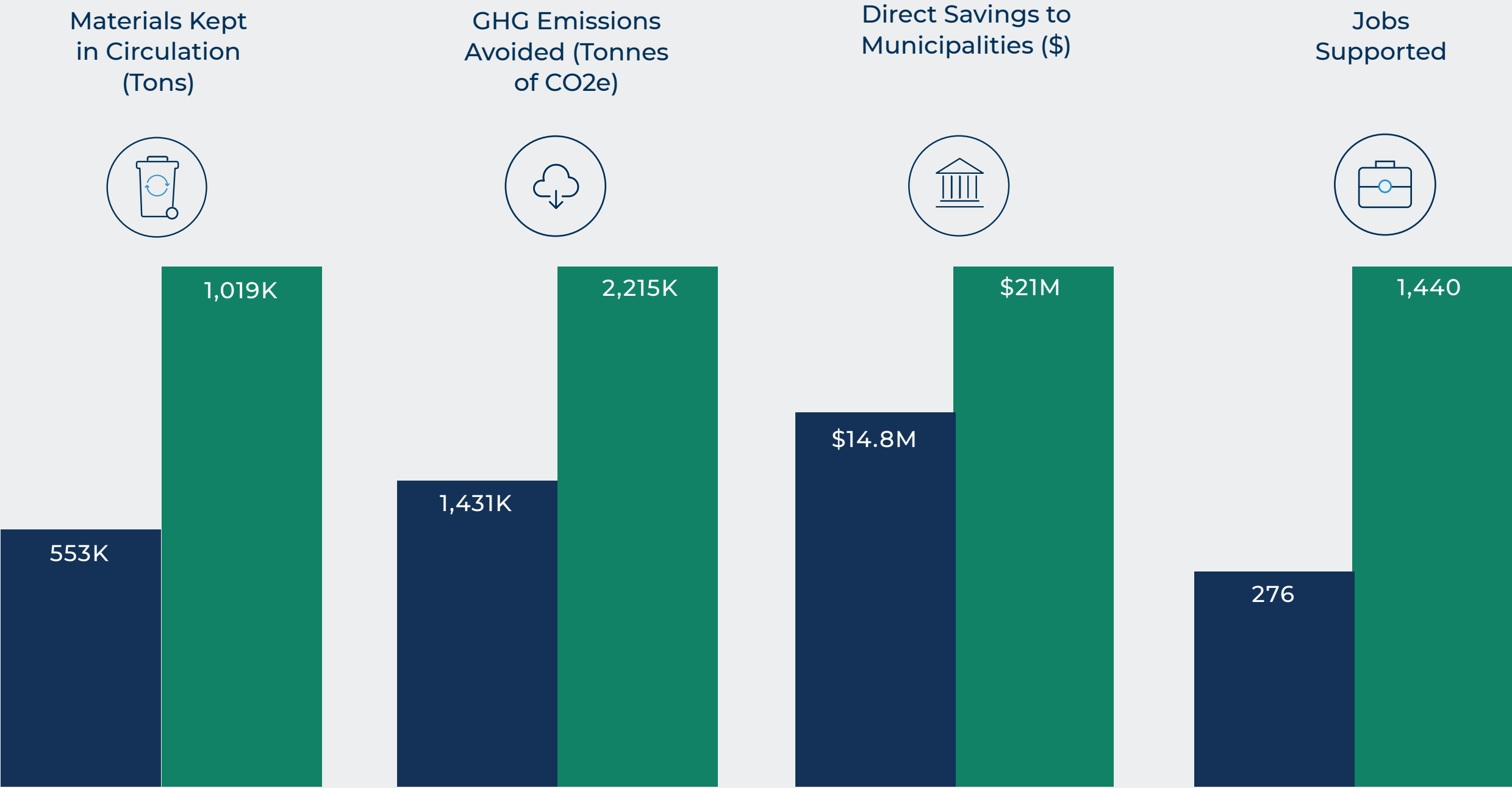
ACTS TO AVOID
HARM



ABC Categorization Framework by IMP

BUYOUT
PRIVATE
EQUITY

Our Impact by the Numbers



BUYOUT PRIVATE EQUITY

Apkudo

Enabling Circularity for Connected Devices

Apkudo integrates circularity throughout the lifecycle of connected electronic devices like phones and laptops.

In 2019, an estimated 53.6M¹¹ metric tons of e-waste was generated globally, with ~13.1M¹¹ tons generated in the Americas alone. Yet only 9.4%¹¹ of e-waste is recycled in the Americas, with a fragmented ecosystem, inefficient reverse logistics process, manual and lengthy device diagnostics and processing, and lack of visibility around quality, limiting device reuse at scale. Today, e-waste is one of the fastest growing waste streams, in need of solutions that can bring electronics back into supply chains.

A global leader in supply chain automation, robotics solutions and inventory management, Apkudo aims to strengthen the entire electronics supply chain. Through a data platform that integrates across partner systems, Apkudo improves transparency and consistency

and enables increased electronic device reuse, refurbishment and resale. Through more effective quality assurance & testing diagnostics, they also minimize the sale of defective devices, which results in less waste—fewer returns, improved material use and reduced packaging waste.

In 2022, Apkudo reached significant milestones, delivering strong financial projections, making key hires, advancing product development and expanding its customer base. They focused on refining their product, launching even more precise, streamlined customer solutions. As demand increased, they also expanded product and automation capabilities into tablets, broadening their addressable market.

As a result of consistent innovation, Apkudo has formed new partnerships with leading new technology companies, in addition to deepening relationships with existing partners. The company continues to execute on its growth strategy and looks forward to continued opportunities going into 2023.

1,500 tons
materials kept in circulation
as a result of diagnostics enabling
more devices to be refurbished,
repaired, resold and recycled

37,600 tonnes of CO2e
emissions avoided
as a result of avoided manufacturing
of new devices and materials

Statistics for 2022 reporting period

BUYOUT
PRIVATE
EQUITY

SMR

Advancing Materials Circularity

SMR (formerly Sims Municipal Recycling) is a leading recycling company, collecting materials annually from more than 10 million people.

Expanding access to recycling services and infrastructure is critical to enabling cities and businesses to impact significant volumes of metals, glass, plastics and paper, avoid the cost of landfilling products and achieve their sustainability goals.

SMR operates material recovery facilities (MRFs) across New York, New Jersey and Florida, including the largest and most advanced dual stream MRF in North America. The company sorts and markets recovered paper, metals, glass and plastics commodities. This sortation of post-consumer curbside material is a pivotal step in securing

feedstock for mills, smelters and reclaimers, who rely on recycled feedstock as their raw material for new product production, while also minimizing materials going to incinerators or landfills.

Collection, sortation and eventual recycling of these volumes ultimately keep these materials in circulation and mitigates greenhouse gas emissions compared to the extraction of virgin materials. Enabling and expanding municipal recycling and improving recycling infrastructure positively impacts the planet and domestic supply chains as well as communities near SMR's footprint.

SMR continues to execute on its growth strategy and was recently awarded the operating contract for Lee County, FL. Looking ahead, SMR has identified multiple expansion opportunities for the MRF business, as well as strategic relationships and value-added propositions for materials it already manages.

330,000 tons
materials kept in circulation
through processing of valuable
commodities

516,000 tonnes of CO₂e
emissions avoided
as a result of materials kept in
circulation

Statistics for 2022 reporting period

CATALYTIC CAPITAL

Closed Loop Infrastructure Group

Strengthening Infrastructure for the Circular Economy

CATALYTIC
CAPITAL

Catalyzing Capital Into the Circular Economy

WHY CATALYTIC CAPITAL?

As the circular economy grows, many organizations that are critical to its development often lack access to funding. Collectively backed by the world’s largest retailers, corporate foundations, industry associations, materials science and consumer goods companies, the Closed Loop Infrastructure Group provides investment that is flexible and risk-tolerant to support private companies, organizations and municipalities to launch or develop projects, ultimately aiming to attract further investment and meet the criteria of driving net positive environmental and social outcomes.

Our Infrastructure Group makes investments across collection, sortation, processing, end-manufacturing and enabling technology projects that enhance the recovery of recycled material, and seeks out opportunities to improve the quality and quantity of materials kept in circulation across North America. They identify the infrastructure, innovations and businesses critical to the transition to the circular economy, aiming to accelerate their integration and scale by attracting further investment through collaboration and partnership.



**CLOSED LOOP
INFRASTRUCTURE
FUND**



**CLOSED LOOP
BEVERAGE
FUND**



**CLOSED LOOP
CIRCULAR
PLASTICS FUND**

CATALYTIC
CAPITAL

About Our Infrastructure Fund



\$86M
assets under
management

45
projects invested
in to date

including **9**
follow-on loans

189
qualified deals
reviewed in 2022

WHAT'S THE CHALLENGE?

Insufficient infrastructure, outdated technologies and collection gaps have led to hundreds of millions of tons of valuable commodity materials being discarded to disposal, rather than circulated back into products and packaging across the United States.

HOW ARE WE SOLVING IT?

The Closed Loop Infrastructure Fund finances scalable and sustainable infrastructure projects, equipment and new technologies across the collection, sortation and processing stages of the recycling value chain.

HOW WE ALIGN WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

CONTRIBUTES TO
SOLUTIONS



BENEFITS
STAKEHOLDERS

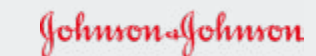


ACTS TO AVOID
HARM



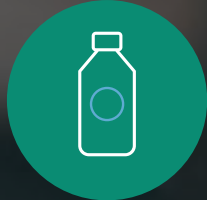
ABC Categorization Framework by IMP

OUR INVESTORS



CATALYTIC
CAPITAL

About Our Beverage Fund



\$50M fund focused on building circular economy infrastructure for the beverage industry

3 portfolio companies to date

The fund aims to impact **150,000+ tons** of PET bottles that will be recycled rather than landfilled over the 10 year fund period, equivalent to approximately **10B** PET bottles

WHAT’S THE CHALLENGE?

In North America alone, only about 31%¹² of plastic bottles are recovered and pulled back into manufacturing supply chains. This not only contributes to the growing amount of plastic waste, but also means that there is not enough recycled PET available to be manufactured into new bottles.

HOW ARE WE SOLVING IT?

In partnership with the American Beverage Association, the Closed Loop Beverage Fund makes targeted investments to improve the collection, sortation and processing infrastructure for the industry’s valuable plastic bottles, so they can be made into new bottles.

HOW WE ALIGN WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

CONTRIBUTES TO SOLUTIONS



BENEFITS STAKEHOLDERS



ACTS TO AVOID HARM



ABC Categorization Framework by IMP

INVESTORS

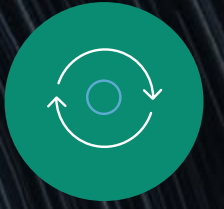


PARTNERS



CATALYTIC
CAPITAL

About Our Circular Plastics Fund



Target \$100M
fund focused on
building more
circular systems for
polyethylene and
polypropylene plastics

THE CLOSED LOOP CIRCULAR PLASTICS
FUND IS DESIGNED WITH SPECIFIED
IMPACT HURDLES. FUND LIFE TARGETS:

250,000 tons
of plastics kept in circulation

260,000+ tonnes of CO₂e
emissions avoided

WHAT'S THE CHALLENGE?

Millions of tons of polyethylene (PE) and polypropylene (PP) are combusted, landfilled or escape into the environment annually. With a lack of recycling infrastructure for these resins in the U.S. and Canada, the current supply of recycled PE and PP hardly meets the growing demand for these industrially-important resins in the U.S. and Canada.

HOW ARE WE SOLVING IT?

The Closed Loop Circular Plastics Fund deploys debt and equity financing into circular economy technologies, companies and projects to advance the recovery of PE and PP plastics.

HOW WE ALIGN WITH THE UN SUSTAINABLE DEVELOPMENT GOALS

CONTRIBUTES TO
SOLUTIONS



BENEFITS
STAKEHOLDERS



ACTS TO AVOID
HARM



ABC Categorization Framework by IMP

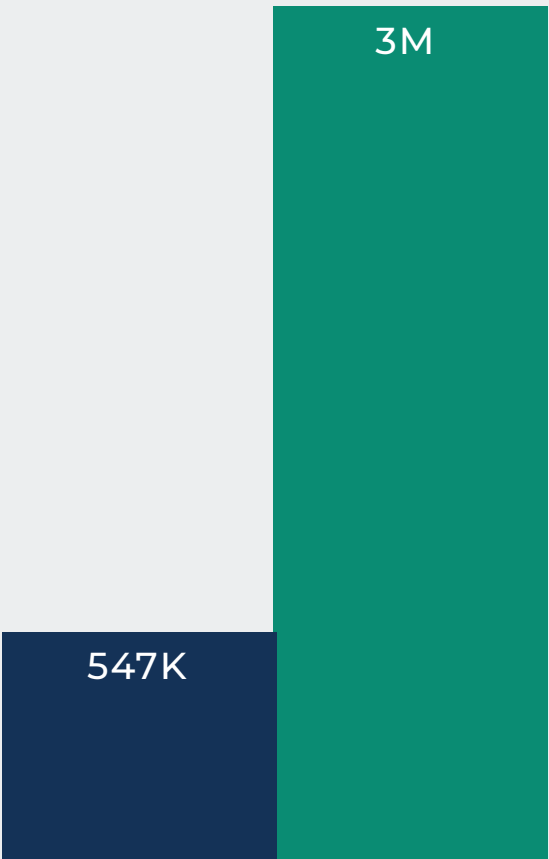
INVESTORS INCLUDE



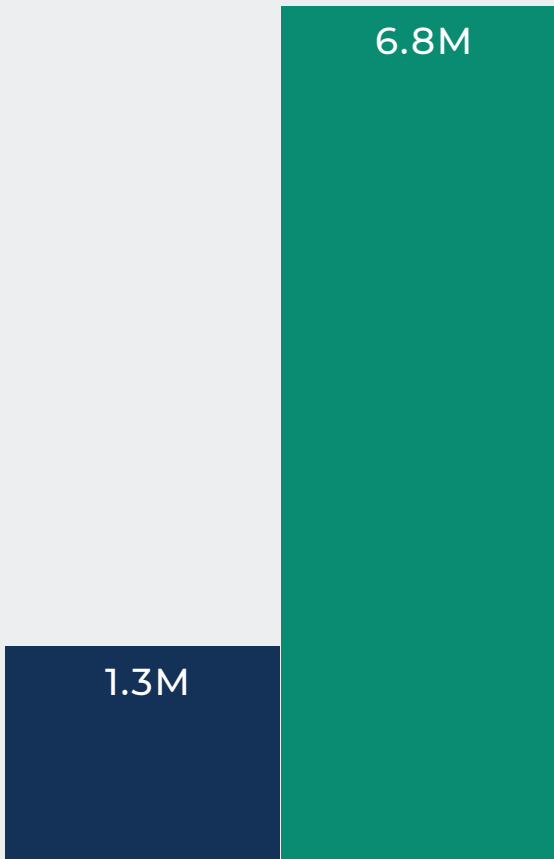
Infrastructure Group Impact by the Numbers



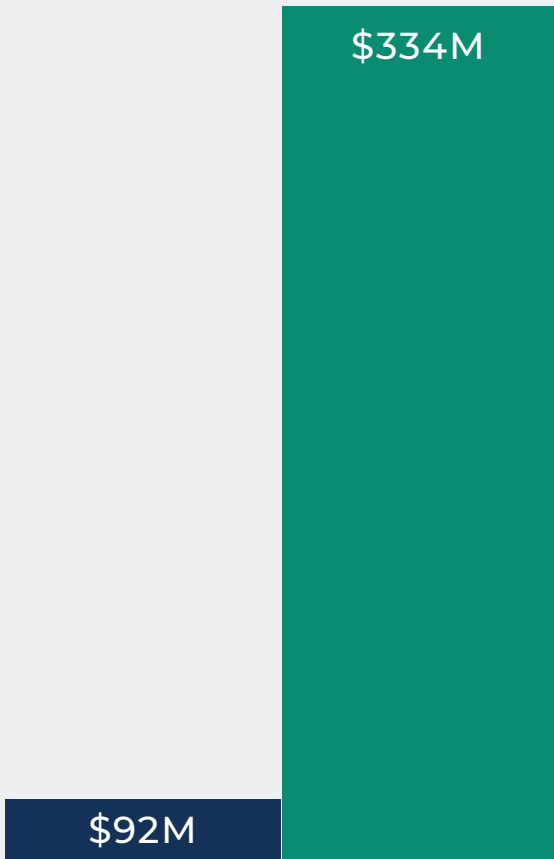
Materials Kept
in Circulation
(Tons)



GHG Emissions
Avoided
(Tonnes of
CO2e)



Co-
Investment
(\$)



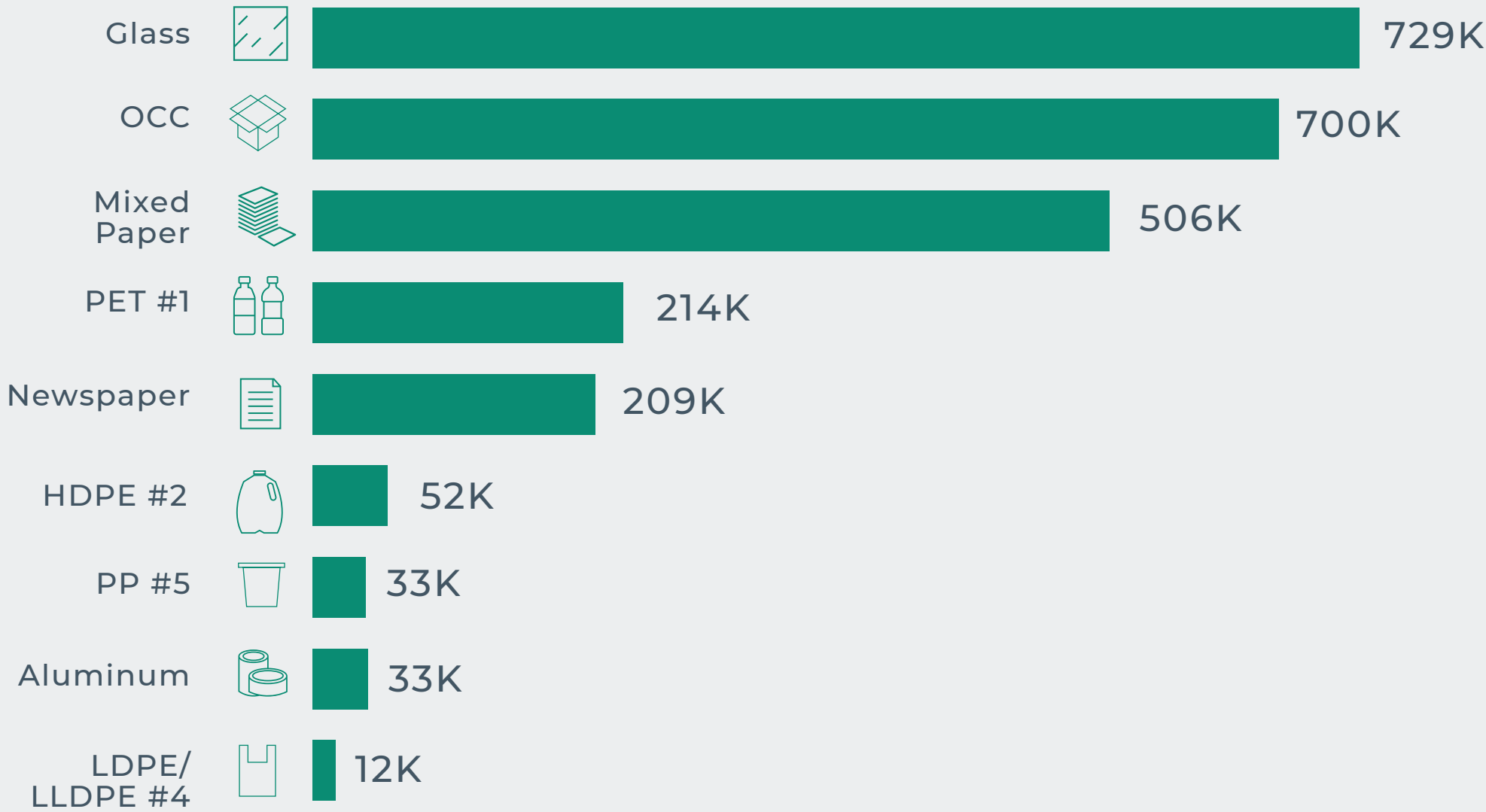
Direct Savings to
Municipalities (\$)



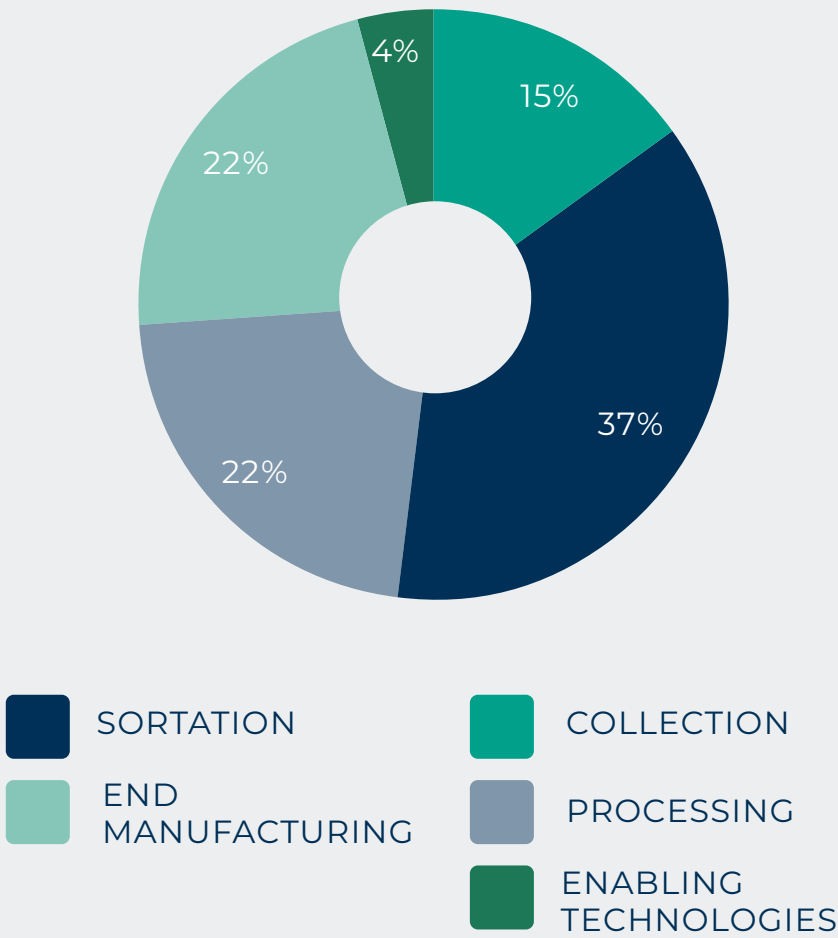
Infrastructure Group Impact by the Numbers



TONS OF MATERIALS RECOVERED AND RETURNED TO SUPPLY CHAINS (CUMULATIVE TO DATE)



PORTFOLIO BREAKDOWN BY SECTOR



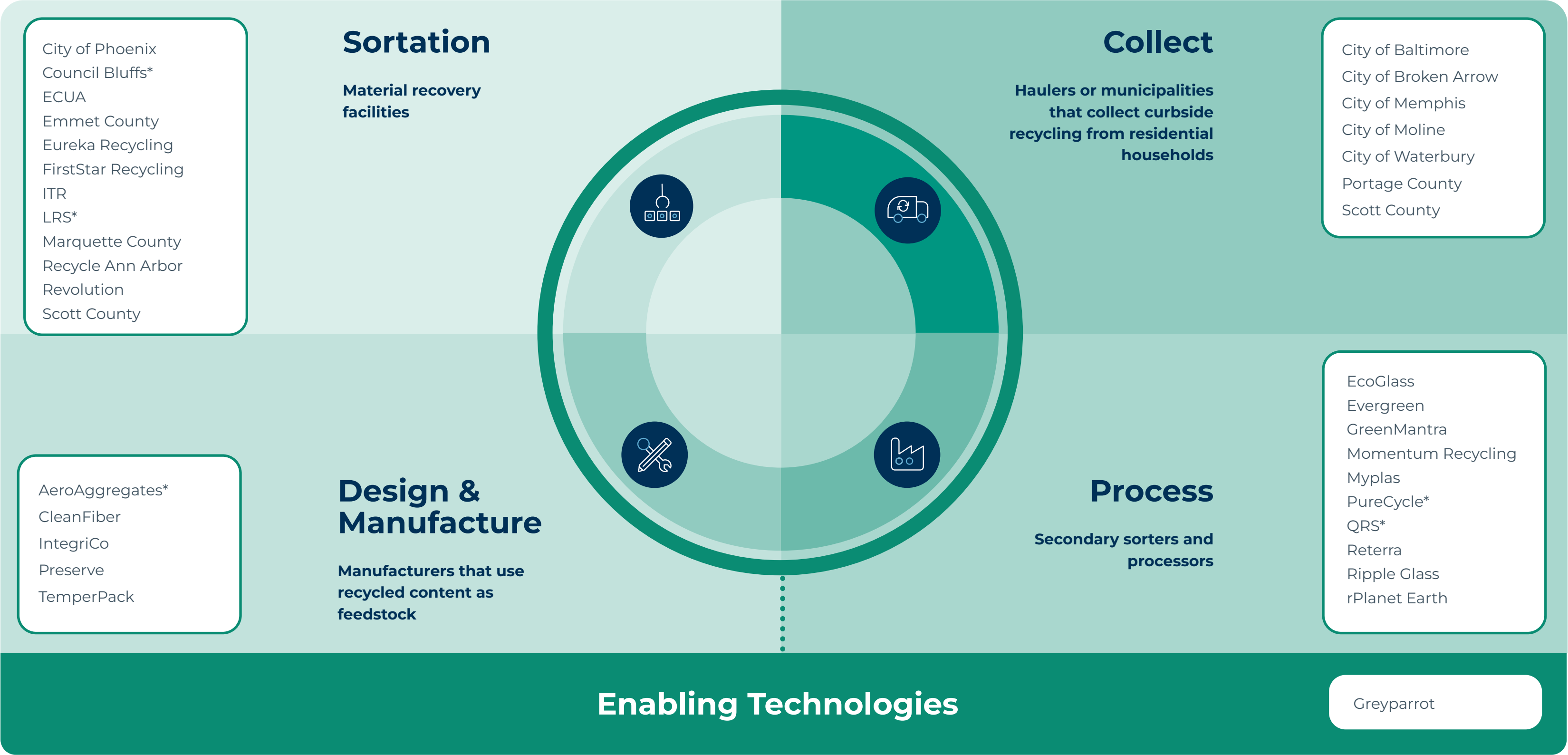
15
municipal
loans

30
private
loans

CATALYTIC
CAPITAL

Infrastructure Group Portfolio

We invest across the entire circular value chain to strengthen the overall system, catalyze investments and scale impact outcomes.



*Closed Loop Partners is no longer an investor or lender

CATALYTIC
CAPITAL

GreenMantra

Keeping More Plastics in Circulation



GreenMantra, a leading molecular recycling technology provider, helps keep recycled post-consumer and post-industrial plastics in circulation.

Plastics like polyethylene, polypropylene and polystyrene are often hard to recycle, and without the proper infrastructure or technologies in place to recover them, they could otherwise be destined for landfill.

GreenMantra fills this gap—purchasing recycled post-consumer and post-industrial plastics, specifically PE, PP and PS, as feedstock for their depolymerization process. Using a selective depolymerization technology, the company transforms hard-to-recycle plastics into specialty waxes. The company's operations aim to create new, scalable end markets for recycled plastics and reduce the carbon intensity of industries such as

roads and roofing, and plastic building materials, such as pipes, lumber and siding.

Today, the company operates its commercial facility in Brantford, Ontario, Canada, operating four lines, three of which are commercial scale. In 2022, GreenMantra not only continued to grow its team, but continued to diversify its customer base and identification of alternative applications.

GreenMantra continues to refine their depolymerization process to expand the quality and types of resins that the plant can process. The specialty waxes that the company manufactures from recycled plastic pellets and regrinds are used by industries that have significant opportunity to embrace more circular practices. GreenMantra's depolymerization process ensures low-energy use, no water or solvent usage, and no waste streams. Scaling technologies such as these can create much needed end markets for hard-to-recycle types of PE and PP, and advance more circular systems for plastics.

4,800 tons
materials kept in circulation
by using recycled plastic as
feedstock

15,200 tonnes of CO₂e
emissions avoided
due to avoided raw plastic
manufacturing

Statistics for 2022 reporting period

CATALYTIC
CAPITAL

Evergreen

Expanding the Recovery of PET Plastics



Evergreen is North America's third largest PET reclaimer and rPET producer.

In the U.S., only 30% of rPET is recovered for recycling. Significant work is needed to expand capacity to recover more PET. Evergreen operates four facilities in North America, processing PET collected curbside and via bottle deposit programs, and manufacturing high quality food-grade rPET pellets. With a strong demand for baled PET, Evergreen has the opportunity to significantly improve PET recycling in the U.S.

In 2021, Closed Loop Partners invested in Evergreen to support the expansion and modernization of their facility. Evergreen strives to increase recovery and recycling of PET containers, decrease dependence on landfill, help customers meet their ESG and sustainability goals and close the loop for bottle-to-bottle PET recycling.

In 2022, processing upgrades were made to the Clyde, Ohio facility, including construction of a new building to house the food-grade pellet manufacturing. Four new manufacturing lines will be installed here in addition to three manufacturing operations acquired in Riverside, CA; Albany, NY and Nova Scotia, Canada.

These additional facilities will add 85,000 tons of processing capacity to the Evergreen business, with an estimated additional 62,500 tons of rPET food-grade pellets produced annually. Evergreen also added AI-enabled AMP Robotics technology to their operations, accelerating sorting capacity, increasing accuracy of material flow and insuring a high-quality feedstock into the manufacturing lines.

With the growing demand for rPET food-grade pellets, Evergreen is now a preferred supplier of food-grade rPET for a wide range of companies. Across all four facilities, Evergreen processes 108,500 tons of collected PET bottles that will be remade into bottles, driving a more robust 'bottle-to-bottle' system.

5,200 tons
materials kept in circulation
as a result of recycling PET bottles
for new PET bottles

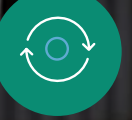
5,400 tonnes of CO₂e
emissions avoided
due to avoided raw plastic
manufacturing

Statistics for 2022 reporting period

CATALYTIC
CAPITAL

Myplas

Building Circular Systems for Plastics



Myplas uses recycled HDPE and LDPE to produce pellets, which ultimately can be used to make recycled products like pallets, conduit, pipe and bags.

Approximately only 4%¹³ of residential polyethylene film is recovered from households in the U.S. Recognizing the challenge, South Africa-based plastics processor Myplas expanded to the U.S., developing a recycling model for the upper Midwest region to create pull through demand and a new end market for hard-to-recycle plastics.

In 2022, Myplas USA raised over \$20M for their mechanical recycling facility in Minnesota, successfully bringing together leading companies in the food sector, MBOLD members, and leading circular economy lenders to finance the project.

Since the project was officially announced, Myplas received accolades for its foresight and vision, including features in leading trade magazines and recognition from industry innovation awards. The company expects to commence operations of its facility in the City of Rogers, MN in spring 2023, initially housing two processing lines to mechanically recycle LDPE film and rigid HDPE.

With their strategic partners, the Myplas team seeks to lead a paradigm shift away from the way plastic is used and discarded today, toward a more sustainable future. Pull through demand at scale can improve the economics upstream to encourage sortation and separation of film plastics at MRFs that today are typically part of a mixed plastics bale and have a lower market value. The project will also generate economic benefits through job creation, building a community-based local circular economy for plastic films.

Target
45,000 tons
materials recycled annually
at full capacity

Target
250 people
employed
at full capacity

Innovation

Innovation plays a key role in advancing circularity—both in mitigating unintended consequences of new solutions and addressing current bottlenecks in today's linear systems. This creativity will shape the future of how consumers shop and how cities function, creating massive shifts that will advance consumer and brand value.

The Center for the Circular Economy

Taking on a challenge as large and complex as advancing the circular economy requires experimentation, innovation and continuous iteration, to advance systemic change and mitigate unintended consequences. This is where the Center for the Circular Economy operates—driving collaborative partnerships and groundbreaking insights to tackle the toughest material challenges and accelerate a more circular economy.

HOW THE CENTER ADVANCES THE CIRCULAR ECONOMY



Innovate

Source, identify and nurture leading circular solutions



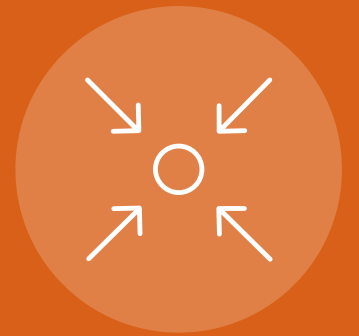
Test

Help refine and hone solutions through holistic testing and piloting



Scale

Link innovation to the global supply chain



INNOVATE

Collaborations

Creating the systems change needed to advance the circular economy is larger than any one organization or individual. Collaboration is at the core of this work. By bringing together key stakeholders, including designers, brands, manufacturers, trade associations, retailers, non-governmental organizations, activist groups, municipalities, recovery facilities, material processors and end markets, the Center for the Circular Economy creates a platform for collaboration.

COLLABORATIONS

The NextGen Consortium



The NextGen Consortium is a multi-year consortium that addresses single-use food packaging waste globally by advancing the design, commercialization and recovery of sustainable food packaging alternatives. The Consortium brings leading brands, industry experts and innovators together to reimagine foodservice packaging, open access to recycling and accelerate sustainable and circular solutions to reduce waste on a global scale.

Today, the Consortium works to redesign the single-use cup so that it's widely recyclable, compostable or reusable. Globally, more than 250 billion fiber cups are produced each year. While many cups are potentially recyclable, in practice the vast majority end up in landfill, wasting valuable resources.

By advancing innovative material solutions and scalable reuse models, while unlocking infrastructure pathways for recovery, we look to identify, accelerate and scale commercially viable and circular cup solutions.



COLLABORATIONS

NextGen by the Numbers



2022 Highlight

PepsiCo joined as a Sector Lead Partner, alongside Founding Partners Starbucks and McDonald's, inaugural Sector Lead Partner The Coca-Cola Co., Supporting Partners Yum! Brands, Wendy's and JDE Peets, and Environmental Advisory Partner WWF.



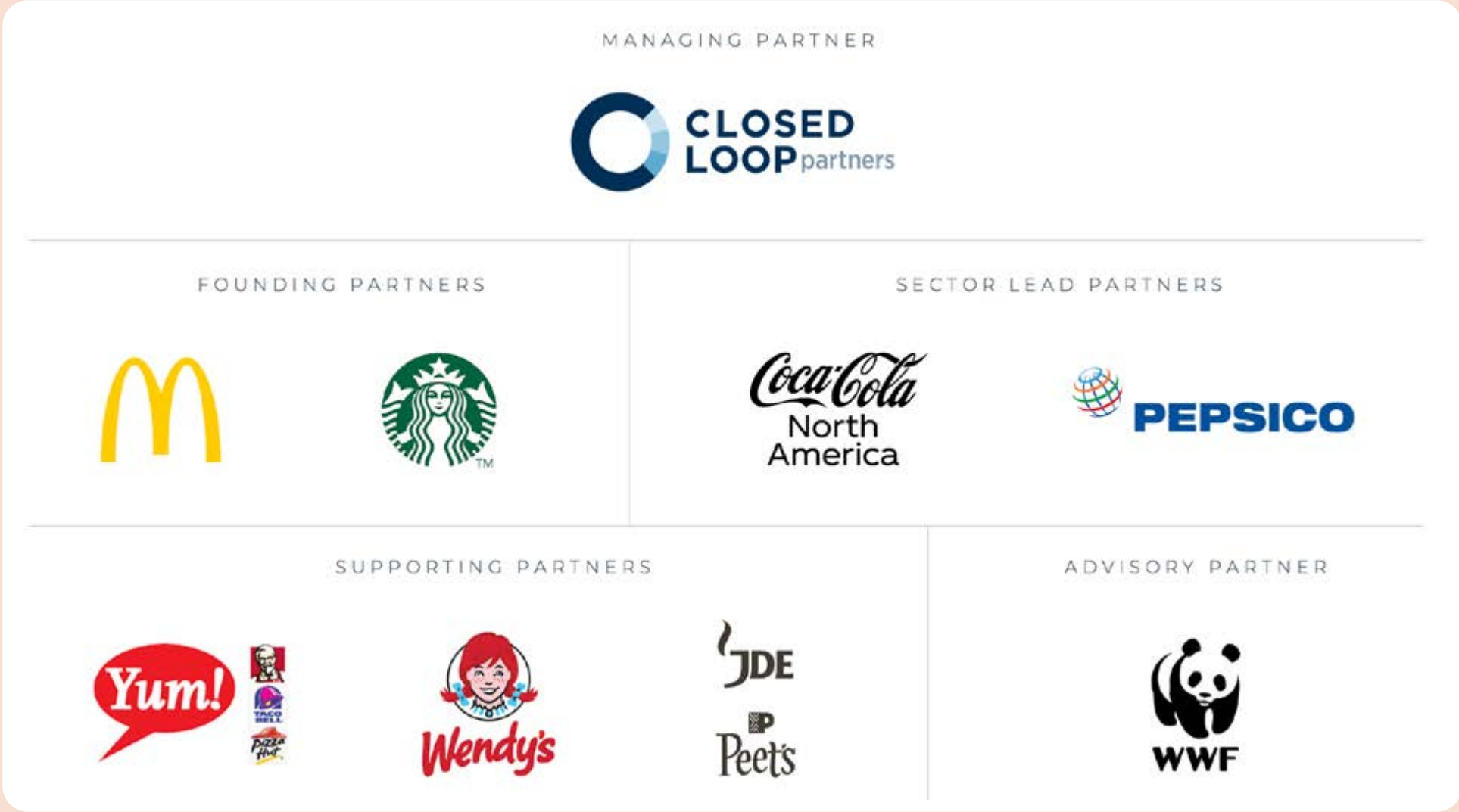
\$20M+ Collaborative initiative



7 Leading food services brand partners



30 Stakeholders convened across recycling value chain in collaborative infrastructure workshop to discuss fiber cup recovery at McDonald's headquarters



COLLABORATIONS

Consortium to Reinvent the Retail Bag



The short use—12 minutes, on average—and long lifespan of the single-use plastic bag have led to rising concerns. It's estimated that 100 billion plastic bags are used per year in the U.S.—and single-use plastic bags are among the top 10 items found on beaches and waterways, wasting valuable materials and contributing to a global waste challenge.

The Consortium to Reinvent the Retail Bag is a multi-year collaboration across retail sectors that identifies, tests and implements viable design solutions and models that more sustainably serve the purpose of the current retail bag. The Consortium drives forward a circular future for retail by reducing single-use plastic bags through education, incentives, nudges and policy, by encouraging and scaling reusable bag solutions, and by identifying renewable material substitutions when reusable bags aren't an option, and the necessary infrastructure is in place.



COLLABORATIONS

Beyond the Bag by the Numbers



2022 Highlight

The Consortium made significant progress across its impact areas, with an initial focus on reduction and reuse, due to their potential near-term economic and environmental impact. This year, the Consortium focused on synthesizing insights from the 2021 in-market pilots, evaluating and managing unintended consequences of new operating models while catalyzing broader cultural and political shifts to ensure long-term resilience.



\$16M
Collaborative initiative



50K
Stores represented across 15 retail partners



New Report
Latest report on reuse launched by the Consortium



COLLABORATIONS

The Composting Consortium



The composting landscape in the U.S. is evolving, with new materials flowing through the organics stream, adding complexity to the system. With the market for compostable packaging poised to grow 17% annually between 2020 and 2027 and growing attention to the challenge of food waste, it's critical to ensure alignment across every point on the value chain to ensure valuable materials are not wasted.

The Composting Consortium is a multi-year collaboration across the entire compostable packaging value chain to pilot industry-wide solutions and build a roadmap for investment in technologies and infrastructure. The Consortium aims to increase the amount of food waste diverted from landfills and determine where compostable food packaging could add value to the system.



2022 Highlight

Amidst increasing climate risks, rapidly depleting agricultural land and a growing food waste crisis, Closed Loop Partners' Composting Consortium published a new brief in 2022, identifying four initial steps to creating a more resilient composting system in the U.S.

MANAGING PARTNER



FOUNDING PARTNERS



SUPPORTING PARTNERS



INDUSTRY PARTNERS



ADVISORY PARTNERS





TEST

Research & Analysis

Deep insights are needed to uncover the intricacies and complexities of the circular economy and chart a data-driven path forward. The Center for the Circular Economy is a leading insights hub on the circular economy, conducting in-market tests, sharing valuable data from the field and creating investment and opportunity roadmaps across sectors.

RESEARCH
& ANALYSIS

Research Focus Areas

Design and Material
Innovation

To avoid replacing one problem with another in the transition from where we are today and where we need to go, we must assess any new material’s impact on human health and the environment. We are examining the role of design and material innovation to advance the recyclability, compostability and recoverability of packaging.

Reuse & Refill

The business case for resource efficiency is becoming increasingly clear as a consequence of an urgent climate crisis, the pressures of environmentally conscious consumers and evolving regulatory pressures.

We are testing, piloting and advancing reusable packaging models to accelerate their pathway to scale. We see reuse and refill as critical to address the mounting single-use plastics waste challenge, reduce the need for virgin plastic extraction and keep valuable materials in circulation.

Materials Recovery

There is a misalignment between the amounts and kinds of materials produced today and the infrastructure available to recover, process and return them to supply chains after use. We are identifying best practices in how to collect, recover, re-manufacture and resell materials after their initial use. This includes optimizing mechanical recycling systems, while identifying opportunities for newer molecular recycling technologies and composting infrastructure to address the waste challenge.

- Mechanical
Recycling
- Molecular
Recycling
- Composting

RESEARCH
& ANALYSIS

REUSE AND REFILL SPOTLIGHT

Insights from First-of-a-Kind Multi-Retailer Reusable Bag Pilots

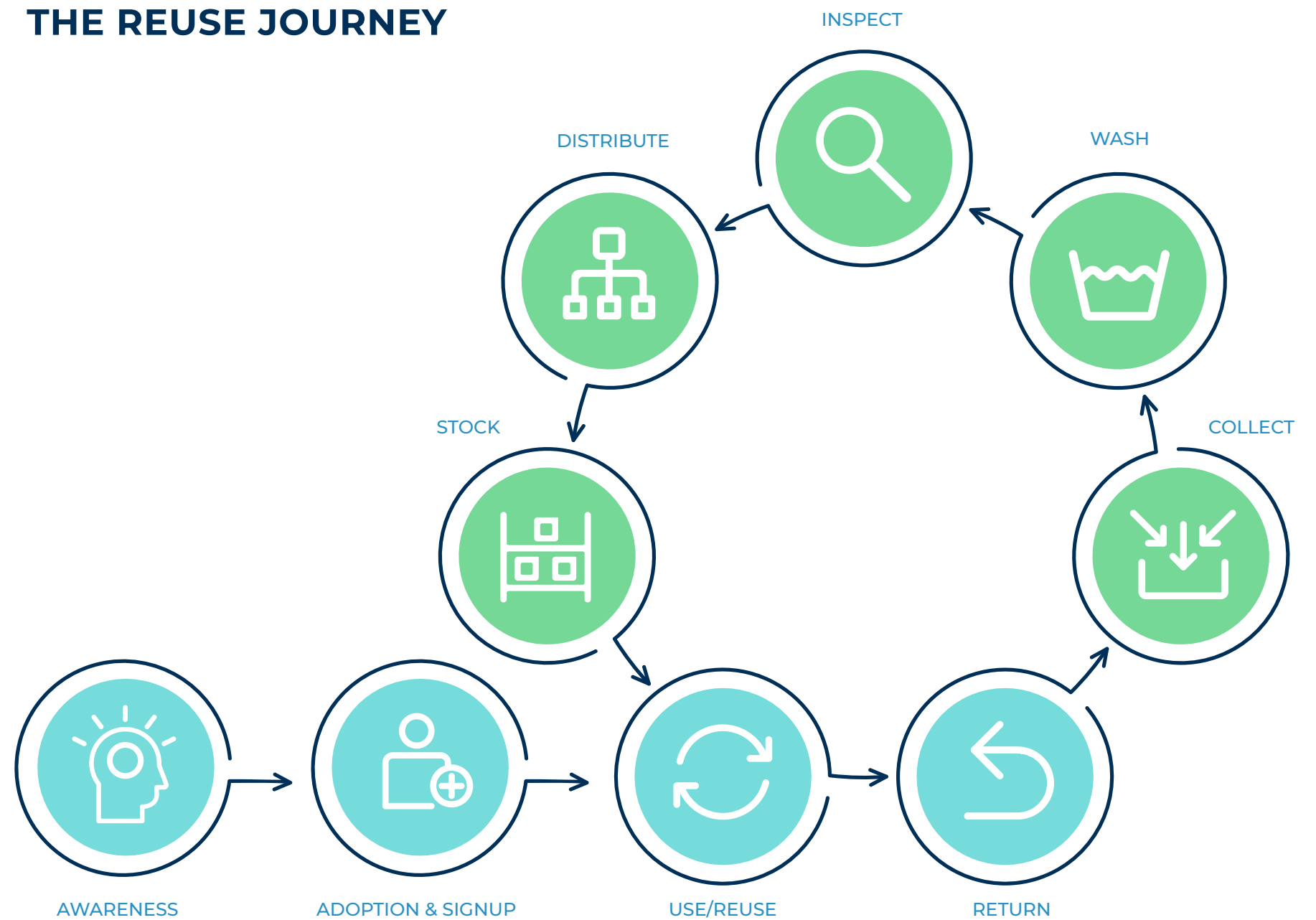
The Center for the Circular Economy and the Consortium to Reinvent the Retail Bag released a new resource to help guide retailers looking to adopt reusable bag service models. The report, *Beyond the Plastic Bag*, shares key insights and analysis gathered from collaborative reusable bag pilots conducted in select CVS Health, Target and Walmart stores throughout Northern California in 2021.



CLICK
ON
IMAGE
TO READ
FULL
REPORT



THE REUSE JOURNEY



RESEARCH
& ANALYSIS

MATERIALS RECOVERY SPOTLIGHT

What will it take for us to get to zero waste?
Composting plays an essential role.

In the transition to a circular economy—one where waste is eliminated, materials are circulated, and nature is regenerated—we need to consider the key role of one of the earliest forms of material cycling: composting.

Designing an industrial composting system that can effectively process large volumes of food waste, and the compostable packaging that may come with it, will require restructuring economic incentives, aligning policy creation with infrastructure expansion, expanding access to composting, and educating to drive new patterns of consumption.



CLICK
ON
IMAGE
TO READ
FULL
REPORT



4 INITIAL STEPS TO ADVANCE A MORE RESILIENT
COMPOSTING SYSTEM IN THE UNITED STATES:

1

Strengthen economic incentives for composting facilities to process food waste and food-contact compostable packaging

2

Address physical and chemical contamination of compost, both upstream and downstream

3

Support the transition and expansion of composting infrastructure

4

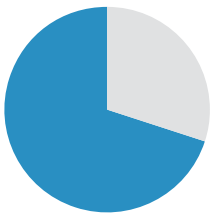
Support local, state and federal legislation that incentivizes organics diversion

Team

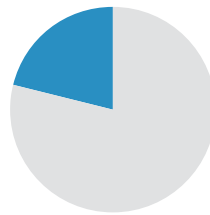
The Closed Loop Partners team dedicated to
advancing the circular economy.

The Closed Loop Partners Team

Since Closed Loop Partners’ founding in 2014, our ethos has been to embody an inclusive culture within our firm, attracting smart, dedicated and mission-driven team members. We continue to evolve our policies, procedures and efforts regarding diversity, equity and inclusion (DEI) at the firm, as we work toward being an industry leader in business culture and as investors. Throughout 2022, our employee-led DEI committee continued to advance an action-oriented approach toward developing short-term, medium-term and long-term goals. From hiring practices, to educational resources, to investment practices, among many other things, we will continue to work to advance inclusive diversity at the firm, at our portfolio companies and in the communities we service. Most importantly, we expect any statements we make to be accompanied by actions and results.



70%
identify as female



21%
people of color*

*Defined as a person who is not white



13

Languages Spoken

- Arabic
- Armenian
- Cantonese
- English
- Filipino
- French
- German
- Hebrew
- Norwegian
- Portuguese
- Russian
- Spanish
- Swedish

2022 VOLUNTEER DAY



As a proud member of the New York City community, Closed Loop Partners partnered with The Sanitation Foundation in the summer of 2022 to conduct a community clean up in the Mott Haven neighborhood of the Bronx. The firm-wide event resulted in a significant amount of recyclables and waste collected, helping advance circularity in our local communities.

Appendix

Closed Loop Ventures Group Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	POTENTIAL FOR IMPACT
Accelerated Filtration	MI	Organics	Accelerated Filtration is a water filtration company that develops industrial water filtration technologies.	Advances water reuse across a range of industries and applications.
Algaeing	Israel	Fashion	Algaeing has developed a technology for converting micro-algae to textile fibers and dyes using proprietary blends and strategic feedstock sources.	Reduces dependence on plastic fibers and toxic dyes for textiles by providing solutions produced from a renewable resource, micro-algae.
Algramo	Chile	Plastics and Packaging	Algramo builds a “smart dispensing system” for CPG products that incentivizes the reuse of packaging, and provides an economic benefit to buyers (able to buy small quantities of products at bulk prices), retailers, and brand owners.	Reduces single-use and unrecyclable CPG packaging and offers high quality products at an economic value to populations regardless of socioeconomic status.
AMP Robotics	CO	Technology	AMP Robotics uses state-of-the-art computer vision and robotics that rapidly identifies and recovers material from the waste stream.	Improves the quantity and quality of recycled commodities recovered from co-mingled waste streams.
Ansa (formerly Griin)	Israel	Organics	Ansa has a distributed coffee roasting technology that can bring green coffee beans directly to the forefront of the trade and into the hands of the consumer.	Eliminates unnecessary transportation, packaging and advances on-demand, zero-pollution roasting.
Atlas Organics*	SC	Organics	Atlas Organics recycles organic waste streams by partnering with municipalities to collect & process organic waste, and sell finished compost.	Diverts food waste from landfill and turns it into a valuable soil amendment. Increases the accessibility of composting.
By Rotation	United Kingdom	Fashion	By Rotation is a community-powered fashion rental platform that aims to transform the way we consume apparel.	Reduces textile waste by advancing reuse.
CoLoadX	NY	Technology	CoLoadX is an e-commerce platform for partial container ocean freight. CoLoadX improves both operations and user experience.	Reduces waste in the global supply chain by making international logistics simpler and more efficient.
DAI	United Kingdom	Fashion	DAI creates performance wear for women, committed to sustainability, circular economy and social impact that empowers women.	Demonstrate a fully circular business model without compromising on quality and comfort.
dimpora	Switzerland	Fashion	Dimpora is a chemical company that develops sustainable and non-harmful membranes, mostly aimed at the production of outdoor gear.	Creates high-performance products that protect outdoor enthusiasts while leaving the least possible trace in nature.
Easy Aerial	NY	Technology	Easy Aerial develops advanced and customized autonomous aerial monitoring solutions.	Potential to improve the quality and efficiency of recycling operations, e.g., increasing the quality of material coming into MRFs by enhanced hauler visibility systems.
Evrnu	WA	Fashion	Evrnu transforms post-consumer cotton garment waste into high quality cellulosic fiber.	Diverts and recovers cotton fiber waste and converts it to new fibers, thereby reducing the need for virgin cotton fibers.

*Closed Loop Partners is no longer an investor or lender

Closed Loop Ventures
Group Portfolio (cont.)

Fillogic	NY	Technology	Fillogic is the leading platform for localized logistics that enables more efficient and sustainable supply chains for retailers by converting underutilized space in malls into micro-distribution hubs.	Reduces transport emissions, uses smaller warehouse spaces more efficiently and maximizes the useful life of retail products.
For Days	CA/NY	Fashion	For Days designs everyday basics and sells through a “swap” model that takes used products as inputs for their new ones.	Reimagines consumption habits of basic apparel, thereby dramatically reducing textiles that get disposed of in landfill.
HomeBiogas	Israel	Organics	HomeBiogas produces biogas systems that turn organic waste into a cooking fuel and fertilizer.	Diverts food waste from landfill and increases its value as usable fuel, reduces indoor air pollution from dirty cookstoves, and offers “free” fertilizer.
Linhaus*	NY	Metals, Minerals	Linhaus is a proprietary technology and design platform that delivers customizable and closed-loop jewelry with a unique customer experience.	Avoids extractive diamond and gemstone mining by increasing demand for recycled metals and lab grown diamonds.
Loliware*	NY	Organics	Loliware is the world’s first Edible Bioplastic Company dedicated to replacing plastic with edible materials.	Reduces the need for unrecyclable plastic straws with hyper-compostable alternatives.
Mori (formerly Cambridge Crops)	MA	Organics	Mori extends the shelf-life and freshness of food by using natural, edible and invisible coatings.	Minimizes food waste, limits GHG emissions and water waste created by the food supply chain, and reduces the reliance on plastic packaging.
Natural Machines	Spain	Organics	Natural Machines’ 3D food printer allows users to print what they want to eat and nothing more, and recover food that is traditionally classified as food waste.	Makes use of food scraps in commercial kitchens, diverting discarded food from landfill.
Partsimony	NY	Technology	Partsimony is a SaaS network that unifies disparate data from multiple sources to more efficiently manage hardware from prototype through production, bringing superior intelligence to manufacturing supply chains.	Helps hardware companies turn designs into products with less time, capital and frustration than ever before.
Rebound Technologies	CO	Organics	Rebound Technologies accelerates freezing processes with bursts of high capacity cooling and generates sub-zero temperatures at 40% greater efficiency than legacy systems.	Cuts fresh food waste at logistics sites, and reduces energy consumption for freeze-point cooling.
Rebundle	MO	Fashion	Rebundle creates and sells hair extensions made from plant-based materials, aiming to remove plastics from the product and mitigate waste.	Advance hair extension alternatives, with more comfort and less waste.
The Renewal Workshop*	OR	Fashion	The Renewal Workshop takes unsellable apparel and textiles and “renews” them for resale by brands.	Diverts textiles that would otherwise be sent to landfill or incineration.
Retrievr	NY	Fashion	Retrievr (formerly CurbMyClutter) is a software that enables municipalities and haulers to collect and recycle used electronics and apparel.	Diverts textiles and electronics from landfill by dedicated collection and recycling.
SOLARCYCLE	TX	Technology	SOLARCYCLE’s tech-driven platform provides solar asset owners a process for retiring solar systems and repurposing them for new uses.	Keeps valuable materials in circulation by advancing the recycling of solar panels.

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Closed Loop Ventures
Group Portfolio (cont.)

Thrilling	CA	Fashion	Thrilling is a vintage clothing marketplace, leveraging the infrastructure of pre-existing “sorters”/vintage clothing store owners to accelerate the circular economy.	Increases accessibility to vintage clothing and promotes resale of clothing.
Thrive Lot	TN	Organics	Thrive Lot is a platform for installing and maintaining edible, ecological landscaping and more, for homeowners who want yard-to-table health and impact.	Grows organic, nutrient-rich food, creates habitats for wildlife, builds resilient soil, and rekindles connections with nature.
TradeLanes	CA	Technology	TradeLanes is a global trade execution platform that connects trade participants into a digital document chain.	Saves exporters 30-80% on supply chain management by digitizing and automating supply chains, particularly related to recycled paper and bulk foods.
ucrop.it	Argentina	Organics	ucrop.it connects growers with companies to agree on sustainable crop production objectives, using blockchain technology for their traceability and the confidential cryptographic storage of the grower’s information.	Enables the growers to obtain greater profitability and incentivizes sustainable agricultural practices.

Closed Loop
Infrastructure
Fund Portfolio

Investment	Location	Material	Summary	Impact by 2030
AeroAggregates*	PA	Glass	AeroAggregates provides ultra-lightweight fill material for infrastructure projects throughout the Mid-Atlantic region.	Provide a home for curbside recycled glass that has no other home outside of landfilling.
City of Baltimore	MD	Single stream	The City of Baltimore aims to expand Baltimore residents’ access to safe, effective recycling and improved collection infrastructure.	Collect and process more recyclable materials, including beverage bottles and cans.
City of Phoenix	AZ	Single stream	The City of Phoenix is working to upgrade its North Gateway materials recovery facility to enable greater diversion of plastics from landfill and to improve the quality of baled paper produced.	Recover more tons and better quality commodities out of single-stream recyclables in the City of Phoenix.
CleanFiber*	NY	Fiber	CleanFiber manufactures a premium cellulose insulation made from recycled feedstock, a mix of OCC and ONP.	Turn more tons of cardboard waste headed to the landfill into valuable insulation product.
Council Bluffs*	IA	Single stream	The Council Bluffs Recycling Center sorting facility serves 42,500 households in a rural community.	Recover more tons of post-consumer recyclables.
Emerald Coast Utilities Authority	FL	Single stream	Emerald Coast Utilities Authority materials recovery facility serves more than 250,000 households across Escambia County, the Florida panhandle, and eastern Alabama. ECUA’s facility processes 45,000 tons of recyclables each year.	Save local municipalities nearly \$1M.
Emmet County Recycling	MI	Dual stream	Emmet County Recycling desired an upgrade to its existing MRF to improve sortation of various containers.	Expand capacity to process valuable recyclable materials and expand coverage to the communities.
Eureka Recycling	MN	Single stream	Eureka Recycling is a nonprofit social enterprise based in the Twin Cities, whose mission is to demonstrate that waste is preventable, not inevitable. Eureka provides recycling collection and processing services to over 200,000 households and sorts over 90,000 tons a year.	Recover more tons of single-stream recyclables.

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Closed Loop
Infrastructure Fund
Portfolio (cont.)

Evergreen	OH	Plastics	Evergreen is a plastics reclaimer and rPET manufacturing facility.	Expand services to process recycled PET plastic into food-grade recycled rPET pellets used to manufacture new bottles.
FirstStar Recycling	NE	Single stream	FirstStar Recycling is the largest full-service recycler (hauler and MRF) in the state of Nebraska ensuring comprehensive recycling in the greater Omaha and Lincoln metro areas.	Generate millions of dollars in savings and revenues for the County.
GreenMantra	Ontario, Canada	Plastics	GreenMantra Technologies is focused on applying its upcycling catalytic technology to advance the circular economy. The first application of their technology transforms polyethylene and polypropylene into an industrial wax used in construction products. They have now reached commercial scale.	Divert valuable materials from landfills and create end markets for hard-to-recycle plastics.
IntegriCo	LA	Plastics	IntegriCo Composites is a manufacturer of composite railway products including railway crossties and composite grade using 100% recycled plastics.	Return more tons of waste plastics to supply chains in the form of plastic railroad ties.
ITR/Ecoglass	TX	Single stream, glass	ITR provides new collecting, sorting and processing capacity for post-consumer single stream in the Houston, TX market. At scale, the facility will handle 33,000 tons of single-stream material per year.	Improve access to convenient curbside recycling for 300,000 multifamily housing residents.
LRS*	IL	Single stream	Lakeshore Recycling Systems (LRS) is Illinois’ largest private waste company, specializing in recycling and waste diversion programs for Chicagoland businesses and homeowners, dumpster services and portable restroom rental.	Recover and return to supply chains more tons of single-stream recyclables in the Chicagoland region.
Marquette County	MI	Single stream	Marquette County Solid Waste Management Authority is working to upgrade its existing MRF from a small dual-stream facility to a larger single-stream installation.	Recover more tons and better quality commodities out of single-stream recyclables in rural upper peninsula Michigan.
City of Memphis	TN	Single stream	The City of Memphis introduced universal single-stream curbside recycling across the city in 2016. More efficient carts and trucks bring significantly more material to the area’s materials recovery facility.	Recover more tons of single-stream recyclables.
City of Broken Arrow	OK	Single stream	The City of Broken Arrow is using the funds for recycling carts for single-stream curbside collection and recycling collection vehicle, serving 35,000 households across the city.	Collect 124 million pounds of recycled material, including over 5 million pounds of new polyethylene terephthalate (PET) and 2 million pounds of new aluminum.
City of Moline	IL	Single stream	The City of Moline, IL, is expanding access to curbside recycling services and introducing new 96-gallon carts for its 19,000 households. Moline’s recycling will go to nearby Scott County, Iowa’s single-stream MRF (another Closed Loop Infrastructure Fund financed project).	New carts will yield a projected 40% increase in recycling volume annually.
Momentum Recycling	CO	Glass	Momentum Recycling is a cullet processor and recycling services provider, with operations in Salt Lake City and Denver. The Denver facility processes over 75,000 tons of glass per year for container, fiberglass and abrasives markets.	Momentum is creating a market for both single-stream and source-separated post-consumer glass.
Myplas	MI	Plastics	Recycling facility that uses recycled HDPE and LDPE to produce pellets, which ultimately can be used to make recycled products like pallets, conduit, pipe and bags.	Aims to be capable of processing up to 45,000 tons of plastic waste annually at full capacity.
Portage County*	OH	Single stream	Portage County is a rural county in Ohio SE of Cleveland with a population of 165,000 residents.	Improve their landfill diversion rates by investing in collection infrastructure.

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Closed Loop
Infrastructure Fund
Portfolio (cont.)

Preserve	MA	Plastics	Preserve manufactures everyday household goods, such as tableware, food storage containers, razors, and toothbrushes from 100% recycled plastic.	Continue manufacaturing products from recycled plastics.
PureCycle Technologies*	OH	Plastics	PureCycle Technologies uses a proprietary process to transform colored and contaminated polypropylene (PP) into an FDA-grade clear/natural PP pellet. At scale, the Lawrence County, OH, facility will process 50,000 tons of PP a year.	Return to supply chains more tons of post-consumer recycled polypropylene.
QRS of Maryland*	MD	Mixed 3-7 Plastics	QRS of Maryland was a plastics recovery facility that sorted and processed post-consumer mixed plastics with limited markets into a washed flake.	Recovered and returned to supply chains more than 36,000 tons of mixed 3-7 plastics in its first two years of operations.
Ripple Glass*	MO	Glass	Ripple Glass is a glass recycling company that helps keep glass out of landfills, and in circulation.	Help hundreds of communities keep glass out of their landfills.
Reterra	TX	Plastics	Reterra is a Houston-based advanced recycling company that turns waste byproduct streams of PET plastic that are produced during the recycling process into high value intermediary products.	Create a market for material that would otherwise typically end up in a landfill, while improving the overall economics of PET recycling.
Revolution Systems	CO	Recycling infras- tructure	Revolution manufactures low-cost, modular MRF systems for small communities.	Recover recyclables from rural and underserved areas via Modular Material Recovery Facility equipment.
rPlanet Earth	CA	Plastics	rPlanet Earth is the world's first completely vertically integrated manufacturer of post-consumer recycled PET (rPET) and multiple high rPET content packaging products, creating a much needed market for PET packaging collected from curbside recycling programs across California.	The company estimates that every ton of PET recycled at rPlanet Earth's facility will help reduce global greenhouse gas emissions by 2.5 metric tons of CO2.
Scott County	IO	Single stream	The Waste Commission of Scott County, a solid waste district in NE Iowa, with support from the Closed Loop Infrastructure Fund invested in new single stream recycling carts.	Continue to strengthen and modernize the county's recycling infrastructure to improve material recovery.
TemperPack	NV	Packaging	TemperPack solves thermal packaging problems through sustainable design. TemperPack specializes in bringing custom solutions for clients to scale in the perishable food and life sciences industries. Today, TemperPack operates two facilities in Virginia and Nevada and is rapidly expanding its reach in the perishable and cold chain shipping market, all with the goal of reducing the amount of packaging that ends up in landfills.	Reduce the amount of expanded polystyrene used for cold-chain insulated packaging.
City of Waterbury	CT	Single stream	The City of Waterbury, CT is the fifth largest city in the state with a population of 110,000 residents.	Enhance recycling rates in the city through improved collection of recyclable materials.

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Closed Loop Beverage Fund Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	IMPACT BY 2030
City of Ann Arbor	MI	Plastics	The loan, provided to Recycle Ann Arbor, in partnership with the American Beverage Association, will help create a state-of-the-art materials recovery facility that allows for enhanced sorting of valuable recyclable materials, like the beverage industry’s 100% recyclable polyethylene terephthalate (PET) plastic bottles.	Collect an estimated 284 million new pounds of materials collected over 10 years, including 7 million pounds of PET and 740,000 pounds of aluminum.
Evergreen	OH	Plastics	Evergreen is a plastics reclaimer and rPET manufacturing facility.	Expand services to process recycled PET plastic into food-grade recycled rPET pellets used to manufacture new bottles.
Scott County	IO	Single stream	The Waste Commission of Scott County, a solid waste district in NE Iowa, with support from the Closed Loop Beverage Fund invested in new single stream recycling carts.	Continue to strengthen and modernize the county's recycling infrastructure to improve material recovery.

Closed Loop Circular Plastics Fund Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	POTENTIAL FOR IMPACT
Greyparrot	United Kingdom	Enabling technology	Greyparrot is a leading AI waste analytics platform for the circular economy.	Increases transparency and automation in recycling to unlock the financial value of waste and keep our planet clean.
Myplas	MN	Plastics	Recycling facility that uses recycled HDPE and LDPE to produce pellets, which ultimately can be used to make recycled products like pallets, conduit, pipe and bags.	Aims to be capable of processing up to 45,000 tons of plastic waste annually at full capacity.
Scott County	IO	Single stream	The Waste Commission of Scott County, a solid waste district in NE Iowa, with support from the Closed Loop Circular Plastics Fund invested in new single stream recycling carts..	Continues to strengthen and modernize the county's recycling infrastructure to improve material recovery.
SMR	NY, NJ, FL	Recycling infrastructure	SMR is a leading recycling company.	Collects, sorts and processes materials from over 10 million people.

Closed Loop Growth Opportunities Fund Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	POTENTIAL FOR IMPACT
Browzwear	Israel and Singapore	Fashion	Browzwear is the leading provider of 3D fashion design, development and merchandising solutions	Reduces greenhouse gas emissions and water use associated with manufacturing samples, reduces greenhouse gas emissions associated with transporting physical samples around the world, and reduces excess materials produced that end up in landfill.

Closed Loop Leadership Fund Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	POTENTIAL FOR IMPACT
Apkudo	MD	Technology	Apkudo is the only platform designed by and for electronics reverse logistic operations.	Enables transparency across the lifecycle of electronic devices, support smart decision making and strengthen repair, resale & recycling markets.
Balcones Resources*	TX, AR	Recycling infrastructure	The largest privately held recycling company in Texas, with 25 consecutive years of profitability and dividend payments to shareholders.	Diverts 200,000 tons of recyclables from landfill annually.
ERI	CA	Recycling infrastruture	ERI is the nation's leading electronics recycler, strengthening circular electronics supply chains that benefit people, the planet and business.	Processes electronic waste at its eight certified locations, serving every zip code in the U.S.
Single-Stream Recyclers*	FL	Recycling infrastructure	A bolt-on acquisition of Balcones Resources; the first artificial intelligence-powered recycling company in the United States.	Diverts 1.2 million tons of material from landfills by 2030.
SMR*	NY, NJ, FL	Recycling infrastructure	SMR is a leading recycling company.	Collects, sorts and processes materials from over 10 million people.

Closed Loop Partners Portfolio

INVESTMENT	LOCATION	MATERIAL	SUMMARY	POTENTIAL FOR IMPACT
Just Salad	NY	Organics	Just Salad is the fast-casual restaurant industry's leading proponent of zero-waste practices.	Demonstrates pathway to scale reusables across food service industry with pioneering reuse program.

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