



# CLIMATE IMPACT REPORT 2021

# MISSION

We provide funding and talent to accelerate the growth and profit of early-stage companies solving the most urgent environmental issues.

Active Impact Investments was founded with one simple but important principle: Money and talent create successful companies, which attracts even more funding and talent — and we want the companies solving the most urgent environmental issues to be the winners.

We are proud to have grown to be Canada's largest climate tech seed fund. We weren't the first to deploy capital with a mission greater than profit and we hope many more will join us. The impact created by our portfolio is significant and working every day in service of a sustainable climate future is incredibly fulfilling.

In 2018 we reported less than 1000 tonnes of greenhouse gas mitigation. In 2021, with just 10 out of our 21 portfolio companies reporting mitigation specific metrics, we hit over 150,000 tonnes. In 2023 we think it's reasonable that the portfolio will achieve 1M tonnes — which would be 1000X in five years. After that, if we can find a way to scale another 500X then there would only need to be 100 Active Impacts worldwide to mitigate all current annual emissions.

It's a big dream, but it's possible.



Certified



Corporation

**\$70M**

**ASSETS UNDER  
MANAGEMENT**

**21**

**INVESTMENTS**

**1**

**EXIT**

# THE 50B TONNE PROBLEM

Every year, humanity adds **50 BILLION** tonnes of CO<sub>2</sub>e into the atmosphere. We need to reduce that to **NET ZERO by 2050**.

We need to minimize emissions, protect nature and remove CO<sub>2</sub>e ... NOW.


At the same time we need to lift the standard of living for the whole world and make room for a few billion more people.

Most of the technology we need already exists. And, investment in climate is moving in the right direction with about **\$1 TRILLION** committed in 2021 alone. But it's not enough yet.

And, we have to kick the **\$1.8 TRILLION** in climate-warming subsidies governments give every year worldwide.

We have the technology.  
We have the money.  
We still have (some) time.

# 2021 RESULTS

150,133 = 347,590 


TCO2E MITIGATED

BARRELS OF OIL

161,926 = 13,630 


MW CLEAN ENERGY  
REPRESENTED

HOMES' ELECTRICITY  
USE FOR 1 YEAR

8357 = 1393 

TONNES WASTE  
DIVERTED

AFRICAN  
ELEPHANTS

2.8M = 1+ 

LITRES WATER  
TREATED

OLYMPIC  
SWIMMING POOL

CONSOLIDATED ACROSS BOTH FUNDS

# IMPACT/GROWTH

We only invest in business models where the revenue and the impact are inextricably linked. When the positive impact grows, revenue grows and vice versa. To us, the most important health measure is growth in revenue run rate measured since the inception of our investment and our impact north star is tonnes (t) of carbon dioxide (CO2) equivalent (e) – tCO2e. We also measure secondary impacts aligned to each company's specific business model, whether it be waste diverted, water treated or meaningful employment to marginalized communities.

Climate impact and financial growth are the primary objectives of the fund, but operational factors are critical to every company's differentiation and overall competitiveness. Diverse teams outperform and are better positioned to unlock innovation that accelerates market growth. Diversity isn't an attainable state, it is a continuous practice. We track diversity metrics to hold ourselves and our portfolio companies accountable to continuous improvement.

## FUND I (2018 VINTAGE)

**15**  
PORTFOLIO  
COMPANIES

**6x**  
AVERAGE  
REVENUE GROWTH

**657**  
TOTAL  
JOBS

**43%**  
FEMALE  
FOUNDED

**46%**  
FEMALE  
EMPLOYEES

**58%**  
DIVERSE  
EMPLOYEES

# PUTTING THE 'ACTIVE' IN IMPACT

Scalable, significant impact is the first lens we look at every company through. We work diligently to determine that the impact a company creates is genuine, will be resilient through policy or market changes and can get very big quickly. Once we are excited about the impact, we look at **team, timing and traction**.

But placing bets in impactful companies isn't enough. We are a team of operators with decades of sales, recruiting, legal, organizational leadership and operational expertise. With our hands-on, outcome-focused approach, we help founders where they need it most: hiring, fundraising and sales.

We average over **700 interactions** per company and to date have placed **10 key hires**, had direct influence **over \$8M in raised capital** and supported revenue growth over **6X** since our initial investment.



## 2021 DEAL PIPELINE

**550**

**THESIS  
ALIGNED  
COMPANIES  
REVIEWED**

**8**

**NEW  
INVESTMENTS**

# CLIMATE VERTICALS



## CLEAN ENERGY & TRANSPORTATION

The technology to renewably generate electricity is advanced and scalable to the point of being cost competitive with fossil fuels. As demand for electricity and transportation increases around the world, installing renewable energy sources and investing in sustainable transportation options to displace legacy fossil fuels is of the highest priority.

14%

OF GLOBAL EMISSIONS  
COME FROM  
TRANSPORTATION

25%

OF GLOBAL EMISSIONS  
COME FROM ELECTRICITY  
PRODUCTION

**INVESTING IN:** Companies that create efficiency and sharing models to optimize current energy and fuel usage, solutions that increase the deployment of existing renewable energy and electric transportation, and innovations that complement existing renewable solutions and offset some of their drawbacks.



## CIRCULAR & SHARING ECONOMY

Waste is a design problem. Conventional production models that extract resources to create consumer goods and end their life cycle in landfills must transition to a circular model, where materials are recovered, resources are regenerated and waste is part of the product value chain.

91%

OF PLASTIC IS NEVER  
RECYCLED

45%

OF GLOBAL EMISSIONS  
COME FROM THE  
PRODUCTION AND USE  
OF EVERYDAY GOODS

**INVESTING IN:** Companies accelerating the transition from finite to infinite resources and closed loop systems through more sustainable production and consumption, or rethinking waste and resource management to achieve zero-carbon prosperity.

# CLIMATE VERTICALS



## SMART INFRASTRUCTURE

The built environment including buildings, electrical grids and the connected networks and devices that enable society to function must be upgraded to enable decarbonization, reverse logistics, distributed energy and the protection of nature based solutions.

**~80%**

OF ENERGY USED BY BUILDINGS IS WASTED

**INVESTING IN:** Companies that optimize the flow of electrons and advance the adoption, efficiency and payback periods for green upgrades. Solutions that minimize the use of fossil fuel generated power and that help proliferate and protect nature-based carbon sequestration systems.

**39%**

OF GLOBAL EMISSIONS COME FROM CONSTRUCTION & THE BUILT ENVIRONMENT



## SUSTAINABLE FOOD & WATER

Industrial scale agriculture has increased crop yields to serve growing populations, but there are many drawdown effects like fertilizer runoff, soil degradation and habitat destruction that are carbon intensive. We must re-invent agriculture, food supply chains and fresh water management to increase production and efficiency without further degrading scarce resources and biodiversity.

**>1B**

TONNES OF FOOD IS WASTED EACH YEAR

**INVESTING IN:** Companies that optimize, innovate and decarbonize agricultural practices and food supply chains through efficient transportation, extending shelf life, enhancing natural carbon sinks, and water purification and protection.

**26%**

OF GLOBAL EMISSIONS COME FROM FOOD PRODUCTION



# CLEAN ENERGY & TRANSPORTATION

## Case Study: Solstice

Boston, MA | Solstice fills a critical gap in the home solar model – their platform connects renters and those in multi-unit residences to community solar projects – making the adoption of renewable energy more inclusive and equitable. Community solar with Solstice creates accessibility for the 90% of US households that can't install rooftop solar and allows low-mid income families to access the savings of switching to solar power while also expanding renewable energy adoption.

2021 was a breakout year for Solstice as they connected over ten thousand households in the northeastern US to the 27 community solar projects – a three-fold increase over the prior year. Solstice's impact is multiplicative in that as they bring on new customers they help demonstrate growing demand for solar power which builds the business case for new community solar developments.

### 2021 IMPACT HIGHLIGHTS

50,003

TCO2E MITIGATED

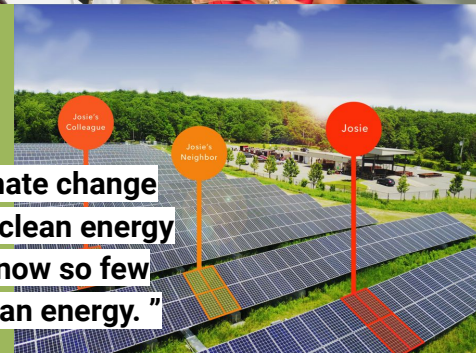
70,558

MWh SUPPLIED BY PROJECTS



**"We're never going to solve climate change until we democratize access to clean energy for more people, because right now so few people actually benefit from clean energy."**

Steph Speirs, Founder & CEO



# SMART INFRASTRUCTURE

## Case Study: EnPowered

Kitchener, ON | EnPowered is a cost-saving solution for industrial customers that dramatically reduces emissions and accelerates the adoption of commercial clean retrofits. Through two products, Programs and Payments, EnPowered creates significant savings on their customers' energy bills and then enables them to finance efficiency and clean energy projects with those savings — and no upfront cost. Programs predicts when electricity prices will peak (meaning that prices will surge and dirtier fuels will be engaged) and alerts customers to reduce usage, which creates huge savings. Their new Payments product is an on-bill payment bundle that allows customers to finance energy efficiency upgrades as operational expenses with the savings the platform creates. In short, EnPowered removes the barriers for large industrial customers to make critical upgrades that dramatically reduce emissions.

In 2021, EnPowered closed their seed financing with Inovia, Version One, Golden Ventures and Active Impact, which catalyzed the release of Payments.

### 2021 IMPACT HIGHLIGHTS

1421

TCO2E MITIGATED

7682

MWh ELECTRICITY SAVED

The screenshot displays the EnPowered Payments interface. At the top, it shows the EnPowered logo and navigation links for Home, Solutions, and Reports. Below this, a summary section indicates a balance of \$2,000 CAD and a next charge of \$110.89 CAD for June 20, 2021. The main content area is divided into three sections: Charges, Rebates, and a summary of electricity bill impact. The Charges section shows a total payment of \$2,000.00 for EnPowered 100 lighting retrofit - Invoice #1413. The Rebates section shows a total rebate of \$1,889.11 for EnPowered Demand Response Payment for Oct 2021. The summary section shows that the bill before charges is \$10,404.28 and the bill after charges and rebates is \$10,515.17. A table below this summary lists individual charges and rebates with their dates, amounts, and statuses (Pending or Succeeded). At the bottom, contact information for support is provided.

Date	Charges	Rebates	Status	Bill
021	CAD \$2,000	---	Pending	👁️ ⬇️
021	CAD \$2,000	CAD \$1,889.11	Succeeded	👁️ ⬇️
021	CAD \$2,000	---	Succeeded	👁️ ⬇️
021	CAD \$2,000	---	Succeeded	👁️ ⬇️
1020	CAD \$2,000	---	Succeeded	👁️ ⬇️
1020	CAD \$2,000	---	Succeeded	👁️ ⬇️

**“The insane part of the energy markets is that on average a large industrial user can save 30-70% of their total electricity bill. Our customers average about 48% and collectively they’re saving about \$100M per year using our services ... in addition to driving massive savings by reducing usage during peak hours, we’re also driving down emissions”**

Tomas van Stee, Founder & CEO

# SUSTAINABLE FOOD & WATER

## Case Study: Aquacycl

Escondido, CA | Aquacycl has a unique, patented technology that treats industrial wastewater. Aquacycl uses anaerobic bacteria to remove 1000X larger concentrations of toxic pollutants than any other system on the market. The system is faster, has a small footprint inside a shipping container AND powers itself by generating electricity!

In 2021, Aquacycl landed and grew their biggest customer relationship with one of the largest food and beverage manufacturers in the world. Their primary customers are food and beverage manufacturers, but they are expanding into new markets. Aquacycl's technology is most recently being deployed to remove hydrocarbons from facilities that contain oil contamination, which is a hugely impactful opportunity that no one has been able to crack until now.

### 2021 IMPACT HIGHLIGHTS

358

TCO2E MITIGATED

608,076

GALLONS WATER TREATED



**“A third of the world's population doesn't have that same access to clean water, and lack of sanitation is still the #1 cause of poverty throughout the world. Wastewater has not seen an innovation since the clean water act was signed in the US in the 70s, and it's time to change that.”**

Orianna Bretschger, Founder & CEO

# CIRCULAR & SHARING ECONOMY

## Case Study: ChopValue

Vancouver, BC | ChopValue is completely unique. They have developed a technique to clean, sort and join bamboo chopsticks into a multitude of beautiful, durable, wood composite products. Restaurants separate used chopsticks instead of sending them to the landfill for ChopValue to collect and upcycle at a local microfactory, which are then sold as functional and decorative pieces. They have revolutionized the lowly single use chopstick into luxury feedstock.

In 2021, ChopValue expanded the model developed in Vancouver to 38 microfactories around the world including master franchises in the UK and Mexico, and new locations in Boston, Las Vegas, Toronto East and Singapore. They also established new sales partnerships with EFFYDESK, IGA/Fresh St. Market, Home Depot and London Drugs to find new homes for the long term second life of chopsticks.

### 2021 IMPACT HIGHLIGHTS

7,700,000

CHOPSTICKS RECYCLED

23,000

KG WASTE DIVERTED

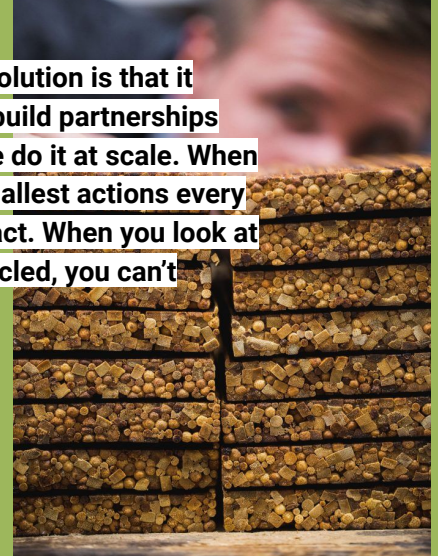
38

GLOBAL MICROFACTORIES



**“The key to our circular economy solution is that it doesn’t feel like a transaction. We build partnerships with every single restaurant and we do it at scale. When we act as a community with the smallest actions every step along the way you create impact. When you look at our 33 million plus chopsticks recycled, you can’t question that community impact.”**

Felix Böck, Founder & CEO



# 2021 IMPACT HIGHLIGHTS

## CLEAN ENERGY & TRANSPORTATION

**Clir**  
73,560 tCO<sub>2</sub>e mitigated

**Jaza Energy**  
2383 tCO<sub>2</sub>e mitigated  
150 African women employed

**RailVision**  
3617 tCO<sub>2</sub>e mitigated

**Solstice**  
50,003 tCO<sub>2</sub>e mitigated

**SWTCH**  
289 tCO<sub>2</sub>e mitigated  
421 charging stations installed

## SMART INFRASTRUCTURE

**Audette**  
865,000 identified tCO<sub>2</sub>e savings

**Carbon America**  
*projects operational in 2023*

**EnPowered**  
1421 tCO<sub>2</sub>e mitigated  
7682 MWh electricity saved

**Encycle**  
12,443 tCO<sub>2</sub>e mitigated  
15,970 MWh electricity saved

**Manifest Climate**  
647,318 tCO<sub>2</sub>e represented by clients

## SUSTAINABLE FOOD & WATER

**Aquacycl**  
608,076 gallons water treated  
358 tCO<sub>2</sub>e mitigated

**Clean Crop**  
*to be reported in 2022*

**GoJava**  
5.1 tonnes waste diverted  
40,470 trees planted

**Therma**  
5631 tCO<sub>2</sub>e mitigated  
8509 tonnes food waste mitigated

## CIRCULAR & SHARING ECONOMY

**ChopValue**  
23 tonnes waste diverted  
7.7M chopsticks upcycled

## FUND I GENERAL IMPACT

**Keela**  
\$394.6M donations raised

**Sametrica**  
9608 new outcome indicators reported

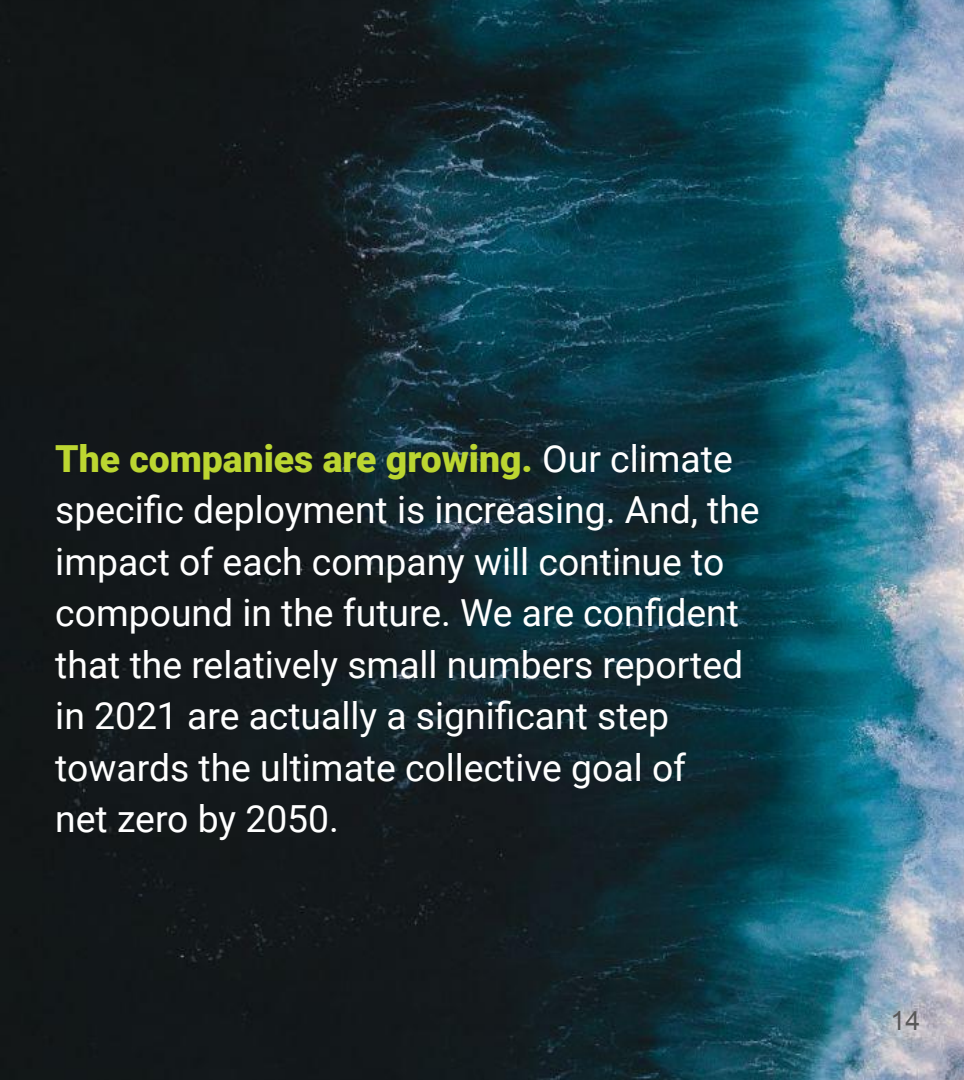
**Social Nature**  
1M+ natural products sampled

*Fund I began as a general impact fund without a specific climate mandate. As our thesis and deal network matured, we were able to specialize in the impact area we are most passionate about: climate change.*

# ADD IT UP

Numbers on a page have little value without context. The 'impact highlights' shared by individual companies or on the aggregate are small in comparison to the enormity of the problem. But, it's important to understand what those numbers can and will become in the next decade, approaching the critical 2050 milestone.

1. We are seed stage investors which means that most companies joined our portfolio when they had approximately 20 employees and less than \$1M in revenue. Fortune 500 companies are roughly 13,500X the size of the companies in our portfolio. We believe some of our companies are capable of becoming global leaders with billions in revenues and that their impact will grow at the same pace → **1000X impact** (target revenue growth)
2. Our first fund was a mix of social and environmental impact. We became exclusively climate tech investors at the beginning of this reporting period and we plan to fund many more climate startups in the future → **50X impact** (target number of companies in portfolio)
3. This report shows one year's worth of impact for 18 companies. Many (hopefully all) of these companies will be in business for decades to come → **20X impact** (target number over many years)



**The companies are growing.** Our climate specific deployment is increasing. And, the impact of each company will continue to compound in the future. We are confident that the relatively small numbers reported in 2021 are actually a significant step towards the ultimate collective goal of net zero by 2050.

# IMPACT METHODOLOGY & DISCLAIMER

We recognize that impact measurement, as it relates to our portfolio companies, is a work-in-progress.

Early stage businesses are on a continuum of impact reporting quality. From due diligence to onboarding, we analyze and validate the impact unit methodology just as we scrutinize the economic aspects of the company. Post investment, we seek continuous improvement of every company's impact calculations including periodic review and challenge of internal assumptions and more granular conversion and emission factors to more accurately reflect their geographic footprint. And, we develop new metrics as they roll out additional product offerings.

**These metrics inform our view of impact target and goal setting. As we gain more input from our portfolio companies, we aspire to set tCO<sub>2</sub>e emission thresholds for our due diligence process to further screen for high impact investment opportunities.**