



# EXPECT THE WORLD FROM US

OPPY 2023 SUSTAINABILITY REPORT





As a global grower, marketer and distributor of fresh produce, we are keenly aware of the effects of climate change and our collective responsibility to minimize environmental impact. While Oppy has implemented successful sustainability initiatives prior to 2023, we were able to step back over the past year and examine our end-to-end approach to sustainability.

**We have identified five specific areas of focus throughout our supply chain: greenhouse gas (GHG) emissions, food waste, water use, packaging materials, and impact on people and communities.**

This report will detail the work that has been done to date in each of these areas, as well as share plans for the future. More importantly, we will be documenting our progress on an annual basis moving forward.



## Bringing fresh global produce home

Transportation and refrigeration are central to our business as they allow us to literally deliver on our promise of providing fresh produce to customers, from different hemispheres, on a year-round basis.

This makes the calculation and reduction of GHG emissions our first area of focus.

## Greenhouse Gas Emissions

The Carbon Trust, a global climate consultancy, categorizes GHG emissions into three scopes:<sup>1</sup>

### SCOPE 1

#### DIRECT EMISSIONS FROM OWNED OR CONTROLLED SOURCES

Fuel combustion  
Company vehicles  
Fugitive emissions



### SCOPE 2

#### INDIRECT EMISSIONS FROM THE GENERATION OF PURCHASED ELECTRICITY, STEAM, HEATING AND COOLING

Purchased electricity, heat and steam



### SCOPE 3

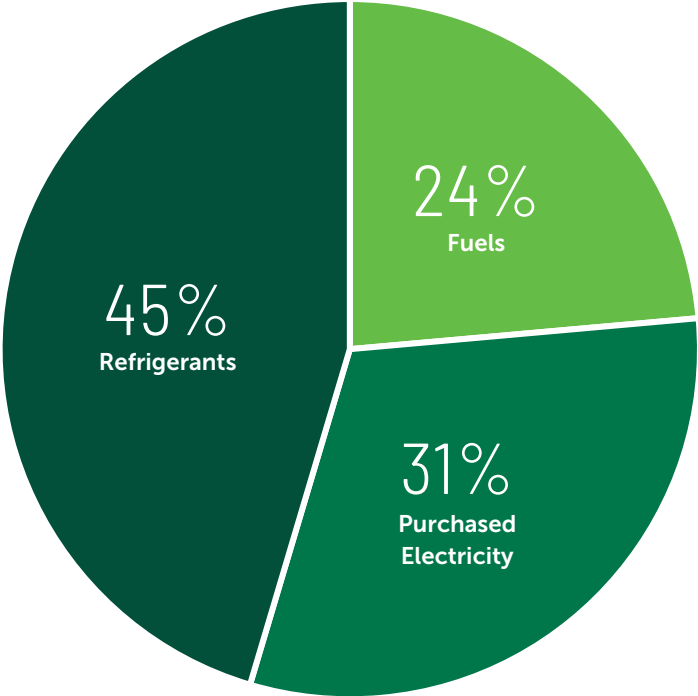
#### INCLUDES ALL OTHER INDIRECT EMISSIONS THAT OCCUR IN A COMPANY'S VALUE CHAIN

Purchased goods and services  
Business travel  
Employee commuting  
Waste disposal  
Use of sold products  
Transportation and distribution (up and downstream)  
Investments  
Leased assets and franchises



<sup>1</sup>[The Carbon Trust: What are Scope 3 emissions?](#)

# 2021 Oppy Scope 1 & 2 Baseline



When looking strictly at emissions from company vehicles, fugitive emissions and purchased electricity, heating and steam (as defined by scope 1 and 2), Oppy’s data is calculated and then validated by a third party, in alignment with Dole plc.

EMISSIONS SOURCE	CLIMATE IMPACT (kg CO <sub>2</sub> e)
Fuels	177540
Purchased Electricity (location-based)	233430
Refrigerants	341691
<b>GRAND TOTAL</b>	<b>752661</b>

**AS THE NUMBERS REFLECT, THE MAJORITY OF ENERGY USED OR PURCHASED BY OPPY TO ENSURE THE DELIVERY OF FRESH PRODUCE TO CUSTOMERS AND CONSUMERS IS USED FOR REFRIGERATION AND ELECTRICITY.**



## Scope 1 & 2 Initiatives

Installing a Direct Digital Control (DDC) cooling system in our Coquitlam, British Columbia warehouse in November 2021 reduced evaporator run times and defrost cycles by 284,000 kWh per year. This translates to a 201 metric ton reduction of Carbon Dioxide (CO<sub>2</sub>) emissions for that facility, according to the EPA's Greenhouse Gas Equivalencies calculator.<sup>2</sup>

Earlier electricity-saving initiatives for that same warehouse include LED lighting conversion in 2016 with further LED upgrades to all coolers and the additional conversion of our Calgary, Alberta warehouse to LED lighting in 2021. These measures have resulted in 72 metric tons (102,000 kWh) and 19 metric tons of CO<sub>2</sub> equivalent (26,650 kWh) reductions respectively.

By the end of 2023, all Oppy offices will be switched to 100% LED lighting which uses an average of 75% less energy than standard fluorescent office lighting, according to the U.S. Department of Energy.<sup>3</sup>

Refrigerants are a well-known contributor to ozone depletion due to the use of hydrofluorocarbons (HFCs). While they are effective at keeping produce fresh and cool, they also have a dramatically higher impact compared to other greenhouse gasses like carbon dioxide.

With this in mind, Oppy is investigating the cost to change the refrigerant in its Vancouver warehouse condensers to R449A, a refrigerant with low global warming potential that won't sacrifice performance or reliability. This transition will take time as it requires modifications to current refrigeration hardware. We are currently evaluating all associated costs in order to make a decision by the end of Q2 2023.

## 2022 Scope 3 Baseline

Like many companies, the majority of Oppy's GHG emissions come from scope 3 supply chain activities.

2022 marked the beginning of our partnership with Carbon Cloud, a leading food industry climate intelligence platform. Using a combination of machine learning together with their ground-breaking software and sophisticated food emissions database, we were able to calculate emissions from the production, transportation and/or packaging of all Oppy products.

This process has allowed us to identify products with the highest and lowest climate impact — as measured by the average CO<sub>2</sub> emissions per kilogram of product. By also

taking our sales volume into account, we can determine the total climate impact of each product. Data can be further broken down to disclose emissions for every product at each stage along the supply chain. Using this information, we are now able to target emissions-reduction efforts to Oppy products with higher emissions. Furthermore, we are also able to focus on the specific part of the product's supply chain that represents a larger share of the total emissions for that product, thereby making our efforts more impactful.

For products shipped longer distances, transportation contributes more to their overall footprint compared to a product grown closer to where it is sold.

<sup>2</sup> [EPA: Greenhouse gas equivalencies calculator](#)

<sup>3</sup> [U.S. Department of Energy: LED lighting](#)



# Scope 3 GHG Emissions

Based on this data, the majority of our efforts to reduce emissions will be focused on agriculture production and transportation.

Total climate impact

**282 484** tonnes CO<sub>2</sub>e/year

Based on all Oppy products, by volume, sold in 2022.

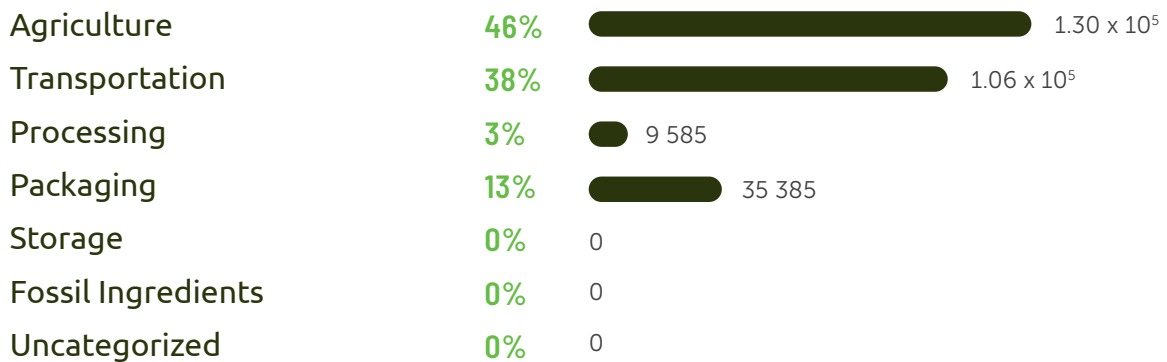
Average product impact

**971** tonnes CO<sub>2</sub>e/year

Based on all Oppy products, by volume, sold in 2022.

## Emissions per sector

tonnes CO<sub>2</sub>e/year





## Scope 3 Initiatives

In 2023, we will implement a process for collecting specific scope 3 primary data at the farm level. This is an incredibly complex task, and we are in the initial stages, but it is important to begin the process of collecting data and tracking progress on an annual basis moving forward.

We are also thrilled to be collaborating with R.R. Plett Trucking in 2023, one of Oppy's long-standing drayage providers, trialing their new fleet of Tesla electric trucks. We will be testing these trucks on routes in the Vancouver, British Columbia region. We look forward to exploring this

new technology and measuring and reporting the potential decrease in carbon emissions in future Oppy sustainability disclosure reports.

The ultimate goal for Oppy is to determine tangible ways to decrease GHG emissions throughout its entire supply chain. In 2023, our focus will be on implementing a comprehensive data collection process and ensuring we have a thorough and valid representation of our emissions. Once this is in place, we will identify emissions-reduction objectives for each and every aspect of our business.

## Regenerative Agriculture

Regenerative agriculture (RA) is a holistic approach that improves the soil, water and other resources it uses, rather than depleting them. It encourages iterative practices that result in environmental, social, economic and spiritual wellbeing by rehabilitating and enhancing the entire ecosystem.<sup>4</sup>

The benefits of RA are numerous. Increased biodiversity and organic matter leads to more resilient soil that can better withstand the impact of climate change, such as flooding and drought, and healthy soil brings strong yields and nutrient-rich crops. It also diminishes erosion and runoff, leading to improved water quality both on and off the farm.

RA also helps offset the effects of climate change by pulling carbon from the atmosphere and sequestering it in the ground.<sup>5</sup> For many of these reasons, there is growing interest from consumers and the industry in its growing practices.

Oppy grows grapes in Mexico and Peru using RA principles and practices. We will continue to track both the benefits and challenges of this production method as we consider expanding acreage.

The images below from Oppy's grower partner in Peru, Agropiura, are particularly impactful. RA practices enabled Agropiura to transform land that was over-grazed and desertified in 2013 to lush, healthy production of organic table grapes in 2021. This evolution was quantified in soil assessments conducted by Terraforma, experts in RA and microbial solutions, resulting in a soil health rating of 3.17 out of 10 in 2019 to 5.06 out of 10 in 2021.



**2013:** The beginning: over grazed, desertified land



**2021:** Harvest of 15 hectares of organic grapes with cover crops under vines, in addition to raising bees and sheep

<sup>4</sup> [Rodale Institute: Regenerative organic agriculture and climate change](#)

<sup>5</sup> [The Climate Reality Project: What is regenerative agriculture?](#)



## Addressing Climate Change with Technology

In the summer of 2022, Oppy executed a pilot project with Saga Robotics, testing the application of UV-C light in order to mitigate the presence of powdery mildew, one of the most common diseases in California strawberry production. The objective was to compare the impact of using UV-C light instead of chemical controls to treat this disease. Using less or no chemicals is potentially more environmentally-friendly in comparison to the application of fungicides.

The data collection and analysis for this trial were managed by the Cal Poly Strawberry Center. The results suggested a UV-C

treatment, applied twice per week, can significantly reduce powdery mildew in comparison to a fungicide program. While this type of study needs to be replicated for further validation, we are very encouraged by the results. A significant amount of research and trials are underway in the strawberry industry with early indications that also point to UV-C light potentially being a viable option for mitigating powdery mildew. In the near future Oppy will continue to support this research in an effort to determine if commercial implementation is feasible.



## Food Waste

In order to run a profitable business, we naturally work to ensure there is little to no food waste in our supply chain. However, given the unpredictable nature of seasonal yields, changing consumer patterns, market fluctuations, and the challenges of bringing perishable items to market — the idea of selling 100% of our fresh produce is simply unattainable. As necessary, we use several avenues to repurpose food that would otherwise go to landfill.

## Alternative Uses for Unsold Food

We are fortunate to work with leading organizations in this field. Here is a breakdown of how our produce was repurposed in 2022.

Any food waste created during the repack process in our Coquitlam, British Columbia facility, such as converting bulk cases of product to consumer-size clamshells, goes to ReFeed — an organization with a mission to regenerate the world's soil while feeding communities, reducing food waste and healing the planet. This partnership diverted 1,984 tons of fruit away from the landfill in 2022.<sup>6</sup>

Zespri kiwifruit handled in one of our Southern California storage and repack facilities that does not meet the quality specifications is sent to Rios Organics — a full-service organics waste management company specializing in generating clean energy using a biological process known as anaerobic digestion (AD), which produces biogas and other fuels. This partnership diverted 1,060 tons of fruit away from the landfill in 2022.<sup>7</sup>

Oppy's long-standing service provider, Manfredi Cold Storage, in the Northeastern U.S. sends any food waste from its facility to local composters as well as to Trenton Renewables — a food waste recycling and renewable energy company in New Jersey that generates premium compost and organic fertilizer.

Our office in Calgary, Alberta found a creative way to dispense with fruit that can't be sold by donating it to four-legged consumers at the Saving Grace Animal Sanctuary. Roughly a pallet a week of fruit that would otherwise be sent to the landfill is enjoyed by goats, pigs, horses and other animals at the sanctuary.

<sup>6</sup> [Data provided by ReFeed](#)

<sup>7</sup> [Data provided by Rios Organics](#)





*Oppy's Transportation Supervisor, Lindsay Mate, at Saving Grace Animal Sanctuary with "Tucker," who apparently loves kiwifruit.*

In addition to repurposing partnerships, Oppy donates produce that isn't cosmetically attractive enough to be sold at retail to food banks throughout the U.S. and Canada.

Most recently Oppy established a new collaboration with Food Forward, one of the nation's largest urban produce reclamation and upcycling organizations. Food Forward fights hunger and prevents food waste by rescuing fresh surplus produce and delivering this abundance of produce free of charge to people experiencing food insecurity while also mitigating food waste.

While we acknowledge and appreciate the partnerships and processes in place, we continue to explore every opportunity to ensure zero product goes to waste in the future. To that end, we are also establishing a more robust data collection process to ensure we can track the ongoing decrease in our food waste in the future.



## Addressing Climate Change with Technology

Oppy is an industry leader in working with shelf-life extension (SLE) technologies. Through an increased amount of testing, we now evaluate multiple SLE technologies on numerous Oppy products each year. Benefits of SLE technologies can include prolonged shelf life, improved quality, increased control of the ripening process and more. By testing and potentially implementing these systems, we use SLE technology as one additional tool for combating food waste, specifically by extending the shelf life and/or making the product more desirable for the end consumer. Deploying any technology naturally adds additional costs so we must ensure benefits gained from the technology outweigh the associated costs.

As one example, Oppy has worked with Hazel Technologies, a leading SLE technology company, on multiple trials, including tests on table grapes from South America in 2020 and table grapes from California in 2021. In both trials, Hazel's shelf-life extending sachets resulted in grapes with a crisper texture, greener and stronger stems, in addition to maintaining higher quality for a longer duration of time.



# Water Use

Water quality and scarcity are two prominent issues related to the production of fresh fruits and vegetables. As an organization growing products around the globe, we naturally experience drought in multiple growing regions each year. These issues affect specific regions like California and Chile more often than others. In addition to exploring opportunities for conservation, we will actively test technologies to help mitigate these issues.

According to the International Water Management Institute, agriculture accounts for about 70% of global water withdrawals and is constantly competing with domestic, industrial and environmental uses for a finite water supply. As this is an ever-growing problem, there is an ongoing attempt to find more effective methods of water management.<sup>8</sup>

To this end, Oppy is actively exploring precision irrigation technologies that allow the application of water and nutrients in small doses to provide optimal growing conditions. Precision irrigation can facilitate increased profitability by achieving higher yields per hectare, and better-quality crops, while using less water, fertilizer, and energy. Additional benefits include greater predictability and stability in uncertain climates.<sup>9</sup>

<sup>8</sup>[The Water Project: Water scarcity and agriculture](#)

<sup>9</sup>[Netafirm: What is precision agriculture?](#)



# Sustainable Packaging

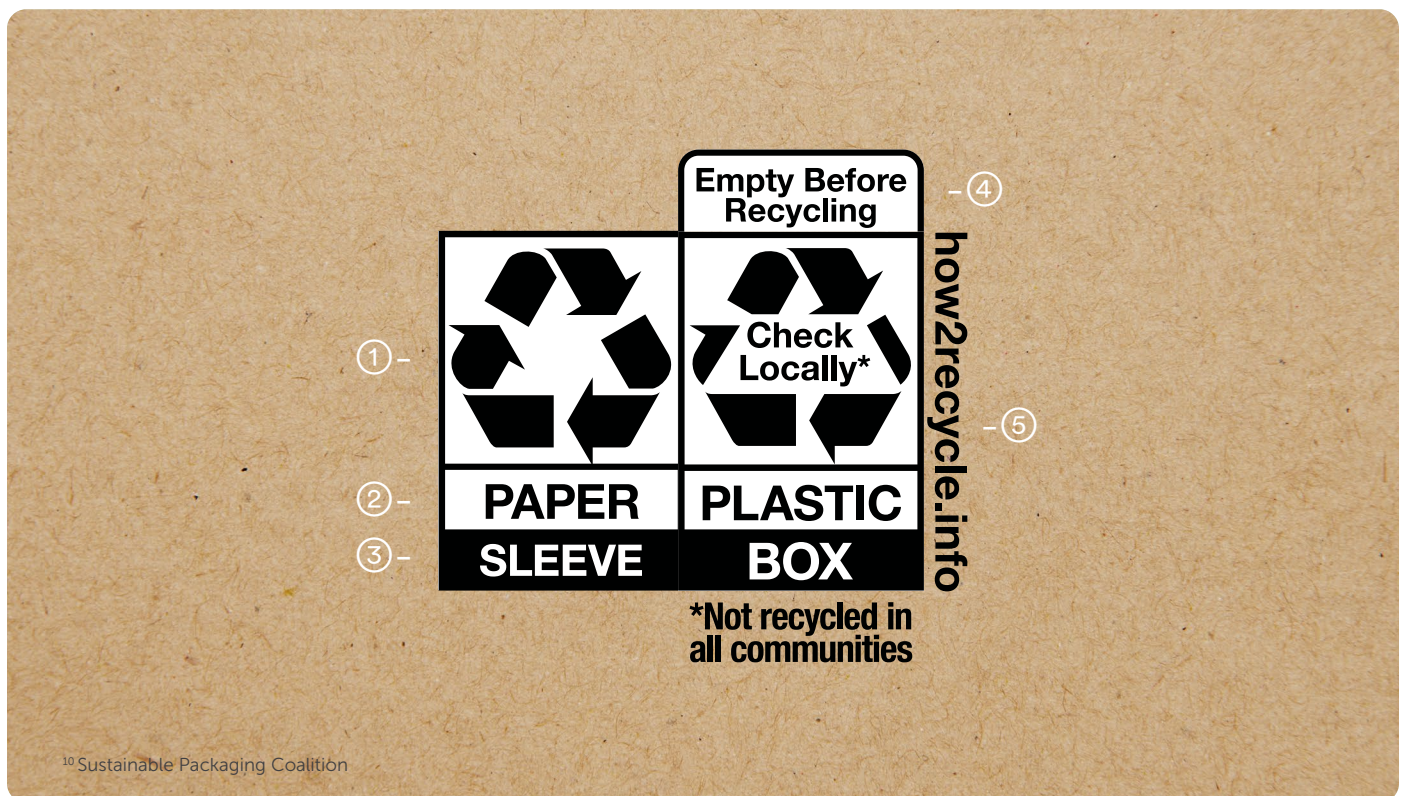
Oppy's team of packaging experts are constantly exploring new and unique environmentally-friendly packaging materials. While we remain interested in alternative materials such as compostable or biodegradable packaging, due to the lack of disposal infrastructure in place we are not currently working with these materials. Without the proper infrastructure, such as a commercial composting facility, these packs often end up in the landfill, decomposing alongside other waste and thus negating the widely promoted benefits of biodegradable and/or compostable packaging.

We do support a closed-loop recycling system and work to ensure our packaging is 100% recyclable whenever feasible. With this in mind, we are pursuing multiple objectives when designing new packaging. These include converting multi-layer pouch bags to mono-layer, limiting plastic headspace

to 30%, avoiding large labels to facilitate recyclable packaging and changing mesh and film material to high-density polyethylene (HDPE) so it can be recycled together.

In addition to being a member of the **Canadian Produce Marketing Association's (CPMA) Plastics Working Group (PPWG)** to prioritize and implement system-wide changes in the industry, we have been working with **How2Recycle** for three years to incorporate clear and concise consumer recycling instructions in our packaging.

Our team will continue to explore new ways of decreasing the amount of plastic used in our packaging and partnerships that improve pre- and post-consumer recycling and waste disposal infrastructure. Measurable data of our progress will soon follow.



## 1 Recyclability Icon

Indicates the recyclability of the packaging component

## 2 Packaging Material

Identifies the material type of packaging component

## 3 Packaging Component

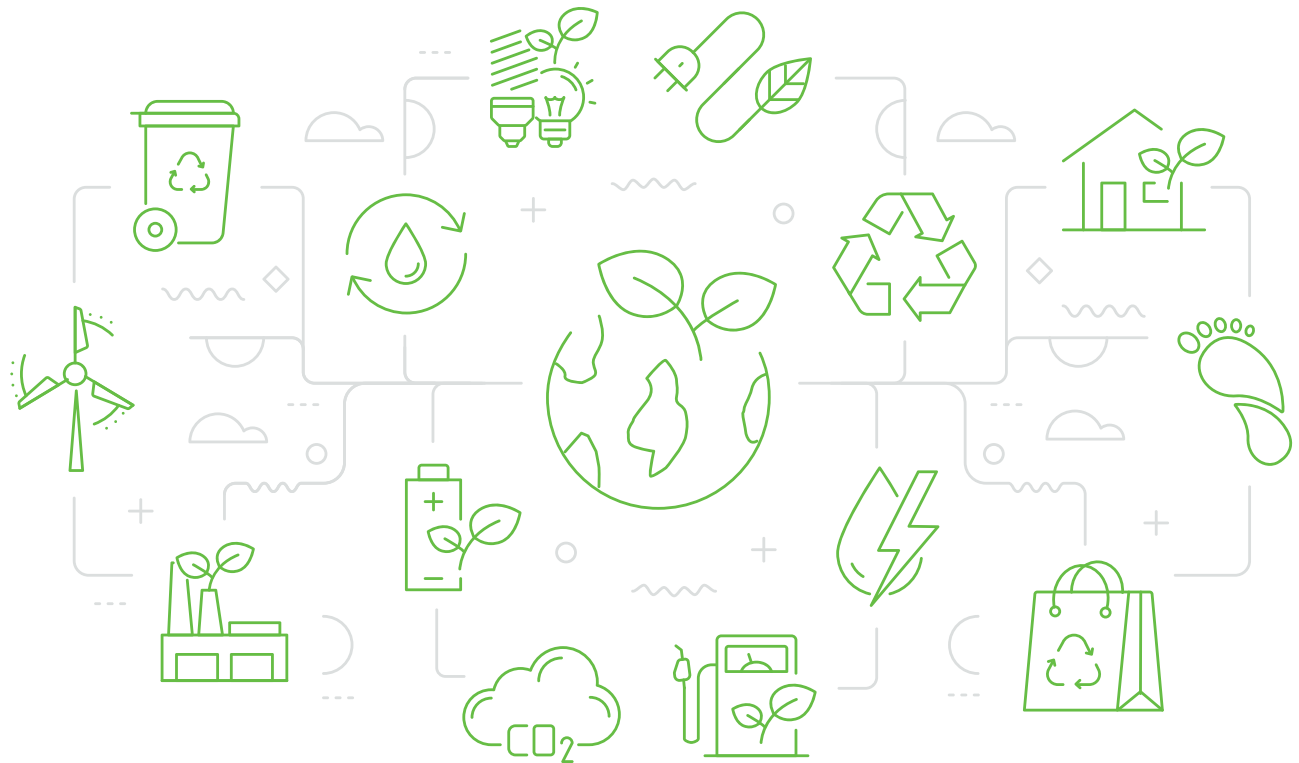
The specific part of the package referenced by the label

## 4 Special Instructions

Tells consumer how to prepare component for recycling

## 5 How2Recycle Website

Provides information on the label and additional recycling information



## Waste Management

Oppy's **Adopt a Highway** program in Peru, spearheaded with our partner Agropiura, was initially aimed at removing waste next to a major highway by engaging citizens, local partners and authorities.

Due to a lack of disposal services in rural areas of Peru, it was common for discarded waste to pile up along the roads and highways surrounding the town of San Rafael. The common practice of burning the waste created health and environmental concerns due to seepage into groundwater and farmland.

**Agropiura** and Oppy initially invested in a small waste disposal vehicle to collect trash along the highway and posted signs to explain the initiative.

Local authorities soon took an active part in the program, purchasing waste disposal trucks. The program has expanded to the nearby town of Obrilla, and is now almost entirely self-sustaining, with management and 80% of funding coming from 12 local partners. We are looking to establish similar initiatives in other regions.





# Community Development

As part of its **expect the world from us** promise, Oppy has marketed **Fair Trade Certified™** fresh produce since 2004. Fair Trade is a rigorous and globally recognized sustainable sourcing certification program that improves livelihoods, protects the environment, and builds resilient, transparent supply chains.

The Fair Trade Certified™ label is only awarded to products that meet rigorous social, environmental, and economic standards.<sup>11</sup> Premiums generated by the sale of Fair Trade produce help fulfill the urgent needs of the communities in which they are grown by supporting healthcare, education, freshwater access and other vital initiatives.

Oppy's volume of Fair Trade produce has increased over the years, generating over \$1.3 million in premiums in 2021, which accounted for 11% of total premiums by Fair Trade Certified™ produce programs in North America.

From farms and fields to markets around the world, we are committed to Fair Trade and giving back to worker communities to ensure their prosperity and our shared success.



## \$7.2M+

Fair Trade Premium generated by Oppy's Fair Trade Certified™ sales since 2013

## \$1.3M+

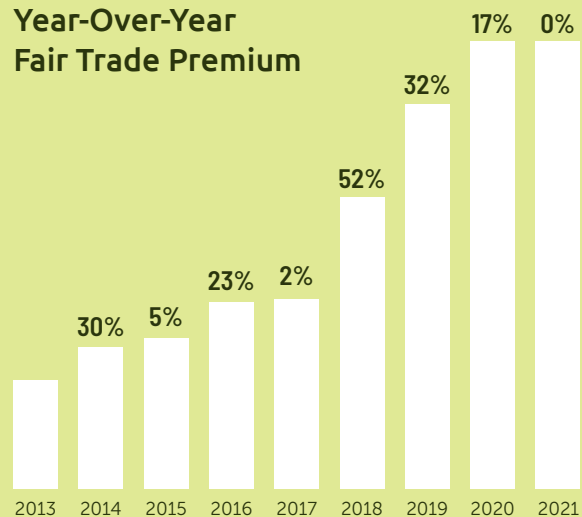
Fair Trade Premium generated by Oppy's Fair Trade Certified™ sales in 2021

## 17%

growth in Fair Trade Premium funds generated by Oppy's sales from 2019 to 2021



Year-Over-Year Fair Trade Premium



<sup>11</sup> [Fair Trade Certified™: Why fair trade?](#)



Our partner, Divemex excels at improving the lives of their worker communities. They were the first bell pepper grower in North America to become Fair Trade Certified™ and continue to go above and beyond with their “Como en Casa” (“Just like Home”) program. This provides comfortable homes with well-equipped living spaces as well as daycare, playgrounds, schools, medical and dental services.

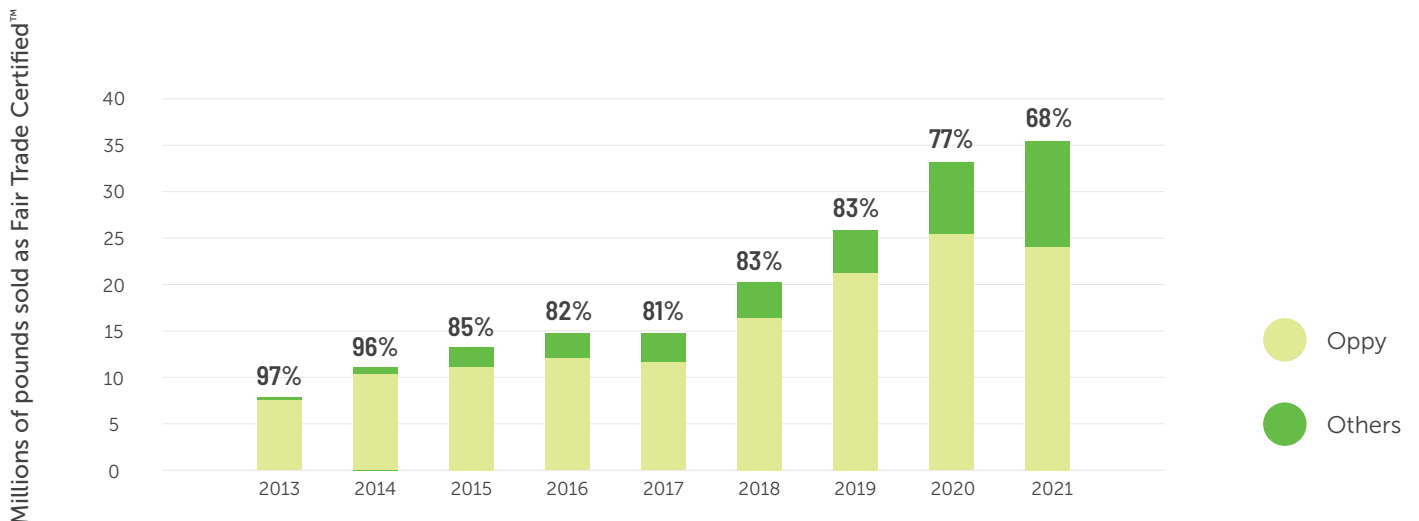


**"I SEE THE FUTURE NOW. MY ONE-YEAR-OLD DAUGHTER WILL COMPLETE HIGH SCHOOL AND HOPEFULLY GO TO COLLEGE. FAIR TRADE CERTIFICATION CREATES A STRONGER COMMITMENT AMONG US AND HELPS US BUILD A BETTER TOMORROW FOR OUR KIDS."**

**Olegario Uriarte**, Divemex Farm Worker

## Market Share: Bell Peppers

In 2021, Oppy's reported sales volume of Fair Trade Certified™ bell peppers represented 68% of the total volume sold.







## Education

At Oppy, we cultivate a continuous learning culture, emphasizing adaptability, collaboration, innovation and resiliency to offset the inherent volatility and fast pace of the produce industry.

Well over 90% of our team members regularly access ever-evolving learning resources for everything from business fundamentals to wellness. Other resources include **Diversity, Equity and Inclusion (DEI)** training as well as **Women in Leadership at Oppy (WilO)** and **Oppy U** which target personal and professional development.

## Charity and Volunteerism

Oppy has a long history of supporting local charities including food banks, Red Cross flood relief, Variety Club, Cycle for Sight, Canadian Cancer Society and Vancouver, British Columbia-based hospitals BC Women's, BC Children's and St. Paul's. In 2022, we doubled the maximum amount of our donation matching program to account for inflation and encourage everyone at Oppy to support worthy causes in our community.

To reflect and support the diverse interests and areas of passion of our workforce, we have also recently streamlined our volunteer policy to allow members of our team to take up to two paid days per calendar year to volunteer with an accredited charitable organization of their choice.

# A Sustainable Future



## Grow Our Tomorrow

As British Columbia’s oldest company, and an organization that relies on healthy soil, clean water and strong people, sustainability is a key element of our company’s strategic pillar: **Expect the world from us** — where we strive to provide our children and the world, environmental, social and economic sustainability.

While we have been successful at creating exceptional value for our customers under the banner of **expect the world from us** we recognize the need for us to play a more active role to minimize our environmental impact. This report is meant to provide a baseline assessment of where we currently stand and identify further steps that need to be taken.



Oppy U visits **OriginO**



Chicago team in the **Ocean Spray** cranberry bog



Grape innovation with **International Fruit Genetics (IFG)**



**Fresh Green Farms** marketing visit