

**ISLAND PLASTIC BAGS, INC.**  
Sustainability Report  
December 31, 2022

**About Island Plastic Bags, Inc. (IPB):** IPB is a C corporation, founded in 1992, that operates in the State of Hawaii. It is located at 99-1330 Koaha Place, Aiea, HI 96701. The company is a locally and minority-owned manufacturing company. It produces high-density and low-density polyethylene bags. In addition, it sells compostable cutlery, paper bags, and Colgate-Palmolive products, which is complementary to its line of plastic bags. IPB's mission is provide quality, sustainable, and disposable products to its customers.

The company serves customers in industries such as foodservice, hospitality, janitorial/sanitation, medical, and government. What separates Island Plastic Bags from competitors is the commitment to sustainability. IPB feels that sustainability is its responsibility and good business.

This annual report details IPB's progress towards its sustainability goals and has been reviewed and approved by the company's board of directors. It covers the period from January 1<sup>st</sup>, 2022 to December 31<sup>st</sup>, 2022 and the operations of Island Plastic Bags, Inc. This report is published publicly on IPB's website and distributed through the company's newsletter.

If you would like to provide feedback on IPB's ESG performance and the contents covered in this report, please send questions or comments to [ahong@islandplasticbags.com](mailto:ahong@islandplasticbags.com).

**Materiality.** IPB performs an annual assessment of what sustainability topics are material. It does so by considering what is significant to the company's long-term operations and its relationship with stakeholders. Stakeholders include customers, vendors, employees, owners, and the community IPB operates in. The following are the material topics identified in this assessment for 2022:

- Material Usage
- Greenhouse Gas Emissions (GHG)
- Employee Safety
- Water Usage
- Cybersecurity

Water usage and cybersecurity are new material topics. In previous materiality assessments, the company did not find it used a significant amount of water. However, IPB's assessment of significance changed with the fuel spill at the Red Hill Bulk Fuel Storage Facility operated by the United States' Navy.

### **Water Usage**

In November 2021, a fuel spill at the Red Hill facility contaminated the surrounding ground water prompting the Board of Water Supply on Oahu to shut off nearby wells to stop contaminated water reaching its distribution system. The contaminated water did pollute the United States' Navy water system and afflicted people who drank it.

The shutting down of wells surrounding the spill caused 20% of Oahu's water supply to go offline. To compensate for the drop in supply, the Board of Water Supply urged consumers and businesses to reduce their usage voluntarily by 10% and considered implementing a mandatory reduction in water usage. The company uses water in its manufacturing and recycling operations. A 10% decrease in IPB's water usage would have had a significant impact on its operations.

Fortunately, Oahu was able to avoid a mandatory cut in water usage through consumers and businesses reducing their usage by 5% and the Board of Water Supply bringing other capacity online. This issue is ongoing as the Red Hill facility still needs to be defueled and new wells need to be dug to bring the water supply back up to where it was before the crisis.

## Cybersecurity

Cybersecurity is a growing issue for small businesses. Criminal gangs and foreign state actors continue to threaten businesses through ransomware attacks, data breaches, wire transfer fraud, credit card fraud, and other types of cybercrime. As a result of the significant increase in the volume of attacks, the company has decided that cybersecurity is a material topic and has taken steps to lower the company’s attack surface and improve its defenses.

**Use of Estimates.** IPB uses estimates to calculate its GHG emissions. These estimates are known as emission factors. Emission factors allow IPB to convert the gallons of gasoline, diesel, and propane used into the kilograms of CO<sub>2</sub> emitted. The following are the emission factors used to create the data for this report and the source of the emission factors:

Source	Description	2022 Emission Factor
EPA Emissions Factor Hub Table 2	Convert a gallon of diesel to kg of CO <sub>2</sub>	10.21
EPA Emissions Factor Hub Table 2	Convert a gallon of gasoline to kg of CO <sub>2</sub>	8.78
EPA Emissions Factor Hub Table 2	Convert gallon of propane (LPG) to kg of CO <sub>2</sub>	5.68
EPA Emissions Factor Hub Table 5	Convert gallon of propane (LPG) to grams of CH <sub>4</sub>	.45
EPA Emissions Factor Hub Table 5	Convert gallon of propane (LPG) to grams of N <sub>2</sub> O	.64
EPA Emissions Factor Hub Table 6	Convert MWh of electricity pulled from HECO to lbs. of CO <sub>2</sub>	1,653
EPA Emissions Factor Hub Table 6	Convert MWh of electricity pulled from HECO to lbs. of CH <sub>4</sub>	.178
EPA Emissions Factor Hub Table 6	Convert MWh of electricity pulled from HECO to lbs. of N <sub>2</sub> O	.027
EPA Emissions Factor Hub Table 11	Convert CH <sub>4</sub> to CO <sub>2</sub> e (GWP of CH <sub>4</sub> )	25
EPA Emissions Factor Hub Table 11	Convert N <sub>2</sub> O to CO <sub>2</sub> e (GWP of N <sub>2</sub> O)	298
EPA Emissions Factor Hub Table 12	Convert R-410A to CO <sub>2</sub> e (GWP of R-410A)	2,088

Once the lbs. of CO<sub>2</sub> emitted from pulling power from Hawaiian Electric Company (HECO) are known, they are converted to kilograms of CO<sub>2</sub> through the conversion rate of .453592 kilograms to a pound.

**Organizational Boundary.** IPB uses the operational control consolidation approach to determine which emissions it is responsible for.

**Compliance with Laws and Regulations.** Part of IPB’s sustainability policy is to comply with all environmental, labor, and other laws in the State of Hawaii. As of December 31, 2022, the company was not party to any civil or criminal litigation nor was it fined for non-compliance with laws in the state.

**Material Usage.** The company’s sustainability goal around material usage is to increase use of recycled, reusable, and renewable materials in the products it sells. The following table shows the pounds of plastic bags sold that are manufactured from recycled and virgin resin (rounded to the nearest thousand):

<u>Material</u>	<u>2021 (LBS)</u>	<u>% of Total</u>	<u>2022 (LBS)</u>	<u>% of Total</u>	<u>Var %</u>
Recycled Resin	1,111,000	58.8%	1,487,000	65.7%	33.8%
Virgin Resin	778,000	41.2%	775,000	34.3%	(.4%)
Total	1,889,000	100%	2,262,000	100%	19.7%

The 19.7% increase in the total pounds of plastic bags sold is the result of increased demand for IPB's products as Hawaii's economy improved as well as the addition of a statewide distributor as a customer. The increase in the percentage of plastic bags sold, manufactured from recycled plastic to 65.7%, is a result of the demand for IPB's low density trash liners, which are manufactured with post-industrial and post-consumer recycled resin. The recycled resin metric noted above includes both post-industrial and post-consumer recycled resin in it.

Island Plastic Bags does not anticipate that the pounds nor the percentage of plastic bags sold, made from recycled resin, to change as dramatically in 2023. The large variances were the result of the pandemic's effect on 2021 sales. The company's target for 2023 is to keep the percentage of plastic bags sold, manufactured with recycled resin, to 66% of total plastic bags sold. The company believes it would be difficult to increase the usage of recycled resin in 2023 given its inability to source high density, post-industrial recycled resin on a consistent basis.

### **Onsite Recycling**

IPB continues to recycle plastic scraps from its manufacturing process onsite to save money and reduce waste. The company decided against making the amount it recycles a key performance metric as it could create a perverse incentive (i.e. give the company an incentive to recycle more than what is needed).

### **Paper Bags**

The company sells a line of paper bags that have a minimum 40% post-consumer content in them. The paper bags are fully recyclable. The following table shows the pounds of paper bags sold (rounded to the nearest thousand):

<u>Material</u>	<u>2021 (LBS)</u>	<u>2022 (LBS)</u>	<u>Var %</u>
Paper Bags	185,000	129,000	(30%)

Demand for paper bags decreased in 2022 as a result of consumers purchasing takeaway food less and dining-in at restaurants more. The company is hopeful the demand for this product will stabilize in the short term and grow in the long term. The company's target for 2023 is to sell another 129,000 lbs. of paper bags.

### **Compostable Cutlery**

IPB's Ohanaware brand of compostable cutlery has continued to grow at an impressive rate. The cutlery is sold to institutional customers like foodservice distributors and to stores such as Foodland, Seven Eleven Hawaii, The Waianae Store, etc. The following table shows the pounds of compostable cutlery sold (rounded to the nearest thousand):

<u>Material</u>	<u>2021 (LBS)</u>	<u>2022 (LBS)</u>	<u>Var %</u>
PLA Cutlery	86,000	153,000	77.9%

The company's target for 2023 is to increase the pounds of PLA cutlery sold by 5%.

### PFAS

The company met its goal in 2022 to eliminate the use of PFAS (per- and polyfluoroalkyl substances) in its bagasse products by the end of the year. Island Plastic Bags, Inc. no longer sells products treated with PFAS.

**Greenhouse Gas Emissions (GHG).** The company's sustainability goals around greenhouse gas emissions are as follows:

- Begin the process of electrifying our fleet
- Source 100% of electricity used from renewable sources by 2045

The following are the company's Scope 1 emissions:

<u>SCOPE 1 (DIRECT EMISSIONS INCLUDING VEHICLES)</u>			
<u>Source</u>	<u>2021</u>	<u>2022</u>	<u>Var %</u>
Mobile Combustion (kg CO <sub>2</sub> e)	32,264	34,141	5.8%
Fugitive Emissions (kg CO <sub>2</sub> e)	<u>0</u>	<u>58,715</u>	<u>100%</u>
Total (kg CO <sub>2</sub> e)	32,264	92,856	187.8%

Emissions noted above include CO<sub>2</sub> emissions from mobile combustion of diesel, gasoline, and propane. The emissions noted also include CH<sub>4</sub> and N<sub>2</sub>O emissions from propane. Numbers noted above do not include CH<sub>4</sub> and N<sub>2</sub>O emissions from the mobile combustion of diesel nor gasoline, as IPB did not have a system in place to track the miles driven by the company's vehicles. A tracking system has been put in place for 2023. Emissions for 2021 were restated to include CH<sub>4</sub> and N<sub>2</sub>O emissions from propane to make 2021 numbers comparable to 2022.

### Fleet Composition

At the beginning of the year, the company's fleet consisted of one gasoline-powered flatbed, one gasoline-powered cargo van, two hybrid passenger vehicles, two propane-powered forklifts, and one gasoline-powered passenger vehicle. The cargo van and flatbed were aging and needed to be replaced, which provided an opportunity to electrify IPB's fleet. Unfortunately, the flatbed continued to break down and IPB was unable wait until electric-powered flatbeds hit the market. The company purchased a diesel-powered flatbed, the only option available to it, and sold the gasoline-powered flatbed.

On a positive note, the company was able to order an electric-powered cargo van from Ford in early 2022. IPB should receive the Ford E-Transit in early 2023. The delay is a result of supply-

chain issues Ford is experiencing. The company also sold its gasoline-powered passenger vehicle. These steps should help the company reduce emissions going forward.

### **Fugitive Emissions**

The company’s chiller experienced a refrigerant leak in 2022. This was the first refrigerant leak in IPB’s history. By the time the leak was discovered and addressed, 28.12 Kg of R-410A had escaped. Unfortunately, R-410A has a global warming potential (GWP) of 2,088, which means that the equivalent CO<sub>2</sub> emissions from the leak is 58,715 kg of CO<sub>2</sub>e. To prevent future leaks, the company has contracted Heide & Cook to perform quarterly maintenance on the chiller.

The following are the company’s Scope 2 emissions:

<b><u>SCOPE 2 (INDIRECT EMISSIONS - ELECTRICITY)</u></b>			
<b><u>Source</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>Var %</u></b>
Electricity (MWh)	317.99	401.66	26.3%
Location-based Emissions (kg CO <sub>2</sub> e)	246,281	303,434	23.2%
Market-based Emissions (kg CO <sub>2</sub> e)	246,281	303,434	23.2%

The electricity used by Island Plastic Bags comes from two sources: Hawaii Electric Company (HECO) and two photovoltaic systems (PV) it owns and one PV system it leases. The emissions noted above are related to the power pulled from HECO. Scope 2 CO<sub>2</sub>e emissions for 2022 include CH<sub>4</sub> and N<sub>2</sub>O emissions as well as CO<sub>2</sub> emissions. Scope 2 CO<sub>2</sub>e emissions for 2021 have been restated to include CH<sub>4</sub> and N<sub>2</sub>O emissions for comparability purposes.

For various reasons, a portion of the power generated by the PV systems is sent back into HECO’s grid. Last year, the company netted the emissions avoided by supplying HECO with zero emissions power against the emissions generated by pulling power from HECO. This year the company felt it was more appropriate to break out the emissions from using HECO’s power, and the emissions avoided by providing the utility with zero emissions power. For comparability purposes, 2021’s scope 2 emissions were restated to match 2022’s presentation.

Emissions avoided by sending solar power to HECO was 130,971 kg. CO<sub>2</sub>e and 110,561 kg. CO<sub>2</sub>e for 2021 and 2022, respectively.

The company predicts that IPB will use 100% renewable energy by 2045 because of its PV systems and HECO’s efforts to add more renewable energy to the electricity grid.

IPB is currently not able to calculate the company’s Scope 3 emissions.

**Safety.** Employee safety continues to be a priority for IPB. The company continues to have “All Hands Meetings” to stress different safety topics covered in the safety handbook and to review findings from the quarterly safety and cleanliness audits performed by the president. IPB also provided forklift training to refresh the skills of its production and warehouse workers. The following are the company safety metrics:

<u>Description</u>	<u>2021</u>	<u>2022</u>	<u>Var %</u>
# of Injuries with Days Away from Work	2	1	(50%)
# of Days Away from Work	9	47	422.2%
# of Days Lost X (1,000/total hours worked)	.41	2.11	414.6%

The 47 days away from work was the result of an employee passing out, while at the mouth of a 40' container, and hitting his head on the concrete floor. IPB conducted interviews with the employee, the other employees in the vicinity, and the doctor and nurse at the hospital the employee was admitted to determine the cause of the injury. The result of the interviews led IPB to believe that the workplace environment was not the proximate cause of the injury. None of the interviews identified anything in the workplace that had caused the injury.

As a result of this conclusion, no corrective actions were taken at the company. The president reported to employees the number and types of injuries that have occurred during the year and the mitigation measures that have been put in place to avoid them.

The goal for 2023 is to have no workplace injuries.

**Water Usage.** The company's sustainability goal for water usage is to comply with any mandatory water usage reduction targets issued by the Board of Water Supply. IPB understands it is going to take a community wide effort to address the long-term impacts of this crisis and is ready to do its part. The following is IPB's water usage in gallons:

<u>Description</u>	<u>2021 (GAL)</u>	<u>2022 (GAL)</u>	<u>Var %</u>
Water	82,000	86,000	4.9%

The two biggest sources of water usage at IPB are its recycling operations and extruding operations. To avoid waste in the company's manufacturing operations, it recycles all scrap and defects on premises. The scrap is fed into the recycling machine which grinds down, melts, extrudes, cools with water, and pelletizes it for reuse. The company uses water in its extruding operations to cool the plastic tubing that eventually becomes plastic bags. This allows the plastic bags to be manufactured at a much faster rate.

During the recycling process, water evaporates and is also discharged as surface water back into the environment. The recycling machine is designed to ensure that only water is discharged and that there is no discharge of any plastic. Water is also discharged during the turning on, turning off, and cleaning of the extruder's chiller. As only water is moving through the chiller, only water is discharged as surface water back into the environment.

The company will continue to monitor the Navy fuel spill and has plans to address mandatory water usage reduction targets put out by the Board of Water Supply.

**Cybersecurity.** The company's sustainability goals around cybersecurity are to have no data breaches and no money lost to cybercrime. To achieve this goal, IPB performed a risk assessment of potential cyber threats to the company and found the following threats to be the highest risks in need of addressing:

1. Ransomware Attacks
2. Wire Transfer Fraud / Credit Card Fraud caused by spear phishing, business email compromise, or social engineering
3. Data Breach

Cyber criminals are using ransomware attacks much more frequently and are targeting small businesses as well as large ones. Having all the company's data encrypted would cripple its operations. Given the high probability of attack and the consequences of losing the data forever, ransomware attacks are the highest cyber threat to IPB.

To mitigate the risk of a ransomware-attack the company has taken the following measures:

1. Installed a firewall that provides content filtering, malware protection, and intrusion prevention
2. Licensed email software that quarantines malicious links, tests attachments, and filters out phishing and social engineering emails
3. Licensed software that controls which applications are installed and uninstalled as well as isolate applications and control their interactions with other software, which helps prevent malware from being installed and spreading
4. Installed antivirus software on the company's computers
5. Patched software regularly
6. Licensed software that identifies unusual activity on the system such as ransomware and reports it to our outsourced IT support team who will determine if the threat is legitimate and determine if incident response is needed
7. Trained employees on cybersecurity threats
8. Licensed a cloud service that performs daily offsite backups of the data on our server

Cyber criminals often also target small businesses with spear phishing emails or emails that come from compromised email accounts encouraging employees to wire money or make credit card purchases. To mitigate the risk of making a fraudulent wire transfer or credit card purchase, IPB requires a multi-channel authentication approach to confirm any changes to wire transfers or credit payments and to set up any new wire transfers or credit card payments.

IPB believes it is at a lower risk for data breaches when compared to larger companies. The company has less data worth stealing. However, while the probability of a data breach is lower, the liability incurred by such an attack could be enormous.

The same procedures and software that mitigate the risk of a ransomware attack, partially mitigate the risk of a data breach. However, the programs do not prevent data breaches where employees misuse data or inappropriately send information.



To prevent those types of data breaches, the company has restricted access to sensitive data unless there is a business need that requires that information to be disclosed. In addition to those measures, IPB has also encrypted its server. If it is stolen, there is no easy way to pull data from it.

IPB has a contingency plan in place should a data breach occur. It is reviewed, along with all the other contingency plans, on a bi-annual basis.

The company experienced no data breaches nor lost any money that it is aware of, because of cybercrime. The target for next year is to also have no data breaches nor lose any money because of cybercrime.