Metro Vancouver's Upcycling Potential

Turning Waste Into Wins for Circular Economy

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Executive summary

This report explores the challenges and opportunities faced by upcycling companies operating in Metro Vancouver. Three companies were interviewed. For the purpose of this report, they will be called Startup Company, Meal Upcycler, and By-product Producer. These companies tackle food waste by producing value-added products but face barriers such as production limitations, funding gaps, regulatory ambiguity, and marketing issues. Key findings highlight the need for financial support, regulatory frameworks, consumer education, and collaboration to scale the impact of upcyclers in Metro Vancouver. Recommendations include investing in machinery, clarity around regulatory guidelines for upcycled products, and fostering partnerships amongst upcyclers and other food recovery companies to build a sustainable food system.

Key findings

The following are the three key findings from the interviews:

- Upcyclers face significant barriers in production, funding, regulation and consumer perception.
- Collaboration, mentorship, and financial support are critical for scaling.
- A regulatory framework and consumer education is important to develop the upcycling market.

Recommendations

The following are areas of upcycling that should be improved.

Funding

All three upcyclers need financial support for production areas such as machinery, co-packing or scaling.

Regulatory support

A clear regulatory framework around upcycled food is needed to increase consumer confidence and market access.

Consumer awareness

Consumers seek education on the safety of upcycled food and lack awareness of its benefits.

Collaboration

Partnerships with larger companies, mentors, the larger upcycling community or food recovery networks such as FoodMesh could help to provide resources and solutions.

Marketing

A renewed marketing strategy using social media focusing on the benefits and safety of upcycled food would help to create a positive image and awareness around these products.

Introduction

In the past few years, upcycled food has gained attention as a strategy to advance the United Nations' Sustainable Development Goal 12 (SDG 12): *Ensure sustainable consumption and production patterns* (United Nations, 2024). Historically, food waste solutions focused on prevention, re-use, recycling, recovery, composting, or landfill (US Environmental Protection Agency, 2015) and have not included upcycling. However, upcycling is now being recognized as an important tool in food waste prevention by creating value-added products that "use ingredients that otherwise would not have gone to human consumption, are procured and produced using verifiable supply chains, and have a positive impact on the environment". (Spratt et al., 2021).

The global food system generates 1.3 billion tonnes of food waste annually, which contributes 8-10% of global greenhouse gas emissions (FAO, 2011, 2019). In response, upcycled food has increased in popularity, and the market for upcycled products is expected to grow significantly in the near future. In 2021, the upcycled food market was valued at $46.7 billion USD and is projected to grow as consumer awareness and demand for sustainable products increases (Upcycled Food Association, 2021).

Upcycled food is evolving from a niche, experimental concept into a category of its own, similar to organic foods. While it has much potential, upcycled food faces several barriers such as scalability, regulatory ambiguity, marketing issues, and lack of funding.

A common and significant challenge is the lack of a standardized regulatory framework for upcycled food. The market operates in a "grey area" which causes uncertainty amongst consumers. Furthermore, there is the perception that upcycled products are "waste" and thus are of questionable quality and safety. Lastly, the high capital costs needed to process upcycled ingredients can create economically unviable finished products, especially for smaller companies.

Despite these challenges, the future for upcycled food products has its place in the circular economy and has much potential. By nature, upcycled food converts surplus food into value-added products, allowing upcyclers to not only reduce food waste but also to contribute to the economy and food security.

This report is based on interviews with three upcycling companies in Metro Vancouver. For anonymity purposes, we will refer to them as Startup Company, Meal Upcycler, and By-product Producer. In this report, I describe their business model, the barriers they face, and their needs for growth.

Significance

The development of a thriving upcycling food industry is in the interests of Metro Vancouver as it is a key piece of the city's 2050 goal to reduce solid waste emissions by preventing waste creation through a transition to a circular economy.

Waste Prevention

Because upcycling diverts edible food away from the landfill, it prevents waste from being created in the first place. A secondary benefit is that by repurposing edible food, it preserves the environmental, nutritional and financial resources that have gone into its production (Aschemann-Witzel et al., 2023, Rao et al., 2021).

Food Security

When upcycled products are created from industry byproducts that would otherwise not have entered the food system, this creates a new source of food (Aschemann-Witzel et al., 2023), contributing to food security. By-product Producer, covered in this report, is a good example of this.

Economic Growth

As upcycling is a key part of the circular economy, it shares its economic advantages; namely maximizing economic savings via resource-efficient supply chains and production processes. This is achieved by implementing closed-loop businesses. (Camilleri, 2019; Jackson, 2016, Schulze, 2016). A successful upcycling sector in Metro Vancouver would bring in financial returns to the local economy while creating physical infrastructure that supports other circular activities (Williams, 2021). Generally, circular economies create cities that are economically more adaptive, resilient, and stable. (Dobson and Jorgensen, 2014; Stevens and Dovey, 2019).

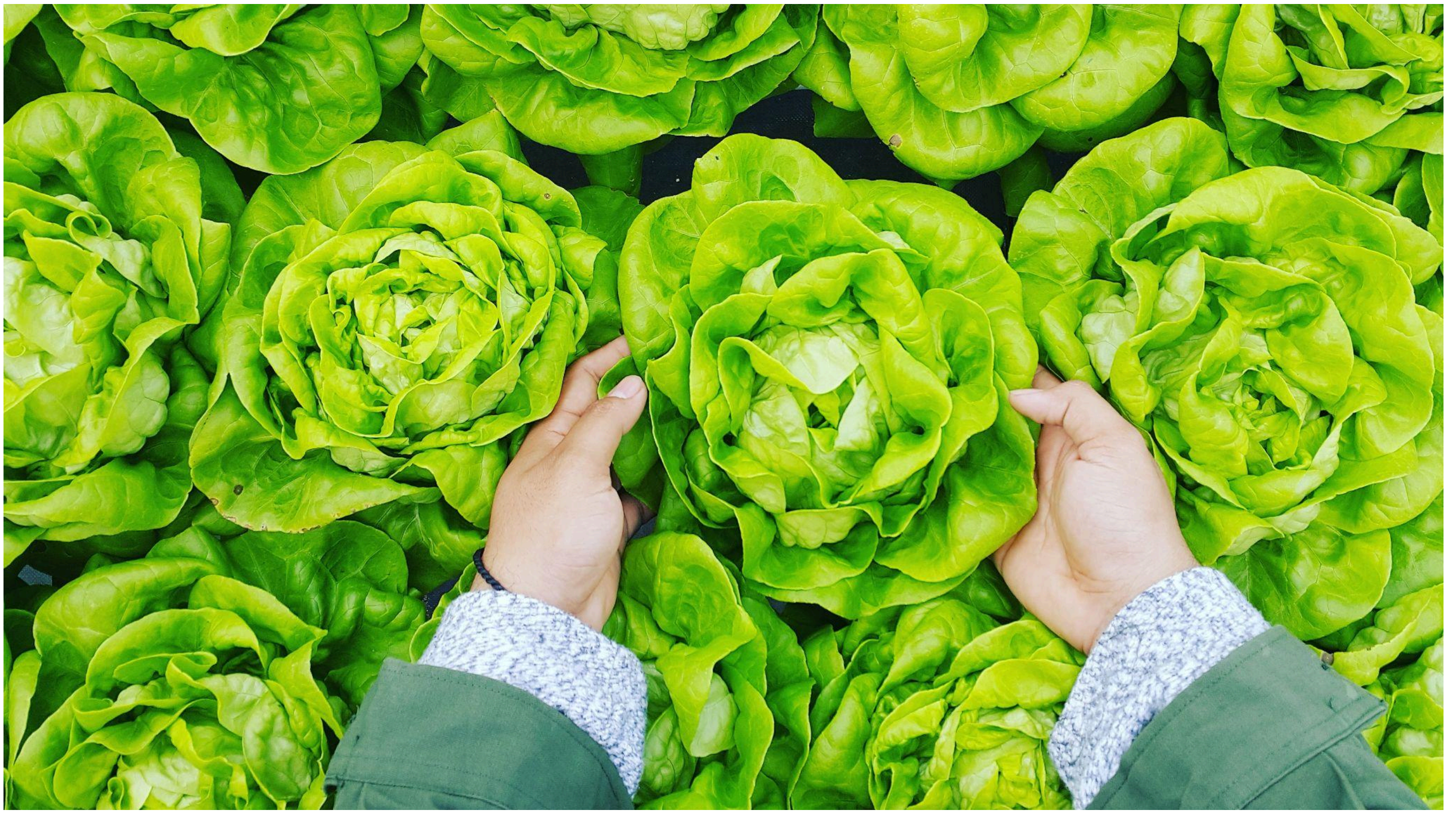
Consumer Education

Similar to the organics industry that is now a well-established category in most grocery stores, upcycled foods have the potential to follow in the organic industry's footsteps (Bhatt et al., 2018). A broader market and increased exposure of upcycled products would increase consumer awareness of the upcycled industry.

Social Benefits

Exposure to upcycled food could cause a "spillover effect" i.e. changing consumer behaviour to become more environmentally conscious (Piras et al., 2022). For example, Portugal experienced an increase in the popularity of imperfect produce after consumer exposure to the food waste problem (Ribeiro et al., 2018).

Methodology



Description of approach

FoodMesh identified and contacted upcycling companies operating in the Metro Vancouver area. For the scope of this project, upcycling companies were defined as those that use surplus food to produce and sell an upcycled and value-added product, ingredient or meal for human consumption. Upcyclers producing products for animal or industrial use were excluded. As well, upcyclers operating as a charity were excluded e.g. A Better Life Foundation who rescues surplus produce and meat to produce and donate meals.

FoodMesh offered the qualifying upcycler companies a 1-hour interview in exchange for a $50 honorarium for their time. Of the 7 upcyclers in Metro Vancouver, 3 were interviewed, and 2 provided data on their operational volumes. The data from these two upcyclers has been aggregated in Table 1.

Business Names	Input Ingredients	Products	Volume (lbs/month)
Startup Company	Fruit off-cuts	Snack	
By-product Producer	Edible produce	Inedible plant byproduct	235,830
Meal Upcycler	Edible produce	Ready-to-eat meals	

Table 1. Upcyclers interviewed for this report and their aggregated operational volumes.

The companies were added to FoodMesh's internal database of corporate companies in Salesforce. This database automatically bridges to the Metro Vancouver Food Recovery Network map (see Figure 1).

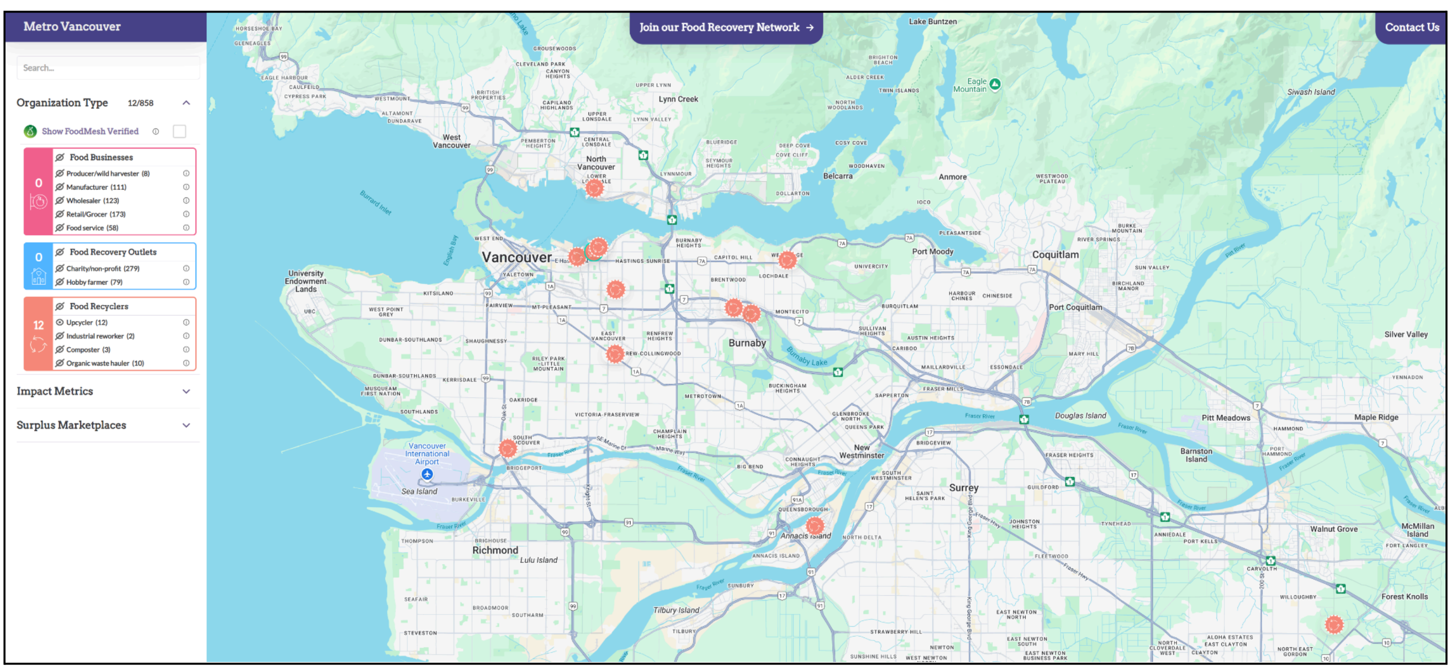


Figure 1. Upcyclers are identified by filtering the views by Organization Type on the left hand menu of the Metro Vancouver Food Recovery Network Map.

Technique

- 3 upcyclers were interviewed for an hour each over video call.
- Interview topics included business model, operational process, constraints, needs, market trends, and data on volumes.

Limitations and constraints

- 43% of the known upcyclers operating in Metro Vancouver were interviewed as part of this study.
- One upcycler could not provide accurate data on their operational volumes as only a portion of their organization operates as a business, with the majority of their operations being charity.
- Several upcyclers previously known to be operating in the region were found to have closed or moved.

Of the 7 known upcyclers operating in Metro Vancouver, only 3 responded to an interview request, despite multiple attempts to follow-up and the $50 honorarium incentive. This represents 43% of the upcyclers operating in the region, and thus this small sample size may be insufficient to accurately represent the industry.

One upcycler, referred to in this report as Meal Upcycler, was unable to provide an exact volume of surplus food rescued as the interviewee explained that they do not track the food rescued, but track meals created as part of their charity work. However, only a small portion of the meals were actually sold (either as frozen portions, as a catering service, or as a private chef service) with the majority being donated. Additionally, many of the frozen portions were still unsold and in storage. As such, we have taken Meal Upcycler's annual production of meals regardless of whether they were sold, donated, or frozen, estimated the weight of a single meal as 3lbs, and added it to the aggregate data in Table 1.

While researching upcycling companies to contact, it was found that several upcyclers were either no longer in operation, had changed business models away from upcycling, or had moved their operations outside of Metro Vancouver. They are listed in Table 2.

Business Name	**City**	**Specialization**	**Input Ingredients**	**Products**
Susgrainable	Barons (AB)	Product	Spent grains	Barley flour and baking mixes
Luv the Grub	Vancouver	Product	Fresh produce	Chutney
Trendi Tech Inc.	Vancouver	Product	Fresh produce	Dehydrated fruit and vegetable powders
ReCruz Produce	Vancouver	Ingredients	Fresh produce	Ingredient

Table 2. Upcyclers no longer operational in Metro Vancouver.

Some upcyclers that were unable to be interviewed for this report had been interviewed for the purpose of a blog post series on the FoodMesh website in 2023. While the target demographic of the blog post series was the general public for the purpose of engagement and education, they may provide some helpful insight. These blog posts are linked in the Appendix (p 35.)

Findings

Key findings

Production

All three upcyclers face production challenges. The organization referred to as Startup Company in this report, relies on manual labour to process fruit off-cuts which is time-consuming and limits scalability. Meal Upcycler cannot distribute its frozen meals to grocery stores due to ingredient label issues as the surplus ingredients vary. The organization referred to as Byproduct Producer in this report, faces the high cost of machinery which makes upcycling economically unviable.

Funding and Financial Barriers

Startup Company operates on volunteer hours and occasional use of personal funds. There is a lack of funding for processing equipment, co-packing and farmer's market fees. Meal Upcycler's financial barriers stem mainly from its inability to penetrate the retail market and to garner consumer enthusiasm for recycled meals. Byproduct Producer requires significant capital investment for processing equipment with limited return-on-investment for their upcycled products.

Market Barriers

Meal Upcycler faces competition with traditional businesses as consumers are under the impression that a business using "free" ingredients should be priced low - thus missing the key mission of the company which is to fund charitable meal donations via the sale of frozen meals. A lack of a regulatory framework for surplus food also creates consumer hesitation and limits market opportunities. Byproduct Producer has noted that the term "upcycling" may not resonate with retailers or consumers, thus requiring a shift in marketing language.

Consumer Education

Meal Upcycler experiences consumer resistance due to upcycled food misconceptions and pricing expectations. Byproduct Producer benefits from its sustainability appeal to younger consumers, but feels that this is insufficient to drive sales.

Sales and Distribution

Startup Company is unable to ship direct-to-consumer outside Vancouver due to high shipping costs. Meal Upcycler is limited to direct-to-consumer sales within Vancouver due to labeling and regulatory barriers which restrict access to retailers. Byproduct Producer is unable to process their fruit off-cuts into an edible upcycled product, and donates all unprocessed plant byproduct as farm feed.

Collaboration and Mentorship

Startup Company, as a grassroots student-led organization, requires business development mentorship and guidance to scale operations. Meal Upcycler seeks partnerships with B-Corp companies for resources and marketing expertise. Byproduct Producer has been unable to collaborate with other byproduct producers for the purpose of processing due to low return-on-investment and complexity in the investment process.

Marketing

All three companies leverage the environmentally-friendly aspect of their products. Startup Company emphasizes that their upcycled product is locally-made and sustainably-packaged. Meal Upcycler uses story-telling to highlight their meals created with upcycled food to fund their charitable donations. Byproduct Producer is focused on the plant-based protein trend.

Individual Interviews

The following are summaries of each interview.

Startup Company

Background

Startup Company is an entirely student volunteer based organization that started producing their upcycled product sourced from surplus fruit off-cuts in 2024.

Sourcing and Production

The fruit off-cuts are procured at no cost from a local food retailer. While the retailer is the main supplier, the students have also started sourcing from other smaller food service companies. The fruit off-cuts are manually processed by volunteers and packaged in eco-friendly recyclable bags.

Sales and Distribution

The upcycled product is sold back to 4-5 of their source retailer's locations, as well as direct-to-consumer via their online platform, and through farmers markets. Startup Company is currently exploring an opportunity to sell to a farmer's market.

Marketing and Branding

Startup Company leverages social media channels Instagram and LinkedIn for marketing. Their main selling points are the Canadian-owned, locally-made, sustainably-packaged, and student-led aspects.

Barriers

Startup Company mentioned several challenges including:

- Production limitations due to the fruit off-cuts being manually processed by volunteers, and a lack of machinery.
- Lack of secure funding and cash flow.
- Need for business development mentorship and guidance.
- Farmers market connections and fees.
- High shipping costs for direct-to-consumer sales outside Vancouver.

> *"One big problem is shipping. I remember we had an order from Kelowna, and it cost us $20 to ship so we were not actually earning any money."*
> - Interviewee, Startup Company

The main challenge that Startup Company faces is production limitations due to the reliance on manual volunteer labour which is time-consuming as the fruit off-cuts have to be hand-cut. Additionally, the business is still grassroots and has no formal funding and banking setup - with organizers propping up business costs with their personal funds.

Needs

- Funding to acquire processing machinery, or to partner with a co-packer, and to afford high farmers market fees.
- Business development mentorship and guidance for scaling.

Meal Upcycler

Background

Meal Upcycler is the upcycling branch of a catering company based in Vancouver. While the catering company operates as a traditional business offering catering services and private chef events, home meals are also sold under the Meal Upcycler program, using surplus food. The sales from Meal Upcycler help fund the company's charitable work involving community meal donations to six non-profit organizations in Vancouver.

> *"The purchase of one frozen meal could help us feed 10 people."*
> \- Interviewee, Meal Upcycler

Sourcing and Production

Meal Upcycler sources surplus produce from suppliers and distributors. Meal Upcycler has found sourcing to be plentiful and has not found the need to approach grocery stores for surplus food donations as they are aware that most grocery stores are already affiliated with professional food recovery services such as FoodMesh.

Sales and Distribution

Meal Upcycler meals are available as single-portion, frozen meals that are available on their direct-to-consumer website for purchase.

Marketing and Branding

Meal Upcycler uses word-of-mouth and Instagram to market their frozen meals.

Barriers

Meal Upcycler's main challenges include:

- Absence of governmental regulation around surplus food which is linked to the consumer hesitation around surplus food.
- Stringent labeling requirements hindering sale of frozen meals in grocery stores.
- Lack of consumer awareness about upcycled food and consumer hesitation around food safety of upcycled food.
- Difficulty competing with traditional food businesses on price.

Meal Upcycler expressed frustration with a lack of a governmental regulatory stance on surplus and upcycled food. Although the use of surplus food in commercially sold products is not prohibited, this is because surplus food is not acknowledged at all. A lack of clear guidance is needed for consumer confidence in upcycled products.

> *"The government does not say that you can't do it (upcycle food), therefore does that mean that you can? That is a missing piece. If people knew that this was legal, then more people would use surplus ingredients and it would raise more consumer awareness."*
> - Interviewee, Meal Upcycler

Meal Upcycler has been unable to introduce its frozen meals into grocery stores since they are unable to produce a list-of-ingredients label since the contents of the meals vary depending on the type of surplus food that is rescued. This reduces visibility of the product and hinders marketing opportunities.

A lack of consumer understanding around upcycled food also means that Meal Upcycler has encountered resistance to their pricing which is on par with traditional businesses. Consumers assume that since the input ingredients are free and/or are of a lesser quality, unwanted, or of dubious origin, that the pricing should reflect this.

Needs

- Regulatory framework.
- Collaboration with larger, established companies such as B-Corp certified companies.
- Access to business development skills and marketing expertise.
- Increased consumer education about upcycled food safety and benefits.

A regulatory framework around upcycled food would increase consumer awareness and confidence. Additionally, partnering with B-Corp businesses would allow upcyclers, who are mostly small start-ups, to access resources like business development and marketing.

The inability to produce a list-of-ingredients label for frozen meals due to the unpredictable and variable nature of rescued food, remains a significant barrier for breaking into the retailer space and it is unclear how this can be resolved.

Byproduct Producer

Background

Byproduct Producer is unique in the upcycler space as they do not use surplus food to create upcycled products - rather they create a surplus byproduct that they wish to upcycle. Byproduct Producer uses edible produce to develop meat-alternative, vegan products. Their byproduct is a plant fiber that remains after processing. The plant byproduct must be dehydrated before being used for further applications, as it has a short shelf life when fresh. It is heavy with a 75% moisture content, and is produced in large quantities, requiring significant storage space.

Sourcing and Production

Currently none of the plant byproduct is upcycled, but Byproduct Producer is exploring options including vegan protein powder, ready-bake mixes, and a wheat-flour alternative. They are also exploring selling the plant byproduct to be industrially recycled for use in asphalt as an alternative to producing an edible upcycled product.

"The younger generation definitely wants sustainable products, wants to know that they are making a difference, and that is 100% important, but the word 'upcycling' might not be the best verbiage to use."
- Interviewee, Byproduct Producer

Marketing and Branding

Byproduct Producer has observed an increased interest in plant-based proteins. In terms of upcycled food, this was a notable food trend in 2022 that garnered much attention. Both these selling points appeal to the younger generation of consumers.

Barriers

Low return on investment due to:

- High cost of processing machinery.
- Low selling price of the upcycled product.
- Marketing challenges

"The biggest challenge with upcycling is from a brand perspective, we all want to put it on our package and talk about it, but when I pitch to retailers, it doesn't sound appetizing. "
- Interviewee, Byproduct Producer

Byproduct Producer (and several other companies producing this plant fiber) has been unable to upcycle the plant byproduct as it contains significant amounts of water (75% moisture), and must be dehydrated before serving as a functional ingredient. The processing equipment is costly at $1.2 million for a dehydrator and miller, and the sale value of the finished product is negligible especially compared to the investment. As such, the return-on-investment is unfavourable. Byproduct Producer is attempting to offset the significant capital investment by submitting a proposal to the BC Manufacturing Jobs Fund to help fund 20% of the cost of the machinery. However, the grant is highly competitive with numerous applicants.

Another avenue that Byproduct Producer explored was partnering with other local companies producing plant byproduct to share communal equipment. This proposal would require that the participating companies pay royalties for use of the equipment or would forfeit rights to the finished products. This idea was eventually abandoned due to the low return on investment, and the want for a more simple solution.

Since the food-grade machinery required to process the plant byproduct has seemed out of reach, Byproduct Producer is considering selling the byproduct to an asphalt company which would industrially recycle it to produce a binder ingredient that increases durability. As these dehydrators do not need to be food-grade, they cost significantly less and are already owned by the asphalt companies. This represents a turn-key solution that Byproduct Producer is seeking, although the finished product would not be an upcycled food helping to feed humans.

While younger demographics view sustainability as important, the language around “upcycling” needs to change to be more appealing to retailers and purchasers. Without a more attractive marketing strategy, upcycled products may suffer from lack of buyers both at the retail and consumer level.

Needs

- Funding to acquire dehydrating and milling machinery.
- Collaboration with other upcyclers.
- Support with surplus or unsold products.

- Guidance on effective marketing.

Lack of funding for the purchase of equipment is the primary barrier for Byproduct Producer. Should Byproduct Producer receive a grant which would cover 20% of the $1.2m cost, they would explore leasing the equipment or co-packing with other known companies who produce plant byproduct such as other meat-alternative companies.

As there are many of these companies in British Columbia, it would be beneficial to collaborate and solve processes together. However it can be challenging to coordinate and allocate time for this purpose.

Occasionally, Byproduct Producer has surplus or returned products that are difficult to manage and donate. A collaboration with FoodMesh's on-demand matching service was proposed, and will be used by Byproduct Producer in the future due to the agility of the system in finding a recipient for the surplus product within an hour of receiving the request.

Creating more demand for upcycled products is also an important component of the business, and a marketing strategy would greatly benefit the company.

Sales and Distribution

Due to the barriers in processing the plant byproduct to transform it into a material suitable for upcycling, the entirety is donated to a dairy farmer for use as farm feed.

Conclusion

The three companies interviewed demonstrate the potential for the Metro Vancouver upcycling industry to reduce food waste. However there are significant challenges that prevent these companies from growing to become economically viable particularly around scalability and market penetration.

Financial instability is a barrier experienced by all interviewed companies. Startup Company is not currently economically viable without volunteer labour and occasional use of personal funds. Both Startup Company and Byproduct Producer expressed the need for costly machinery. And Meal Upcycler experienced issues with slow sales, partially due to consumer expectations that an upcycled meal be priced lower than a traditional product, and hesitation around what is perceived as “waste ingredients”. Willingness to pay has been measured as lower for circular food products such as upcycled foods, and it has been suggested that this is due to consumers’ perceptions that upcycled ingredients are risky in terms of health and safety. (Goodman-Smith et al., 2021, Hellali et al., 2023). Even among consumers who prefer upcycled food to conventional products, only 12% of them will purchase the upcycled food if it is priced higher (Goodman-Smith et al., 2021).

Unless upcyclers can realize economies of scale, long-term financial success might be out of reach (Donner et al., 2001, Lavelli & Becalli, 2022). To grow, the upcyclers will require help from two sources: collaboration from the local network (other food upcyclers, farmers, and food organizations), and funding from the government e.g. in the form of subsidies, research and development (Donner et al., 2021, Salvador et al., 2022). These research findings were echoed by all upcyclers we interviewed who expressed the need to collaborate with other local upcyclers to identify opportunities and business mentorship.

A method to attract upcycling collaborators is discussed by Närvänen et al. (2022), who outlined a 4-point strategy consisting of: salvation, thrift, innovation, and normalization. In salvation, the upcycled food relies on its environmentally friendly appeal. In thrift, frugality and waste reduction is framed as a financial advantage for partnership. Innovation targets trendsetters in sustainable business practices. Lastly, normalization shifts upcycled products into the conventional food market, causing partner companies to automatically consider an upcycled product as a part of their operations and offerings. Regarding the second source of financial support, governmental funding, Byproduct Producer has applied for a provincial grant, but the grant is not specific to upcyclers and attracts a broad applicant base, which creates significant competition. Grants that are specific to upcyclers would be beneficial.

Meal Upcycler had issues with regulatory ambiguity, as upcycled foods are not officially recognized by regulatory bodies. This lack of framework contributes to their inability to produce ingredient labels for retail markets as surplus ingredients used in a meal vary according to availability. These concerns are supported by

Goodman-Smith et al. (2021) who found that upcycled products were more attractive to consumers when the sourcing of surplus ingredients was fully disclosed. As well, a regulatory framework and an official stance by recognized governmental agencies would greatly benefit the perceived health risks around upcycled food that Meal Upcycler mentioned.

The experience of Byproduct Producer and Meal Upcycler with the lack of consumer education around upcycling is consistent with studies that have found consumer knowledge and understanding of upcycling is crucial for the industry's success (Goodman-Smith et al., 2021, Ma et al., 2024, Yilmaz and Kahveci, 2022). Unfortunately despite the growing market, the knowledge and understanding of most consumers is low (Goodman-Smith et al., 2021).

Marketing and the term "upcycled" was a point stressed by Byproduct Producer as being unattractive to consumers. Yet when the upcycled food industry was in its infancy, extensive consumer studies were undertaken before the word "upcycled" was carefully chosen over others including "recycled", "reprocessed" and "rescued". (Bhatt et al. 2018). It is possible that the lack of market appetite does not stem from the language around upcycled food, but rather the lack of research and strategy around marketing upcycled food in the age of social media. (Ma et al., 2024). This is particularly important because as Big Mountain Food observed, sustainable products are most attractive to a younger demographic, and this comprises the majority of social media users. Communicating sustainability and health information increases consumers' willingness to pay (Coderoni and Perito 2020, Proserpio et al., 2020) - two benefits that Byproduct Producer already capitalizes on. However, going an extra step and framing social media posts around empowerment by voting with one's dollar to solve an issue could lead to actual behaviour change which would positively affect the upcycled food industry (Ma et al., 2024). Along the same lines of solutioning, consumers are drawn to participate in collaborative movements (Ma et al., 2024), so it is important to engage the online community to solve a problem through easy actions like choosing upcycled food. The sharing and word-of-mouth nature of social media could also help with increasing awareness of upcycled food.

As consumer awareness, education and understanding is needed, certifications and logos on upcycled food packaging could benefit the upcyclers. For example, biscuits using upcycled ingredients were perceived more favourably when the packaging displayed the Carbon Trust label (Grasso and Asioli, 2020). The Upcycled Food Association offers the Upcycled Certified label; a third-party certification whose products reportedly increased in sales by 1046% between 2021 and 2022 (Upcycled Food Association, 2022). Certification could benefit the companies interviewed, but this comes at a monetary cost, and would only be effective if recognized by consumers.

An interesting case is that of ReCruz Produce based in Burnaby BC that is no longer operational, but was interviewed in 2023 (see Appendix). ReCruz functioned as a food diversion company, partnering with produce processors. The company diverted trimmings to food manufacturers for the purpose of upcycled food products, and to dairy farmers for the purpose of farm feed. It is possible that start-up founders, driven by a mission to reduce food waste, are seeking niche opportunities to divert surplus food to already-established food manufacturers instead of assuming the risks and scalability issues of producing upcycled products themselves. For unknown reasons, ReCruz is no longer operational. While the upcycling industry attracts innovative, and mission-driven individuals, if the environment in which they seek to operate is not start-up friendly, more companies like ReCruz could shutter, soon after emerging. Another example of an upcycler no longer operational in Metro Vancouver is Susgrainable. Also covered in our blog post series (see Appendix p.35), Susgrainable was locally-based and growing quickly due to the popularity of its upcycled baking mixes, made from the spent grain from local breweries. Unfortunately, this company relocated to Alberta as a strategic business decision. Before moving its operations away from British Columbia, CEO Marc Wandler had recounted to FoodMesh:

“We’re primarily focused on BC, as we believe a local economy is more circular and more sustainable. A number of local retailers have recently started carrying our products, including Nature’s Fare and Fresh St. Market. We’re also working with Sobeys through a number of Thrifty Foods and Safeway stores, which are carrying our products as part of their BC local program.”

“We are limited in how much grain we can rescue because we don’t have our own facility. As we know, real estate in Vancouver is extremely cost-prohibitive, and food-safe spaces are even harder to come by.”

- Marc Wandler (Chief Executive Officer), Susgrainable, **2023**

The upcycling industry can play an important role in Metro Vancouver’s goal of reducing solid waste emissions by preventing waste creation through a transition to a circular economy by 2050. However the fledgling industry needs support and would benefit from an environment of awareness around upcycling, financial aid, an improved marketing strategy, and regulatory frameworks.

Summary of Needs

Funding

All three upcyclers need financial support for production areas such as machinery, co-packing or scaling.

Regulatory support

A clear regulatory framework around upcycled food is needed to increase consumer confidence and market access.

Consumer awareness

Consumers seek education on the safety of upcycled food and lack awareness of its benefits.

Collaboration

Partnerships with larger companies, mentors, the larger upcycling community or food recovery networks such as FoodMesh could help to provide resources and solutions.

Marketing

A renewed marketing strategy using social media focusing on the benefits and safety of upcycled food would help to create a positive image and awareness around these products.

Literature

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Appendix

Below are the 2023 blog posts published by FoodMesh on upcyclers who were not interviewed for this report.

Upcycler Blog Link	Operational Region	Reason for Exclusion
Slow Bottled Sunday	Okanagan, BC	Not within Metro Vancouver
Goodly Foods	Vancouver, BC	Unavailable
Luv the Grub	Vancouver, BC	No longer an upcycler
ReCruz Produce	Vancouver, BC	Unavailable
Susgrainable	Alberta	No longer within Metro Vancouver
Trendi Tech Inc.	Burnaby, BC	No longer operational