UBC Social Ecological Economic Development Studies (SEEDS) Student Report
Melt Collective: Changing the Narrative Around Plastic Waste Through Up-Cycled Public Goods
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COMM 486M
March 9, 2018
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Comm 486M 002 Group 5 Capstone Strategy Plan Melt Collective



Opening Worlds





Executive Summary



problem	The Melt Collective at UBC is seeking a formal and sustainable business model									
challenges	A desirable, high-margin product with visibility	Sustainable and predictable revenue	Ensuring revenue growth through effective marketing							
solution	Plastic public goods, such as benches, for the UBC Campus	5-10k per unit sold in bulk to universities, cities, and contractors	Direct relationship building with public bodies, construction and architect industries							
impact	Providing up-cycled public goods is the most impactful, visible, feasible, and scalable model to change the narrative around plastic waste at UBC and beyond.									

The growth of the Melt Collective of the University of British Columbia has resulted in a dire need for a formal business model in order to reach their mission of reducing plastic waste in landfills and changing the narrative around plastic waste. Currently, the Collective is a casual team of 30-40 students or volunteers, and several individual consumer products have been already made, such as jewellery.

The project aims to address 3 key challenges:

- What is the most viable project to commercialize in order to reach their vision?
- How can the Melt Collective, currently a student club, ensure the financial longevity of their organization?
- How can the Melt Collective ensure its products or services are desirable by consumers?

Respectively, our key solutions are:

- To provide large public goods, such as benches, planters, lampposts, or public art, to local communities with a vision to increase waste awareness to citizens and reduce the cost of waste management to organizations
- Two sources of revenue streams: up-cycled plastic goods competitively (eg. at MSRP of \$1000 per bench) to ensure substantial cash flow, possible consumer retail stream in the future to supplement
- Build intimate partnerships with bodies at UBC to pilot recycled plastic benches, then leverage successes to win larger contracts in scale and geography.

Our analysis has found up-cycled public goods the most viable solution:

- A B2B or B2G relationship is contingent on direct sales, relationship building, and contracts, mitigating the cash flow
 volatility of retail in holding inventory, meeting fluctuating consumer demand, or decreased wholesaler margins (up to 50%).
- Public goods allow the Melt Collective to convey their message to the most number of people possible, for example, by crafting evocative messaging on bench backs "You helped us make this bench X pounds of non biodegradable waste per person is thrown away each day. Do your part."
- Plastic public goods are far superior to current metal or concrete fixtures in MSRP, durability, and maintenance cost.





Company Background









The Melt Collective aims to create a localized process of recycling plastic to raise awareness and change the narrative around waste and sustainability

Our client, the Melt Collective, is a UBC initiative created in July of 2016 that aims to create a localized recycling process for UBC's plastic. The initiative heavily values sustainability and consequently wants the entire supply chain to be sustainable from product development to deployment.

The Melt Collective proposed to develop a product that is sold at a high price yet develop a few of these products. The key challenge was to decide what item to produce at these guidelines while creating a positive social and environmental impact.

While the Melt Collective's business of recycling plastic found in UBC waste containers and transforming the plastic into small items such as jewelry or skateboards is respectable, it is not sustainable to achieve long-term growth in areas such as brand awareness, scalability, and profitability. Our team conducted a SWOT analysis of the Melt Collective to determine the key strengths and weaknesses to consider when proposing a business model to them. The main strength identified was the source of the plastic the Melt Collective obtains. Sourcing plastic from UBC allows for a large quantity of plastic as UBC's campus is 993 acres, encompassing over 50,000 students. With dozens of buildings and students producing waste, UBC harbors more than enough recycled plastic for the Melt Collective to recycle for any given project. It's weakness however is that they currently have a small amount of capital which directly contributes to the (in)feasibility and scale of a project. There are a number of opportunities we have identified for the Melt Collective to seize. As mentioned above, 11% of UBC's disposed materials are plastic which provides an opportunity for the Melt Collective to obtain these raw materials by partnering with UBC Buildings Operations to obtain a greater percentage of this plastic collected within the recycling units at UBC. A threat we identified to the Melt Collective are the competing recycling initiatives as UBC aims to be a zero-waste campus by 2020, there are additional governing bodies as well as student-run organizations that are long-standing. A full SWOT analysis can be found in the appendices.





Key Issues



Product Decision



No decision made about product lines or services

Formal Organization



Lack of capital, product roadmaps, formal hierarchy and succession

Lack of Marketing



Little marketing efforts and inability to identify a focused target market

The Melt Collective's current lack of continuity in the organization and volatility of their current consumer base poses an issue that our proposed recommendation aims to fix.

The Melt Collective contracted our team to inquire about creating a formal and sustainable business model to support their initiative of recycling plastic at UBC. In order to propose a recommendation that aligned with the Melt Collective's values of sustainability and localization, we began our analysis of the Melt Collective's current business model. We have identified three main issues that we feel hinder the success of the Melt Collective and ultimately pose a threat to the continuance of the Melt Collective.

The first issue we have identified is the lack of capital the Melt Collective has gathered thus far. Monetary and physical capital are critical to a startup and the Melt Collective has made few efforts to secure funding thus far. When planning their business and identifying the products they chose to create, they should have created a financial roadmap for their current expenses and income to assist in their product and business development. Organization is critical to success, and thus going forward we recommend they keep a financial ledger.

The second issue we identified is the lack of formal designation, hierarchy, and succession planning. Without these key attributes of continuity, the Melt Collective runs the risk of being unable to develop and support their initiative. In addition to a lack of formal structure within the members of the group, their product development is run entirely by volunteers. We feel this is not sustainable for the Melt Collective to base their product output on volunteers who are most likely not formally trained in how to mold plastic safely and efficiently. Additionally, having volunteers primarily run their business runs the risk of being unable to meet supply with demand. Without concrete staff, there could be instances of a lack of labor to produce the items demanded.

The third and final issue that threatens the business of the Melt Collective is their lack of marketing and efforts to raise brand awareness. Without brand awareness it will be hard to attract investors and deliver the social message about changing the narrative around waste that the Melt Collective desires. The website also lacks necessary information such as the current projects, information about how to contribute, as well as the current and future objectives of their initiative. Additionally, the Melt Collective failed to conduct market research to see if there is even a demand for retail items made out of recycled plastic.





The Melt Collective's New Value Proposition



Value Proposition

The MC is a local company that changes the narrative around "waste" by up-cycling what is thrown away each day into public goods for institutions and communities that can be enjoyed by the greater good, for a greater purpose.

Competitive Advantage

Plastic public goods are more durable, environmentally friendly, rot resistant, and require less maintenance than concrete or metal fixtures.

In order to achieve the Melt Collective's goal of profitability, sustainability, and scalability our team proposes the solution: to create benches made out of recycled plastic. Each bench will have message that directly raises awareness about the sheer amount of waste that is produced. An example of a message we will place on the bench would be the amount of plastic bottles that were recycled in order to re-use and mold the plastic into the bench.

Benches, although it is not a small item that the Melt Collective was initially looking to produce, is more sustainable and creates a greater social and economic impact on the amount of waste disposed. Benches are more durable, environmentally friendly, and require less maintenance than typical concrete or metal benches. It directly aligns with the Melt Collective's value proposition of "changing the narrative around waste" and serves a greater social purpose than the originally proposed retail items. We feel this strategy is more profitable and sustainable for the long-term.





Industry, Market & Competitor Analysis



Types of Recycled Plastic



Sources: bottles, rigid plastic and foam, bags and films, carpet and fiber.

> End-use: packaging, construction, automobile

Current Competition



Current contract UBC has with the provider of the concrete and wooden benches on campus.

Market Analysis



Demand for post consumer recycled plastic rose over 6% in 2016, demonstrating a growing market for recycled plastics and profitable future.

An abundance of available resources at UBC coupled with UBC's initiative to be a zero-waste campus by 2020 further emphasizes the demand for the Melt Collective to produce benches.

Our team conducted an industry analysis to ensure that creating benches from recycled plastic would be a viable and profitable solution. We began by investigating the types of plastic that is recycled at UBC as well as the most common types of plastic that are currently used when making recycled products. The main sources of plastic that are used to make recycled products are bottles, rigid plastics and foam, bags and film, as well as carpet and fiber. UBC has an abundance of both bottles and rigid plastics that are recycled on campus that is ideal for end-use construction of benches.

As for the current competition the Melt Collective faces by constructing plastic benches, there are not that many construction companies that offer benches made from recycled plastic. We regard the contract that UBC currently has with the provider of the concrete and wooden benches currently on campus as their primary competition. However, UBC aims to be a zero-waste campus by 2020 so our team believes the governing body at UBC will consider implementing additional benches from a recycled source to accompany the array of new buildings at UBC. We have created a strategy canvas, depicted in the appendices, that outline the benefits of benches made from recycled plastic to that of the current wooden benches at UBC to further emphasize the value and sustainability of our proposed solution. Partnering with UBC as a buyer of our benches will ensure the commitment to recycled plastics due to UBC's mission to be a zero waste institution by 2020.

After extensive market research, our team discovered that the demand in North America for post-consumer recycled plastic was forecasted to rise 6.5% in 2016 and exceeded 3.5 billion pounds of plastic. Due the increase in price for conventional plastic coupled with the growing emphasis of sustainability and heightened awareness of environmental issues, the global recycled plastic market has been steadily increasing and is predicted to continue, thus we are confident that recycled plastic benches are a viable solution.

We conducted a PEST analysis that highlights the political, economic, social, and technological factors that further support the creation of benches from recycled plastic. Political factors such as increasing regulation in the plastics industry, the amount of waste produced, as well as the increased governmental laws in recycling have been identified as support for the recycled plastics movement. As for economic factors, analysis suggests that the global recycled plastics market will expand at a compound annual growth rate of 4.31% from 2016 to 2020 according to a report by Technavio. As for societal factors, there has been an exponential increase in demand for sustainable goods. Technological improvements that further enhance our proposed recommendation is that new machines have been built that assist with cleaning plastic as well as molding plastic to be recycled into other uses, whether it be for construction or automobiles. A full PEST analysis can be found in the appendices.





Alternatives Analysis



- Unpredictable cash flows and consumer demand leave company growth and liquidity uncertain for future years
- Retailers charge markup for goods
- Online selling is
- Plastic filament is a commodity provided by other mature manufacturers at low cost and high scale



- Mature market with fierce competition
- Dependent on expensive showrooms and foot traffic to sell
- Most visibility & impact
- Generates awareness
- Customer relationship can be easily managed
- · Stable & predictable cash flows

Criteria

<u>General:</u> Profitability Scalability Sustainability <u>Product:</u>
Recyclable end product
Long lasting
Design-centric

Process:
Simple
Low quantities / high prices
Low dependency on 3rd parties

Our team considered many alternatives before settling on public goods such as benches. We came up with alternatives such as consumer goods, plastic furniture, and raw materials, however these proposals did not fully align with the criteria the Melt Collective desired. The requirements given by the Melt Collective was for the proposed solution to be profitable, sustainable, and scalable. As for the product itself, it was crucial that the end product be long-lasting and for the design to assist in their goal of changing the narrative about waste. As for the process of creating said good, it was vital for the Melt Collective to produce a good in small quantities yet sell at a high price as well as have a low dependency on 3rd parties. With these requirements in mind, our team conducted extensive analysis on the alternatives to ensure that public goods was the most sustainable and feasible product for the Melt Collective to produce.

The first alternative, consumer goods, was infeasible with respect to the scalability requirement. Demand would be volatile and unpredictable, wreaking havoc in terms of staffing and cash flows. Due to the unpredictable nature of consumer demand, the Melt Collective would have no stability in terms of production and revenue growth, leaving for an uncertain future. Additionally, in order to be profitable, the Melt Collective would have to mark up their goods significantly which might not be popular with consumers as it is recycled plastic.

As for plastic furniture, our team concluded that there is too great of competition in order for the Melt Collective to be sustainable and profitable. The market for furniture is mature and additionally it provides no social impact that the Melt Collective desires. Third party dependency would also be high with this alternative, directly violating their requirement.

As for raw materials, our team entertained this option. However, a common raw material such as plastic filament is often provided by companies at a low cost and would provide the Melt Collective with little margins. This option violates the requirement set by the Melt Collective of producing low quantity items with a high margin.

Our solution, benches, provides the most stable, and scalable source of revenue. As we plan to contract with UBC, it will be easier to manage customer relationships which is essential as the hierarchy and succession of the Melt Collective is unknown. Our decision to display the environmental impact by writing a message on the benches about the amount of plastic used to produce one bench or write a message about recycling directly contributes to the Melt Collective's requirement of creating a social impact and also is the most sustainable of the alternatives we considered.

Benches made from recycling UBC's plastic contributes directly to UBC's 2020 Zero Waste goals by significantly increasing the amount of plastic waste diverted from landfills. Not only will these benches educate the large student body at UBC and change the narrative around waste, it aligns with the Melt Collective's original value proposition of sustainability and localization.







The above slide shows examples of a design prototype for a recycled plastic bench that Melt Collective could make. Our accounting and cost calculations assume that the benches produced have a one plank back, and one plank seat physical configuration. Making benches with two or more seat planks or back planks will increase costs, increase the amount of time for assembly and increase the amount of third party materials needed to assemble them together such as bolts and screws. Another possible configuration is one whole piece of moulded plastic that is curved in the middle between the back and seat.

The benches can include evocative messaging in the company's branded text font with Melt Collective's logo beside it to increase brand awareness and impact and visibility on social media. The messaging or part of it should be able to be seen from a distance away. The company may choose to include a hashtag or page handle as well, although this may decrease how classic and durable the furniture is for the long-term, so if this is more valued then just placing a logo is fine. An example of messaging would be "You helped us make this bench – X pounds of non biodegradable waste per person is thrown away each day. Do your part." - [Melt Collective Logo]. People who are curious after prompted by the messaging may search for Melt Collective online, or upload pictures of the bench/them sitting on the bench onto their social media profile. They may tag or mention Melt Collective in these posts, which would increase the awareness and reach of the initiatives amongst their friends and followers. Once this reaches enough scale, the company can use this as part of their marketing portfolio when selling or bidding on further public good projects to new clients to show previous successes and impact.

Depending on the criteria and desires of the clients if they choose to participate in the design process, Melt Collective can use their point of differentiation of colourful, blended plastic patterns for their benches. It would also help to set apart the company from other competitors during competitive bidding and selling processes especially to government. The above slide shows two designs with two different colourful plastic patterns, and one design with just a solid blue colour.

Melt Collective will have to research safety standards and other legal regulations that their products, especially public goods provided in a contract to government and universities/colleges, must meet. Examples include weight holding requirements and pressure/stress testing on the recycled plastic to ensure that the material is hard enough to prevent scratches and dents easily, lamination or other ways to ensure that any colour of the recycled plastics do not rub off onto people's clothing if they sit on the bench, and making sure it withstands in different weather conditions (rain, shine, wind, snow and hail).

Please see the Appendix: Sample Locations of Benches & Additional Prototype for possible locations that these benches could be placed around the UBC campus, and one additional design prototype of a bench that could be produced





Key Features of Recommendation



Impact & Visibility



Highest possible visibility of product in high-traffic space

Sustainability



Plastic benches are more durable than metal or concrete

Can be recycled at end of life

Feasibility & Scalability



Defends from competition with business relationships

Ability to ensure revenue streams through contracts

For organizations such as UBC, the Melt Collective's value proposition will be to collect the plastic used in the community and upcycle them into beautiful public goods. The mission is to make the greater community visualize the waste that is thrown away while going about their day to day lives and perceive its impact on the environment, landfills, and the oceans. The public goods, such as benches or planters, will have messaging on the product, such as: "You helped us make this bench – X pounds of non biodegradable waste per person is thrown away each day."

The benches might have the visual appearance of composite plastic, so that people can still see the crushed plastic containers thrown away, or the planters might be made from clear crushed water bottles, with plants regularly growing inside, conveying that plastic is destroying the environment. If the plastic waste provided by the respective area is not enough to fulfill product demand, plastic waste can be sourced from other areas, such as communities in Greater Vancouver.

Our key solutions are:

- To provide large public goods, such as benches, planters, lampposts, or public art, to local communities with a vision to increase waste awareness to citizens and reduce the cost of waste management to organizations
- Two sources of revenue streams: up-cycled plastic goods competitively (eg. at MSRP of \$1000 per bench) to ensure substantial cash flow, possible consumer retail stream in the future to supplement
- Build an intimate partnerships with bodies at UBC to pilot recycled plastic benches, then leverage successes to win larger contracts in scale and geography.

Our recommendation to service B2B or B2G bodies with beautiful up-cycled plastic goods is the superior solution for several reasons:

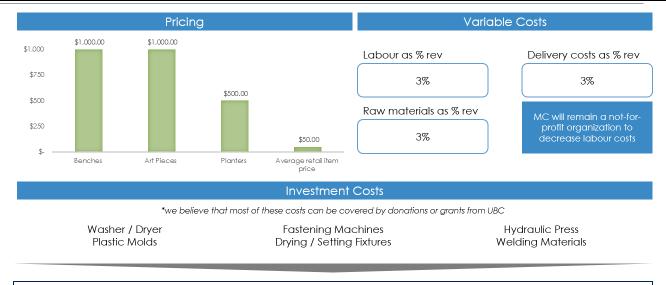
- A B2B or B2G relationship is contingent on direct sales, relationship building, and contracts, mitigating the cash flow volatility of retail in holding inventory, meeting fluctuating consumer demand, or decreased wholesaler margins (up to 50%).
- Public goods allow the Melt Collective to convey their message to the most number of people possible, for example, by crafting evocative messaging on bench backs "You helped us make this bench X pounds of non biodegradable waste per person is thrown away each day. Do your part."
- Plastic public goods are far superior to current metal or concrete fixtures in MSRP, durability, and maintenance cost.





Unit Economics





Variable costs to create a bench involve only incremental labour and cheap materials.

Comparable plastic benches are typically at an average price of \$1,000

On average, ticket items sold to large corporations and governments have the highest returns. Not only does the model provide reasonable profit margins at 30%, revenue can be realized in advance with large contracts or requests for proposal, unlike the B2C market, which is volatile, fickle, and seasonal. The long cycles of construction projects allow Melt Collective ample time to acquire resources, labour, and materials necessary to deliver on the contracts, as opposed to the retail market, which necessitates holding inventory, paying wholesale mark up to retailers, or fulfilling JIT online sales.

Our research shows that comparable plastic benches sold at distribution price have a MSRP of \$1000. Metal or concrete counterparts are much more expensive to purchase, install, and maintain for universities, communities, and cities, making plastic the financially superior choice, in addition to the social impact.

Key variables costs include the labour involved in the collection of the plastic, such as sourcing raw materials, cleaning, producing, and delivering the final product to site.

Key fixed costs include future salaried administrative and business development managers and rent. Although the Melt Collective might be able to operate in their current small space for the first several years, we have allocated \$25,000 in rent and utility expenditure from 2020 onwards. We believe an average cost of \$2,000 per month can be achieved by leveraging grants or donated spaces.

Up front investment costs include plastic molds and welding materials. Further suggested asset acquisitions may include more washers and dryers, fastening machines, drying or setting fixtures, or a hydraulic press. Specific material or equipment will be best determined by the engineers, of which there are roughly 20 on the team.

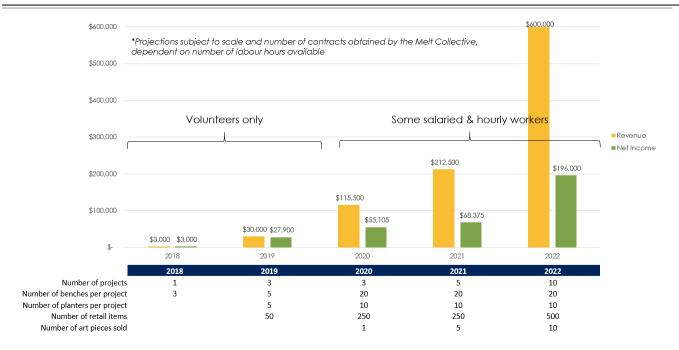
Through the AMS Sustainability Fund, UBC Green Initiative, and support by the Applied Science, Engineering, and Sustainability departments at UBC, some grants and donations may be available to assist with the upfront and ongoing investment costs. In the future, venture capital funding may be an attractive option.





Financial Projection & Growth





We recommend that the Melt Collective operate as a student club or solely volunteer based for the next 2.5 years while it establishes a core team, proof of concepts, builds business relationships, and fulfills the first several contracts. Starting in 2020, contingent on proven market and growth, we suggest the organization to hire at least one full time administrative staff, as well as some regular hourly workers to assist with operations. Starting in 2021, one full-time business development staff may be needed.

The strategy for the next 5 years is as follows:

- For the rest of 2017, the Melt Collective will build a core team and secure one project at UBC that desires 3 benches.
- By 2018, the mentioned project will be fulfilled.
- By 2019, the company will acquire 2 more clients, expand the average contract to more benches, add planters to their product
 mix, and introduce some small retail items to be sold online. Increased amounts of plastic must be sourced to meet
 production, so part-time labour must be hired to collect, wash, produce, and deliver.
- By 2020, the company will extend its reach into the City of Vancouver and partner with local artists to sell at least 1 public art piece. The company will hire its first full time salaried worker.
- By 2021, Melt Collective will also hire a full time business development manager and continue to expand operations.
- By 2022, the company reaches a profit margin of roughly 30%.

Given an average number of 5 new construction or restoration projects at UBC alone each year, we believe these top-line projections are realistic and achievable.

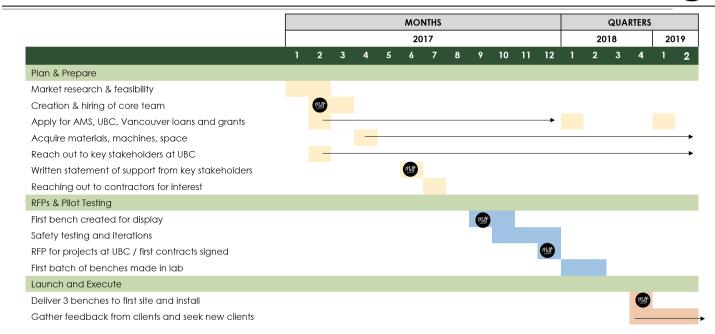
The financial projections we have estimated are contingent mainly on the Melt Collective's bandwidth to create partnerships, scale, and obtain contracts, which is a direct function of the number of volunteers available. Therefore, the impetus to hire, train, and motivate a core team of volunteers, including students of all faculties, UBC admin staff, UBC professors, and stated support by key UBC stakeholders will be imperative. Our timeline describes key tasks in more detail below.





Timeline Overview





The following activities must happen in 2017 in order to produce a product by 2018:

- Begin market research into consumers, which will include acquiring a list of upcoming construction projects at UBC, publicly available on their website
- Creation and hiring of core team, which includes founders, engineering, business development, and marketing
- Apply for publicly available loans and grants
- Acquire assets, such as machines and space by funding, donation, or loan
- Reach out to key stakeholders at UBC for interest in purchasing such benches for upcoming projects
- Obtaining statements of support from key stakeholders at UBC

In 2018, the goal is to have the first prototypes of benches created in the lab such that it can act as a display product, and sell at least 3 benches to public spaces at UBC. Once the first project is complete, the organization can then leverage this contract to approach other projects. Beyond 2019, the Melt Collective will continue to expand operations geographically, and have the option to use their retained earnings to host further community initiatives, such as pop-up educational classes, or melt-your-own-plastic workshops. Retail streams may also be added (entering the B2C market) to supplement the cash-cow operations.





Key Business Partners



Message						
Partner with the UBC Building Operations to systematically collect waste plastic around campus to decrease workload on volunteers						
In order to further strengthen the relationship with UBC, the conversation must also be had with the board of directors, AMS council, and other important parties.						
Apply for grants and loans to raise working capital needed to fund operations						
Following Universities, we suggest targeting local municipalities and city planning offices to get Melt Collective benches into city parks.						
Our recommendation is to target Universities and local municipalities,						

UBC Building Operations: Collection on the materials is the first step towards creating the products, and this too takes a key business partner; UBC Building Operations. In their statements on the UBC Building Operation website, they list "Supporting Zero Waste" Initiative, including recycling, as important aspects of their work. In this they reference "Targets to divert 60% of our operational waste from the landfill by 2016, and 80% by 2020" (http://buildingoperations.ubc.ca/sustainability/zero-waste/). The Melt Collective can assist Building Operations with this goal, by creating a system with them to help recycle plastic waste, turning it into benches, planters, and art pieces for all to enjoy. This can all contribute to UBC achieving their goals set out in the zero Waste Action Plan. (https://sustain.ubc.ca/campus-initiatives/recycling-waste/what-ubc-doing/waste-action-plan)

Board of UBC, AMS Council, ect: Our proposed plan is to sell these benches to UBC and other Universities, as well as local municipalities. In order to have any chance of success in this, you must first begin discussions with UBC Building Operations. The Board of Governors of UBC holds five meetings during the regular school year, all of which are open to attendance but with limited space. A space can be reserved through emailing bog.ubc.ca and information regarding the time and place can be found here https://bog.ubc.ca/?page_id=25. These meetings can be the beginning steps of building a relationship with the Board of Governors, and from here the Melt Collective can reach out the the board members personally to speak with them regarding the Melt Collectives project and sustainability goals. In addition to this, we recommend also reaching out to the AMS Council, who may be able to influence the board of Governors to include Melt Collective benches, planters and art pieces in school construction or revitalisation projects. More information regarding their meeting times can be found here https://www.ams.ubc.ca/leadership/council/agenda-minutes/.

AMS Sustainability Fund and other Grants and Funds: Initially costs will be high, and the Melt Collective will need funding to be able to afford the equipment required to begin production. As a way to jump start this program, we recommend applying for sustainability grants and entrepreneurship grants from the AMS and outside funding sources. Some available funds are included below.

O AMS Sustainability Fund: Funded by a small student fee to every student annually, the applications are reviewed year round. Past applications have been granted as much as \$10,000 to begin a sustainable initiative for UBC. In order to apply you can email sustainability@ams.ubc.ca or apply at https://sustain.ubc.ca/get-involved/students/ams-sustainability-projects-fund. For additional information check out https://www.ams.ubc.ca/sustainability/.





- Club Benefit Fund: Maximum Funding of \$1500 and can be used to fund "special projects related to the club's academic interest, or furnishing expenses which benefits the club as a whole." This grant can only be received once per year. More information at https://www.ams.ubc.ca/leadership/commissions/financedepartment/clubsandconstituencies/funds/
- Student Initiatives Fund: Maximum funding of \$500, with no limit on applications per year. This can be used to "fund philanthropic, academic or other causes deemed worthy by the AMS Finance Commission." https://www.ams.ubc.ca/leadership/commissions/financedepartment/clubsandconstituencies/funds/
- o Greenest City Grants: As a part of the efforts to become a Greenest City 2020, the City of Vancouver is offering Green Grants, to registered charities and BC Societies. These grants can be as high as \$100,000, with a typical grant being between \$35,000 and \$45,000. More information at greenestcitygrant@vancouver.ca and through the website http://vancouver.ca/people-programs/green-grants.aspx#.
- Greenest City Neighbourhood Small Grants: Between \$500 and \$1000 funding is available for Vancouver Residents to create "grassroots action" on the City of Vancouver's Greenest City 2020 Plan. More information at http://neighbourhoodsmallgrants.ca/grants

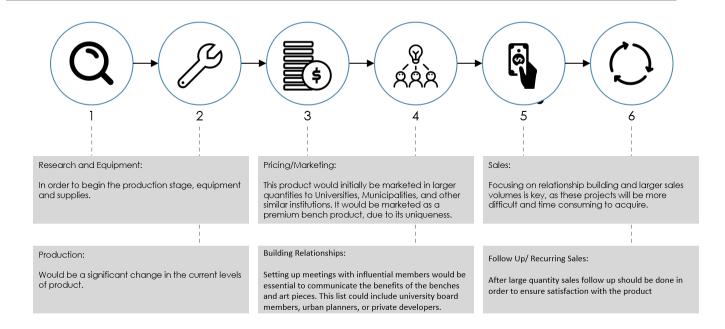
City of Vancouver and Other Local Municipalities: Following Universities, we suggest targeting local municipalities and city planning offices to get Melt Collective benches into city parks. The city of Vancouver's Greenest City by 2020 Action Plan makes Vancouver the best local market to target first. By implementing such a visual demonstration of recycling, and more potently, of plastic waste, it can help encourage residents to use less plastic overall. In addition, the city of Vancouver could serve as an additional plastic resource in the future if UBC cannot provide adequate amounts in the future. Beginning contacts could include local urban planners, for example the Jericho Lands Urban Planning information can be found here http://vancouver.ca/home-property-development/jericho-lands.aspx. After establishing a relationship with local city planners on smaller projects, the next progression could to be reach out to the Vancouver City councilors, all of whom can be contacted through the information provided here http://vancouver.ca/your-government/city-councillors.aspx. This could be done independently, or with the assistance of an urban planner that the Melt Collective has built a relationship with to this point.





Implementation Process





The following is a sample project process for a client:

- Step 1 Research and Equipment: In order to begin this plan, equipment for production would need to be acquired. This includes molds for the plastic portions of the bench, and other pieces requires to form the bench.
- **Step 2 Production:** Production will be one of the most difficult processes initially. Based off the information given, we believe the current production of plastic products by the Melt Collective to be quite low, this would be a significant increase in the production demands, and would deplete plastic reserves significantly. With increased experience and staffing as the Melt collective expands, this process would become less difficult.
- **Step 3 Pricing / Marketing:** Pricing and marketing strategies will be very different than for consumer goods. As these products, either benches or art pieces, would be marketed towards Universities, Municipalities and other public spaces, the marketing strategy would have to be customized for each pitch. In addition, the pricing would also be different, selling higher priced and at a premium over other market versions. Current similar product sell for approximately \$800.00, however these could be sold at a premium because of their unique look and message. We believe for the benches the best pricing strategy is to price them at \$1000.00, and for the planters we have set the price as \$500.00. The prices for all items can be found in the Appendices.
- **Step 4 Building Relationships:** Setting up meetings with influential members would be essential to communicate the benefits of the benches and art pieces. This list could include university board members, urban planners, or private developers. This is outlined in the section of "Key Business Partners", and this contains the recommendations for specific contacts and methods of contact.
- Step 5 Sales: The sales process is potentially more complicated than with other products, as this may be done through RFQ/RFP and Tendering processes. If this is the case, some training may be required to teach Melt Collective volunteers and staff to complete the tendering process. This will also involve contracts, and this may also involve further training in order to understand proper procedure and protect the Melt Collective. The AMS Finance Department may be able to help with training or contracts. The current Vice President of Finance of the AMS is currently, and can be contacted though the email or through his phone number at https://www.ams.ubc.ca/leadership/commissions/financedepartment/
- **Step 6 Follow Up/ Recurring Sales:** After large quantity sales follow up should be done in order to ensure satisfaction with the product. This process is outlined future in the "Marketing Plan" section.

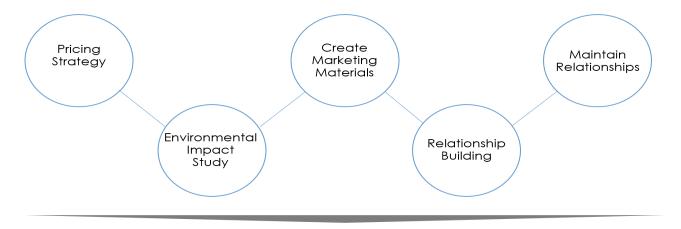
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Marketing Plan





Position as a premium product at a premium price, and build relationships with customers.

Marketing Plan: Marketing strategy will be personalized to each potential customer, and sales will be done is larger quantities and positioned as a premium product.

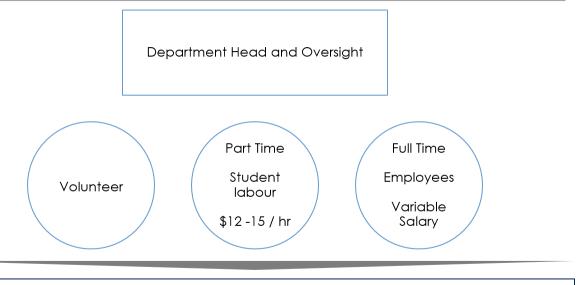
- **Step 1 Pricing Strategy:** The Melt Collective is providing a product no one else in the market can, which allows us to justify a price premium over other benches and planters made of non-recycled plastics. Additionally the multi-coloured look and specific environmental messages will also act as a justification for the price premium over other recycled plastic products. This is something locally made, which is environmentally friendly, and which looks like a piece of art. One of these factors alone could justify a premium price range, combined it makes it easy to justify to markup.
- Step 2 Environmental Impact Information: Determining the approximate environmental impact of other products in the market and that of the Melt Collective Benches and Art pieces is paramount to the success of the Melt Collective. For instance this could include: How many plastic bottles were saved from the landfills per bench? How much plastic goes into a regular sized bench or planter? These calculations for a bench similar to our proposed model per plastic bar would be: 2 inches in height by 18 inches in width by 6 feet in length. This piece of the bench would have 2,592 cubic inches of PET plastic with each cubic inch containing 15 grams of plastic. Because the average water bottle contains 9.25 grams (http://www.recyclingtoday.com/article/water-bottle-weight-decreases-recycled-content-increases/). After doing the math, you can find that each piece of the bench would contain approximately 4,205 water bottles, and each bench would then be made of 8,410 recycled bottles.
- **Step 3 Marketing Materials:** Developing comprehensive marketing materials for this new product will be essential. These will be the go to flyers, forms, and other informational booklets to give to potential customers. In addition, these things can also be available online, to allow for a more environmentally friendly reading, and the potential to use in social media, email and other electronic forms of marketing.
- **Step 4 In Person Conversations and Relationship Building:** As mentioned previously, this is a crucial step for gaining customers and selling the product. With a higher expense product which is also positioned as a premium product, being able to gain connections with decision makers in potential markets is essential. These specific individuals have been outlined in the section "Key Business Partners".
- **Step 5 Maintain Relationships:** Furthermore, creating lasting relationships is essential, and could lead to repeat business from larger organizations such as Universities and municipal governments, who will likely need benches on an ongoing basis. This is something which does not need to be incredibly time consuming, but can be streamlined for efficiency. By creating alerts and follow up templates, Melt Collective employees and volunteers can be sure to follow up with each past customer on a regular basis. Shortly after a purchase and installation, approximately 1 month, the first alert would notify a member to follow up for review and to hear about the experience. A simple email template would be prepared to allow for easy follow up. The second would be 6 months after, followed by another 1 year after, both to check in on the customer, the product and their level of satisfaction. These emails could also be used as ways to ask about any upcoming projects and see about additional needs.





People & Succession Planning





In beginning stages rely on strong volunteer base, as the Melt Collective experiences growth, full time or part time staff members can be hired.

Department Head and Oversight: We suggest that the Melt Collective find a faculty advisor who would be willing to operate as a faculty advisor to the club. This would provide the Melt Collective with some consistency in the leadership and guidance for the club. Several suggestions for Faculty Advisors include:

- Dr. Simon Peacock, Dean of Science: As the Dean of Science, Simon Peacock is responsible for leading the faculty. This project could be of interest to him as a way to demonstrate where UBC would like to take its faculty of Science, into a more sustainable long term future. Mail:minchenko@science.ubc.ca Phone Number:

 https://science.ubc.ca/about/leadership
- Dr. Karon MacLean: Special Advisor/Knowledge Mobilization for the faculty of Science. While her research is primarily in Computer Science, she has the advantage of being responsible for UBC's Science innovation strategy, which focuses on ways to increase student participation with the faculty of Science. Email: maclean@cs.ubc.ca
- Dr. Milind Kandlikar: a UBC Professor of the Liu Institute for Global Issues and the Institute for Resources, Environment and Sustainability. Email: mkandlikar@ires.ubc.ca Phone Number: http://ires.ubc.ca/person/milind-kandlikar/
- Dr. Jiaying Zhao: UBC Professor with the Institute of Resources, Environment, and Sustainability. Notable for their work on the psychology of recycling, and how to make people conserve more through public policy. Email: jiayingz@psych.ubc.ca
 Phone Number: http://psych.ubc.ca/persons/jiaying-zhao/

Volunteer: Initially the Melt Collective will not be able to sustain the cost of a full or part time staff member, and in these early stages it will be essential to rely heavily on volunteer labour. As the Melt Collective currently has a volunteer base, this will be something to maintain until they can become productive and profitable enough to hire part time staff. Our calculations have determined that for the first two years of operations the Melt Collective would need to rely solely on volunteer hours to meet production requirements and the gain significant foothold in the market to be able to hire staff and continue to make a profit.

Part Time: The next stages would be to hire a part time employee, perhaps former volunteers or students, preferably engineering students to help with production or business students to help with marketing and strategic planning. These employees could be hired at a lower cost than industry standard because of having less experience, but would be able to draw from their time as volunteers or their education to help them in the production. Our calculations anticipate the first part time admin staff member being hired by the beginning of year three of operations, and continuing with one employee until the end of year three. In addition we anticipate the ability to hire part time labourers during the third year of operations, to help with increasing demand for the benches.

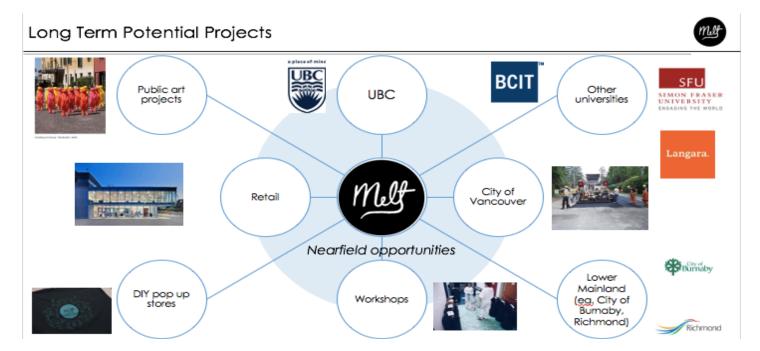




Full Time: In order to be able to afford a full time, consistent staff member, the Melt Collective would need to have established itself in the market and formed a reputation for quality. In addition it will need to have developed a network or connections with potential customers, and be constantly acquiring new contracts. Our estimation is that this would be consistent enough by year four to allow the Melt Collective to hire one full time administrative, and one full time business development employee.







In order to sustain the Melt Collective's revenue stream for a long-term time range, the company should consider implementing the following projects after the first project of producing 3 benches for UBC is fulfilled in 2018:

UBC and Other Lower Mainland Universities and Colleges: By 2019, the company may choose to add other public goods to their product mix that can be marketed to the first UBC client, and/or to one or two new clients either at other universities and colleges, or other municipalities in the Lower Mainland. Examples of such items include picnic tables, planters and lampposts.

Retail: By 2019, the company will introduce some small retail items to be sold through contracts with stores and retailers such as the UBC Bookstore, as well as introducing items to be sold online through the Melt Collective's website and an e-commerce platform. Examples of such items include iPhone/cellphone cases, clipboards, messenger bags, tote bags, wallets, jewellery (eg. necklaces, bracelets, rings), pens, mechanical pencils, skateboards/longboards, Frisbees, mugs, water bottles, notebooks, keychains and magnets.

City of Vancouver and Other Lower Mainland Municipalities: By 2020, the company will extend its reach into the City of Vancouver by selling them public goods. After this project is fulfilled, the Melt Collective can use its expanded portfolio and new business development manager hired in 2021 to market public goods to other municipalities such as the City of Burnaby and City of Richmond.

Public Art Projects: By 2020, the company will partner with local artists to sell at least 1 public art piece. The Melt Collective can approach organizations and agencies ranging from government such as the City of Vancouver to PR and media such as the Daily Hive to help put out calls for public art using recycled plastic. Other sources of public art call information channels exist such as Vancouver Biennale http://www.vancouverbiennale.com. Potential contacts to follow up on include Glenn Olav Madsen, Cultural Services Supervisor of the District of West Vancouver, Phone Number: https://westvancouver.ca/arts-culture/public-art; Karen Mills, Public Art Consultant of Public Art Management for Marine Gateway, https://www.nvrc.ca/arts-culture/public-art/public-art-calls.

Workshops and Do It Yourself (DIY) Pop-Up Stores: DIY Workshops such as the BYO Print Night that the Melt Collective has already done should be simultaneously continued as other projects are underway, and leveraged on social media to increase marketing efforts and to further create awareness of the initiative. After 2021 – 2022, the company may rent a store outside of the UBC Campus to sell its own merchandise and even bring in some machines for workshops or display/educational purposes. Or, more flexible spaces to rent for shorter periods of time across multiple locations can be found here https://thisopenspace.com.

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council





Risks & Mitigations



Risk	Risk Severity Likelihood Mitigation		Mitigation	Contingency
Production capacity is limited for supply of large scale contracts.	High	High	Start with smaller contracts first. Do thorough estimates of maximum supply capacity.	Move to a larger production facility off campus and source VC funding
Lack of new construction projects in Vancouver/ Marketing is not competitive enough to secure bids.	Medium	Medium	Marketing campaigns target cost & environmental impact of recycled plastics.	Pivot to alternatives (eg. B2C and B2B) or, Always have them as secondary markets.
Team succession is not long term.	Medium	Medium - Low	Diversify team members (eg. students, advisory board, long term UBC faculty/staff).	Long term UBC staff members/department s sign contracts, not students.

There are three main risks associated with the implementation of our recommendations. We have identified strategies to mitigate these potential risks, and contingency plans if the results of the risks end up occurring:

Limited Production Capacity: The likelihood of the Melt Collective's supply chain and production capacity not being expanded enough and therefore being a bottleneck to producing and supplying multiple larger scale items such as benches is high. This is especially the case for the short-term time range. The severity of signing a contact and then defaulting on it is high, unless terms were legally written into the contract to lessen the consequences of this. To mitigate this, we suggest that the company start with small contracts first such as our recommended 3 benches for UBC, and to perform thorough estimates of the supply chain's maximum capacity to not reach this limit. If this does end up happening, we recommend that the company have a backup larger production facility researched beforehand to move into (it could be off UBC campus), and to find funding from sources such as venture capital, grants and subsidies or small business loans such as from the Business Development Bank of Canada to fund this move.

Lack of Construction Projects and Highly Competitive Bidding: A lack of construction projects in the Lower Mainland area whether it be government sponsored or built at universities and colleges would be a barrier to fulfilling our recommendations. Another challenge is being competitive enough to secure bids against other private, for-profit companies, especially as a start-up and small business. We recommend that the Melt Collective develop strong marketing by creating an attractive portfolio of present products, presenting the proposed strategy in this report, and emphasizing their points of differentiation from their competitors. This would be using recycled plastic with good environmental benefits, the cost savings from using recycled materials, the company's ability to raise awareness of the impact and value of waste, and its novel and eye-catching designs. We also recommend that the company always produce smaller retail items and put on DIY workshops and educational classes as a secondary market to ensure that revenue is still flowing in amongst the larger public goods projects.

Lack of Long Term Team Succession: As a student run initiative with high volunteer turnover, holding volunteers accountable to fulfilling any contracts signed in the short term may be a challenge, especially if fulfilling these contracts last longer than a year. This challenge may be reduced by 2020-2021 when full time salaried workers can be hired. The Melt Collective should diversify its team members to include not only students, but also championing UBC department staff and faculty, and external advisory board members. Only UBC staff should sign off on any contracts instead of students doing so, but a strong plan and arrangements to hold students accountable to fulfilling these contracts should be created.





What does success look like?



Sales	Profitability	ROI	Customer	Labour
Revenue growth rate = (Current month's Rev- Last month's Rev) / (Last month's Rev) * 100	Gross profit margin = ([Sales Revenue – Direct Cost]/ Revenue) * 100	ROI= (Gain from investment – cost of investment)/cost of investment	Purchaser retention rate	Employee/Volunteer Turnover Rate
1.7% per year	30%	30%	20%	Keep track for hiring forecasting

Sustainability – Sustainability – Materials Use Materials Use		Social Media Social		
Avg quantity of recycled material used/unit	recycled material savings from reduction of waste disposal		Instagram Metrics (followers, likes, comments, brand mentions)	Number of posts
400 <u>lbs</u>	\$60 per ton x 400 lbs = \$12 per bench	15 – 25 % minimum	15 – 30 likes avg.	2-3 times per week

The Melt Collective should track the progress of their company using the following metrics in five categories:

Revenue: Ensuring that the company has a profitable business model and sustainable revenue stream is essential to the survival of the Melt Collective as a for-profit business. Some common metrics under this category include sales, profitability and return on investment (ROI).

- 1) Under sales, the revenue growth rate will tell you how much sales increases or decreases over time which indicates whether your business is expanding or contracting, and can be calculated as described on the above slide. According to industry average, a growth rate about 2-3% per year and according to TD Bank, an increase in sales of 1.7% is the average.
- 2) Under profitability, the gross profit margin will tell you the amount of money leftover from your revenue after you subtract the cost of goods sold. The Melt Collective should expect a total profit margin of 30% by 2020. Please see Appendix: Financial Projections for more details.
- 3) The return on investment will show you the gain or loss on an investment compared to how much money you originally invested. Here, the ROI would be for sales.

Customer: The Melt Collective should aim to retain around 20% of customers so that they make repeat purchases. This is for both individual customers who purchase smaller retail items, and also for large-scale purchasers such as government or universities. This is important for the large-scale purchasers as there are fewer of them and you may want to sell other public goods them in the future.

Labour: It is important for the company to keep track of the volunteer turnover rate and how many hands are needed to keep the organization running each year. This way the number of people you need to hire and the types of positions needed can be forecasted and prepared beforehand. The dynamic of this will change in 2020 when salaried workers begin to be hired, and metrics to evaluate performance can be added for the paid positions.

Sustainability: The average quantity of recycled material used per item can be tracked to calculate the savings from using this waste. This is also crucial for the educational component; as how much waste does Melt Collective reduce from landfills and beaches?

Impact and Visibility: Social media will be the main metrics for the short term range until concrete data can be gathered from the results of creating benches and selling more retail items. Platforms like Hootsuite can be used to keep track of social media metrics. We recommend that Melt Collective reach out to larger media platforms like the Daily Hive, the Ubyssey and other newspapers and TV shows for write-ups, mentions and appearances, and then to repost them to their own social media platforms for a larger reach.





Appendix: Sample Locations of Benches & Additional Prototype



Sample Prototype







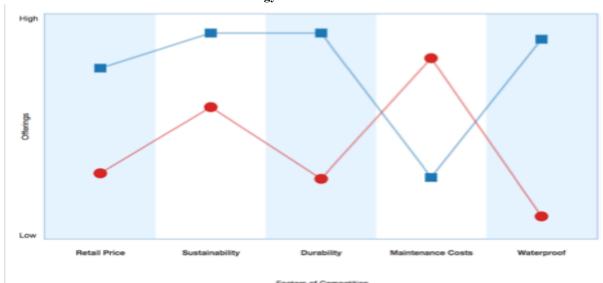


Appendix: Tools of Analysis

1. Melt Collective SWOT

Strengths 1. Sourcing plastic from UBC as it is a large campus aiming to be zero-waste	Weaknesses 1. Small amount of funding provided to the Melt Collective by UBC
Opportunities 1. As UBC produces and disposes a lot of plastic, the Melt Collective should partner with Building Operations to obtain the plastic collected within all of the recycling units to use for their products. 2. Partnerships with UBC Sustainability or AMS Grants	Threats 1. UBC has quite a few recycling initiatives already as it aims to be a zero-waste facility by 2020 so there are many student-run competitors as well as initiatives taken by the governing body of UBC.

2. Strategy Canvas: Benches



Wooden Benches Recycled Plastic Benches

3. PEST Diagram - Recycled Plastics

Political	Economic	Social	Technological
Increasing industry regulation on plastics	Increased support by federal, state, and local governments for recycling efforts	Societal demand for sustainable goods	New machinery has been built in recent years that cleans and molds plastic, saving labor costs.
Increasing federal restriction on waste produced Increasing federal regulation on recycling waste	The global recycled plastics market will expand at a compound annual growth rate of 4.31% during the period 2016-2020, according to a new report by Technavio.		





Appendix: Financial Projections

Quantities	2018	2019	2020	2021	2022
Number of projects	1	3	3	5	10
Number of benches per project	3	5	20	20	20
Number of planters per project		5	10	10	10
Number of retail items		50	250	250	500
Number of art pieces sold			1	5	10
Pricing	2018	2019	2020	2021	2022
Be nche s	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Planters	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00
Average retail item price	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00
Art Pieces	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Variable Cost of Operations	2018	2019	2020	2021	2022
Labour as % rev	0%	1%	3%	3%	3%
Raw materials as % rev	0%	3%	3%	3%	3%
Cost of product delivery as % rev	0%	3%	3%	3%	3%
Fixed Cost of Operations	2018	2019	2020	2021	2022
Salaried workers	\$ -	\$ -	\$50,000.00	\$50,000.00	\$ 50,000.00
Number of admin staff	0	0	1	1	1
Number of biz dev staff	0	0	0	1	1
Rent & Utilities	\$ -	\$ -	\$ -	\$25,000.00	\$250,000.00

Under the not-for-profit category, assumed D&A, interest income/loss, and income tax rate 0

Pro Forma Income Statement	2018	2019	2020	2021	2022
Revenue	\$ 3,000	\$ 30,000	\$ 115,500	\$ 212,500	\$ 600,000
Bench revenue	\$ 3,000	\$ 15,000	\$ 60,000	\$ 100,000	\$ 200,000
Planter revenue	\$ -	\$ 7,500	\$ 15,000	\$ 25,000	\$ 50,000
Retail revenue	\$ -	\$ 7,500	\$ 37,500	\$ 62,500	\$ 250,000
Art revenue	\$ -	\$ -	\$ 3,000	\$ 25,000	\$ 100,000
COGS	\$ -	\$ 2,100	\$ 10,395	\$ 19,125	\$ 54,000
Labour	\$ -	\$ 300	\$ 3,465	\$ 6,375	\$ 18,000
Raw materials	\$ -	\$ 900	\$ 3,465	\$ 6,375	\$ 18,000
Cost of product delivery	\$ -	\$ 900	\$ 3,465	\$ 6,375	\$ 18,000
SG&A	\$ -	\$ -	\$ 50,000	\$ 125,000	\$ 350,000
Admin salaries	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000
Biz dev salaries	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000
Rent & Utilities	\$ -	\$ -	\$ -	\$ 25,000	\$ 250,000
Gross Margin (EBITDA)	\$ 3,000	\$ 27,900	\$ 55,105	\$ 68,375	\$ 196,000
Depreciation & Amortization	\$ -	\$ -	\$ -	\$ -	\$ -
EBIT	\$ 3,000	\$ 27,900	\$ 55,105	\$ 68,375	\$ 196,000
Interest	\$ -	\$ -	\$ -	\$ -	\$ -
Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Retained Earnings	\$ 3,000	\$ 27,900	\$ 55,105	\$ 68,375	\$ 196,000
Asset Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income	\$ 3,000	\$ 27,900	\$ 55,105	\$ 68,375	\$ 196,000
Profit Margin	100%	93%	48%	32%	33%

After adjusting for salaried workers about part time labour hours in 2020, total profit margin rests at a reasonable 30%





Appendix: Key Assumptions

- 1. **Provided product and value proposition may be altered** The client current ideal profile for produced products is: an item that is produced in low quantity, and sold at a high price, made from primarily recycled materials, with a low dependency on third parties for parts. The project team may propose alternative business models and products that deviate away from the provided ideal profile if we have evidence based reasons for recommending alternative models that improve profitability, viability or sustainability.
- UBC Campus as home base Melt Collective is currently operating a student run initiative based at UBC. Therefore, our
 project team's short-term recommendations will assume limitations to resources, supply chain capacity and labour capacity
 accordingly.
- 3. **Supply chain and production has the capacity to expand** We assume that the supply chain and production capacity of Melt Collective has the potential to expand, especially if the client expands operations and stores outside of UBC.
- 4. **Option for paid labour** Labour is currently free and contributed on a volunteer basis with high rates of turnover. We assume that there is an option for staff to be paid in the future, especially if Melt Collective decides to scale up.
- 5. **Source of plastic is free** By recycling UBC's plastic, Melt Collective is saving the university money. The client does not have to pay for their main source of raw material.
- 6. **Rental space is not free** Although current rental space is subsidized by the UBC AMS, we assume that the cost of increasing space will increase as well if the client decides to expand operations.
- 7. **Financing options are not limited to sources within the university** Methods of financing may include university provided funding such as grants, but are not limited to it. The client is open to external sources of funding such as crowdsourcing and investors.
- 8. **The main recycled material is only plastic** Melt Collective is not seeking to recycle any other materials other than plastic, such as glass or metal.





Appendix: Extended Acceptance Criteria

The chosen strategy for Melt Collective will be the alternative that best meets the following criteria:

General Acceptance Criteria:

- 1. Strategic Fit most aligned to mission and values of organization
- 2. Profitability economically viable
- 3. Scalability potential and ease of scale
- 4. Sustainability environmentally viable via local production
- 5. Feasibility executable now and in the future

Product-Specific Acceptance Criteria:

- 6. Produced in low quantities, and sold at high prices
- 7. End product must be recyclable
- 8. End product must be "long-lasting"

Process Design Acceptance Criteria:

- 9. Low dependency on third parties for parts
- 10. Simplification
- 11. Not reliant on tacit knowledge

"Nice to Have" Requirements:

- 1. Creation of a "closed loop" system
- 2. Design-centric items
- 3. Of high value to students
- 4. UBC branded
- 5. Ability to sell online





Project Team

Scarlett Edwards



- Two years of experience as a Market Research Assistant for the Sauder School of Business UBC working with Dr. Darren Dahl and Dr. Kirk Kristofferson.
- Experience working in the local non-profit industry as the Online Community Engagement Coordinator for Fashioning Dreams, was later asked to become a board member and served for two years.
- Marketing Co-op Intern for Turner Construction, in charge of all proposals and marketing requirements for the Vancouver office and assisted in winning over \$60,000,000 worth of projects during the 8 month internship.

Maddie Ladner



- Experience in sales and marketing from hotel CEOs to travel agencies, including providing sales representation and event coordination for an exclusive group of international hotel and resorts
- Experience in law services and international trade business
- Strong grasp of digital marketing from experiences in branding, online presence, website, social media.

Patricia Poon



- Worked in Ethiopia and Uganda consulting for over 10 small to medium businesses, most memorably aiding in the 5-year business development direction of The Aids Support Organization (TASO).
- 2+ years experience as a project manager for a LinkedIn consulting company, with local clients such as BMO, RBC, Pan Pacific Hotels, and UBC. In particular, added \$2MM to the sales pipeline of a Vancouver- client after 1-month engagement. Participated in 2 product roll-outs including creation of delivery strategy, SOPs, training handbooks.
- Most recent experience working at Accenture in Toronto, developing AI proof of concepts for top Canadian retailers.

Trina Wang



- 3+ years of experience in event planning and management towards building the entrepreneurship ecosystem at UBC and the wider Vancouver technology start-up community. Experience in a broad range of execution functions including marketing, logistics, sponsorships and partnership/outreach.
- Worked as an academic research assistant for the Dean's Office at the Sauder School of Business at UBC, collecting data and conducting literature reviews for topics including housing price bubbles, employment and wage growth comparisons across metropolitan areas and assessing the state of BC's high tech sector.
- Gained experience in the healthcare sector, including as a volunteer pharmacist assistant under the close supervision of pharmacists and pharmacy technicians.