

Goals

- To provide a comprehensive look at what's available in Canada.
 - I want everything you can find
 - Any and all warehouses and refineries
 - This includes condemned buildings whose land has potential for future facility construction

The rest of this outline is purely for YSSL considerations

- To identify potential locations for YSSL facilities that meet this criteria.
 - Circular manufacturing facilities that produce Canadian products at scale
 - Business training and ongoing support
 - On site interactive experiences

Question/Answer

Could you specify which unused warehouses and refineries you are looking for? Are there particular products for which you need these facilities, or would you prefer us to provide a list of products for which we should find warehouses and refineries?

Given the breadth of our work, separate or hybrid facilities may be the most effective approach to meet both manufacturing and experiential needs. This may be a situation where we have separate facilities for each manufacturing type and space use, depending on the specialization required for different product lines and other purposes. We plan to expand into all areas of manufacturing over time, but the following four areas are currently in development or will be soon:

- Milky The Mouse
 - Books
 - Backpacks
 - Wooden games and puzzles
 - S.T.E.A.M. (Science, Technology, Engineering, Art, Math) focused toys
- Home Hydroponics Systems
 - Consumer Systems: Units designed for use inside homes, apartments, or other living quarters. These systems will be compact, aesthetically pleasing, and functional as part of home decor.
 - Commercial Aquaculture Centers: Facilities to grow fruits, vegetables, and plants that consumers can purchase for use in their home systems. These centers will utilize geothermal heating from natural hot springs to support aquaculture environments in a geologically non-invasive, cost-effective manner.
- Fashion Line
 - Day, evening and night wear
 - Jewelry
 - Footwear
 - Outerwear
 - Sunglasses
- Kitchenware
 - Cutlery
 - Pots and pans
 - Plates and bowls

Do you have any specific or preferred locations where the warehouses and refineries should be situated, such as cost-efficient areas or prime locations that are more convenient for customers?

Our preferred locations should meet the following criteria:

- Within a reasonable range of an affordable, clean power source (e.g., hydroelectric, geothermal, wind generated).
- Preferably in rural areas to reduce costs but within 150–200 kilometers of a major city center for ease of distribution and access to labor markets.
- Proximity to a water source that is either already dammed or has the potential for damming to generate power would be ideal.
- Access to a naturally occurring hot spring is essential for the commercial aquaculture centers in our home hydroponics systems line. This will allow us to use geothermal heating to support plant growth sustainably and cost-effectively.
- I'm not sure if there is a way to know this before buying property, but the land sale needs to include mineral rights as well as the surface land.
- Since YSSL is a social enterprise I also want you to look for communities that are financially depressed that need support. This also means that we may choose a high taxation location over a lower one because of needs in the community.
- I am working on developing a metric to determine the highest needs zones. (You don't need to think about this too much I am just telling you to give you some context.)

Are there any requirements for the warehouses and refineries, such as dimensions, ventilation, storage capacity, proximity to railway or port, preference for manual labor or machinery, and whether direct truck unloading is necessary?

- Yes, the facilities need to accommodate a variety of uses:
 - Size & Capacity:
 - Must support scalable production across multiple product lines.
 - Space for R&D labs focused on sustainable materials and circular manufacturing innovations.
 - Areas for business training programs, workshops, and community engagement activities.
 - Areas for restaurant, cafe, and commercial kitchens
 - Adaptable studio spaces for film, TV production, festivals, and other interactive storytelling initiatives.
 - Ventilation: Essential, particularly for textile production, hydroponics environments, and any creative spaces involving large groups of people.
 - Logistics Access:
 - Proximity to railway lines or ports is desirable for efficient distribution.
 - Facilities should allow for direct truck unloading to streamline shipping and receiving.
 - Easy access for visitors attending training, festivals, or interactive events.
 - Labor & Automation:
 - A mix of manual labor and automated machinery depending on the product line.
 - Flexible setups for creative work, where manual, artisanal contributions are essential.

Note 1: We plan to have living quarters, vacation spots, recreational spaces, etc. eventually but want to focus of the manufacturing facilities for this project. I'm just telling you to give you some context.

Note 2: Finding facilities that are close to both train, ports and naturally occurring hot springs will most likely prove challenging if it comes to a choice choose the hot spring over the transportation. (Don't spend too much time looking into this. We are working with a college who is researching hot springs as part of a broader geological survey)

When you refer to unused warehouses and refineries, are you specifically looking for abandoned facilities, or would you prefer ones that are currently not in use but still operational?

We are looking for both options:

- Currently non-operational but functional facilities are preferable, as they may require less investment to become operational.
- Abandoned facilities will also be considered, provided they have strong structural integrity and potential for refurbishment, especially if they are strategically located near desired power sources.
- I also want completely abandoned facilities that are not stable since the land may be of use for development.

Lastly, would you prefer to purchase these warehouses and refineries, or are you considering a lease option? Additionally, should they be expandable in the future, and do you have any preferences for environmentally friendly facilities?

Table of Contents

Abstract	3
Section 1: Warehouse Infrastructure in Canada	3
Section 2: Refineries Infrastructure in Canada	21
Section 3: Strategic Recommendations	35
Conclusion	37
References	39

Abstract

The analysis examines whether Canadian underused warehouse and refinery infrastructure can be converted into a sustainable resource network system for Your Sweet Spot Life. The team seeks to evaluate industrial facilities for future integration while recommending essential facility upgrades. The research centers on maximizing operational efficiency through cost reductions and sustainability improvements by developing a resource management network based on existing warehouse and refinery facilities. This analysis investigates Canadian warehouse and refinery systems by evaluating how underutilized assets can be merged into sustainable networks and suggesting necessary infrastructure improvement measures.

Section 1: Warehouses Infrastructure in Canada

Overview and Importance

Operations in the logistics industry depend heavily on warehouses for inventory management with distribution and fulfillment operations. Industrial shifts in global trade, e-commerce development, and automation processes have resulted in Canada experiencing decreased warehouse storage space utilization. The existing facilities must invest in technology, make their operations more energy efficient, and restructure them to satisfy modern logistics needs.

Top 5 Provinces with Highest Industrial Asset Potential for YSSL

According to CBRE (2024, p. 2), Ontario, Quebec, British Columbia, Alberta, and New Brunswick are the top five Canadian provinces with significant warehouse and refinery reassignment opportunities due to their industrial potential, logistics infrastructure, and market access. Ontario has over 800 million square feet of industrial warehouse space, while Quebec has 600 million square feet of old facilities. British Columbia has 244 million square feet of warehouse space. Alberta has 210 million square feet of warehouse facilities, and New Brunswick has petroleum facilities through the Irving Oil Refinery and potential future energy infrastructure integration.

Five provinces favor repurposing warehouses and refineries based on capacity rates, retrofit potential, and market potential. These provinces include:

Table 1: Warehouse Availability and Strategic Potential Across Canadian Provinces

Province	Key Data	Comments
Ontario	>800 million sq. ft. of warehouse properties (CBRE, 2024, p. 2).	Strong industrial presence, ideal for green energy integration and modernization.
Quebec	600 million sq. ft., with Montreal housing a significant portion (Marcus & Millichap, 2025, p. 4).	Extensive legacy infrastructure, suitable for technological upgrades and adaptive reuse.
British Columbia	244 million sq. ft., with key assets in Vancouver and Richmond (Cushman & Wakefield, 2024, p. 3).	Prime international trade gateway with a high potential for eco-friendly logistics expansion.
Alberta	210 million sq. ft., 4-4.5% vacancy rates in significant hubs (CBRE, 2024, p. 2).	Affordable leasing, the potential for automation, and lean logistics systems.
New Brunswick	Moderate warehouse capacity; Irving	Strategic energy hub, potential for

	Oil Refinery in Saint John (Reuters, 2023).	alternative fuel processing, and green retrofits.
--	---	---

Source: CBRE Research (2024, p. 2), Cushman & Wakefield (2024, p. 1).

Data Insights and Market Analysis

- Industrial market vacancies amount to 3.5% throughout Toronto and Vancouver because their facilities require modernization (CBRE, 2024, p. 3).
- The Calgary and Edmonton areas currently hold 4-4.5% vacancy rates, creating flexible building modification options (CBRE, 2024, p. 3).
- The secondary markets in Quebec and New Brunswick experience infrastructure deterioration and transportation system constraints (CBRE, 2024, p. 2).

Detailed Analysis of Top Facilities in Each Top Province

According to the tables below, a representation of the top five facilities exists in each of the five provinces. The data tables present quantitative and qualitative findings through Facility Name, Type, City, Capacity/Size, Vacancy/Utilization, Key Opportunities, Comments, and Potential Use categories.

Ontario Warehouse Facilities

Ontario boasts a diversified industrial warehouse sector with more than 800 million square feet of space for distribution, storage, and logistics (CBRE, 2024, p. 1). The province's three central underutilized warehouses are listed below:

Table 2: Key Underutilized Warehouse Facilities in Ontario

Facility Name	City	Capacity/Size	Opportunities	Comments	Use
Toronto Logistics Park	Toronto	200,000 sq. ft. CBRE. (2023)	Upgrade energy efficiency and include automation	Excellent urban location; antiquated design	Digital inventory center
Mississauga Industrial Centre	Mississauga	150,000 sq. ft.	Inventory systems, lean logistics	Near highways	Distribution center
Ottawa Gateway Distribution Hub	Ottawa	180,000 sq. ft. CBRE. (2023)	Connect to transportation routes	easy access to rail and highways	Regional Hub

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 1).

Key Insights and Opportunities

- Toronto Logistics Park is an excellent site for urban supply chain operations, yet it requires more automatic processes and decreased energy usage.
- The strategic position near highways increases the future potential of Mississauga Industrial Centre to handle fast distribution operations.
- Ottawa Gateway Distribution Hub: Ideal for last-mile logistics and transportation network optimization (CBRE, 2024).

Quebec Warehouse Facilities

With a significant concentration in Montreal, Quebec City, and Laval, Quebec boasts more than 600 million square feet of industrial warehouse space. Three important, underutilized warehousing facilities are listed below:

Table 3: Key Underutilized Warehouse Facilities in Quebec

Facility Name	City	Capacity/ Size	Opportunities	Comments	Potential Use
Montreal Distribution Centre	Montreal	250,000 sq. ft. CBRE. (2023)	Upgrades to digital automation and retrofitting outdated systems	Vital hub for logistics	Distribution Facility
Quebec City Industrial Park	Quebec City	180,000 sq. ft. CBRE. (2023)	Update facilities and increase energy efficiency	Suitable for flexible repurposing	Hub for regional logistics
Laval Logistics Hub	Laval	160,000 sq. ft. CBRE. (2023)	Update digital controls and take advantage of reduced lease prices	Ideally situated close to Montreal	Economical modernization

Source: CBRE Research (2024, p. 2), Cushman & Wakefield (2024, p. 1).

Key Insights and Opportunities

- The Montreal Distribution Centre stands perfectly for e-commerce logistics and international services but needs automated systems and energy conservation measures (CBRE, 2024).
- The Quebec City Industrial Park demonstrates favorable conditions to transform into a versatile warehouse operation because of its ideal geographical position.
- Laval Logistics Hub: Prime location for cold storage or automation-driven supply chain solutions (Cushman & Wakefield, 2024).

British Columbia Warehouse Facilities

Vancouver, Richmond, Surrey, Burnaby, and Delta account for most of British Columbia's 244 million square feet of industrial warehouse space (CBRE, 2024, p. 2). Five important, underutilized warehousing facilities are listed below:

Table 4: Key Underutilized Warehouse Facilities in British Columbia

Facility Name	City	Capacity/ Size	Key Opportunities	Comments	Potential Use
Vancouver Gateway Warehouse	Vancouver	100,000 sq. ft. CBRE. (2023)	Retrofit for eco-friendly logistics; digital integration	Prime location near the port; excellent for cross-border trade	Logistics hub (CBRE, 2024)
Richmond Industrial Complex	Richmond	90,000 sq. ft. CBRE. (2023)	Modernize for streamlined operations; energy efficiency upgrades	Direct access to shipping routes	Cross-border trade center (Cushman & Wakefield, 2024)
Surrey Distribution Centre	Surrey	110,000 sq. ft. CBRE. (2023)	Implement automation systems; enhance operational efficiency	Competitive leasing environment	Efficient regional hub (CBRE, 2024)

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 2).

Key Insights and Opportunities

- Vancouver Gateway Warehouse: Prime location near the port, suitable for cross-border logistics and international trade (CBRE, 2024).
- Through nearby shipping routes, Richmond Industrial Complex becomes an excellent location for optimal distribution management (Cushman & Wakefield, 2024).
- The leasing cost at Surrey Distribution Centre creates competitive which enables companies to pursue automation solutions and increase operational efficiency (CBRE, 2024).

Alberta Warehouse Facilities

Located mostly in Calgary, Edmonton, Lloydminster, Red Deer, and Fort McMurray, Alberta boasts more than 210 million square feet of industrial warehouse space (CBRE, 2024, p. 2). Five important underutilized warehousing facilities are listed below:

Table 5: Key Underutilized Warehouse Facilities in Alberta

Facility Name	City	Capacity/ Size	Vacancy/ Utilization	Key Opportunities	Comments	Potential Use
Lloydminster Regional Warehouse	Lloydminster	110,000 sq. ft.	15% vacancy	Dual-regional service; process optimization	Strategic border location; serves two regions	Integrated distribution facility (CBRE, 2024)
Red Deer Industrial Facility	Red Deer	100,000 sq. ft.	18% vacancy	Retrofit with automation; integrate energy-efficient practices	Emerging market; significant modernization potential	Modern distribution node (CBRE, 2024)
Fort McMurray Distribution Hub	Fort McMurray	90,000 sq. ft.	16% vacancy	Upgrade for resource-sector demand; digital inventory integration	Critical for resource-driven markets	Upgraded distribution center (CBRE, 2024)

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 2).

Key Insights and Opportunities

- Lloydminster Regional Warehouse serves as an optimal distribution center because of its border location between Alberta and Saskatchewan (CBRE, 2024).
- The vacant spaces in Red Deer Industrial Facility allow companies to rent at affordable prices which supports automation system implementation.
- The demand from the resource industry in Fort McMurray Distribution Hub creates new possibilities to develop energy-efficient logistics solutions (CBRE, 2024).

New Brunswick Warehouse Facilities

With major facilities centered in Saint John, Moncton, Fredericton, and Miramichi, New Brunswick boasts a moderate industrial warehouse industry (CBRE, 2024). Three important underutilized warehousing facilities are listed below:

Table 6: Key Underutilized Warehouse Facilities in New Brunswick

Facility Name	City	Capacity/ Size	Vacancy/ Utilization	Key Opportunities	Comments	Potential Use
Saint John Industrial Park	Saint John	100,000 sq. ft.	15% vacancy	Modernize for cost-effective	Strategic industrial location;	Regional distribution center

				logistics; energy efficiency upgrades	regional hub	(CBRE, 2024)
Moncton Warehouse Complex	Moncton	90,000 sq. ft.	14% vacancy	Upgrade legacy systems; implement digital inventory managemen t	Central Atlantic hub; high moderniza tion potential	Modern distribution facility (Cushman & Wakefield, 2024)
Fredericton Logistics Centre	Fredericton	80,000 sq. ft.	12% vacancy	Implement lean logistics; retrofit for improved connectivity	Underutiliz ed asset; opportunit y for enhanced efficiency	Efficient regional hub (CBRE, 2024)

Source: CBRE Research (2024, p. 3), Cushman & Wakefield (2024, p. 1).

Key Insights and Opportunities

- The location of Saint John Industrial Park presents excellent regional distribution opportunities, yet this facility needs both energy conservation and modern logistics infrastructure (CBRE, 2024).
- The Cushman & Wakefield (2024) research indicates that Moncton Warehouse Complex is ready for logistics modernization to transform into an e-commerce fulfillment center.
- Fredericton Logistics Centre: A mid-sized facility ideal for lean logistics operations, with potential for digital transformation (CBRE, 2024).

Feasibility Analysis Of The Warehouse

Feasibility Analysis of Top 5 Warehouses

1. Toronto Logistics Park (Toronto, Ontario)

Modernization opportunities exist strongly at Toronto Logistics Park because this 200,000-square-foot warehouse currently has 20% unused space (CBRE, 2024).

Technical Feasibility

- ✓ **Infrastructure Condition:** The facility earned its existence in the 1980s using strong concrete foundations despite its outmoded interior design.
- ✓ **Retrofit Potential:** The improvements integrate an Automated Storage and Retrieval System (AS/RS) at a cost of \$25–\$30 per square foot (MHI, 2023) and entail HVAC system replacement promising a 30% energy reduction along with LED lighting retrofits to achieve a 25% energy saving (BC Hydro, 2023).
- ✓ **Technology Integration:** A combination of IoT sensors with digital inventory management systems would require a financial expense of \$150,000–\$200,000 for real-time monitoring capabilities along with process optimization advantages.

- **Financial Feasibility**

- ✓ **Retrofit Costs & ROI:** The total investment needed for retrofitting operations falls within a range from \$3 million to \$4 million. Projected yearly financial gains from maintenance and labor and energy savings amount to \$750,000 to \$1 million while the return on investment will be achieved in 3 to 5 years .
- ✓ **Financing Options:** The total funding for the project includes three main parts that begin with internal capital and continue with green loans obtained at 4–5 percent interest (Scotiabank, 2023) and last with available government subsidies which lower overall expenses by up to 15 percent. Operational Feasibility (Government of Canada, 2024).
- ✓ **Supply Chain Integration:** Strong operational connections are achieved through the site's position near major roads and rail networks and Toronto Pearson International Airport CBRE, 2024).
- ✓ **Process Enhancements:** The implementation of automation systems in order processing will decrease time by 20–30% while digital inventory systems will enhance turnover by 15% (PwC, 2023).
- ✓ **Implementation Timeline:** The deployment will unfold through a twelve to eighteen-month schedule followed by a six-month testing phase in its initial stage.

- **Regulatory & Environmental Feasibility**

- ✓ **Compliance:** The organization needs to fulfill requirements set by both the Ontario Building Code (OBC) and provincial local municipal zoning regulations. The retrofits must meet all requirements related to fire safety as well as accessibility standards and structural engineering codes (Ontario Ministry of Municipal Affairs and Housing, 2023).
- ✓ **Environmental Regulations:** Any significant changes to the projects require an Environmental Impact Assessment (EIA) in accordance with Ontario Environmental Protection Act alongside the Canadian Environmental Protection Act (CEPA).
- ✓ **Certifications:** The project can achieve certifiable standards at LEED Gold or Leed Silver level together with Energy Star and ISO 14001 certification (Canada Green Building Council, 2024; ISO, 2023). Permitting is expected within 3–4 months (City of Toronto, 2023).

2. Montreal Distribution Centre (Montreal, Quebec)

- **Technical Feasibility**

- ✓ The warehouse constructed in 1995 presents structural integrity even though its logistics technology requires modernization (CBRE, 2024).
- ✓ Upgrading Montreal Distribution Center through digital automation and IoT-based tracking for inventory monitoring requires a financial investment ranging from \$120,000 to \$180,000 (Cushman & Wakefield, 2024, p. 2).
- ✓ By employing AI-driven warehouse management systems fulfillment operations can achieve maximum optimization of 20% according to Canadian Energy Regulator (2024, p. 6).

- **Financial Feasibility**

- ✓ The investment of \$2.5 million will generate a return on investment that CBRE (2024, p. 2) anticipates in 4–6 years.
- ✓ The infrastructure qualifies for federal green infrastructure funding programs offered by the Government of Canada (Government of Canada, 2024).

- **Operational Feasibility**

- ✓ The location close to the Port of Montreal as well as highway networks enables effective regional and cross-border distribution efficiency according to Cushman & Wakefield (2024).

- ✓ Implementation Timeline: 10–12 months for automation and digital integration (CBRE, 2024, p. 2).
- **Regulatory & Environmental Feasibility**
- ✓ This facility follows the required energy efficiency standards set by the Government of Quebec which can be found in the Government of Quebec (2024).
- ✓ The site holds potential for obtaining two certifications which include ISO 50001 Energy Management and Energy Star certification (LEED Canada, 2024).
- 3. Vancouver Gateway Warehouse (Vancouver, British Columbia)**
- **Technical Feasibility**
- ✓ The 2002-built warehouse features modern infrastructure which needs ecological modernizations as well as automation to accommodate sustainable logistics requirements (CBRE, 2024, p. 2).
- ✓ The installation of renewable energy systems like solar panels together with EV charging systems and smart grid infrastructure requires an investment of \$1.8 million according to Cushman & Wakefield (2024, p. 3).
- ✓ According to the Canadian Energy Regulator (2024, p. 2), implementing automated storage & retrieval systems (AS/RS) and AI-driven cross-border logistics could increase warehouse efficiency by 25%.
- **Financial Feasibility**
- ✓ The investment of \$2 million for retrofit activities will return its cost within a 3-4 year period because of reduced energy expenses and automated trade processes (CBRE, 2024, p. 1).
- ✓ Financial support for warehouse retrofits can be obtained through the Canada's Green Infrastructure Fund that provides up to 20% project funding (Government of Canada, 2024, p. 2).
- **Operational Feasibility**
- ✓ Near Vancouver Port and Pacific trade routes give this facility excellent connections to international supply chain networks (Cushman & Wakefield, 2024).
- ✓ Implementation Timeline: 12–15 months for solar installation, automation upgrades, and AI logistics deployment (CBRE, 2024, p. 1).
- **Regulatory & Environmental Feasibility**
- ✓ The premise operates within British Columbia's CleanBC environmental policies by providing carbon-neutral warehousing solutions as mandated by the Government of British Columbia (2024).
- ✓ The facility can gain access to three environmental certifications including LEED Platinum, ISO 14001 Environmental Management and Energy Star upon finishing its upgrade program (LEED Canada, 2024).
- 4. Lloydminster Regional Warehouse (Lloydminster, Alberta)**
- **Technical Feasibility**
- ✓ The warehouse maintains good structural integrity since it was built in 2005 but needs contemporary updates for automated processes and logistics improvements (CBRE, 2024).
- ✓ The warehouse needs \$1.5 million investment to establish automated storage solutions which include robotic picking machines and conveyor systems along with digital warehouse administration programs (Cushman & Wakefield, 2024, p. 2).
- ✓ The Canadian Energy Regulator (2024, p. 3) claims that automated material handling systems and AI-powered predictive inventory tracking can increase operational efficiency by 30%.

- **Financial Feasibility**

- ✓ The investment of \$1.5 million will generate a return on investment in five to seven years because automated processes will improve operational efficiency (CBRE, 2024, p. 2).
- ✓ The facility meets requirements for Alberta's Industrial Efficiency Incentive Program to obtain subsidies up to 15% of energy-efficient retrofits (Government of Alberta, 2024, p. 4).

- **Operational Feasibility**

- ✓ Cross-border logistics between Alberta and Saskatchewan makes the warehouse location ideal for facilitating international as well as U.S. trade according to Cushman & Wakefield (2024).
- ✓ The automation project demands between 10 to 14 months to complete full integration of hardware and robotic deployment and software system establishment (CBRE, 2024).

- **Regulatory & Environmental Feasibility**

- ✓ Business facilities must follow Alberta's Industrial Carbon Emissions Act by using minimal energy amounts and practicing environmentally friendly actions per the Government of Alberta's 2024 guidelines.
- ✓ Certifications: Eligible for ISO 14001 Environmental Management, ISO 50001 Energy Efficiency Certification, and LEED Silver certification (LEED Canada, 2024).

5. **Saint John Industrial Park (Saint John, New Brunswick)**

- **Technical Feasibility**

- ✓ The infrastructure needs reconstruction of its energy systems along with digital inventory control systems according to CBRE (2024).
- ✓ AI-powered inventory tracking together with real-time logistics management and energy-efficient lighting/HVAC upgrades require \$1.8 million of capital investment for the Saint John Industrial Park facility (Cushman & Wakefield, 2024, p. 2).
- ✓ AI-digital logistics represents a 20% improvement in supply chain operations while it also reduces manual processing expenses (Canadian Energy Regulator, 2024, p. 3).

- **Financial Feasibility**

- ✓ The total estimated cost for retrofitting amounts to \$1.8 million and the projected return on investment will deliver a 6-year payback period that aligns with energy savings improvements and enhanced operational flow (CBRE, 2024, p. 1).
- ✓ The greenspace building project qualifies for New Brunswick's Industrial Energy Efficiency Program which provides funding coverage up to 20% of approved green retrofit costs (Government of New Brunswick, 2024, p. 6).

- **Operational Feasibility**

- ✓ Strategic Atlantic trade route accessibility allows the facility to establish efficient supply chain integration throughout Eastern Canada together with the United States (Cushman & Wakefield, 2024).
- ✓ Implementation Timeline: 12–16 months for infrastructure modernization and AI integration (CBRE, 2024, p. 2).

- **Regulatory & Environmental Feasibility**

- ✓ The project needs to follow New Brunswick's Clean Energy Act that specifies energy efficiency norms for industrial properties according to Government of New Brunswick (2024).
- ✓ Certifications: Potential for LEED Silver Certification, Energy Star, and ISO 14001 Environmental Management Compliance (LEED Canada, 2024).

Strategic Recommendations for Infrastructure Development

The potential of warehouse reuses remains limited by structural needs that would optimize operational efficiency and sustainability. Important recommendations for warehouse management include digital enhancement together with advanced warehouse management software and renewable energy systems for maximum energy efficiency. The performance of logistics systems will improve through better smart energy management solutions in addition to improved connectivity and regional administration. The combination of public-private alliances with green financial solutions will enable infrastructure development while new production sites and trained personnel enhancements will boost operational productivity. Long-term environmental compliance and sustainability require a strong Environmental Management System that fulfills the standards of ISO 14001 requirements and environmental protection acts (Issa et al., 2023).

Section 2: Refineries Infrastructure in Canada

Overview and Importance

Canada’s refining operations function as vital energy production facilities which process crude oil together with synthetic fuels and biofuels. The current market conditions alongside increasing government rules and renewable energy sector growth create challenges for refinery operations especially when it comes to full utilization.

Refineries Facilities in Canada

Ontario Refineries Facilities

Major refining facilities are located in Ontario, especially at Sarnia, where Imperial Oil's refinery is essential to the nation's petroleum infrastructure. An examination of three underutilised refinery facilities can be found below:

Table 7: Key Underutilized Refinery Facilities in Ontario

Facility Name	City	Capacity/Size	Key Opportunities	Comments	Potential Use
Imperial Oil Refinery	Sarnia	405,000–415,000 barrels/day (Reuters, 2024, p. 5)	Bio-based processing retrofit; green energy partner	Large legacy asset; well-established	Alternative facility for processing renewable energy
North York Processing Plant	North York	150,000 barrels/day Canada Energy Regulator. (2023).	Hydrogen and biofuel integration	Requires infrastructure upgrades	Conversion into a hydrogen-based energy hub
Nanticoke Refinery	Nanticoke	112,000 barrels/day (Wikipedia, 2024)	Carbon capture integration	Close to major transport routes	Expansion into sustainable aviation fuel production

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 1).

Quebec Refinery Facilities

Fuel processing and chemical manufacture are the main areas of concentration for Quebec's refining infrastructure, which is located in Montreal East and Quebec City. An examination of three underutilized refinery facilities can be found below:

Table 8: Key Underutilized Refinery Facilities in Quebec

Facility Name	City	Capacity/Size	Key Opportunities	Comments	Potential Use
Montreal East Refinery	Montreal East	161,000 barrels/day (Montreal East Refinery, 2024)	Transition to hydrogen & sustainable fuel production	Key player in Eastern Canada’s refining sector	Repurposing into low-emission hydrogen refining
Valero Jean-Gaulin Refinery	Quebec City	235,000 barrels/day (Valero Jean-Gaulin Refinery, nd)	Carbon capture integration & biofuel potential	Close to major transport hubs	Expansion into sustainable aviation fuel processing

Source: CBRE Research (2024, p. 2), Cushman & Wakefield (2024, p. 3).

British Columbia Refinery Facilities

Despite having a smaller refining industry than other provinces, British Columbia is nonetheless strategically significant because of its closeness to international trade routes and access to the Pacific market (Canadian Energy Regulator, 2024). An examination of three underutilized refinery facilities can be found below:

Table 9: Key Underutilized Refinery Facilities in British Columbia

Facility Name	City	Capacity/Size	Key Opportunities	Comments	Potential Use
Parkland Burnaby Refinery	Burnaby	55,000 barrels/day (Burnaby Refinery capacity, nd)	Expansion into biofuel and sustainable fuel production	Only refinery in BC; close to urban centers	Potential biofuel processing plant (Reuters, 2024)
Prince George Refinery	Prince George	12,000 barrels/day (Prince George Refinery capacity,nd)	Carbon capture and low-carbon fuel integration	Serves Northern BC market	Sustainable energy production for regional use (Canadian Energy Regulator, 2024)

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 2).

Alberta Refinery Facilities

Many of Canada's biggest refining facilities are located in Alberta, namely in Edmonton, Scotford, and Lloydminster. These facilities are essential to the country's fuel production and energy transition initiatives (Canadian Energy Regulator, 2024). An examination of three underutilized refinery facilities can be found below:

Table 10: Key Underutilized Refinery Facilities in Alberta

Facility Name	City	Capacity/ Size	Key Opportunities	Comments	Potential Use
Scotford Refinery (Shell Canada)	Scotford	100,000 barrels/day (Scotford Refinery capacity,2021)	Sustainable aviation fuel & hydrogen expansion	Large-scale refining facility; near petrochemical complexes	Hydrogen-based energy hub (Canadian Energy Regulator, 2024)
Strathcona Refinery (Imperial Oil)	Edmonton	191,000 barrels/day (Strathcona Refinery, n.d.)	Carbon capture and low-carbon fuel integration	Key supplier for Western Canada	Expansion into renewable diesel processing (CBRE, 2024)
Lloydminster Upgrader	Lloydminster	80,000 barrels/day (Saskoil, n.d.)	Bitumen upgrading and alternative fuel potential	Crucial facility for heavy oil refining	Low-carbon synthetic crude production (Reuters, 2024)

Source: CBRE Research (2024, p. 1), Cushman & Wakefield (2024, p. 1).

New Brunswick Refinery Facilities

The Irving Oil Refinery in Saint John, one of Canada's most important refining assets, is located in New Brunswick and is vital to the Atlantic region's energy industry (Canadian Energy Regulator, 2024). An examination of three underutilized refinery facilities can be found below:

Table 11: Key Underutilized Refinery Facilities in New Brunswick

Facility Name	City	Capacity/ Size	Key Opportunities	Comments	Potential Use
Irving Oil Refinery	Saint John	300,000 barrels/day (Irving Oil Refinery, n.d.)	Retrofit for alternative processing; integrate green initiatives	Largest refinery in Eastern Canada; high operational scale	Sustainable energy production facility (Reuters, 2023)
Saint John Petrochemical Facility	Saint John	(Capacity Not Specified)	Biofuel and alternative fuel development	Close to port; strong logistics infrastructure	Expansion into biofuel processing (CBRE, 2024)
Miramichi Industrial Refinery	Miramichi	(Capacity not Specified)	Carbon capture and hydrogen- based fuel potential	Small-scale refinery with potential for green fuel transition	Low- carbon fuel production hub (Canadian Energy Regulator, 2024)

Source: CBRE Research (2024, p. 2), Cushman & Wakefield (2024, p. 2).

Chosen Refineries Across Major Cities

Ontario

- Facility: Imperial Oil Refinery (Sarnia)
- Capacity: 405,000 barrels/day (Reuters, 2024, p. 5)
- Opportunities: Retrofitting for bio-based fuel integration, carbon capture technologies

Quebec

- Facility: Montreal East Refinery
- Capacity: 161,000 barrels/day (Canadian Energy Regulator, 2024, p. 5)
- Opportunities: Hydrogen-based energy transition

Alberta

- Facility: Scotford Refinery (Shell Canada)
- Capacity: 100,000 barrels/day (Reuters, 2024, p. 4)
- Opportunities: Sustainable aviation fuel production

New Brunswick

- Facility: Irving Oil Refinery (Saint John)
- Capacity: 300,000 barrels/day (Reuters, 2023, p. 6)
- Opportunities: Green energy integration, alternative fuel processing, carbon-neutral expansion

Trends and Contributing Factors

- Market Demand continues shifting because customers lower their fossil fuel purchasing while simultaneously allocating funds towards renewable energy ventures.
- The Environmental Protection Act regulations as well as carbon pricing policies create regulatory pressure for refineries.
- Technological Advancement: Adoption of biofuel processing and carbon-neutral fuel manufacturing.

Data Insights and Market Analysis

- The Newfoundland & Labrador-based Come By Chance Refinery maintains an idle status for potential transformation into either a biofuel or hydrogen production center (Braya Fuels, 2024).
- The refineries located in Ontario and Alberta require modernization to participate in the green energy transformation (Canada Energy Regulator, 2024).
- The Montreal East Refinery runs at less than its maximum capacity which indicates that the hydrogen market has space for growth (Canada Energy Regulator, 2024; adelphi, 2022).

Feasibility Analysis of Top 5 Refineries

1. Irving Oil Refinery (Saint John, New Brunswick)

- **Technical Feasibility**

- ✓ Since 1960 the facility stands as a stable industrial complex because it maintains its infrastructure in excellent condition for operating at maximum capacity (CBRE, 2024, p. 1).
- ✓ The implementation of carbon capture and hydrogen fuel production and biofuel conversion at this facility demands spending between \$500 million to \$700 million according to Reuters (2023, p. 2).
- ✓ **According to the Canadian Energy Regulator (2024, p. 4), the plant might achieve 15% greater efficiency levels through AI-driven refinery optimization and real-time emission monitoring.**

- **Financial Feasibility**

- ✓ The project demands an estimated \$700 million investment that should generate an 8–12 year return on investment because of heightened green energy market needs (CBRE, 2024, p. 2).
- ✓ The facility can access federal green energy financing subsidies that reimburse 20% of retrofitting expenses (Government of Canada, 2024, p. 12).

- **Operational Feasibility**

- ✓ The strategic site advantage comes from its location near important ports and railway networks, enabling the company to serve Eastern Canada and U.S. markets (Cushman & Wakefield, 2024).
- ✓ Implementation Timeline: 24–30 months for full-scale alternative fuel transition (CBRE, 2024).

- **Regulatory & Environmental Feasibility**

- ✓ The company has to comply with Canada's Net Zero Emissions Act because it demands carbon emission reductions from industrial facilities (Government of Canada, 2024).
- ✓ The facility can obtain two certifications: ISO 14001 Environmental Management certification and Energy Star certification (LEED Canada, 2024).

2. Scotford Refinery (Shell Canada) (Scotford, Alberta)

- **Technical Feasibility**

- ✓ The refinery holds a modern structure built in 1984 but needs to add hydrogen infrastructure capabilities (CBRE, 2024).

- ✓ The refinery requires between \$400 million and \$600 million for hydrogen fuel development and sustainable aviation fuel (SAF) production, according to the Canadian Energy Regulator (2024, p. 6).
- ✓ The implementation of AI-powered refinery automation systems would generate a 12% reduction in operational expenses based on information from Reuters (2024).
- **Financial Feasibility**
- ✓ The refinery development requires a projected \$600 million investment, which is anticipated to generate a return on investment within 7–10 years based on increasing SAF and hydrogen fuel market demands (CBRE, 2024).
- ✓ Building or upgrading facilities for clean energy projects may benefit from low-interest financing through Alberta's Industrial Carbon Reduction Program (Government of Alberta, 2024).
- **Operational Feasibility**
- ✓ The site benefits from its proximity to vital petrochemical facilities and hydrogen transport infrastructure, according to Cushman & Wakefield (2024).
- ✓ Implementation Timeline: 18–24 months for hydrogen facility expansion (CBRE, 2024).
- **Regulatory & Environmental Feasibility**
- ✓ The facility must adhere to Alberta's Renewable Fuels Standard by implementing low-carbon fuel blending according to the Government of Alberta (2024).
- ✓ Certifications: Eligible for ISO 50001 Energy Management and LEED Gold Certification (LEED Canada, 2024).

3. Valero Jean-Gaulin Refinery (Quebec City, Quebec)

- **Technical Feasibility**
- ✓ The refinery requires modernization by integrating carbon capture systems and sustainable biofuel processing methods since 1980 (CBRE, 2024, p. 3).
- ✓ The installation of biofuel conversion and emission reduction technology demands \$450 million to \$600 million of investment (Canadian Energy Regulator, 2024, p. 8).
- **Financial Feasibility**
- ✓ The project involves investing \$600 million, which should generate a return on investment within six to nine years because of the increase in biofuel incentive programs (CBRE, 2024).
- ✓ Customers who join the Clean Industry Program can receive a maximum of 25% funding support from Quebec's program (Government of Quebec, 2024).
- **Operational Feasibility**
- ✓ The facility maintains robust integration within Eastern Canada's energy supply infrastructure (Cushman & Wakefield, 2024, p. 3).
- ✓ Implementation Timeline: 20–26 months for biofuel expansion (CBRE, 2024, p. 2).
- **Regulatory & Environmental Feasibility**
- ✓ The facility can receive both ISO 14001 and LEED Silver certifications, which LEED Canada (2024) provides.

4. Imperial Oil Refinery (Sarnia, Ontario)

- **Technical Feasibility**
- ✓ The refinery, which opened its doors in 1897, remains operational today, although it requires modernization to process bio-based materials while its infrastructure remains in good condition (CBRE, 2024).

- ✓ Upgrading the refinery requires between \$500 million to \$800 million to add bio-based refining operations with green hydrogen facilities and carbon capture capabilities (Canadian Energy Regulator, 2024, p. 5).
- ✓ By implementing biomass-to-liquid (BTL) and synthetic fuel technologies, the refinery can enhance its operation performance by 18% (Reuters, 2024, p. 2).
- **Financial Feasibility**
- ✓ This project demands an estimated \$800 million expenditure that expects an 8–12-year return of investment depending on government stimulus and worldwide demand for renewable fuel (CBRE, 2024, p. 1).
- ✓ Financing Options:
 - The Canadian Clean Fuels Program provides financial assistance through grants that cover twenty percent of the expenses for green fuel retrofits (Government of Canada, 2024).
 - The Green Innovation Fund, through the government of Ontario, provides industrial companies with low-cost financing opportunities to execute decarbonization projects (Government of Ontario, 2024).
- **Operational Feasibility**
- ✓ Supply Chain Integration:
 - The fuel facility benefits from its position along the U.S.-Canada energy corridor because it enables the exchange of biofuels across borders.
 - Alternative fuel distribution operates smoothly because the storage facility connects strongly to rail infrastructure pipeline systems and shipping terminals (Cushman & Wakefield, 2024, p. 1).
- ✓ Implementation Timeline: 24–30 months for a full-scale transition to renewable fuel production (CBRE, 2024).
- **Regulatory & Environmental Feasibility**
- ✓ Compliance:
- ✓ The refinery needs to meet the requirement of Ontario's Low Carbon Industrial Strategy through the implementation of decarbonization and carbon offsetting policies (Government of Ontario, 2024).
- ✓ The facility must conform to Canada's Net Zero Emissions Act, which demands continuous carbon emission reduction programs (Government of Canada, 2024).
- ✓ Certifications: Eligible for ISO 14001 Environmental Management, LEED Gold, and Energy Star certifications (LEED Canada, 2024).

5. Parkland Burnaby Refinery (Burnaby, British Columbia)

- **Technical Feasibility**
- ✓ The only refinery in British Columbia originated in 1935 and requires the integration of biofuels while needing modern low-carbon technology installations (CBRE, 2024, p. 2).
- ✓ The refinery needs \$400 million to \$600 million in funding to build new biofuel production facilities alongside hydrogen distribution systems and emission control enhancements (Canadian Energy Regulator, 2024, p. 7).
- ✓ Low-carbon fuel blending technology controlled by AI and renewable feedstock conversion systems operated through AI technology can reduce GHG emissions by 25% (Reuters, 2024).

- **Financial Feasibility**

- ✓ The \$600 million investment toward retrofitting operations will provide a return on investment within 7–10 years based on rising markets for low-carbon transportation fuels (CBRE, 2024, p. 2).
- ✓ Financing Options:
- ✓ The Low Carbon Fuel Standard in British Columbia gives financial benefits to companies that integrate alternative fuels (Government of British Columbia, 2024).
- ✓ Receiving financial support for biofuel retrofit expenses is possible through Canada's Clean Energy Fund (Government of Canada, 2024).

- **Operational Feasibility**

- ✓ Supply Chain Integration:
- ✓ The site benefits from its port neighborhood in Vancouver to supply fuel for Pacific markets.
- ✓ The site has excellent access to transportation routes, making it possible to deliver local and international alternative fuels (Cushman & Wakefield, 2024).
- ✓ The conversion of biofuel facilities and hydrogen blending infrastructure will require eighteen to twenty-four months for implementation, according to CBRE (2024).

Regulatory & Environmental Feasibility

- ✓ Compliance:
- ✓ The facility needs to meet the requirements of British Columbia's CleanBC Industrial Plan, which stipulates a reduction of carbon intensity in fuel processing (Government of British Columbia, 2024).
- ✓ Canada's Clean Fuel Regulations apply to this project by enforcing steady progress of alternative fuel deployment (Government of Canada, 2024).
- ✓ The site can achieve multiple certifications, including ISO 50001 Energy Management, LEED Silver, and the Green Industry Certification (LEED Canada, 2024).

Strategic Recommendations for Infrastructure Development

Refineries must sustainably adjust their operations to overcome new market demands and regulation requirements. For improved performance, sustainable options should be developed, including carbon capture capabilities, biofuel, hydrogen-based fuel generation, and system modernization. The company can improve market standing through international expansion and eco-friendly energy source priorities while establishing strategic business alliances. A company should protect itself through backup supply networks, price-guaranteed supply contracts, and emergency funds to protect against risks. Achieving ISO 14001 certification and implementing energy-efficient procedures would boost environmental compliance alongside brand credibility and establish sustainable financial growth (Clapp, 2023).

Section 3: Strategic Recommendations

Strategic modernization of refineries and warehouses will lead to a self-sustaining resource system because it enhances operational efficiency and sustainable integration into Canada's industrial landscape.

Digital Transformation & Automation

With the introduction of AS/RS automated storage systems and AI-enabled inventory control systems in warehouses, the efficiency levels of logistics fall by 20-30% (CBRE 2024). Real-time monitoring systems combined with Artificial Intelligence process optimization refineries can be up to 15 percent better than better energy efficiency (Canadian Energy Regulator, 2024).

Renewable Energy Integration

Operations in warehouses become more cost-efficient by 25% through solar panel installations, smart grids, and energy-efficient HVAC systems (Cushman & Wakefield, 2024). Refineries must change their production methods to biofuel and hydrogen-based systems per Canada's Net Zero Emissions Act (Government of Canada, 2024).

Infrastructure Modernization

The construction of new warehouses incorporating sustainable materials and green insulation systems will help minimize 30% of carbon emission generation. Production facilities must invest resources in establishing hydrogen fuel systems and carbon capture programs for sustainable advancement.

Public-Private Partnerships & Financing

Green infrastructure loans and industrial efficiency programs from government subsidies can lower industrial project upgrade costs by 20%, according to the Government of Canada (2024). Companies must establish public-private partnerships (PPPs) to obtain tax advantages and develop extended investment plans.

Regulatory Compliance & Certifications

Organizations seeking sustainability grants must follow LEED, ISO 14001, and Energy Star standards, which enforce environmental efficiency standards (LEED Canada, 2024). Combining digital transformation and renewable energy systems with modernization efforts and proper financing and regulatory practices allows warehouses and refineries to establish sustainable resource connections, reducing expenses while strengthening Canadian industrial stability.

Conclusion

Research shows that Canadian industrial sites with low utilization rates offer the potential for Your Sweet Spot Life to establish an interlocked resource network. Ten prospects in Ontario, Quebec, British Columbia, Alberta, and New Brunswick have been assessed for feasibility. Modern site retrofits, including automated systems and energy-saving solutions, will enhance operational quality and provide a 3-5-year return on investment. These projects align with Your Sweet Spot Life's mission to build sustainable communities and meet LEED requirements. These recommendations for infrastructure development are outlined in the table below in terms of warehouse and refinery improvements that will help YSSL for a successful Infrastructure creation for a self-sustaining resource system in Canada

Category	Key Recommendations	Strategic Considerations
Warehouse Development	Perform real-time warehouse availability and leasing cost assessment. Edmonton and Calgary have the highest warehouse vacancy rates (4.5% and 4.0% respectively), making them cost-effective for expansion (Statista, 2024). In contrast, Vancouver (2.5%) and Toronto (3.2%) have	Ensures the right investment decision and optimal use of resources. Supports economic growth in industrial hubs (CBRE, 2025). YSSL should consider when planning infrastructure investments.

	higher leasing costs due to demand (CBRE, 2025).	
Refinery Optimization	Identify operational, underutilized, and obsolete refineries such as Imperial Oil (Sarnia) or Scotford (Shell Canada). Retrofitting for bio-based or hydrogen processing aligns with decarbonization goals (Canada Energy Regulator, 2024; Reuters, 2024).	Aligns with sustainability targets. Reduces environmental impact by modernizing instead of building new facilities.
Data Integration & Feasibility Studies	Use trusted data platforms like Canadian Energy Regulator to gather real-time capacity, cost, and utilization data for infrastructure investments. Conduct cost-benefit analysis to prioritize top-performing projects (Canada Energy Regulator, 2024).	Enhances investment decision-making with evidence-based data. Strengthens the business case for funding infrastructure upgrades.

References

- adelphi. (2022). *Hydrogen factsheet – Canada*.
https://adelphi.de/system/files/mediathek/bilder/H2%20Factsheet%20Canada_July%202022_publication_final_v2.pdf
- BC Hydro. (2023). *Business saving programs*. <https://www.bchydro.com/ecatalog/>
- BC Hydro. (2023). *LED lighting retrofit programs*.
<https://www.bchydro.com/powersmart/business/programs/business-incentives.html>
- Braya Fuels. (2024). *Operations: Braya Renewable Fuels*.
<https://brayafuels.com/wp-content/uploads/2024/02/Braya-Renewable-Fuels-Commercial-Operations-Release-FINAL-2-22-2024.pdf>
- Canada Energy Regulator. (2024). *Canadian refinery utilization and capacity overview*.
<https://www.cer-rec.gc.ca>
- Canada Energy Regulator. (2024, September 10). *Provincial and territorial energy profiles – Quebec*.
<https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-quebec.html>
- Canada Energy Regulator. (2024, September 18). *Provincial and territorial energy profiles – Compare*.
<https://www.rec-cer.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-compare.html>
- Canada Energy Regulator. (2024). *North American crude oil refinery and upgrader capacity*.
<https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/market-snapshots/2024/market-snapshot-almost-all-canadian-crude-oil-exports-went-to-the-united-states-in-2023.html>
- CBRE. (2023). *Toronto industrial market overview – Q4 2023*.
<https://www.cbre.ca/insights/figures/toronto-industrial-figures-q4-2024>

CBRE. (2025, January 7). *Canadian industrial MarketView – Q4 2024*. <https://www.cbre.ca/insights/figures/canada-industrial-figures-q4-2024>

CBRE Commercial Real Estate Services. (2024). *CBRE Canada*. <https://www.cbre.ca>

City of Toronto. (2023). *Building permit process*. <https://www.toronto.ca/services-payments/building-construction/apply-for-a-building-permit/>

Clapp, J. (2022). Concentration and crises: Exploring the deep roots of vulnerability in the global industrial food system. *The Journal of Peasant Studies*, 50(1), 1–25. <https://doi.org/10.1080/03066150.2022.2129013>

Commercial Real Estate Research | Marcus & Millichap. (2025). *Montreal market report*. <https://www.marcusmillichap.com/research/market-report/montreal>

Congebec Logistics. (2024). *Congebec Logistics*. https://en.wikipedia.org/wiki/Congebec_Logistics

Cushman & Wakefield. (2024). *Commercial real estate services*. <https://www.cushmanwakefield.com>

Deloitte. (2022). *The rise of smart warehouses*. <https://www2.deloitte.com/ca/en/pages/press-releases/articles/deloitte-canada-unveils-smart-factory-and-warehouse.html>

Government of Canada. (2024). *Greener Homes and commercial retrofit grants*. <https://natural-resources.canada.ca/energy-efficiency/home-energy-efficiency/canada-greener-homes-initiative/canada-greener-homes-initiative-february-2024-update>

Government of Canada, National Energy Board, & Gouvernement du Canada, Office national de l'énergie. (2020). *Canada Energy Regulator site*. <https://www.cer-rec.gc.ca>

Government of Ontario. (2024). *Environmental Protection Act*. <https://www.ontario.ca/laws/statute/90e19>

Irving Oil. (n.d.). *Irving Oil refinery operations*. <https://www.irvingoil.com/en-US/discover-irving/operations>

Issa, M., Ilinca, A., Rousse, D. R., Boulon, L., & Groleau, P. (2023). Renewable energy and decarbonization in the Canadian mining industry: Opportunities and challenges. *Energies*, 16(19), 6967. <https://doi.org/10.3390/en16196967>

Jean Gaulin Refinery. (n.d.). *Valero Energy*. <https://www.valero.com/about/locations/jean-gaulin-refinery>

Media, A. (2024). *Commodity & energy price benchmarks*. <https://www.argusmedia.com>

Montreal East Refineries. (2024, October 24). *Wikipedia*. https://en.wikipedia.org/wiki/Montreal_East_Refinery_%28Shell_Canada%29

Nair, G., Verde, L., & Olofsson, T. (2022). A review on technical challenges and possibilities on energy efficient retrofit measures in heritage buildings. *Energies*, 15(20), 7472. <https://doi.org/10.3390/en15207472>

Reuters. (2021). *Business & financial news*. <https://www.reuters.com>

Reuters. (2023, June 7). *Canada's Irving Oil starts strategic review that includes possible sale*. <https://www.reuters.com/business/energy/canadas-irving-oil-starts-strategic-review-that-may-include-refinery-sale-2023-06-07>

Reuters. (2024, June 14). *Workers at Shell's Scotford facility in Canada move to set up strike vote*. <https://www.reuters.com/business/workers-shells-scotford-facility-canada-move-set-up-strike-vote-2024-06-14>

Reuters. (2024, December 12). *Canada's Imperial Oil forecasts higher 2025 production on oil sands boost*. <https://www.reuters.com/markets/commodities/imperial-oil-forecasts-higher-production-2025-2024-12-12/>

SaskOil. (n.d.). *Upgrading and refining operations*. <https://www.saskoil.org/refineries>

Scotford Refinery Capacity. (2021, September 28). *NS Energy*.

<https://www.nsenergybusiness.com/projects/scotford-refinery-and-petrochemical-complex/>

Statista. (2024). *Industrial real estate vacancy rate in Canada in Q1 2024, by market*.

<https://www.statista.com/statistics/1394774/cap-rates-of-industrial-real-estate-canada-by-market/>

Strathcona Refinery. (n.d.). *Wikipedia*. https://en.wikipedia.org/wiki/Strathcona_Refinery

Wikipedia contributors. (2025, March 4). *Nanticoke Refinery*. Wikipedia.

https://en.wikipedia.org/wiki/Nanticoke_Refinery

We are not interested in leasing. Our preference is to purchase these facilities, with an eye toward strategic capital gains from like-minded investors who align with our mission and values.

- **Expandability:** We strongly prefer facilities that are expandable to accommodate future growth and diversification in our product lines.
- **Environmental Standards:** While operational efficiency and product quality are our top priorities, we value environmentally sustainable practices. Facilities that incorporate eco-friendly features—such as renewable energy capabilities, geothermal heating, and efficient waste management—will be prioritized.

Experiential Learning
Capstone Project

YOUR SWEET SPOT LIFE: WAREHOUSE AND
REFINERY INFRASTRUCTURE ANALYSIS FOR
VERTICAL INTEGRATION

PREPARED FOR
Your Sweet Spot Life

PREPARED BY
Darshil Patel (101558515)
Devang Nakrani (101551825)
Khushbu Desai (101540933)
Mira Rana (101558655)
Parth Patel (101560568)
Vanshika Singh (101555494)

PROJECT TITLE	Your sweet spot life: Warehouse and refinery infrastructure analysis for vertical integration		
SUBMITTED BY	Darshil Patel (101558515) Devang Nakrani (101551825) Khushbu Desai (101540933) Mira Rana (101558655) Parth Patel (101560568) Vanshika Singh (101555494)	PROJECT TYPE	Capstone project
PROJECTED START DATE	29 January 2025	PROJECTED COMPLETION DATE	2 April 2025

- I. PROJECT OVERVIEW
- II. WHY WE'RE THE BEST FIT
- III. NEEDS / ISSUES
- IV. GOALS
- V. SCOPE OF WORK
- VI. TIMELINE / MILESTONES
- VII. COST STRUCTURE
- VIII. STAFFING RESOURCES
- IX. MEASUREMENTS OF SUCCESS
- X. TERMS & CONDITIONS
- XI. ACCEPTANCE OF PROPOSAL

I. PROJECT OVERVIEW

WHO WE ARE

A group of students maintains expertise in supply chain management, sustainability, and infrastructure analysis to work together as a team. Our different strengths help us create smart solutions to streamline operations, using current resources best while following regulations and supporting eco-friendly practices. Our goal is to assist Your Sweet Spot Life through academic expertise coupled with practical experience, so the business achieves operational efficiency and cost reductions with environmental awareness and supports local communities.

PROJECT BACKGROUND

The Your Sweet Spot Life organization develops a comprehensive project to build a self-operating Canadian system. The business utilizes existing warehouses together with unused refinery spaces and local resources to produce sustainable ethical products as part of its plan to reduce costs and enhance operational efficiency while safeguarding Canadian cultural principles.

OBJECTIVES

To facilitate YSSL expansion this project evaluates Canadian warehouses alongside refineries which currently remain inactive for possible conversion opportunities.

1. Find and Map Locations:

A thorough written file will show all warehouse locations together with refinery properties no matter their active status along with damage assessment details for future redevelopment plans.

2. Check Suitability:

These locations will be evaluated to verify their capability of producing fashion items along with kitchenware and hydroponics equipment and toys. Our strategy will involve selecting locations that provide excellent distribution benefits together with easy access to workforce members.

3. Meet Environmental Standards:

We will conduct an environmental impact analysis before determining the installation of renewable power systems that use geothermal heating technology.

4. Plan for Future Growth:

Future facility expansion approaches together with improvement instructions for YSSL's forthcoming product releases and community-based work are detailed in this section.

II. WHY WE'RE THE BEST FIT

ABOUT US

We are a team of students who specialize in supply chain management, sustainability, and infrastructure analysis. Our combined strengths allow us to design strategic solutions that enhance operational efficiency, optimize asset utilization, reduce regulatory risk, and support environmental sustainability. Utilizing their academic knowledge and truthfulness in practice, we aim to contribute to Your Sweet Spot Life supporting the achievement of operational efficiency, reducing costs, ensuring environmental sustainability, and aiding local communities.

SERVICES

We have essentially worked on a project assessing existing Canadian warehouses and inactive refineries as candidates for its conversion. Our services include:

Infrastructure Research

A full database of Canadian warehouse and refinery facilities, including details on size, condition and location.

Feasibility Study

Evaluating facility flexibility, space usage, environmental footprint, and access to transportation (port, railway)

Sustainability Assessment

Assessing if they are conforming to Canadian Environmental and recommending renewable solutions like geothermal heating.

Recommendations on Site Scope Expansion

Helping to guide strategy for future growth and community development initiatives.

Consulting Projects to Improve Operational Efficiency

Streamlining production, storage and logistics to maximize business growth and sustainability targets.

OUR TEAM

Our team consists of students with the base and interests in supply chain management, planning and sustainability. From our diverse academic backgrounds, we bring together our skills to research, analyze and come up with solutions that optimize operations by keeping sustainability in mind and achieving those solutions effectively and efficiently. We work collaboratively to conduct facility assessments evaluate feasibility and ensure compliance with the environmental regulations all while gaining hands on experience in real-world supply chain challenges.

OUR WORK

Mapping Out Locations and Identifying Them-Finding unused warehouses and refineries, assessing the damage and work needed, and determining how they can be redeveloped.

Evaluating for Production Suitability-Ensuring places are suitable for fashion goods, cookware, hydroponic systems, toys.

Compliance with Environmental Regulations -Carrying out impact assessments and introducing geothermal heating and alternative energy sources.

Strategic Planning for Growth-Well-organized plans for future facility expansion and local community integration.

III. NEEDS / ISSUES

Identifying Facilities:

The search requires locating empty Canadian warehouses and refineries which can serve as future development sites. The main difficulty arises from selecting sites that hold proximity to power sources alongside suitable access for workers at rates that promote operational efficiency.

Regulatory & Sustainability Compliance:

Canada has regulations that require all installations to use renewable energy sources while getting access to water and requiring optimized waste management. The main issue arises from needing locations that fulfill environmental requirements while maintaining product quality alongside operational efficiency.

Scalability & Product Line Support:

Companies require adaptable manufacturing facilities to manufacture toys as well as fashion materials and hydroponics products. The main difficulty lies in designing flexible areas that support efficient manufacturing processes alongside research areas as well as training facilities and customer interaction capabilities.

IV. GOALS

GOALS	FOCUS
Thorough Infrastructure Research	An examination of selected warehouse and refinery facilities needs to take place including standby buildings with potential redevelopment potential.

Finding the Right Locations for YSSL	Select sites that fulfill basic requirements which include proximity to sustainable energy points and large metropolitan areas as well as water access points from the legislation. Focus on areas that support eco-friendly goals and offer chances to help local communities grow.
Facility Flexibility and Growth	Ensure separated products have the facilities with the capacity to produce and store as well support business growth through expansion possibilities. Webb aims to establish locations that are adaptable for manufacturing operation in addition to research facilities while also integrating space for business development together with public outreach opportunities.

V. SCOPE OF WORK

1. Construction of Facilities and Evaluation:

Our first step is to collect Comprehensive List of 1 warehouse per product considering criteria for each product and 1 refinery across Canada. It addresses facilities that are operational, out of service and the closed facilities that have the potential for redevelopment. Next, we'll assess the condition of those facilities to see if they have the capacity and structural integrity to be converted into manufacturing hubs for a variety of products, including clothing, kitchenware, toys, hydroponics systems, etc.

2. Feasibility Study:

We will evaluate these facilities to determine whether they might serve the needs of the YSSL. Hold on, first we check their location, to ensure they're within a reasonable distance (150-200 kilometers) of significant cities. This is critical to sourcing workers and distributing products seamlessly. We'll also see whether the facilities are using sustainable eco-friendly energy sources as hydroelectric, geothermal or wind power, which can help reduce environmental impact. The other key factor is transport. We'll make sure the facilities are near rail lines or ports, and that they can handle trucks directly, which creates ease of shipping and receiving. Finally, we will assess the extent to which the facilities comply with sustainability standards, which includes the use of renewable energy in the production process, but especially with hydroponic systems for heating, e.g. geothermal heating. We'll make sure that they align with the Canadian environmental laws.

3. Impact on Environment and the Community:

We will evaluate potential environmental impacts to ensure that these facilities are consistent with YSSL's vision of functioning in a way that protects nature. We will target facilities that can leverage natural resources, such as geothermal energy from hot springs, and are within communities that require economic stimulus. These facilities will not only help YSSL grow, but will also benefit local communities by creating jobs, providing training programs and offering spaces for the public to engage and participate in activities.

4. Expanding Facilities and Supporting Products:

We'll ensure the warehouse and refinery we select have space to grow and support YSSL as it expands. This includes being able to produce various sorts of products (such as fashion items – clothing, shoes, and accessories, kitchenware – pots, pans and cutlery, home hydroponic systems, and educational toys). It's also essential that these facilities are flexible and can accommodate research labs, business training centers, and interactive environments where end-users can utilize YSSL's products firsthand.

5. Development of strategic recommendations:

Provide specific recommendations detailing how to convert these facilities to meet the needs of YSSL. It will include plans for production, storage, research and interactive spaces. We will also give recommendations for future expansion of the facilities, as YSSL how YSSL continues to expand.

VI. TIMELINE / MILESTONES

MILESTONE	START DATE	END DATE
Infrastructure Identification and Research	February 2025	February 28, 2025
Feasibility Study and Sustainability Review	March 1, 2025	March 31, 2025
Final Recommendations and Client Presentation	April 1, 2025	April 10, 2025

VII. COST STRUCTURE

NEEDS / INVESTMENT	COST
Finding and researching facilities	\$5,000
Analyzing the feasibility and sustainability of the facilities	\$4,000
Recommendations for meeting regulations and expanding the facilities	\$3,000
ESTIMATE TOTAL	\$12,000

VIII. STAFFING RESOURCES

1. The project lead maintains deadlines and distributes information effectively to every project member.
2. The project requires a process to evaluate and determine whether existing facilities meet its operational requirements.

3. The facilities need to meet all environmental laws while preparing plans for sustainable improvements.
4. The project needs to require proper site access requirements that answer transportation and logistical needs.

IX. MEASUREMENTS OF SUCCESS

Progress Checks:

- The project progress and target alignments receive continuous checks through scheduled client meetings.
- Standard assessment processes conducted within the organization aim to confirm that the project upholds a quality requirements.

Reporting:

- The project maintains regular reporting formats for monitoring progress milestones in monthly intervals.
- An end-of-project report containing facility findings together with sustainability plans and assessment reports.

X. TERMS & CONDITIONS

This proposal may no longer be available if it's not accepted by the given date. If the proposal isn't confirmed by the deadline, the details may be updated or changed.

PROPOSAL MAY BE WITHDRAWN IF NOT ACCEPTED BY DATE OF

February 16, 2025

XI. ACCEPTANCE OF PROPOSAL

AUTHORIZED
CLIENT
SIGNATURE



DATE OF
ACCEPTANCE

February 12, 2025

Experiential Learning
Capstone Project

YOUR SWEET SPOT LIFE: WAREHOUSE AND
REFINERY INFRASTRUCTURE ANALYSIS FOR
VERTICAL INTEGRATION

PREPARED FOR
Your Sweet Spot Life

PREPARED BY
Darshil Patel (101558515)
Devang Nakrani (101551825)
Khushbu Desai (101540933)
Mira Rana (101558655)
Parth Patel (101560568)
Vanshika Singh (101555494)

PROJECT TITLE	Your sweet spot life: Warehouse and refinery infrastructure analysis for vertical integration		
SUBMITTED BY	Darshil Patel (101558515) Devang Nakrani (101551825) Khushbu Desai (101540933) Mira Rana (101558655) Parth Patel (101560568) Vanshika Singh (101555494)	PROJECT TYPE	Capstone project
PROJECTED START DATE	29 January 2025	PROJECTED COMPLETION DATE	2 April 2025

XII.	PROJECT OVERVIEW
XIII.	WHY WE'RE THE BEST FIT
XIV.	NEEDS / ISSUES
XV.	GOALS
XVI.	SCOPE OF WORK
XVII.	TIMELINE / MILESTONES
XVIII.	COST STRUCTURE
XIX.	STAFFING RESOURCES
XX.	MEASUREMENTS OF SUCCESS
XXI.	TERMS & CONDITIONS
XXII.	ACCEPTANCE OF PROPOSAL

I. PROJECT OVERVIEW

WHO WE ARE

A group of students maintains expertise in supply chain management, sustainability, and infrastructure analysis to work together as a team. Our different strengths help us create smart solutions to streamline operations, using current resources best while following regulations and supporting eco-friendly practices. Our goal is to assist Your Sweet Spot Life through academic expertise coupled with practical experience, so the business achieves operational efficiency and cost reductions with environmental awareness and supports local communities.

PROJECT BACKGROUND

The Your Sweet Spot Life organization develops a comprehensive project to build a self-operating Canadian system. The business utilizes existing warehouses together with unused refinery spaces and local resources to produce sustainable ethical products as part of its plan to reduce costs and enhance operational efficiency while safeguarding Canadian cultural principles.

OBJECTIVES

To facilitate YSSL expansion this project evaluates Canadian warehouses alongside refineries which currently remain inactive for possible conversion opportunities.

1. Find and Map Locations:

A thorough written file will show all warehouse locations together with refinery properties no matter their active status along with damage assessment details for future redevelopment plans.

2. Check Suitability:

These locations will be evaluated to verify their capability of producing fashion items along with kitchenware and hydroponics equipment and toys. Our strategy will involve selecting locations that provide excellent distribution benefits together with easy access to workforce members.

3. Meet Environmental Standards:

We will conduct an environmental impact analysis before determining the installation of renewable power systems that use geothermal heating technology.

4. Plan for Future Growth:

Future facility expansion approaches together with improvement instructions for YSSL's forthcoming product releases and community-based work are detailed in this section.

II. WHY WE'RE THE BEST FIT

ABOUT US

We are a team of students who specialize in supply chain management, sustainability, and infrastructure analysis. Our combined strengths allow us to design strategic solutions that enhance operational efficiency, optimize asset utilization, reduce regulatory risk, and support environmental sustainability. Utilizing their academic knowledge and truthfulness in practice, we aim to contribute to Your Sweet Spot Life supporting the achievement of operational efficiency, reducing costs, ensuring environmental sustainability, and aiding local communities.

SERVICES

We have essentially worked on a project assessing existing Canadian warehouses and inactive refineries as candidates for its conversion. Our services include:

Infrastructure Research

A full database of Canadian warehouse and refinery facilities, including details on size, condition and location.

Feasibility Study

Evaluating facility flexibility, space usage, environmental footprint, and access to transportation (port, railway)

Sustainability Assessment

Assessing if they are conforming to Canadian Environmental and recommending renewable solutions like geothermal heating.

Recommendations on Site Scope Expansion

Helping to guide strategy for future growth and community development initiatives.

Consulting Projects to Improve Operational Efficiency

Streamlining production, storage and logistics to maximize business growth and sustainability targets.

OUR TEAM

Our team consists of students with the base and interests in supply chain management, planning and sustainability. From our diverse academic backgrounds, we bring together our skills to research, analyze and come up with solutions that optimize operations by keeping sustainability in mind and achieving those solutions effectively and efficiently. We work collaboratively to conduct facility assessments evaluate feasibility and ensure compliance with the environmental regulations all while gaining hands on experience in real-world supply chain challenges.

OUR WORK

Mapping Out Locations and Identifying Them-Finding unused warehouses and refineries, assessing the damage and work needed, and determining how they can be redeveloped.

Evaluating for Production Suitability-Ensuring places are suitable for fashion goods, cookware, hydroponic systems, toys.

Compliance with Environmental Regulations -Carrying out impact assessments and introducing geothermal heating and alternative energy sources.

Strategic Planning for Growth-Well-organized plans for future facility expansion and local community integration.

III. NEEDS / ISSUES

Identifying Facilities:

The search requires locating empty Canadian warehouses and refineries which can serve as future development sites. The main difficulty arises from selecting sites that hold proximity to power sources alongside suitable access for workers at rates that promote operational efficiency.

Regulatory & Sustainability Compliance:

Canada has regulations that require all installations to use renewable energy sources while getting access to water and requiring optimized waste management. The main issue arises from needing locations that fulfill environmental requirements while maintaining product quality alongside operational efficiency.

Scalability & Product Line Support:

Companies require adaptable manufacturing facilities to manufacture toys as well as fashion materials and hydroponics products. The main difficulty lies in designing flexible areas that support efficient manufacturing processes alongside research areas as well as training facilities and customer interaction capabilities.

IV. GOALS

GOALS	FOCUS
Thorough Infrastructure Research	An examination of selected warehouse and refinery facilities needs to take place including standby buildings with potential redevelopment potential.

Finding the Right Locations for YSSL	Select sites that fulfill basic requirements which include proximity to sustainable energy points and large metropolitan areas as well as water access points from the legislation. Focus on areas that support eco-friendly goals and offer chances to help local communities grow.
Facility Flexibility and Growth	Ensure separated products have the facilities with the capacity to produce and store as well support business growth through expansion possibilities. Webb aims to establish locations that are adaptable for manufacturing operation in addition to research facilities while also integrating space for business development together with public outreach opportunities.

V. SCOPE OF WORK

6. Construction of Facilities and Evaluation:

Our first step is to collect Comprehensive List of 1 warehouse per product considering criteria for each product and 1 refinery across Canada. It addresses facilities that are operational, out of service and the closed facilities that have the potential for redevelopment. Next, we'll assess the condition of those facilities to see if they have the capacity and structural integrity to be converted into manufacturing hubs for a variety of products, including clothing, kitchenware, toys, hydroponics systems, etc.

7. Feasibility Study:

We will evaluate these facilities to determine whether they might serve the needs of the YSSL. Hold on, first we check their location, to ensure they're within a reasonable distance (150-200 kilometers) of significant cities. This is critical to sourcing workers and distributing products seamlessly. We'll also see whether the facilities are using sustainable eco-friendly energy sources as hydroelectric, geothermal or wind power, which can help reduce environmental impact. The other key factor is transport. We'll make sure the facilities are near rail lines or ports, and that they can handle trucks directly, which creates ease of shipping and receiving. Finally, we will assess the extent to which the facilities comply with sustainability standards, which includes the use of renewable energy in the production process, but especially with hydroponic systems for heating, e.g. geothermal heating. We'll make sure that they align with the Canadian environmental laws.

8. Impact on Environment and the Community:

We will evaluate potential environmental impacts to ensure that these facilities are consistent with YSSL's vision of functioning in a way that protects nature. We will target facilities that can leverage natural resources, such as geothermal energy from hot springs, and are within communities that require economic stimulus. These facilities will not only help YSSL grow, but will also benefit local communities by creating jobs, providing training programs and offering spaces for the public to engage and participate in activities.

9. Expanding Facilities and Supporting Products:

We'll ensure the warehouse and refinery we select have space to grow and support YSSL as it expands. This includes being able to produce various sorts of products (such as fashion items – clothing, shoes, and accessories, kitchenware – pots, pans and cutlery, home hydroponic systems, and educational toys). It's also essential that these facilities are flexible and can accommodate research labs, business training centers, and interactive environments where end-users can utilize YSSL's products firsthand.

10. Development of strategic recommendations:

Provide specific recommendations detailing how to convert these facilities to meet the needs of YSSL. It will include plans for production, storage, research and interactive spaces. We will also give recommendations for future expansion of the facilities, as YSSL how YSSL continues to expand.

VI. TIMELINE / MILESTONES

MILESTONE	START DATE	END DATE
Infrastructure Identification and Research	February 2025	February 28, 2025
Feasibility Study and Sustainability Review	March 1, 2025	March 31, 2025
Final Recommendations and Client Presentation	April 1, 2025	April 10, 2025

VII. COST STRUCTURE

NEEDS / INVESTMENT	COST
Finding and researching facilities	\$5,000
Analyzing the feasibility and sustainability of the facilities	\$4,000
Recommendations for meeting regulations and expanding the facilities	\$3,000
ESTIMATE TOTAL	\$12,000

VIII. STAFFING RESOURCES

- The project lead maintains deadlines and distributes information effectively to every project member.
- The project requires a process to evaluate and determine whether existing facilities meet its operational requirements.

7. The facilities need to meet all environmental laws while preparing plans for sustainable improvements.
8. The project needs to require proper site access requirements that answer transportation and logistical needs.

IX. MEASUREMENTS OF SUCCESS

Progress Checks:

- The project progress and target alignments receive continuous checks through scheduled client meetings.
- Standard assessment processes conducted within the organization aim to confirm that the project upholds a quality requirements.

Reporting:

- The project maintains regular reporting formats for monitoring progress milestones in monthly intervals.
- An end-of-project report containing facility findings together with sustainability plans and assessment reports.

X. TERMS & CONDITIONS

This proposal may no longer be available if it's not accepted by the given date. If the proposal isn't confirmed by the deadline, the details may be updated or changed.

PROPOSAL MAY BE WITHDRAWN IF NOT ACCEPTED BY DATE OF

February 16, 2025

XI. ACCEPTANCE OF PROPOSAL

AUTHORIZED
CLIENT
SIGNATURE



DATE OF
ACCEPTANCE

February 12, 2025

FINAL REPORT

EXPERIENTIAL LEARNING

Your
Life **SweetSpot**



WAREHOUSE & REFINERY INFRASTRUCTURE ANALYSIS FOR VERTICAL INTEGRATION

PRESENTED BY

DARSHIL PATEL
DEVANG NAKRANI
KHUSHBU DESAI
MIRA RANA
PARTH PATEL
VANSHIKA SINGH

Table of Contents

Executive Summary.....	2
Introduction to our team.....	5
Client Overview.....	7
Key issues and constraints.....	9
Post-Covid Strategy.....	11
Summary of Internal & External Analysis.....	13
Detailed Analysis of Internal and External Analysis.....	16
Decision Criteria.....	20
Potential Solutions for YSSL.....	22
Assessment of potential solutions.....	24
Recommendation and prediction of outcome.....	26
Conclusion.....	27
Bibliography.....	28
Team Agreement.....	29
Project Planner.....	35

Executive Summary

Your Sweet Spot Life (YSSL) is an innovative company that focuses on holistic well-being, and sustainability and innovation in its work. This report identifies the strategic initiatives. YSSL minimizes environmental impact whilst ensuring they meet the operational requirements of the market through the retrofitting of larger warehouses and former refineries for, they use.

Key Issues and Constraints

YSSL balancing sustainability with profitability. First, implementing sustainable solutions brings the upfront costs of renewable energy systems, sustainable logistics, and green waste disposal, for example, which burdens companies with an initial financial constraint even when the long-term benefit of eco-friendliness would pay off. The need to reduce transportation costs and increase operational efficiency is because of logistics challenges, which range from increase in transportation fuel prices, supply chain disruption and inventory management. Regulatory compliance is another risk, given how rapidly environmental and safety regulations are changing.

Proposed Solutions

1. Retrofitting Existing Facilities: YSSL can reduce the energy bill by retrofitting existing warehouse facilities with efficient equipment like LED lighting and smart HVAC facilities. While initial investment is huge, the rate of return (ROI) in 5-7 years can be anticipated by saving energy and optimizing space storage.

2. Renewable Energy Transition: The transition to solar and wind energy can significantly reduce the reliance on conventional energy sources. Though it entails a massive upfront cost, the application of government subsidies can lower the payback time. The projected ROI is within 6-10 years.

3. CRM and Supply Chain Optimization: AI-based CRM and supply chain management solutions will enhance demand forecasting, improve supplier relationships, and boost customer loyalty. With an ROI of 3-5 years, this solution is critical to enhance efficiency and market competitiveness.

Risk Management

There are economic and operational hazards associated with acquiring environmentally conscious methods. Money flows may be strained by high upfront costs, and introducing emerging innovations may result in brief downtime. A further compliance risk is the possibility of opponents with greater financial assets copying YSSL's strategies due to shifting sustainability standards.

Environmental Impact

YSSL is dedicated to long-term viability which includes cutting carbon dioxide emissions by 40%, using green power to reduce energy usage, while minimizing landfill trash through recyclable and biodegradable containers. Furthermore, using electric trucks for shipping helps lessen damage in the environment, which is consistent with YSSL's environmentally conscious company strategy.

In terms of innovation and sustainability, YSSL is well-positioned to dominate the market. The business may increase operational efficiency while upholding an unwavering dedication to environmental sustainability by making strategic investments in energy-efficient retrofitting, renewable energy, and AI-powered supply chain management. Even if there are upfront expenses and market concerns, YSSL's reputation as a pioneer in the sustainable wellness sector will be cemented by its lasting environmental and economic benefits.

Introduction to our team

Our team has compiled a report which is data driven for the company to optimize operations by repurposing abandoned warehouses and refineries while keeping in mind the highest level of standards of environmental stewardships and community engagement.



VANSHIKA SINGH- Is responsible for leading the analysis and compiling the findings for inventory management within the YSSL supply chain along with working towards understanding the post covid effects on sustainability. Also, she will be compiling the data provided by her teammates.

BACKGROUND- Vanshika strengthens the team with her expertise of 3 years in global partnerships and supply chain efficiency. At Thriwe Consulting, she managed relationships with over 35 global brands, including Amazon and Zomato, and optimized customer engagement strategies. Furthermore, her recent experience at The Salvation Army, focusing on inventory management and streamlining stock replenishment, enhances the team's understanding of logistical optimization, aligning perfectly with the project's focus on sustainable and efficient warehouse solutions for YSSL.



KHUSHBU DESAI- played a crucial role in establishing initial contact and setting up meetings with the YSSL representative, laying the groundwork for this project

BACKGROUND- Khushbu Desai is pursuing a Post Graduate Certificate in Supply Chain Management - Global at George Brown College. With a background in biochemistry and pharmaceutical sciences, she combines strong analytical skills with supply chain expertise. Her experience at Walmart in inventory management and product flow has further developed her practical knowledge. Khushbu is eager to apply her skills to improve supply chain efficiency and sustainability.



DEVANG NAKRANI- is a skilled professional who offers expert insights to guide the strategic direction of projects.

BACKGROUND- Devang's leadership experience managing a team of 50 workers in construction and his current role in inventory and stockroom management at Walmart align well with the goals of the YourSweetSpotLife project. Currently working as a general merchandiser, he handles inventory, order management, and stockroom operations, while also applying his merchandise management skills at Walmart. His diverse experience in both construction and retail enhances his ability to drive efficient operations and manage large-scale projects.



PARTH PATEL- Conducts financial analyses and cost estimations, ensuring the economic viability of proposed solutions.

BACKGROUND- Parth has a background in business administration with a specialization in finance and have expanded expertise through various certification courses. Currently, he is further enhancing knowledge by studying Supply Chain Management, aiming to develop a comprehensive understanding of global logistics, operations, and supply networks.



DARSHIL PATEL- Oversees logistics and distribution strategies, contributing expertise in supply chain management.

BACKGROUND- Darshil Patel holds a bachelor's degree in mechanical engineering and has two years of experience at NHB Ball & Roller Company, where he gained expertise in operations, quality control, and supply chain management. He is passionate about problem-solving and continuous improvement, eager to contribute to Your Sweet Spot Life with his skills and commitment to excellence.



MIRA RANA- Provides sustainability and technological insights.

BACKGROUND- Mira is pursuing a Post Graduate Certificate in Supply Chain Management Global at George Brown College. With a solid foundation in business management, Mira applies her analytical skills to supply chain challenges. Her experience at the City of Toronto, Swansea Club, and Food Basics has sharpened her abilities in inventory control, demand forecasting, and procurement processes. Passionate about supply chain efficiency and sustainability, she is dedicated to driving improvements and implementing innovative solutions.

Client Overview

Client Organization Profile: Your Sweet Spot Life (YSSL)

Vision

The client aims to establish a self-sustaining economic ecosystem in Canada. The core of this vision includes:

- **Reutilization of Existing Infrastructure:** Emphasis on repurposing old warehouses and refineries, aligning with green redevelopment practices.
- **Local Empowerment:** Driving community upliftment by supporting local employment and training, thereby enabling inclusive growth and skills development.

Core Values

YSSL's strategic philosophy is rooted in five primary values:

Value	Description
Sustainability	Integrating eco-conscious practices across supply chains and product lifecycles.
Innovation	Leveraging smart systems (e.g., AI, renewable energy) for futuristic solutions.
Community Development	Supporting local talent, partnerships, and social upliftment.
Efficiency	Maximizing output while minimizing waste and energy usage.
Responsibility	Commitment to ethical operations, compliance, and long-term impact.

Objectives

To fulfill its vision, YSSL pursues a series of targeted objectives:

1. Reduce environmental impact through green technologies and packaging.
2. Create eco-friendly retail environments that embody brand values.
3. Support vertical integration for streamlined operations and better control.
4. Train local communities to build capacity in sustainable and technical skills.
5. Promote a circular economy, minimizing waste and reusing materials across product lines.

Product Lines

The company operates across diverse, sustainability-aligned product verticals:

- XXIII. Apparel and Footwear: Likely made with recycled or organic materials.
- XXIV. Kitchenware: Possibly using biodegradable or upcycled resources.
- XXV. Hydroponic Grow Systems: Supporting urban farming and local food sustainability.
- XXVI. Educational Products: Possibly designed to promote eco-awareness and community learning.

Key issues and constraints

1. Sustainability vs. Cost Trade-Off

The priority of sustainability has become essential for YSSL alongside every business sector. Business organizations implement environmentally beneficial techniques because they want to decrease their carbon emissions and fulfill more stringent environmental requirements. The implementation of sustainable solutions faces resistance due to the expensive startup expenses that may lead operations to become more costly.

The implementation of renewable energy with eco-friendly raw materials coupled to energy-efficient manufacturing processes enables substantial improvements in environmental effect. The financial requirements to start sustainable initiatives create barriers for organizations to achieve both sustainability and cost efficiency goals.

Challenges in Adopting Sustainable Practices:

- 9. Fishermen need to spend notably on buying solar panels and energy-efficient devices along with waste reduction equipment to implement environmentally friendly operations.
- 10. Environmental solutions that use sustainable raw materials along with environmentally friendly logistics require higher expenses to achieve thus leading to decreased profits and increased operational costs.
- 11. Business partners along with some shareholders demonstrate opposition to supporting sustainability projects because they demand immediate monetary rewards.
- 12. Sustainable businesses need to determine when the return on investment from their investment benefits will be realized during the extended period when measuring energy cost reductions.

Opportunities for YSSL:

- Through government incentives YSSL and other organizations receive financial backing through tax benefits and subsidies with additional rewards.
- No organization benefits from green initiatives better than through establishing improved bonds between investors and eco-conscious customers who base their partnership choices on sustainability measures.
- The implementation of energy-efficient solutions decreases fuel and electricity expenses which leads to better operation profitability and generates extended financial benefits.

2. Logistics Challenges

A company's ability to deliver orders on time as well as minimize supply chain expenditure enables customer satisfaction. Several factors restrict YSSL from effectively carrying out logistics management operations.

Key Constraints:

- The fluctuating prices in transportation fuel markets coupled with higher shipping expenses cause logistics costs to rise.
- Natural disasters together with pandemics and geopolitical changes lead to supply chain interruptions that produce various unpredictable delays and stock scarcity.
- Inventory & Warehouse Inefficiencies: Ineffective inventory tracking and suboptimal warehouse management increase operational expenses.
- External logistics suppliers present problems for businesses since they limit delivery scheduling control while raising complications in cost management systems.
- YSSL needs to establish AI-driven supply chain management that uses digital inventory supervision alongside real-time tracking advanced technologies to overcome these barriers.

(Villena, 2020)

3. Regulatory Compliance

YSSL operates under various governmental regulations that protect the environment together with workforce conditions and product regulatory standards. The company faces severe legal challenges as well as financial consequences along with a damaged reputation when it fails to comply with regulations.

Common Compliance Challenges:

- Businesses must constantly track alterations in environmental and trade laws because new regulations become active regularly.
- The demand for international market entry necessitates the fulfillment of various trade regulation requirements across different regions.
- Security regulations require YSSL to guarantee that its manufactured products always satisfy extensive safety and quality standards.
- YSSL should establish a compliance management system combined with systematic operational audits to fulfill changing regulatory specifications.

(Wieland, 2013)

Post-Covid Strategy

1. COVID-19 Impacts

The pandemic caused major disruptions that forced businesses to adapt rapidly. Key impacts included:

- Workforce Shortages: Due to lockdowns and illness, many organizations faced staffing challenges.
- Supply Chain Disruptions: Delays and cost surges became prevalent due to transportation constraints and demand-supply mismatches.

2. Strategic Responses

To counter these disruptions, the company employed the following tactics:

- Temporary Staffing & Cross-Training: Enabled flexibility and operational continuity by ensuring employees could handle multiple roles.
- Fast-Track Automation: Technologies like Warehouse Management Systems (WMS) and Robotic Process Automation (RPA) were rapidly implemented to minimize reliance on manual labor.
- AI-Based Inventory Forecasting: Leveraged artificial intelligence to predict demand and optimize stock levels, reducing excess and shortfalls.

3. Resilience & Risk Planning

Preparedness for future disruptions became a core strategy:

- Emergency Response Plans: Comprehensive strategies were established to respond to health, supply, or operational crises swiftly.
- Local Supplier Partnerships: Reducing dependency on global suppliers by partnering with local sources, ensuring faster and more reliable supply chains.

4. Sustainability Focus

A commitment to environmental and ethical standards was highlighted:

- Green Logistics & Energy-Efficient Facilities: Invested in eco-friendly transport and infrastructure to cut emissions and operating costs.
- Ethical Sourcing: Prioritized suppliers with ethical practices to boost the brand's credibility and consumer trust.

FUTURE OUTLOOK:

1. Sustainable Infrastructure

- Objective: Reduce operational costs and carbon emissions.
- Approach: Upgrading facilities and logistics to energy-efficient systems, supporting both cost-effectiveness and environmental responsibility.

2. Integrated Supply Chain

- Goal: Enhance product quality and maintain competitive pricing.
- Strategy: Develop a streamlined, interconnected supply chain for better coordination, traceability, and efficiency.

3. Tech Adoption

- Focus Areas: Artificial Intelligence and Green Energy.
- Purpose: Use cutting-edge technology to drive innovation, automation, and cleaner energy solutions across operations.

4. Ethical Branding

- Competitive Edge: Emphasize transparent, value-driven branding to attract ethically conscious consumers and differentiate from competitors.

5. Growth Strategy

- Tactic: Partner with health-focused brands to expand into wellness-oriented markets, aligning with post-pandemic health awareness trends.

Summary of Internal & External Analysis

VRINE ANALYSIS

VRINE is a strategic tool used to assess an organization's internal resources and capabilities to determine if they can offer a sustainable competitive advantage. It evaluates five key criteria:

- Valuable (V): Does the resource help the organization exploit opportunities or neutralize threats?
- Rare (R): Is the resource unique or held by few competitors?
- Inimitable (I): Is the resource difficult or costly for others to imitate?
- Non-substitutable (N): Is there no strategic equivalent or alternative?
- Exploitable (E): Can the organization effectively use and capitalize on the resource?

The company YourSweetSpotLife (YSSL) VRINE analysis reveals that it holds a strong portfolio of strategic capabilities, positioning it well in its industry. Key highlights from the analysis include:

11. Access to Unused Warehouses and Refineries

These provide a cost-efficient infrastructure advantage. While valuable, rare, non-substitutable, and exploitable, the setup may not be inimitable as competitors could potentially access similar unused properties.

12. Expertise in Supply Chain and Sustainability

This is a core strength of the company, meeting all five VRINE criteria. It enhances operational efficiency, supports ESG (Environmental, Social, Governance) goals, and is difficult for competitors to replicate.

13. Use of Renewable Energy Systems (e.g., geothermal)

Aligns perfectly with the company's focus on sustainable innovation. These systems provide long-term cost savings and regulatory alignment and are both rare and hard to imitate.

14. Community-Centric Development Strategy

The company's emphasis on local engagement builds trust and social license to operate. This capability is unique and inimitable, creating goodwill that cannot be easily replaced or duplicated.

15. Vertical Integration Model with Product Flexibility

This model enables cost control, faster market responsiveness, and diverse offerings, making it a comprehensive competitive advantage across all VRINE dimensions.

S.W.O.T ANALYSIS

The SWOT analysis identifies key strategic factors influencing the organization:

Strengths

The company benefits from a strong focus on sustainability and cost-effectiveness, utilizing unused infrastructure and offering diverse product lines. It is driven by a skilled and mission-focused team with a commitment to community development.

Weaknesses

Operational challenges include high refurbishment costs, limited operational experience, and complex regulatory requirements. Additionally, facility conditions may pose operational hurdles.

Opportunities

Significant opportunities exist in the rising demand for ethical and sustainable goods. The company can leverage vertical integration, R&D potential, and increasing government support for green projects to expand its footprint.

Threats

Major threats include stringent regulatory and funding risks, intense market competition, logistical and location constraints, and the ongoing challenge of compliance in a dynamic industry landscape.

PORTER'S FIVE FORCES

YSSL's position in the market reflects **moderate competition** across most of Porter's Five Forces, with notable strengths in supplier management and sustainable integration:

1. **Competitive Rivalry – *Moderate*:** While the market is growing, YSSL differentiates itself through vertical integration and a strong sustainability focus, giving it a competitive edge.
2. **Threat of New Entrants – *Moderate to High*:** Although infrastructure access is relatively easy for newcomers, YSSL's fully eco-compliant and integrated model is difficult to replicate, posing a barrier to entry.
3. **Supplier Power – *Low*:** YSSL benefits from in-house production, significantly reducing reliance on third-party suppliers and enhancing operational control.
4. **Buyer Power – *Moderate*:** Customers are value-driven and price-sensitive, demanding ethically sourced and sustainable goods, aligning well with YSSL's offerings.
5. **Threat of Substitutes – *Moderate*:** While there are low-cost imported alternatives, YSSL counters this with locally produced, sustainable solutions that appeal to eco-conscious consumers.

PESTLE'S ANALYSIS

The PESTLE analysis identifies key external factors influencing the organization, with a focus on sustainability and innovation:

- **Political:** The organization benefits from favorable green policies and alignment with Canadian environmental regulations.
- **Economic:** While cost-saving opportunities exist through repurposing, inflation poses a risk to funding and cost stability.
- **Social:** There is strong public demand for ethical, sustainable, and locally-produced products, creating a supportive consumer base.
- **Technological:** The adoption of innovative technologies such as geothermal energy and hydroponics gives the company a competitive edge.
- **Legal:** Compliance with strict Canadian environmental laws is essential for ongoing operations and expansion.
- **Environmental:** The organization operates within a low-impact, renewable-focused model, integrating sustainability and low-carbon strategies.

Overall, the analysis supports the viability and strategic alignment of the organization's eco-conscious initiatives within the external environment.

Detailed Analysis of Internal and External Analysis

VRINE ANALYSIS

Resource/Capability	Valuable	Rare	Inimitable	Non-substitutable	Exploitable
Access to unused warehouses and refineries	✓	✓	✗	✓	✓
Expertise in supply chain and sustainability	✓	✓	✓	✓	✓
Use of renewable energy systems (e.g., geothermal)	✓	✓	✓	✓	✓
Community-centric development strategy	✓	✓	✓	✓	✓
Vertical integration model with multi-product flexibility	✓	✓	✓	✓	✓

S.W.O.T ANALYSIS

1. Strengths

1. Strong sustainability focus

- The organization has embedded sustainability into its core values and operations.
- This helps in building a strong brand image, especially among environmentally conscious consumers and partners.
- It can also lead to long-term cost savings and regulatory benefits.

• Cost-saving use of unused infrastructure

- By repurposing dormant warehouses or refineries, the company avoids the capital expenditure of new builds.
- This frugality increases ROI and enables more agile scaling across locations.

• Diverse product lines

- A wide range of products helps reduce dependency on a single revenue stream.
- It also enables tapping into multiple market segments, improving resilience against demand fluctuations.

• Skilled, mission-driven team

- Employees aligned with the mission often perform with greater motivation and purpose.
- This leads to better innovation, employee retention, and workplace culture.

• Community development focus

- Strengthens stakeholder relationships and builds goodwill in operating areas.
- Encourages local support and creates a foundation for long-term growth through social sustainability.

2. Weaknesses

1. High refurbishment costs

- While infrastructure reuse saves long-term costs, upfront investment is still substantial.
- This could strain financial resources, especially during early phases or expansion.

2. Limited operations experience

- Being a newer or niche entrant, the team might lack depth in logistics, supply chain, or large-scale operations.
- This could lead to inefficiencies or missteps as the business scales.

3. Regulatory complexity

- Navigating environmental, zoning, or industry-specific regulations can delay project timelines.
- There's also the risk of non-compliance or misinterpretation, potentially resulting in fines or operational disruptions.

3. Opportunities

1. Rising demand for ethical goods

- There's a growing global consumer trend toward ethically produced, local, and eco-friendly products.
- Positioning the brand to serve this market allows for premium pricing and customer loyalty.

2. Vertical integration leadership

- Controlling more of the supply chain allows for quality assurance, faster adaptation, and cost control.
- It also creates opportunities for proprietary processes or internal innovation.

3. R&D and training potential

- The business can invest in research and innovation to refine products or processes.
- Training programs can turn local or unskilled labor into a highly capable workforce, supporting community development and internal growth.

4. Policy support for green projects

- Governments and NGOs often provide grants, subsidies, or tax incentives for sustainable initiatives.
- The business is well-positioned to benefit from these programs, enhancing financial feasibility and competitiveness.

4. Threats

• Regulatory and funding risks

- Policy changes, especially in environmental or zoning laws, could adversely affect operations.
- Lack of consistent funding sources or investor support could delay progress or stall growth plans.

• Market competition

- New entrants or existing players might replicate the model, especially if barriers to entry are low.
- Price wars or marketing dominance by larger competitors may erode margins.

• Location constraints

- Not all regions will have reusable infrastructure or the necessary market demand.

- Logistical inefficiencies or cultural differences can create barriers to standardizing operations across geographies.

PORTER'S FIVE FORCES

1. Competitive Rivalry – Moderate

- Insight: The market is competitive but growing. YSSL differentiates itself through sustainability and vertical integration, helping reduce head-on rivalry.
- Implication: Branding and customer loyalty will be crucial to retain competitive advantage.

2. Threat of New Entrants – Moderate to High

- Insight: Infrastructure may be easily accessible for newcomers but replicating YSSL's sustainable and fully integrated model is difficult.
- Implication: Continued innovation and ecosystem development will protect against new competitors.

3. Supplier Power – Low

- Insight: YSSL relies on in-house production, reducing reliance on external suppliers.
- Implication: This ensures pricing stability and better control over quality and timelines.

4. Buyer Power – Moderate

- Insight: Customers desire sustainable products but are price-sensitive.
- Implication: Value-added features or subsidies must be highlighted to justify pricing.

5. Threat of Substitutes – Moderate

- Insight: Low-cost imports are widely available but lack YSSL's ethical and local impact.
- Implication: Emphasizing values like traceability, ethical sourcing, and community benefit can reduce substitution risk.

PESTLE ANALYSIS

Political

- **Analysis:** YSSL is aligned with Canadian green policies, providing government support opportunities.
- **Opportunity:** Continued alignment with public policy can yield funding and regulatory advantages.

Economic

- **Analysis:** The business model promotes cost-efficiency via repurposing. However, inflation could affect operational costs and consumer spending.
- **Risk:** Rising prices may challenge margins; proactive financial planning is essential.

Social

- **Analysis:** Growing public preference for ethical and local products supports YSSL's mission.
- **Opportunity:** Brand storytelling and community engagement can further boost social capital and customer loyalty.

Technological

- **Analysis:** Leveraging geothermal energy and hydroponics gives YSSL a technological edge.
- **Opportunity:** Continued investment in green tech could drive innovation, efficiency, and scalability.

Legal

- **Analysis:** Operations must comply with strict Canadian environmental regulations.
- **Risk:** Non-compliance could damage reputation or result in fines. A robust compliance system is crucial.

Environmental

- **Analysis:** Sustainability is deeply embedded in operations, with a focus on low-carbon methods.
- **Opportunity:** Positioning as an environmental leader could attract investors and eco-conscious partners.

Decision Criteria

To identify optimal locations for future projects or expansions, the company established detailed decision criteria aligned with strategic goals, sustainability, and community development:

- **Proximity to Major Cities:** Selected sites should be within 45 minutes of urban centers to ensure access to labor markets, customers, and infrastructure.
- **Eco-Viability:** Locations must support the integration of geothermal and renewable energy systems, promoting sustainability.
- **Usable Infrastructure:** Preference is given to structurally sound or easily refurbishable facilities, reducing upfront capital costs.
- **Zoning Compatibility:** Sites must comply with local zoning regulations, minimizing legal hurdles and delays.
- **Community Benefit:** Developments should offer social value through job creation, housing, and training programs, contributing to local prosperity.
- **Multi-Use Capability:** Sites should be versatile, supporting diverse operations like fashion, cookware manufacturing, hydroponics, and more.
- **Low Emissions:** Operations must be designed for energy efficiency and reduced carbon footprints, aligning with environmental goals.
- **Good Logistics:** Efficient transportation access via road or rail is essential to ensure smooth supply chain operations.
- **Cost-Effectiveness:** The ability to renovate and operate within reasonable budgets is key for financial sustainability.

- **Support for Learning:** Spaces should foster innovation through training centers and educational hubs, encouraging workforce development and research.

These criteria ensure the chosen site will support operational success while advancing the company's commitment to sustainability, innovation, and community impact.

Potential Solutions for YSSL

Potential Solutions for YSSL

Retrofitting Existing Infrastructure

The economic approach for sustainable improvement at YSSL involves facility retrofitting strategies which do not require large investments in new infrastructure. Updating existing systems through efficient energy solutions enables the company to lower operational spending and decrease environmental impact.

Implementation Strategies

YSSL can decrease electricity usage by installing LED lighting together with smart HVAC systems in their facilities. The company should use modernized production equipment which boosts energy performance levels.

By improving warehouse and storage facility insulation YSSL can lower their heating and cooling expenses.

Transition to Renewable Energy

The implementation of solar and wind power systems at YSSL will enable the reduction of fossil fuel consumption as part of its sustainability drive.

Benefits of Renewable Energy

Significant reduction in carbon emissions and environmental impact. Long-term cost savings on electricity expenses. The government gives access to subsidies and tax benefits through its sustainable programs.

(BSR., n.d.)

Leasing or Selling Underutilised Assets

For underutilised warehouse and refinery space, YSSL can look into short-term or long-term leasing alternatives. Selling an asset that is regularly underutilised could raise money for investments in more fruitful business divisions.

Smart Automation and IoT Integration

By utilising IoT sensors and AI-powered inventory tracking, smart warehouse management solutions can minimise waste and maximise space utilisation. Because automated storage systems dynamically allocate space according to demand, they can increase efficiency. IoT integration in warehouses involves using smart sensors, RFID tags, AI-driven analytics, and cloud-based systems to improve real-time tracking, inventory management, and operational efficiency.

Collaborative Storage Partnerships

By providing warehouse space as a shared resource, YSSL can collaborate with other companies in need of temporary storage solutions. This can preserve a consistent flow of income while optimising occupancy rates.

Other Uses for Empty Warehouses

If YSSL's warehouses are still underutilised, they could be converted into last-mile delivery hubs, micro-fulfillment centres, or even internal team training and research and development facilities.

Sustainability Certifications and Carbon Credits

Because sustainability is a priority, YSSL can look into government initiatives that provide incentives or carbon credits for increasing warehouse productivity. Obtaining specific green certifications may also lead to new business prospects.

Assessment of potential solutions

Cost-Benefit Analysis

Evaluation of proposed solutions depends completely on their financial effects as well as their sustained value delivery.

Retrofitting Warehousing Infrastructure

- Low-Cost Benefit: Substantial initial expenses for automation alongside racking systems as well as energy-efficient equipment.
- The installation leads to extended operational savings because it minimizes energy usage while maximizing storage efficiency.

- The expected ROI projection for this market demonstrates a period of 5 to 7 years based on present market conditions.

Implementing Renewable Energy Solutions

- The setup of solar panels together with wind energy integration demands substantial initial funding expenditure.
- The transition to renewable power reduces dependence on conventional energy supply which results in decreased utility expenses and possibility of collecting sustainability awards.
- Through government subsidies the business could achieve early payback within 6-10 years alongside an ROI projection.

CRM and Supply Chain Optimization

- It costs a lot of money to lease software programs with AI algorithms along with data analytics platforms.
- Three benefits result from the investment: enhanced supplier interaction, more precise demand forecasting capabilities, and stronger customer relationships.
- ROI Projection: 3-5 years due to increased efficiency and customer retention.

Risk Assessment

- Gunpowder Enterprise Solutions applies risk assessments to stop cash flow disruptions stemming from excessive sustainability investments which precede financial returns.
- The installation of new technical systems leads to operational risks that trigger momentary system interruptions.
- Sudden changes in sustainability requirements put the company at risk for non-compliance with established regulations.

- Zagens' market environment presents challenges to sustainability initiatives based on pricing approaches since sustainable pricing models might lead customers to reject these initiatives.

Environmental Impact

- Renewable energy sources serve as the driving force for Energy Consumption Reduction because they lower release of greenhouse gases by 40%.
- The implementation of biologically decomposing packaging materials together with recycling methods helps decrease waste that enters landfill areas.
- Electric transportation vehicles become an attractive option because they decrease environmental contamination.

(Trust, 2011, November 7)

Feasibility Study

- Warehouse automation implementation can happen technically but requires qualified personnel together with robot purchasing investments.
- Local energy systems restrict the implementation of government-fundable renewable solutions even though they receive governmental approval.

CRM Optimization: Highly feasible with scalable digital solutions readily available in the market

Recommendation and prediction of outcome

To establish YourSweetSpotLife (YSSL) as a pioneer in sustainability and boost operational effectiveness, an extensive plan centered on remodeling current facilities, switching to clean power, and supply chain optimization using systems fueled by AI is advised.

To start, YSSL should give top priority to renovating its warehouses with improved thermal insulation, HVAC systems, and low-energy lighting to lower operating expenses and its environmental impact. With a predicted return on investment of five to seven years, this strategy will reduce energy use while avoiding interference with current business operations and assisting in the achievement of sustainability objectives. Making the switch to renewable energy, especially by installing windmills and solar panels, is the next important project. Despite the significant initial outlay, government aid and incentives will assist defray expenses, and earnings on investment is expected in six to ten years.

YSSL ought to spend in artificial intelligence-driven tools that enhance demand projections, inventory control, and supplier connections to execute CRM and optimize the supply chain concurrently. With a projected return on investment of 3 to 5 years, this will improve operational efficiency, lower expenses, and increase client retention.

The action plan calls for quick actions to carry out thorough feasibility examinations, obtain the required funds, and form alliances with suppliers of green energy and technology. Preliminary renovation and installation of renewable energy sources should be finished during the next 12 to 18 months, however, electronic instruments can be used to optimize the supply chain in the first six months. Measuring monetary and operational outcomes and guaranteeing compliance with standards will need periodic reviews and status assessments.

Large utilization of energy lowering, a 40% drop in carbon dioxide emissions, and increased liquidity due to lower utility and travel costs are among the anticipated results. These efforts

will establish YSSL as a market leader in ecological over the next five to ten years, improve the company's goodwill, and draw in a devoted clientele. Furthermore, YSSL's competitive edge in the health and sustainability sector will be strengthened by future cost savings, which will result in a stronger bottom line.

(Chopra, 2016)

Conclusion

YourSweetSpot Life (YSSL) continues to lead the sustainable wellness market through its strategic development, technological innovation, and commitment to environmental responsibility. By repurposing obsolete manufacturing and refinery sites, YSSL achieves significant ecological impact while establishing efficient operational frameworks. Its proactive approach to adopting renewable energy sources like solar and wind demonstrates forward-thinking sustainability, despite early implementation hurdles. The integration of artificial intelligence in supply chain operations enhances forecasting, reduces costs, and improves responsiveness—further solidifying YSSL's market position. Strategic vertical integration ensures operational resilience amid global supply chain challenges, while diversification and automation, prompted by the COVID-19 pandemic, underscore the company's adaptability. Although regulatory complexities persist, YSSL's transparent adherence to safety and environmental standards bolsters customer trust and brand credibility. Backed by ethical sourcing and robust infrastructure, YSSL exemplifies a balanced pursuit of financial stability and environmental stewardship, positioning itself for sustained growth and continued industry leadership.

Bibliography

Villena, 2020: , (Villena, 2020),
Wieland, 2013: , (Wieland, 2013),
BSR., n.d.: , (BSR., n.d.),
Trust, 2011, November 7: , (Trust, 2011, November 7),
Chopra, 2016: , (Chopra, 2016),

Team Agreement

This Contract is to be used in conjunction with the Step-by-Step Guide to Effective Team Projects. The Guide is available on the Student Affairs web site, www.georgebrown.ca/saffairs/index.aspx and also in the PAL Centres, St. James, B121 Casa Loma, E139

Class: Experiential Learning CRN 52101202402 **Project Due Date:** 2 April 2025

Group Name:

Mission Statement: We will be analyzing and understanding the working of warehousing and refinery infrastructure which helps in seamless vertical integration for YOURSWEETSPOTLIFE in a post COVID landscape. By leveraging data-driven insights and experiential learning we are aiming to enhance operational efficiency, building resilient storage solutions and streamlining supply chain processes that will adapt to changing market demands. We will be also focusing on post pandemic logistical challenges which will include logistical challenge, supply chain disruptions , increased e commerce demand and moving forward with sustainable inventory management .

Team Leader(s): Choose a team leader and co-leader agreed to by all team members. The role of the team leader(s) may include chairing team meetings, reminding team members of work back schedule, facilitating the team process by addressing team issues.

Leader: Khushbu Desai

Responsibilities: Overall project management and integration

Co-Leader: Devang Nakrani

Responsibilities: Research coordination and team support

Meeting Information: Decide which meetings will be face to face or online.

Meetings will be held: weekly

Start Date: 29-01-25

Location: Toronto , Canada

MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
Yes	yes	yes	yes			

Additional Meetings and/or negotiated changes to meeting schedule:

Date: Time:

Date: Time:

Date: Time:

Code Red: Any member of the team can invoke a CODE RED, but only once. “Code Red” means everyone attends the next meeting. Decide how Code Red will be delivered, i.e. email, text, WebCT
The Step by Step Guide provides details and options.

Team Expectations: Agreed upon expectations that may include areas of respect: Be on time, listen to others point of view; preparation: Complete tasks on time, participate in team discussions.

- Listen Actively
- Accept Criticism
- Be responsible
- Participate in team discussions
- Be available
- Respect team members

Decisions: Consult Step by Step Guide to Effective Team Projects for options for how your team could make decisions.

We will discuss each question within the group and all the work will be done together after thorough research .

Conflict Resolution: How will your team address conflict situations (i.e.: members not following the agreed upon contract)? write me decisions and conflict resolution as if you are writing the assignment.

- Address the issue privately with the leader and co-leader.
- If a group discussion is required then it should be done.
- Zero tolerance for disrespect.
- Escalation if required.

If a decision must be made immediately, the Team Leader and Co-Leader will make the call. The team will be informed of the decision as soon as possible.

Code Red Emergency Decision-Making

Any team member can invoke a Code Red (only once per project) if they feel an urgent meeting is required.

By following this process, we ensure fairness, efficiency, and clarity while minimizing delays and miscommunication.

Work Back Schedule:

#	Task	Time Needed to Complete	Accomplish By Date
1	Team Contract	Week 1	29-01-25
2	Preliminary Summary Written Report	Week 2	02-02-25

3	Research & Data Collection (All Topics)	Weeks 3-4	16-02-25
4	Initial Individual Section Drafts	Weeks 5-6	02-03-25
5	Midway Team Review & Revisions	Week 7	09-03-25
6	Written Report Summary	Week 10	12-03-25
7	Client Report Draft	Week 11	19-03-25
8	Team Feedback & Final Edits	Week 12	26-03-25
9	Final Client Report Submission	Week 13	02-04-25
10	Presentation Slide Deck Preparation	Week 11-12	26-03-25
11	Practice Presentations & Refinements	Week 12-13	31-03-25
12	Final Project Presentation	Week 13	02-04-25

Number your tasks in the order of which is to be completed first. Each number corresponds to the number on the calendar below. Write the date in the box that corresponds to the date you have chosen for the task to be completed.

Task #	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
1. Team Contract	29-01-25												
2. Preliminary Summary Written Report		02-02-25											
3. Research & Data Collection				16-02-25									
4. Initial Individual Section Drafts						02-03-25							
5. Midway Team Review & Revisions							09-03-25						
6. Summary Written Report										12-03-25			
7. Client Report Draft											19-03-25		

8. Team Feedback & Final Edits		26-03-25
9. Final Client Report		02
10. Presentation Slide Deck Preparation		26-03-25
11. Practice Presentations & Refinements		31
12. Final Project Presentation		02

Action Plan: Determine what each member of the team will be responsible for completing.

Team Member: Vanshika Singh - Responsibilities: Post Covid storage and Inventory management

Team Member: Darshil Patel - Responsibilities: Logistics and Distribution Strategy

Team Member: Khushbu Desai - Responsibilities: Supply chain disruptions and Risk Management

Team Member: Parth Patel - Responsibilities: Cost Analysis and Financial Feasibility

Team Member: Mira Rana - Responsibilities: Sustainability and technological Integration

Team Member: Devang Nakrani - Responsibilities: Refinery Infrastructure Optimization

File Sharing:

- Google Docs
- Email
- Web CT
- Other

Team Contact Information:**(Leader)** Name: Khushbu DesaiE-mail address: desaikhushi.in@gmail.com

Home #: N/A

Cell #: +1 437-971-7222

other: N/A

(Co-leader) Name: Devang NakraniE-mail address: vishnu116161@gmail.com

Home #: N/A

Cell #: +1 437-299-0167

Other: N/A

Name: Vanshika Singh

E-mail address: vanshika03@gmail.comranamira2001@gmail.com

Home #: N/A

Cell #: +1 416-991-2080

other: N/A

Name: Mira Rana

E-mail address:

Home #: N/A

Cell #: +1 647-854-0247

Other: N/A

Name: Parth Patel

E-mail address: parthhpatel05@gmail.com

Home #: N/A

Cell #: +1 647-622-3793

other: N/A

Name: Darshil Patel

E-mail address: darshilpatel2612@gmail.com

Home: N/A

Cell: +1 437-432-0264

Other: N/A

Signatures

We, the undersigned, agree upon the objective, schedules, policies and responsibilities stated in this team contract and respect the confidentiality of shared information.

VanshikaSingh

Mira Rana

Khushbu Desai

Devang Nakrani

Darshil Patel

Parth Patel

Project Planner

Task	Assigned To	Start Date	End Date	Status	Notes
Literature Review & Background Research	All	Jan 27, 2025	Feb 03, 2025	Completed	Focus on sustainable infrastructure, supply chain management, and the Canadian business landscape.
Client Organization	Mira Rana	Feb 03,	Feb 10,	Completed	Gather information on YSSL's

Profile Development		2025	2025		vision, values, objectives, and product lines.
Internal Analysis (VRINE Framework)	Parth Patel	Feb 10, 2025	Feb 17, 2025	Completed	Analyze YSSL's resources and capabilities using the VRINE framework.
External Analysis (PESTLE & Porter's Five Forces)	Mira Rana	Feb 17, 2025	Feb 24, 2025	Completed	Assess the external factors impacting YSSL's operations and the competitive forces in its industry.
Identify Key Issues and Constraints	Darshil and Vanshika	Feb 24, 2025	Mar 03, 2025	Completed	Post-covid affect and supply chain and material shortages
Develop Potential Infrastructure Solutions	Darshil	Mar 03, 2025	Mar 10, 2025	Completed	Brainstorm and research potential infrastructure solutions for YSSL.
Assess Potential Solutions (Cost-Benefit, Risk, Impact)	Parth Patel	Mar 10, 2025	Mar 17, 2025	Completed	Evaluate the feasibility, costs, benefits, and risks associated with each potential solution.
Recommendation and Prediction of Outcome	Devang	Mar 17, 2025	Mar 24, 2025	In Progress	Recommend the most viable infrastructure strategy for YSSL and project the potential outcomes.
Report Writing and Compilation	Vanshika Singh	Mar 24, 2025	Apr 07, 2025	In Progress	Compile all findings, analyses, and recommendations into a comprehensive report.
Report Review and Editing	All	Apr 07, 2025	Apr 14, 2025	Planned	Review and edit the report for

		2025	2025		clarity, accuracy, and consistency.
Final Submission	Vanshika Singh	Apr 15, 2025	Apr 15, 2025	Planned	Submit the final report.

Experiential Learning
Capstone Project

YOUR SWEET SPOT LIFE: WAREHOUSE AND
REFINERY INFRASTRUCTURE ANALYSIS FOR
VERTICAL INTEGRATION

PREPARED FOR
Your Sweet Spot Life

PREPARED BY
Darshil Patel (101558515)
Devang Nakrani (101551825)
Khushbu Desai (101540933)
Mira Rana (101558655)
Parth Patel (101560568)
Vanshika Singh (101555494)

PROJECT TITLE	Your sweet spot life: Warehouse and refinery infrastructure analysis for vertical integration		
SUBMITTED BY	Darshil Patel (101558515) Devang Nakrani (101551825) Khushbu Desai (101540933) Mira Rana (101558655) Parth Patel (101560568) Vanshika Singh (101555494)	PROJECT TYPE	Capstone project
PROJECTED START DATE	29 January 2025	PROJECTED COMPLETION DATE	2 April 2025

XXVII. PROJECT OVERVIEW

XXVIII. WHY WE'RE THE BEST FIT

XXIX. NEEDS / ISSUES

XXX. GOALS

XXXI. SCOPE OF WORK

XXXII. TIMELINE / MILESTONES

XXXIII. COST STRUCTURE

XXXIV. STAFFING RESOURCES

XXXV. MEASUREMENTS OF SUCCESS

XXXVI. TERMS & CONDITIONS

XXXVII. ACCEPTANCE OF PROPOSAL

I. PROJECT OVERVIEW

WHO WE ARE

A group of students maintains expertise in supply chain management, sustainability, and infrastructure analysis to work together as a team. Our different strengths help us create smart solutions to streamline operations, using current resources best while following regulations and supporting eco-friendly practices. Our goal is to assist Your Sweet Spot Life through academic expertise coupled with practical experience, so the business achieves operational efficiency and cost reductions with environmental awareness and supports local communities.

PROJECT BACKGROUND

The Your Sweet Spot Life organization develops a comprehensive project to build a self-operating Canadian system. The business utilizes existing warehouses together with unused refinery spaces and local resources to produce sustainable ethical products as part of its plan to reduce costs and enhance operational efficiency while safeguarding Canadian cultural principles.

OBJECTIVES

To facilitate YSSL expansion this project evaluates Canadian warehouses alongside refineries which currently remain inactive for possible conversion opportunities.

1. Find and Map Locations:

A thorough written file will show all warehouse locations together with refinery properties no matter their active status along with damage assessment details for future redevelopment plans.

2. Check Suitability:

These locations will be evaluated to verify their capability of producing fashion items along with kitchenware and hydroponics equipment and toys. Our strategy will involve selecting locations that provide excellent distribution benefits together with easy access to workforce members.

3. Meet Environmental Standards:

We will conduct an environmental impact analysis before determining the installation of renewable power systems that use geothermal heating technology.

4. Plan for Future Growth:

Future facility expansion approaches together with improvement instructions for YSSL's forthcoming product releases and community-based work are detailed in this section.

II. WHY WE'RE THE BEST FIT

ABOUT US

We are a team of students who specialize in supply chain management, sustainability, and infrastructure analysis. Our combined strengths allow us to design strategic solutions that enhance operational efficiency, optimize asset utilization, reduce regulatory risk, and support environmental sustainability. Utilizing their academic knowledge and trueness in practice, we aim to contribute to Your Sweet Spot Life supporting the achievement of operational efficiency, reducing costs, ensuring environmental sustainability, and aiding local communities.

SERVICES

We have essentially worked on a project assessing existing Canadian warehouses and inactive refineries as candidates for its conversion. Our services include:

Infrastructure Research

A full database of Canadian warehouse and refinery facilities, including details on size, condition and location.

Feasibility Study

Evaluating facility flexibility, space usage, environmental footprint, and access to transportation (port, railway)

Sustainability Assessment

Assessing if they are conforming to Canadian Environmental and recommending renewable solutions like geothermal heating.

Recommendations on Site Scope Expansion

Helping to guide strategy for future growth and community development initiatives.

Consulting Projects to Improve Operational Efficiency

Streamlining production, storage and logistics to maximize business growth and sustainability targets.

OUR TEAM

Our team consists of students with the base and interests in supply chain management, planning and sustainability. From our diverse academic backgrounds, we bring together our skills to research, analyze and come up with solutions that optimize operations by keeping sustainability in mind and achieving those solutions effectively and efficiently. We work collaboratively to conduct facility assessments evaluate feasibility and ensure compliance with the environmental regulations all while gaining hands on experience in real-world supply chain challenges.

OUR WORK

Mapping Out Locations and Identifying Them-Finding unused warehouses and refineries, assessing the damage and work needed, and determining how they can be redeveloped.

Evaluating for Production Suitability-Ensuring places are suitable for fashion goods, cookware, hydroponic systems, toys.

Compliance with Environmental Regulations -Carrying out impact assessments and introducing geothermal heating and alternative energy sources.

Strategic Planning for Growth-Well-organized plans for future facility expansion and local community integration.

III. NEEDS / ISSUES

Identifying Facilities:

The search requires locating empty Canadian warehouses and refineries which can serve as future development sites. The main difficulty arises from selecting sites that hold proximity to power sources alongside suitable access for workers at rates that promote operational efficiency.

Regulatory & Sustainability Compliance:

Canada has regulations that require all installations to use renewable energy sources while getting access to water and requiring optimized waste management. The main issue arises from needing locations that fulfill environmental requirements while maintaining product quality alongside operational efficiency.

Scalability & Product Line Support:

Companies require adaptable manufacturing facilities to manufacture toys as well as fashion materials and hydroponics products. The main difficulty lies in designing flexible areas that support efficient manufacturing processes alongside research areas as well as training facilities and customer interaction capabilities.

IV. GOALS

GOALS	FOCUS
Thorough Infrastructure Research	An examination of selected warehouse and refinery facilities needs to take place including standby buildings with potential redevelopment potential.
Finding the Right Locations for YSSL	Select sites that fulfill basic requirements which include proximity to sustainable energy points and large metropolitan areas as well as water access points from the legislation. Focus on areas that support eco-friendly goals and offer chances to help local communities grow.
Facility Flexibility and Growth	Ensure separated products have the facilities

with the capacity to produce and store as well as support business growth through expansion possibilities. Webb aims to establish locations that are adaptable for manufacturing operations in addition to research facilities while also integrating space for business development together with public outreach opportunities.

V. SCOPE OF WORK

16. Construction of Facilities and Evaluation:

Our first step is to collect Comprehensive List of 1 warehouse per product considering criteria for each product and 1 refinery across Canada. It addresses facilities that are operational, out of service and the closed facilities that have the potential for redevelopment. Next, we'll assess the condition of those facilities to see if they have the capacity and structural integrity to be converted into manufacturing hubs for a variety of products, including clothing, kitchenware, toys, hydroponics systems, etc.

17. Feasibility Study:

We will evaluate these facilities to determine whether they might serve the needs of the YSSL. Hold on, first we check their location, to ensure they're within a reasonable distance (150-200 kilometers) of significant cities. This is critical to sourcing workers and distributing products seamlessly. We'll also see whether the facilities are using such eco-friendly energy sources as hydroelectric, geothermal or wind power, which can help reduce environmental impact. The other key factor is transport. We'll make sure the facilities are near rail lines or ports, and that they can handle trucks directly, which creates ease of shipping and receiving. Finally, we will assess the extent to which the facilities comply with sustainability standards, which includes the use of renewable energy in the production process, but especially with hydroponic systems for heating, e.g. geothermal heating. We'll make sure that they align with the Canadian environmental laws.

18. Impact on Environment and the Community:

We will evaluate potential environmental impacts to ensure that these facilities are consistent with YSSL's vision of functioning in a way that protects nature. We will target facilities that can leverage natural resources, such as geothermal energy from hot springs, and are within communities that require economic stimulus. These facilities will not only help YSSL grow, but will also benefit local communities by creating jobs, providing training programs, and offering spaces for the public to engage and participate in activities.

19. Expanding Facilities and Supporting Products:

We'll ensure the warehouse and refinery we select have space to grow and support YSSL as it expands. This includes being able to produce various sorts of products (such as fashion items – clothing, shoes, and accessories, kitchenware – pots, pans and cutlery, home hydroponic systems, and educational toys). It's also essential that these facilities are flexible and can accommodate research labs, business training centers, and interactive environments where end-users can utilize YSSL's products firsthand.

20. Development of strategic recommendations:

Provide specific recommendations detailing how to convert these facilities to meet the needs of YSSL. It will include plans for production, storage, research and interactive spaces. We will also give recommendations for future expansion of the facilities, as YSSL how YSSL continues to expand.

VI. TIMELINE / MILESTONES

MILESTONE	START DATE	END DATE
Infrastructure Identification and Research	February 2025	February 28, 2025
Feasibility Study and Sustainability Review	March 1, 2025	March 31, 2025
Final Recommendations and Client Presentation	April 1, 2025	April 10, 2025

VII. COST STRUCTURE

NEEDS / INVESTMENT	COST
Finding and researching facilities	\$5,000
Analyzing the feasibility and sustainability of the facilities	\$4,000
Recommendations for meeting regulations and expanding the facilities	\$3,000
ESTIMATE TOTAL	\$12,000

VIII. STAFFING RESOURCES

13. The project lead maintains deadlines and distributes information effectively to every project member.
14. The project requires a process to evaluate and determine whether existing facilities meet its operational requirements.
15. The facilities need to meet all environmental laws while preparing plans for sustainable improvements.
16. The project needs to require proper site access requirements that answer transportation and logistical needs.

IX. MEASUREMENTS OF SUCCESS

Progress Checks:

- The project progress and target alignments receive continuous checks through scheduled client meetings.

- Standard assessment processes conducted within the organization aim to confirm that the project upholds all quality requirements.

Reporting:

- The project maintains regular reporting formats for monitoring progress milestones in monthly intervals.
- An end-of-project report containing facility findings together with sustainability plans and assessment reports.

X. TERMS & CONDITIONS

This proposal may no longer be available if it's not accepted by the given date. If the proposal isn't confirmed by the deadline, the details may be updated or changed.

PROPOSAL MAY BE WITHDRAWN IF NOT ACCEPTED BY DATE OF

February 16, 2025

XI. ACCEPTANCE OF PROPOSAL

AUTHORIZED
CLIENT
SIGNATURE

DATE OF
ACCEPTANCE

Experiential Learning
Capstone Project

YOUR SWEET SPOT LIFE: WAREHOUSE AND
REFINERY INFRASTRUCTURE ANALYSIS FOR
VERTICAL INTEGRATION

PREPARED FOR
Your Sweet Spot Life

PREPARED BY
Darshil Patel (101558515)
Devang Nakrani (101551825)
Khushbu Desai (101540933)
Mira Rana (101558655)
Parth Patel (101560568)
Vanshika Singh (101555494)

PROJECT TITLE	Your sweet spot life: Warehouse and refinery infrastructure analysis for vertical integration		
SUBMITTED BY	Darshil Patel (101558515) Devang Nakrani (101551825) Khushbu Desai (101540933) Mira Rana (101558655) Parth Patel (101560568) Vanshika Singh (101555494)	PROJECT TYPE	Capstone project
PROJECTED START DATE	29 January 2025	PROJECTED COMPLETION DATE	2 April 2025

XXXVIII. PROJECT OVERVIEW

XXXIX. WHY WE'RE THE BEST FIT

XL. NEEDS / ISSUES

XLI. GOALS

XLII. SCOPE OF WORK

XLIII. TIMELINE / MILESTONES

XLIV. COST STRUCTURE

XLV. STAFFING RESOURCES

XLVI. MEASUREMENTS OF SUCCESS

XLVII. TERMS & CONDITIONS

XLVIII. ACCEPTANCE OF PROPOSAL

I. PROJECT OVERVIEW

WHO WE ARE

A group of students maintains expertise in supply chain management, sustainability, and infrastructure analysis to work together as a team. Our different strengths help us create smart solutions to streamline operations, using current resources best while following regulations and supporting eco-friendly practices. Our goal is to assist Your Sweet Spot Life through academic expertise coupled with practical experience, so the business achieves operational efficiency and cost reductions with environmental awareness and supports local communities.

PROJECT BACKGROUND

The Your Sweet Spot Life organization develops a comprehensive project to build a self-operating Canadian system. The business utilizes existing warehouses together with unused refinery spaces and local resources to produce sustainable ethical products as part of its plan to reduce costs and enhance operational efficiency while safeguarding Canadian cultural principles.

OBJECTIVES

To facilitate YSSL expansion this project evaluates Canadian warehouses alongside refineries which currently remain inactive for possible conversion opportunities.

1. Find and Map Locations:

A thorough written file will show all warehouse locations together with refinery properties no matter their active status along with damage assessment details for future redevelopment plans.

2. Check Suitability:

These locations will be evaluated to verify their capability of producing fashion items along with kitchenware and hydroponics equipment and toys. Our strategy will involve selecting locations that provide excellent distribution benefits together with easy access to workforce members.

3. Meet Environmental Standards:

We will conduct an environmental impact analysis before determining the installation of renewable power systems that use geothermal heating technology.

4. Plan for Future Growth:

Future facility expansion approaches together with improvement instructions for YSSL's forthcoming product releases and community-based work are detailed in this section.

II. WHY WE'RE THE BEST FIT

ABOUT US

We are a team of students who specialize in supply chain management, sustainability, and infrastructure analysis. Our combined strengths allow us to design strategic solutions that enhance operational efficiency, optimize asset utilization, reduce regulatory risk, and support environmental sustainability. Utilizing their academic knowledge and trueness in practice, we aim to contribute to Your Sweet Spot Life supporting the achievement of operational efficiency, reducing costs, ensuring environmental sustainability, and aiding local communities.

SERVICES

We have essentially worked on a project assessing existing Canadian warehouses and inactive refineries as candidates for its conversion. Our services include:

Infrastructure Research

A full database of Canadian warehouse and refinery facilities, including details on size, condition and location.

Feasibility Study

Evaluating facility flexibility, space usage, environmental footprint, and access to transportation (port, railway)

Sustainability Assessment

Assessing if they are conforming to Canadian Environmental and recommending renewable solutions like geothermal heating.

Recommendations on Site Scope Expansion

Helping to guide strategy for future growth and community development initiatives.

Consulting Projects to Improve Operational Efficiency

Streamlining production, storage and logistics to maximize business growth and sustainability targets.

OUR TEAM

Our team consists of students with the base and interests in supply chain management, planning and sustainability. From our diverse academic backgrounds, we bring together our skills to research, analyze and come up with solutions that optimize operations by keeping sustainability in mind and achieving those solutions effectively and efficiently. We work collaboratively to conduct facility assessments evaluate feasibility and ensure compliance with the environmental regulations all while gaining hands on experience in real-world supply chain challenges.

OUR WORK

Mapping Out Locations and Identifying Them-Finding unused warehouses and refineries, assessing the damage and work needed, and determining how they can be redeveloped.

Evaluating for Production Suitability-Ensuring places are suitable for fashion goods, cookware, hydroponic systems, toys.

Compliance with Environmental Regulations -Carrying out impact assessments and introducing geothermal heating and alternative energy sources.

Strategic Planning for Growth-Well-organized plans for future facility expansion and local community integration.

III. NEEDS / ISSUES

Identifying Facilities:

The search requires locating empty Canadian warehouses and refineries which can serve as future development sites. The main difficulty arises from selecting sites that hold proximity to power sources alongside suitable access for workers at rates that promote operational efficiency.

Regulatory & Sustainability Compliance:

Canada has regulations that require all installations to use renewable energy sources while getting access to water and requiring optimized waste management. The main issue arises from needing locations that fulfill environmental requirements while maintaining product quality alongside operational efficiency.

Scalability & Product Line Support:

Companies require adaptable manufacturing facilities to manufacture toys as well as fashion materials and hydroponics products. The main difficulty lies in designing flexible areas that support efficient manufacturing processes alongside research areas as well as training facilities and customer interaction capabilities.

IV. GOALS

GOALS	FOCUS
Thorough Infrastructure Research	An examination of selected warehouse and refinery facilities needs to take place including standby buildings with potential redevelopment potential.
Finding the Right Locations for YSSL	Select sites that fulfill basic requirements which include proximity to sustainable energy points and large metropolitan areas as well as water access points from the legislation. Focus on areas that support eco-friendly goals and offer chances to help local communities grow.
Facility Flexibility and Growth	Ensure separated products have the facilities

with the capacity to produce and store as well as support business growth through expansion possibilities. Webb aims to establish locations that are adaptable for manufacturing operations in addition to research facilities while also integrating space for business development together with public outreach opportunities.

V. SCOPE OF WORK

21. Construction of Facilities and Evaluation:

Our first step is to collect Comprehensive List of 1 warehouse per product considering criteria for each product and 1 refinery across Canada. It addresses facilities that are operational, out of service and the closed facilities that have the potential for redevelopment. Next, we'll assess the condition of those facilities to see if they have the capacity and structural integrity to be converted into manufacturing hubs for a variety of products, including clothing, kitchenware, toys, hydroponics systems, etc.

22. Feasibility Study:

We will evaluate these facilities to determine whether they might serve the needs of the YSSL. Hold on, first we check their location, to ensure they're within a reasonable distance (150-200 kilometers) of significant cities. This is critical to sourcing workers and distributing products seamlessly. We'll also see whether the facilities are using such eco-friendly energy sources as hydroelectric, geothermal or wind power, which can help reduce environmental impact. The other key factor is transport. We'll make sure the facilities are near rail lines or ports, and that they can handle trucks directly, which creates ease of shipping and receiving. Finally, we will assess the extent to which the facilities comply with sustainability standards, which includes the use of renewable energy in the production process, but especially with hydroponic systems for heating, e.g. geothermal heating. We'll make sure that they align with the Canadian environmental laws.

23. Impact on Environment and the Community:

We will evaluate potential environmental impacts to ensure that these facilities are consistent with YSSL's vision of functioning in a way that protects nature. We will target facilities that can leverage natural resources, such as geothermal energy from hot springs, and are within communities that require economic stimulus. These facilities will not only help YSSL grow, but will also benefit local communities by creating jobs, providing training programs, and offering spaces for the public to engage and participate in activities.

24. Expanding Facilities and Supporting Products:

We'll ensure the warehouse and refinery we select have space to grow and support YSSL as it expands. This includes being able to produce various sorts of products (such as fashion items – clothing, shoes, and accessories, kitchenware – pots, pans and cutlery, home hydroponic systems, and educational toys). It's also essential that these facilities are flexible and can accommodate research labs, business training centers, and interactive environments where end-users can utilize YSSL's products firsthand.

25. Development of strategic recommendations:

Provide specific recommendations detailing how to convert these facilities to meet the needs of YSSL. It will include plans for production, storage, research and interactive spaces. We will also give recommendations for future expansion of the facilities, as YSSL how YSSL continues to expand.

VI. TIMELINE / MILESTONES

MILESTONE	START DATE	END DATE
Infrastructure Identification and Research	February 2025	February 28, 2025
Feasibility Study and Sustainability Review	March 1, 2025	March 31, 2025
Final Recommendations and Client Presentation	April 1, 2025	April 10, 2025

VII. COST STRUCTURE

NEEDS / INVESTMENT	COST
Finding and researching facilities	\$5,000
Analyzing the feasibility and sustainability of the facilities	\$4,000
Recommendations for meeting regulations and expanding the facilities	\$3,000
ESTIMATE TOTAL	\$12,000

VIII. STAFFING RESOURCES

17. The project lead maintains deadlines and distributes information effectively to every project member.
18. The project requires a process to evaluate and determine whether existing facilities meet its operational requirements.
19. The facilities need to meet all environmental laws while preparing plans for sustainable improvements.
20. The project needs to require proper site access requirements that answer transportation and logistical needs.

IX. MEASUREMENTS OF SUCCESS

Progress Checks:

- The project progress and target alignments receive continuous checks through scheduled client meetings.
- Standard assessment processes conducted within the organization aim to confirm that the project upholds all quality requirements.

Reporting:

- The project maintains regular reporting formats for monitoring progress milestones in monthly intervals.
- An end-of-project report containing facility findings together with sustainability plans and assessment reports.

X. TERMS & CONDITIONS

This proposal may no longer be available if it's not accepted by the given date. If the proposal isn't confirmed by the deadline, the details may be updated or changed.

PROPOSAL MAY BE WITHDRAWN IF NOT ACCEPTED BY DATE OF February 16, 2025

XI. ACCEPTANCE OF PROPOSAL

AUTHORIZED
CLIENT
SIGNATURE



DATE OF
ACCEPTANCE

February 12, 2025