

Sustainability Strategy

May 18, 2016



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MIT Sustainability Team



Nicole Geneau
Sloan Fellow - MIT

The Canadian Nicole is a finance reference and will be the one leading the team through efficient analysis to understand the constraints that we will face in order to make the optimal choose. With all the experience she has in the area, her judgement about the feasibility of our proposal will be very valuable for the team and for the company.



Mariia Levseieva
Sloan Fellow - MIT

Originally from Ukraine, Maria has a vast experience working for companies such as P&G and Mars, where she led many product launches and drove their business forward. She is a marketing expertise and will build up a strategy to make the sustainable investments be worth it.



Giuliana Machado
Industrial Engineering - MIT

Giuliana is from Brazil, an undergrad for engineering in Brazil and an exchange at MIT for economics and management. With pragmatism and focus on operations, she will make sure that all the steps of the project are completed and will help the team to find a solution with minimum impact in the daily activities.



Honey Bajaj
MSc Engineering &
Management - MIT

Honey is a young Indian successful entrepreneur. She was a part of many successful designs, achieving lowcost solutions and being able to launch impacting products. She is ready for the challenge of finding alternative and optimizing ways to get our objectives done. With imagination and research, she will lead the team to find solutions not before explored.

Project Brief

One is the installation of a **Freeaire system** in our shipping warehouse, which we keep at 50 degrees. This system uses outdoor air rather than mechanical cooling when the temperature outside is cooler than desired inside. **Being able to quantify this project** would allow for the persuasion of putting the same system into other cooled spaces.

Another would be the installation of **Big Ass fans and LEDs** and retrofitting T-5 lighting with Big Ass LEDs. We could tack a fair amount of lighting onto the study, considering we have a bunch of older, lower efficiency fixtures and newer LED fixtures. We have also added motion sensors to a few lower traffic areas that have had an impact.





Redefined brief

Like many small and medium businesses, Allagash is committed to environmental & social responsibility, but still trying to find the right place on the sustainability spectrum – one that is authentic and reflects their commitment but doesn't greenwash.

How might we help Allagash benchmark their current activities against industry standards for their current sustainability initiatives?

Agenda

1. Approach

2. Framework & Analysis

- Refrigeration project evaluation
- Benchmarking
- Supply chain leverage

3. Recommendations

- Simple overview framework
- Develop a funnel
- Materiality assessment
- Capture low hanging fruit

4. Next Steps

- Thoughts for further exploration
- Discussion



Approach

Framework & Analysis

Recommendations

Next Steps

Process

UNDERSTAND
& MAP

- Interviews with host, Allagash to understand and align the project objectives, scope, and deliverables.
- Redefine the problem
- Secondary research

IMMERSE

- Site - visit
- 20 interviews with Allagash employees across various departments
- Secondary research on sustainability and craft brewing industry including SASB Standards Disclosure Guidance for Alcoholic Beverages.

SYNTHESIS
& ANALYSIS

- Monthly Utility Bills
- Monthly production and shipping volumes
- Energy efficiency project related invoices and specs
- Details of energy efficiency projects including proposals, invoices and technical specifications.
- Review of interview notes to find themes, key ideas/challenges

FRAMEWORKS
& REPORTING

- Frameworks to capture sustainability initiatives included:
 - Value Driver Model
 - Core of Sustainability Strategy
 - Sustainability-oriented-Innovation Framework

Nuggets from the Interviews

KEY FINDINGS



Sustainability embedded

Sustainability isn't just a philosophy – it's a practical approach to business. It's embedded in Allagash's DNA (they spent a lot of time researching the reuse of materials and if the cost was marginally higher vs. prohibitive, they went with the reuse material. This kind of practicality is embedded in the business from the beginning but even accelerated with appearance of the Green team).

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Strengths of the Green team

Green team is the most effective when the projects are clearly defined with deadlines, delegation and direction (like the office expansion) as well when broad departmental inclusion and engagement takes place.

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Areas for Improvements of the Green team

The team feels like its been challenging to combine the work on the green team with daily routine because the flip-side of adjunct job is that it isn't anyone's real job. The meaning of the Green Team has evolved – started as people who managed the recycling bins. Tactical actions tend to consume time and distract the team from pursuing project identification with greater impact.

Nuggets from the Interviews

INSIGHTS ON SUSTAINABILITY



Sustainability practices/projects/facts

Sustainability was always very important because it's a right thing to do. When company is small some sustainability initiatives are more challenging. The driving need was 'survival' – emphasis on brewing great beer; making payroll; paying vendors. More opportunities pop up with the time when company develops.

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Sustainability Challenges

Main Challenge: lack of expertise and lack of focus. There are a lot of opportunities that are missed at the moment. Allagash cannot calculate cost accurately very often due to lack of expertise in Sustainability projects assessment. Allagash needs a value chart for investments in order to prioritise them.

Deep Thoughts... inspiration!

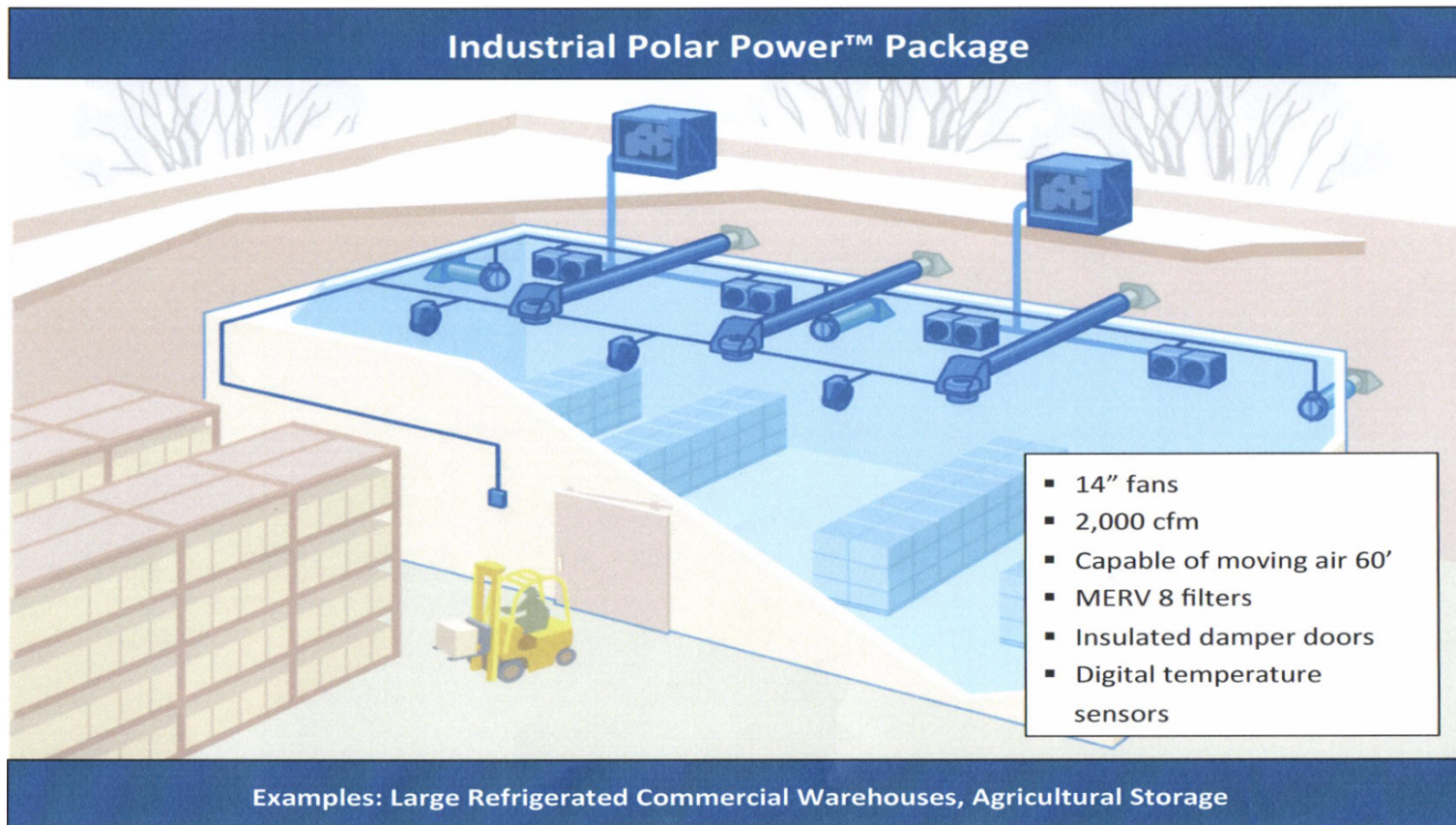
- The expansion of facilities felt organised - despite the spectacular growth
- “Doing good” is embedded in the DNA
- Deep commitment and employee engagement
- Strength of the culture - humility...
- Formalisation of processes is a relatively new thing
- Waste diversion and ‘reuse’ a practical approach

ALLAGASH

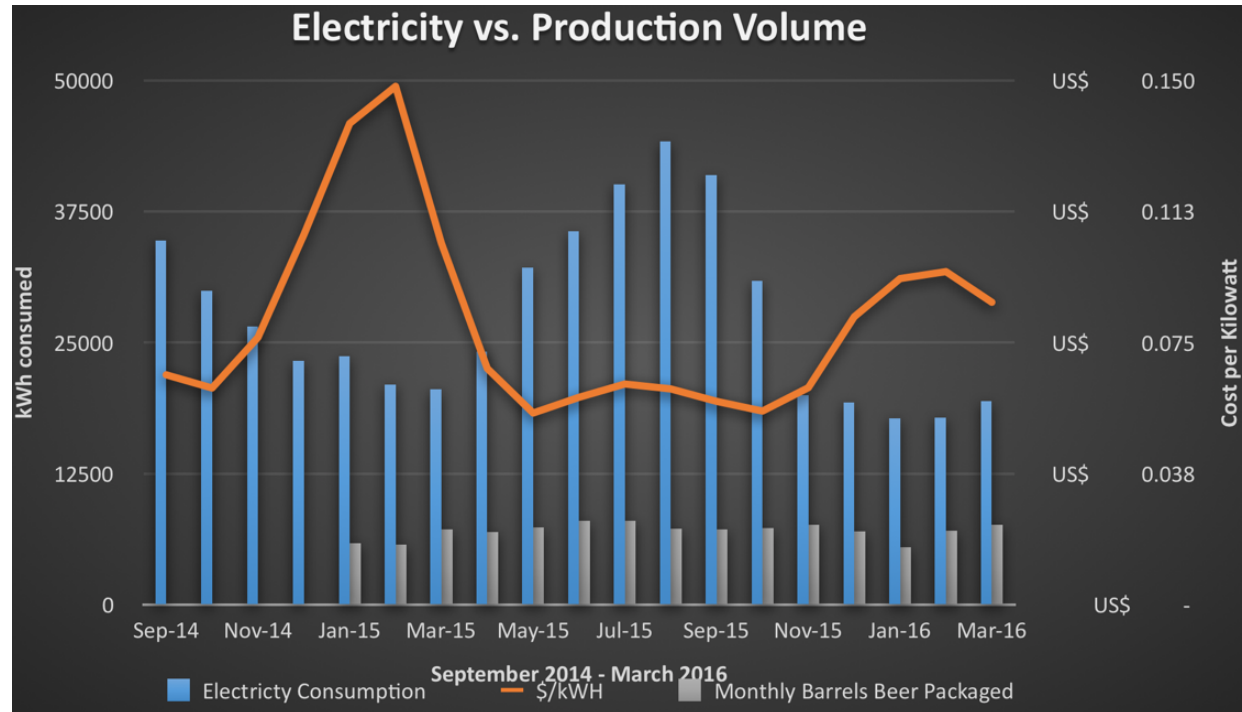
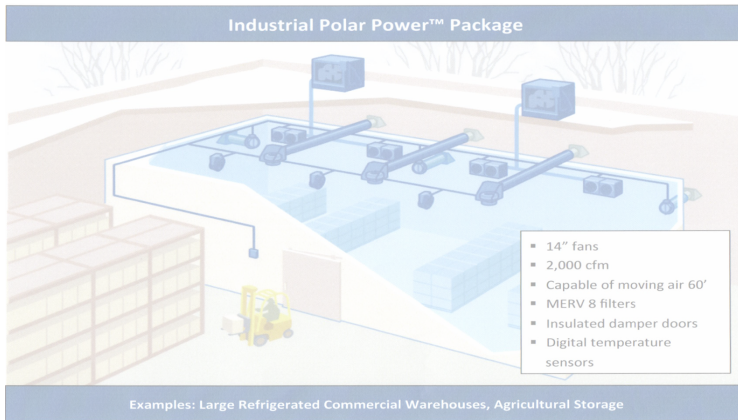
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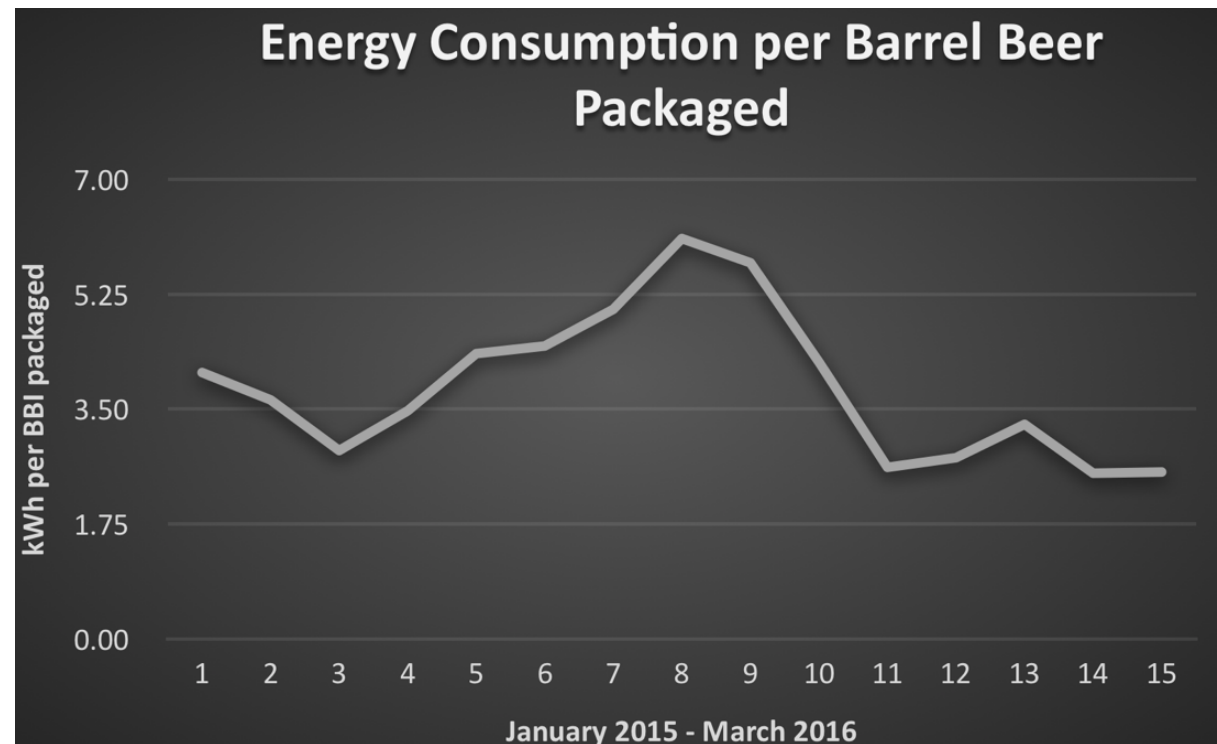
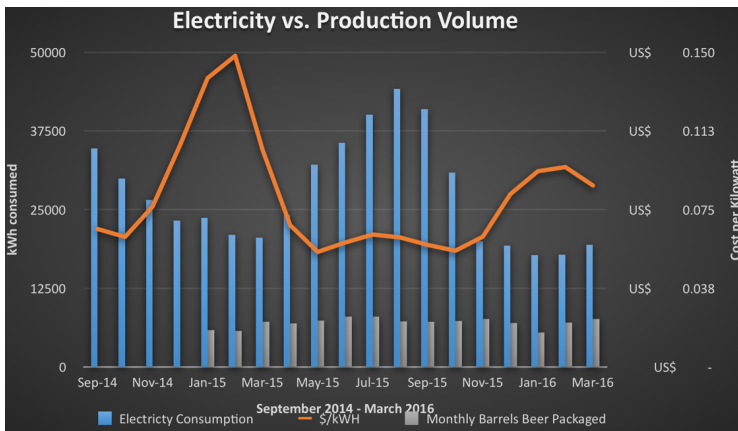
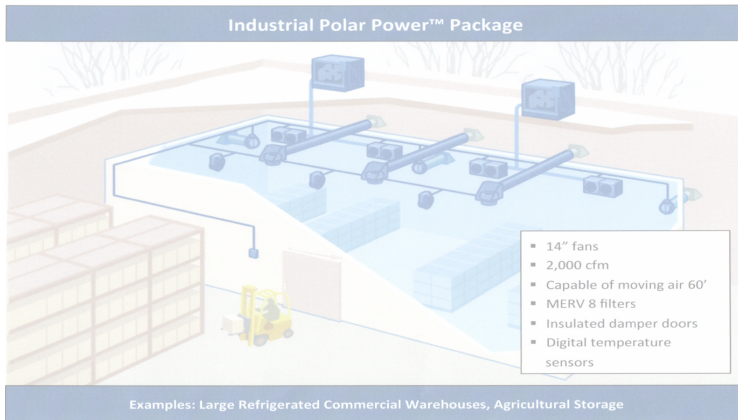
Evaluation of freeaire refrigeration project



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Benchmarking

Allagash punches above its weight class with respect to sustainability given their size and scale.

It is evident that the concern for their impact on the environment and investment in their community have allowed them to embed sustainability as a core value in how they go about doing their business.

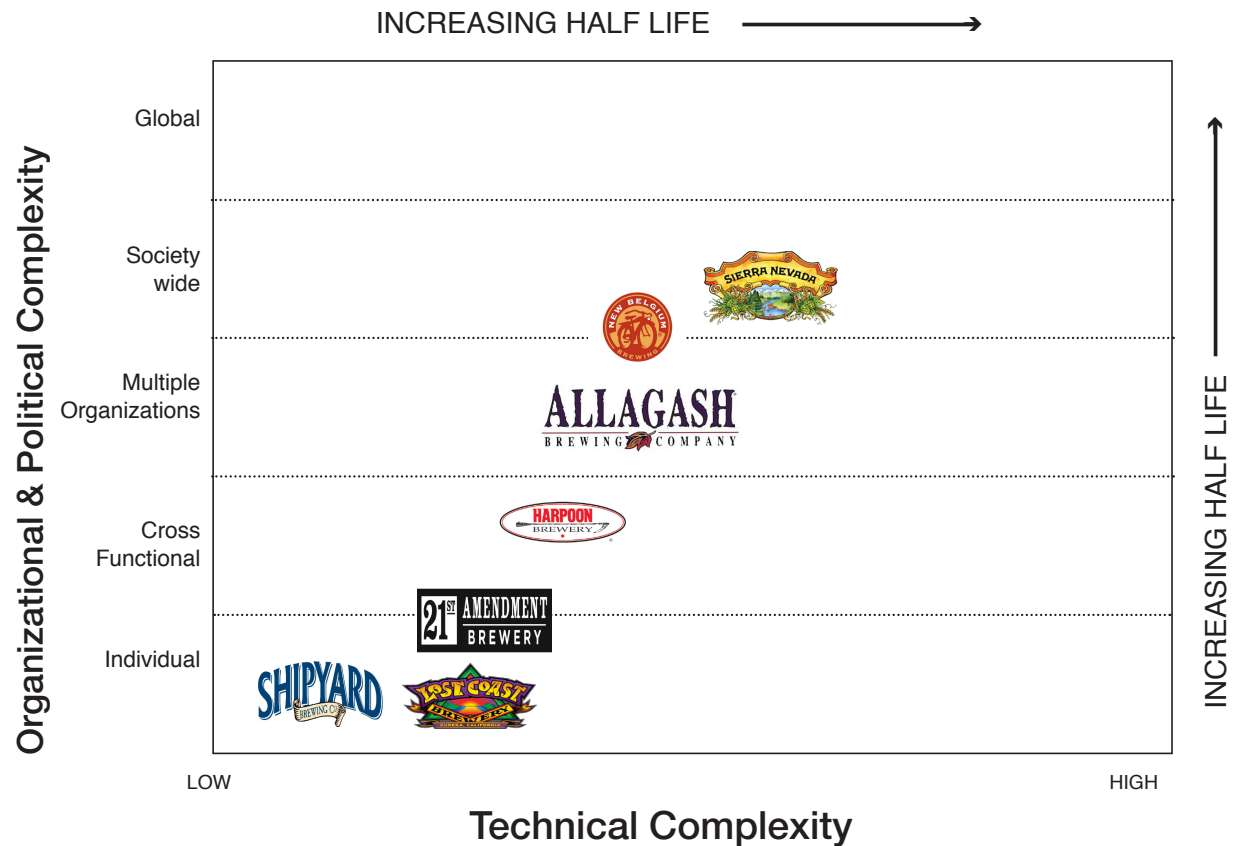


Fig1: Half Life Improvement Process

Supply Chain Leverage

Allagash pays a lot of attention to building fruitful relationships with its suppliers.

It is unclear if sustainability matters are discussed explicitly with suppliers upfront or become part of the relationship after the main contract is agreed upon.

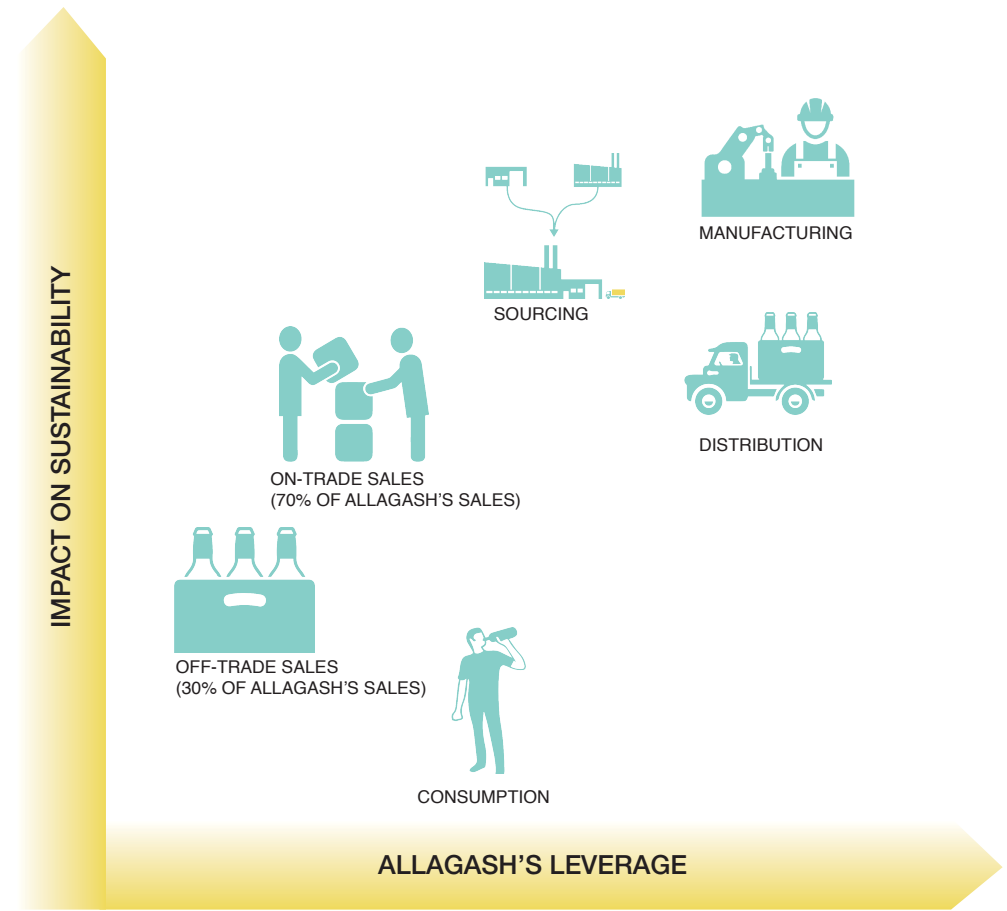


Fig2: Supply chain - Impact of Sustainability & Allagash's Leverage

Simple overview framework

Use a simple tool to categorize and communicate the value of their current initiatives -- This brings us back to framing efforts in the Value Driver Model

Opportunity to establish a more comprehensive baseline using any number of the sustainability audit tools, including a lifecycle assessment for their flagship product

Approach

Framework & Analysis

Recommendations

Next Steps



Fig 3: PRI & Global Compact LEAD, "The Value Driver Model: A tool for communicating the business value of sustainability"

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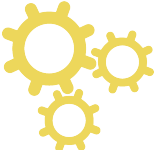
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 <p>Return on Equity or Capital</p>	 <p>Growth</p>	<ul style="list-style-type: none"> • New product opportunities (16 Counties - entirely locally sourced products); • New markets (opportunities where Millennials are majority, eg. College towns); • Pursue a sustainability labeling program for product differentiation. 	
	 <p>Productivity</p>	<ul style="list-style-type: none"> • Reduce inputs (energy and water efficiency, air compressor system audit) and waste (solid waste, beer loss, and waste heat recapture); • Increase labor efficiency (i.e. the low turnover they achieve in HR); • Attracting and retaining key staff in a competitive market). 	

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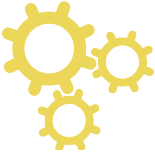

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	 <p>Risk Management</p>	<ul style="list-style-type: none"> • Source of raw materials, including water, grain and hops is critical to the long term sustainability of brewers; • Incentivising local farmers; • Paying employees well; • Balance in growth.

Fig 3: PRI & Global Compact LEAD, “The Value Driver Model: A tool for communicating the business value of sustainability

Develop a funnel

The Embedding Project is a public-benefit research project that relies on strong social science research methods. Each stage has a set of dedicated resources that can help the company to make a decision at every stage. For Allagash these resources could provide the structure needed to approach sustainability projects more systematically. Starting with a self-assessment.

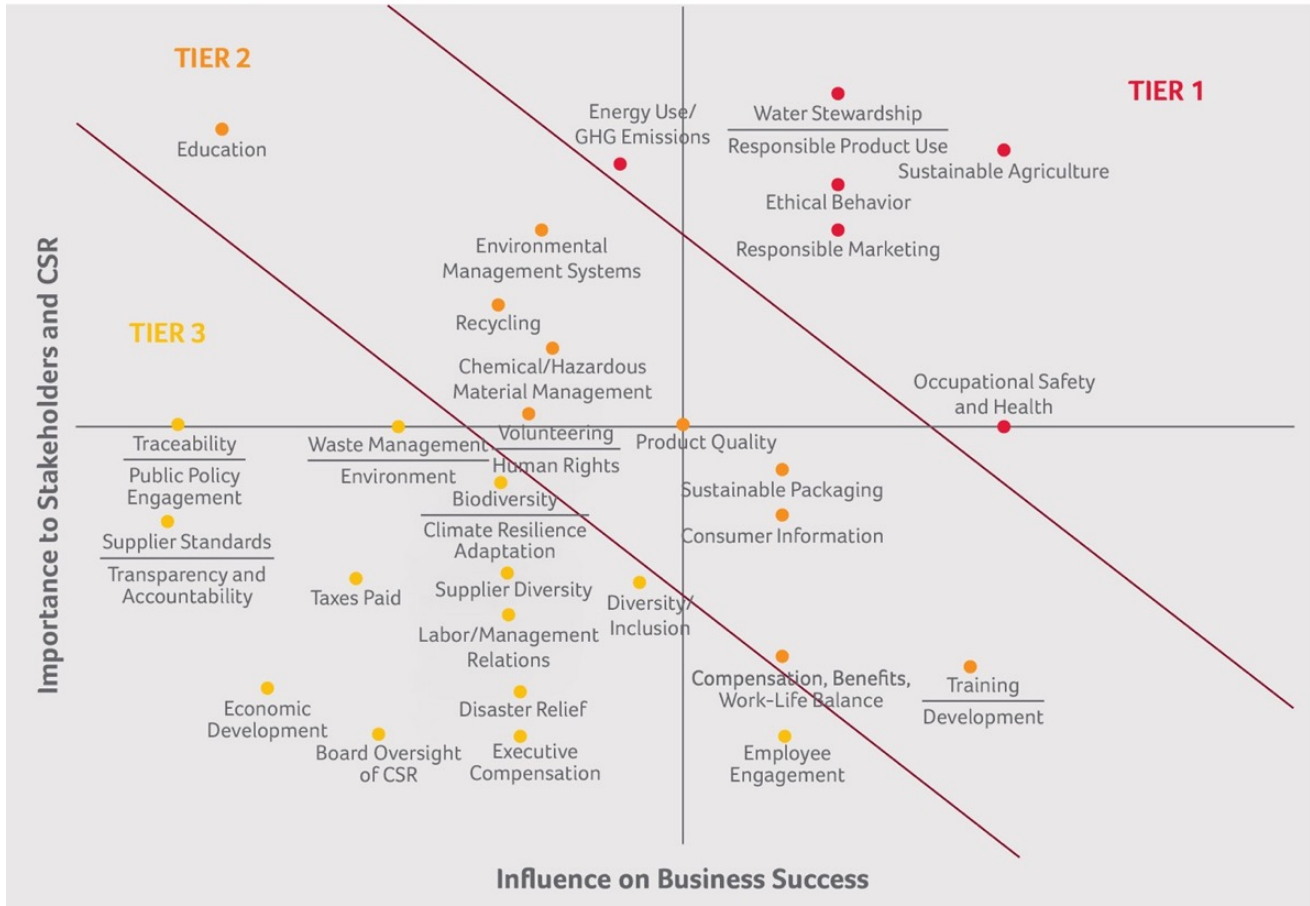


Materiality Assessment

ABInbev uses a **materiality analysis** approach sustainability initiatives that matter to them and to evaluate the results they deliver. For their initiatives they evaluated potential impact on business analyzing revenue growth, cost control, etc.

Mapping to assess their initiatives of policymakers, local communities where they operate, leading NGOs and their consumers.

AB InBev Materiality Assessment Map



Low hanging fruits

The McKinsey Cost Curve: Updated in 2011

- Everything below the x-axis is 'NPV-positive' and above is 'NPV negative' as compared to doing business as usual.
- The height of the bar represents avg cost of avoiding 1 tonne of CO₂e by 2030. The width is the total potential of that opportunity.
- Basically... all the types of projects represented on the left are 'no-brainers'. To the right, these projects require a payback period and investment plan.

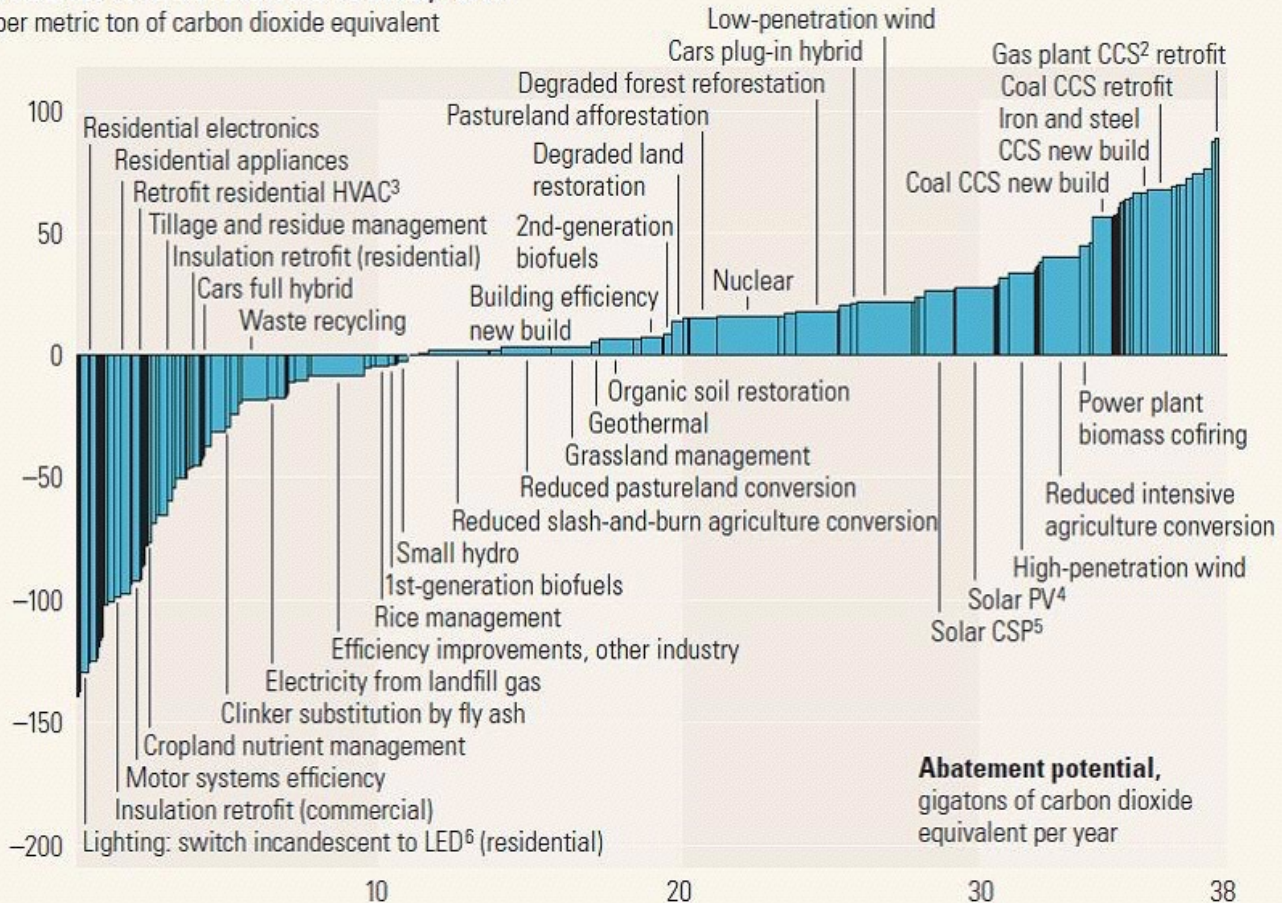
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Abatement costs vs "business as usual," 2030¹
\$ per metric ton of carbon dioxide equivalent



Ideas generated for research



Explore Customer preference and segmentation research around sustainability.

Ideas generated for research



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Value of becoming a BCorp.

Ideas generated for research



Explore Customer preference and segmentation research around sustainability.



Value of becoming a BCorp.



Allocate full time sustainability officer?



Thank You

