

Background

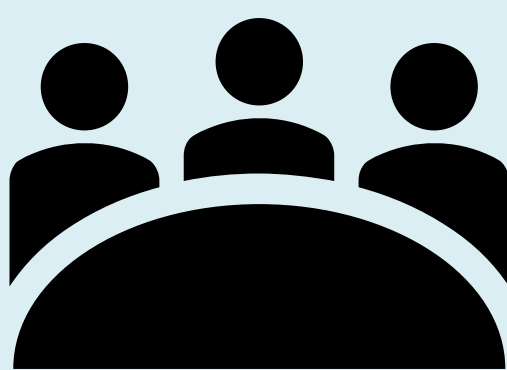
- The increase in greenhouse gas emissions are leading cause of the climate crisis
- Fashion retailers bear a large responsibility for the emission of greenhouse gases (the fashion industry is responsible for 8-10% of global emissions)
- The application of renewable energy to fashion retail has the potential to decrease greenhouse gas emissions, but it is challenging to implement
- My project aims to address and explore frameworks which companies can use to adopt renewable energy



What are the barriers and best practices to renewable energy implementation in fashion retail?

Internship & Methods

- Nordstrom is a fashion retailer in both the United States and Canada, and specializes in Women's, Men's, and children's fashion.
- Worked with the Corporate Social Responsibility Team and Facilities to increase their renewable energy profile and assist in other sustainability initiatives.
- Collected data via interviews, literature review, and hands on experience



Interviews with stakeholders



Literature Review



Hands on experience

Results

Stakeholder interviewee sentiments

"Reducing energy demand makes it better for the grid and how we demand on the grid... **we need to find how to run more efficiently**"

"it comes **down to is economics** every single time."

"**There is a disconnect** there about wanting to do something and being able to support it... I think it is important for people...to **create an alignment for the vision of what renewables should be**"

Table 1. Barriers to renewable energy adoption and relevant best practices. This data was collected through internal company interviews, a literature review, and firsthand experience at Nordstrom.

Barriers	Relevant Best Practices
Economic Feasibility	<ul style="list-style-type: none">• Identify and utilize <u>financial incentives</u>• Join <u>community energy</u> programs (e.g., community solar) (Figure 1.)
Communication and support internally at the company	<ul style="list-style-type: none">• Implement a high-level sponsor for renewable energy implementation• Implement <u>energy efficient measures</u> to operations (ex., energy storage batteries, demand limiting, and load shedding)
Lack of proper infrastructure	<ul style="list-style-type: none">• Procure <u>renewable energy credits</u>
Company bandwidth and time constraints	<ul style="list-style-type: none">• Implement a high-level sponsor for renewable energy implementation



Figure 1. Image of a solar field for community solar. Community solar has no major upfront costs, no onsite installation, and reduces energy bills. All these qualities allow for solar energy to be more feasible to adopt in the fashion retail industry. (CleanChoice Energy, 2021)

Implications



Provides fashion retailers with the information (Table 1) to develop a streamlined process to adopt renewable energy



Implementation of renewables lowers Scope 1 & 2 emissions for Nordstrom and other fashion retailers



Aids Nordstrom in the completion of their science-based targets (Figure 1)



Adoption of renewables aligns fashion retail companies with international guidance and sustainability standards



Engages with customer trends of shopping/wanting to shop more sustainably, which improves company financials

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