

The background image shows a modern house with a light-colored wooden exterior and large windows. A prominent feature is a large array of blue solar panels installed on the roof. The sky is clear and blue.

SunPower Renewable Energy

Case Analysis
Fall 2023
Yiwei Hui

SUNPOWER®

Table of Contents

- 3. Executive Summary
- 5. Industry Overview
- 8. Company Overview
- 12. SWOT Analysis
- 14. Porter's Five Forces
- 16. Comparable Companies
- 18. Solutions
- 20. Implementation Process
- 21. Risks and Mitigants

Executive Summary

SunPower lacks a focus on the individual value per customer/neighborhood, which has led to decreased profitability

SunPower (a subsidiary of TotalEnergies) is a leading residential solar, storage and energy services provider

Problem

 Negative cash flow and low profitability over the last couple of years mainly due to high supply costs

 Lacking the value captured per customer and diverse revenue streams

Solution



Establish key partnerships with critical solar energy solutions to maximize per customer revenue



Licensing through third party distributors and securing major neighborhood contracts



Reintroduce commercial product for small scale businesses to diversify revenue

I. Industry Overviews

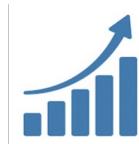
Industry Overview

The solar energy industry has experienced significant growth due to tech advancements, ESG initiatives, and government policies

Economic Trends



Tighter financial conditions, rising global tensions, and rising material costs



Increasing demand for eco-friendly practices, ESG initiative tax benefits

Market Size and Growth

20%

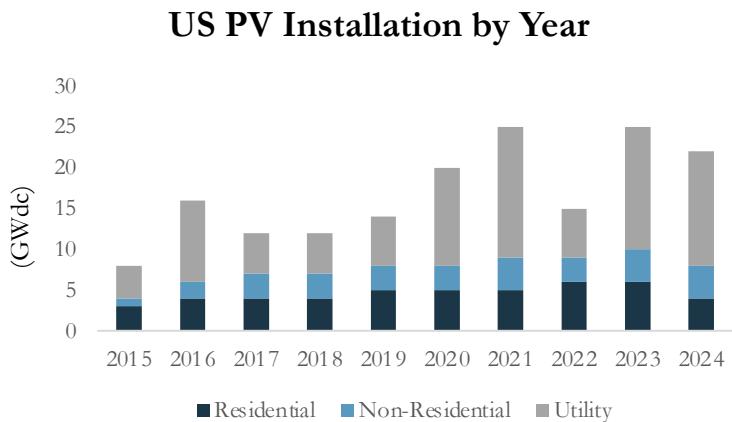
Industry CAGR
2017-2022

~\$190B

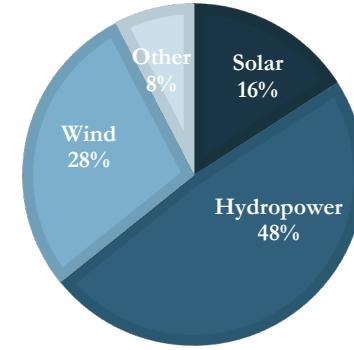
Global Market Size in
2022

16%

Solar energy share of
renewables industry



Share by Energy Source



Competitors



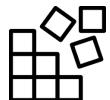
Industry Overview

SunPower is a key player in a fragmented, high growth solar energy market, but has faced stagnant growth prospects

Industry Trends



Solar power has become more attractive due to an industry wide **reduction in LCOE**



Solar energy equipment industry is **heavily fragmented**, creating opportunity for consolidation



Solar energy market has **high barriers to entry** due to its capital intensity and regulations

Competitor Market Share

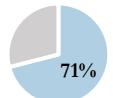


II. Company Overviews

General Background

1

SunPower Corporation is a vertically integrated solar products and services company that designs, manufactures and markets high-performance solar electric power technologies.



Revenue Share: SunPower's residential segment is the largest and most profitable part of the business, accounting for **71% of the total revenue**



Product Selection: SunPower offers a variety of residential solar products

- Solar Panels: Known for high efficiency for energy generation
- Battery Storage: Products that store homeowner solar energy
- Energy Management System: Help track energy usage



Sector Growth: Growth in residential solar power demand driven by falling costs, government incentives, increased awareness

C&I Segment

C&I Solutions Sale: In 2022, SunPower sold their Commercial and Industrial Solutions segment to TotalEnergies for \$250m

Rationale: Allows SunPower to create a superior residential experience and increase focus in product development customer service in the residential sector



18,800 new customers
in Q3 2023

\$4.82

Share price as of
12/01/2023



Its subsidiary is
PowerLight Corp

By divesting the C&I section of their business, SunPower has been able to focus on developing its residential segment.
Now as we assess the company, we want to see how truly profitable it is...

Financials

1

Despite strong revenue growth in the past twelve months ending July 2023, SunPower reported a GAAP net loss of \$32 million in Q3 2023 and a projected loss of \$170 million for the full year.

Financial Summary

\$1.74B
Revenue

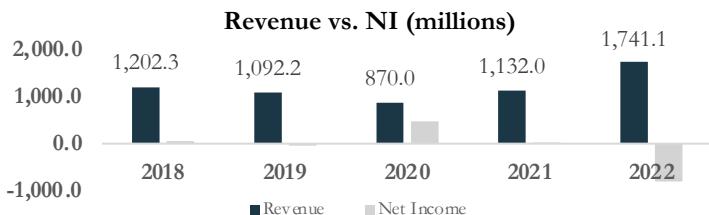
\$1.78B
Total Assets

\$56M
Net Income

\$1.20B
Total Liabilities

-\$236M
Free Cash Flow

\$574M
Shareholder's Equity



Key Ratios

ROA
-6.80%

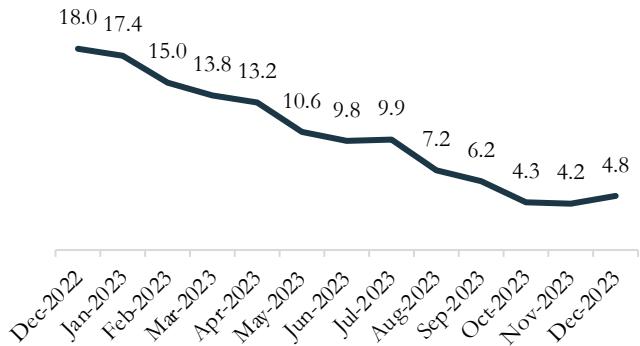
ROE
-21.71%

ROIC
-15.69%

Debt/Equity
0.70

Net Margin
-5.89%

Stock Price Chart



Forecasting Model

	2022A	2023E	2024E	2025E
Revenue	1741.1	2002.3	2152.4	2206.2
<i>Growth (%)</i>	-	15.0%	7.5%	2.5%
COGS	1377.2	1581.8	1786.5	1875.3
Gross Profit	363.9	420.5	365.9	330.9
<i>Growth (%)</i>	-	15.5%	-13.0%	-9.6%
Operating Expenses	364.0	440.5	473.5	485.4
Interest Income	3.2	3.7	3.2	2.9
Interest Expense	(21.6)	(24.8)	(21.6)	(19.5)
Pretax Income	(18.5)	(41.2)	(126.0)	(171.1)
<i>Growth (%)</i>	-	-122.6%	-206.1%	-35.8%
Taxes	5.8	6.6	7.1	7.3
Net Income	(24.3)	(47.8)	(133.1)	(178.4)

According to analyst estimates from Refinitiv, SunPower is expected to grow in revenue but be highly unprofitable

Problem Overview

1

Due to very high operating costs, inefficient value creation from customers, and lack of diversity in consumer base, SunPower has been consistently losing money. **The stock has fell 77% in 2023.**

High Operating Costs



Innovation in the solar industry often involve significant expenses: research & development, manufacturing costs, and marketing expenses



So, despite revenue growth, the high costs will decrease profitability

Inefficient Customer Value

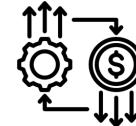


SunPower is not able to create efficient value from each of its individual residential customers due to high costs and unnecessary spending



The company needs to figure out how to gain more value from its consumer base

Reduced Profitability



The combination of these two main issues and the lack of a diverse consumer base after the sale of its C&I segment has reduced profitability



Our focus will be to determine the optimal way for SunPower to gain more value from each customer and reduce the operating costs

Our solution will be broken up into three potential plans that span across a wide range of business operations to increase SunPower's lack of profitability issues

III. SWOT Analysis & Porter's Five Forces

Porter's Five Forces

1

Competitive Rivalry: **High**

Residential solar has significant entrants in the past few years, with prominent players such as Tesla and NRG leading the industry

2

Threat of Entrants: **Medium**

High capex, regulated states, and debt makes it difficult for smaller players to enter. However, large companies are increasing investment in renewables

3

Threat of Substitution: **Medium**

Many P&U companies are beginning to divest their renewable segments, reverting back to natural gas and hydro energy

4

Buyer Power: **Low**

Solar panels and battery energy storage systems are expensive; very high switching costs

5

Supplier Power: **Low**

Suppliers are very fragmented and have little differentiation; little negotiation power over SunPower and other utilities companies

Industry Commentary

- SunPower's specialization in residential solar exposes it to consumer sentiments and low discretionary spending
- SunPower should utilize its past experience to reinvest into the rapidly growing commercial market

SWOT Analysis: Overview

SunPower has strong technology and recognition, but must react to increased investment with strong offerings

Strengths

Established brand

Strong technological innovation

Wide-ranging strategic partnerships

Weaknesses

Insufficient ability to occupy niche market

Low profitability ratio and net contribution

Lack of profitability and declining stock price

S
W
O
T

Supports from environmental policies

Growing favor to renewable energy

Opening up of new markets

Growing strength of local distributors

Compliance in various markets given

Rising raw material cost

Opportunities

Threats

SUNPOWER®

SWOT Analysis: Detailed

Strengths

Established brand and loyal customer base with trustworthy suppliers

High end technology and strategic partnerships (i.e. Ikea, Home Depot)

Weaknesses

Relatively passive in niche market and gradually losing market share

Financial ratios, like the profit margin and stock price, are unsatisfactory

Opportunities

Policies and global environmentally-friendly trends increasing support

Untapped market share to be explored

Threats

Local distributors have shown impressive performance

Compliance challenges and rising raw material costs for supply

IV. Comparable Companies

Comparable Companies Table

SunPower's total TEV/Revenue is low relative to peers, but the TEV/EBITDA remains higher

Name	Market Cap (\$M)	TEV (\$M)	Revenue (\$M)	EBITDA (\$M)	Net Income (\$M)	TEV/Revenue	TEV/EBITDA	P/E
Enphase Energy	14,545.00	14,050.00	2,710.00	678.29	571.77	5.18	20.71	25.44
Sunrun	3,124.00	13,120.00	2,350.00	-265.77	-1190.00	5.58	-49.37	-2.63
Canadian Solar	1,411.00	4,030.00	7,880.00	985.21	353.41	0.51	4.09	3.99
Sunnova Energy	1,540.00	8,260.00	722.00	14.59	-251.22	11.44	566.14	-6.13
SunPower	844.00	1,080.00	1,830.00	2.77	-85.94	0.59	389.89	-9.82
Average	4,292.80	8,108.00	3,098.40	283.02	-120.40	4.66	245.21	14.72
Median	1,540.00	8,260.00	2,350.00	14.59	-85.94	5.18	20.71	-2.63

V. Solution Overview

Solutions Overview

Solution Options

Plan A: Residential package
Introducing key partnerships with solar energy solutions (i.e. vehicle chargers) and home appliance distributors to increase per customer revenue available

Plan B: Licensing distribution path
Licensing panel and electricity storage capabilities to third party distributor (i.e. local power providers) and securing major neighborhood installation contracts

Plan C: Commercial product
Reintroducing commercial product for small scale businesses located in more rural and suburban environments to demonstrate flexible arrangements

Solution Effects

Challenges: Proper partner assessment
Individual partner packages must match SunPower value proposition and market

Solutions: Research, outside-view analysis, trial periods



Challenges: Demand estimation
Licensing through adjacent markets and mass distributors requires strong terms

Solutions: Value retention, product control, contracting



Challenges: Previous failure and costs
Re-entering the commercial space should begin with small-scale stores and outlets

Solutions: Careful scaling, marketing campaign, funding



Solution Recommendation

1

Re-entering the commercial market through brick-and-mortar retail stores and neighborhood shops located in areas with limited energy alternatives. **Licensing home products through energy companies.**

Key info

- Working with local energy companies
- Introducing promotions for stores
- Promoting savings value proposition
- Grassroots sales strategy for stores

Main benefits

- Low initial risk for failure
- Low R&D expenses for launch
- Revenue stream diversification
- Recurring revenue through contracts

Residential package mockup

**SUNPOWER®
AIR**

- AC system
- EV charging
- Price savings

Tier 1 Package:
*Installation and
maintenance*

Tier 2 Package:
*Warranty and
included add-ons*

Commercial plan mockup

**SUNPOWER®
For
Business**

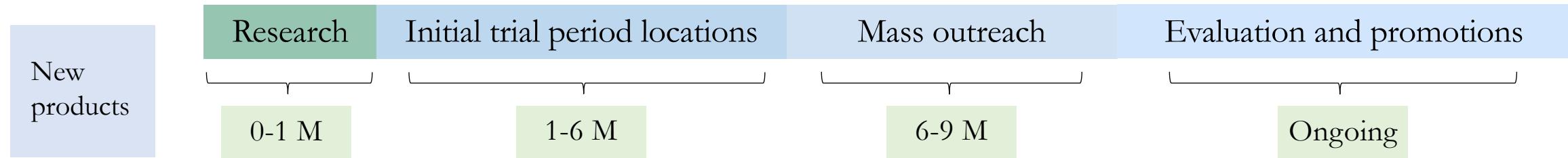
- AIR service
- Contract pricing
- Hardware included

Tier 1 Package:
*Commercial licensing
and approval*

Tier 2 Package:
*Included repair service
for local area*

SUNPOWER®

Implementation Strategy

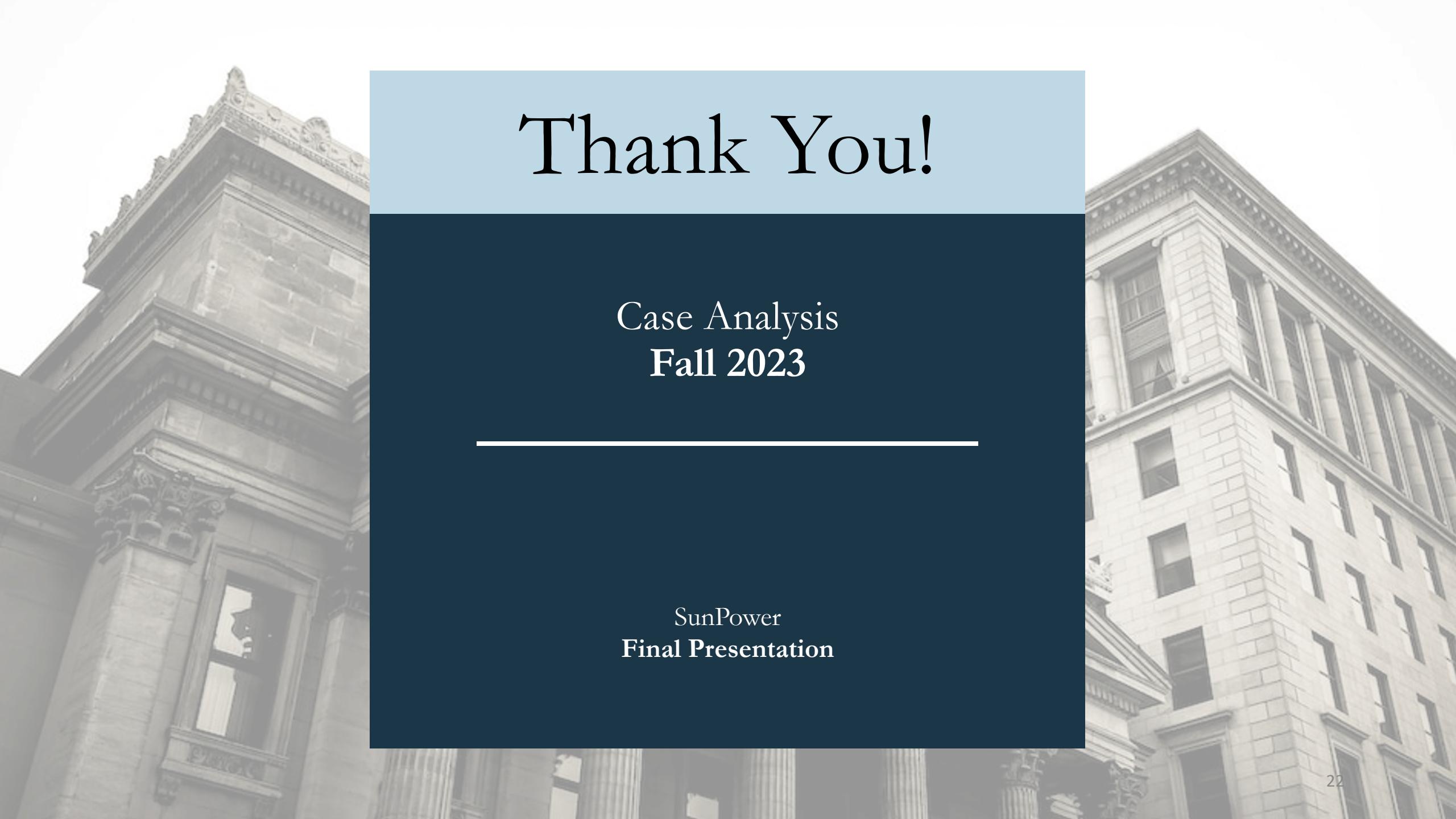


Research	Initial trial period(s)	Mass outreach	Evaluation and promotions
Doing market research and sourcing potential locations to advertise	Designing and altering the individual locations and products offered	Creating customer relationships and entering new locales	Introducing new customer discounts and bulk business contracts
Next steps	▲ Create package offerings	▲ Create location pipeline	▲ Reach out to individual locales

Working with individual market leaders and conducting on the ground research can aid SunPower in expanding reach to new locales and creating a low-risk expansion plan for its business products

Risks and Mitigants

	Details	Mitigants
Tightened Capital Markets	<ul style="list-style-type: none">• Current credit and economic conditions could prevent SunPower from accumulating adequate funding for its retail stores	<ul style="list-style-type: none">• Draw down on \$300 million revolving credit facility; explore fixed-rate debt options to find short-term expansion plans
Local Energy Partnership Failure	<ul style="list-style-type: none">• Failure to partner with local energy companies would result in wasted time and capital; Limits reach to areas without sufficient energy alternative	<ul style="list-style-type: none">• Research and build interest before constructing brick-and-mortar shops; revamp residential package solution to meet demands
Unfavorable Oil Market Conditions	<ul style="list-style-type: none">• Volatility in the oil market could result in periods of sustained low gas prices; Cuts demand for solar and renewable energy alternatives amongst most consumers	<ul style="list-style-type: none">• Conduct market research on oil capacity, exploration, and midstream in key regions; offer discounts to incentivize first time customers to install solar panels



Thank You!

Case Analysis
Fall 2023

SunPower
Final Presentation