

Business Case Overview

Business Case Component	Components Defined
Summarize the marketing need and opportunity	<ul style="list-style-type: none"> Solar water heating market continues to expand Market is to expand from 4B USD in 2023 to over 7B by 2032 Compound annual growth rate (CAGR) of 8.50% during the forecast period (2023–2032)
Define the primary competition	<ul style="list-style-type: none"> Primary competitors are: General Electric, Rheem Manufacturing, Racold, Sun Pad, Bosch There will likely be few new competitors in the short-term
Define product capabilities	<ul style="list-style-type: none"> Solar water heating system will provide 2 options: solar collector options and water tank & storage options Solar collector option will provide 2 solutions: 1) Evacuated tube solar collectors - uses a series of vacuum-sealed tubes to collect and store heat from the sun (highly efficient at capturing solar energy) and 2) Flat plate solar collectors - device that uses solar energy to generate thermal energy (cheaper than evacuated tubes, simpler design and easy to manufacture) Water tank & storage will provide 3 solutions: 1) Only solar - system produces up to 150L of hot water/day (no need for tank), 2) Conventional water heater - solar collector connected with conventional water heater and 3) Instant water heater - solar collector connected to smaller, more compact instant water heater (never run out of hot water, more efficient, waste less energy, takes up less space) An app that will link with the solar water system and provide real-time data, metrics, system monitoring & troubleshooting capabilities and real-time fault indicators
Summarize the Product Vision	<ul style="list-style-type: none"> Our product is a solar water heating system for residential owners and commercial business. Our product uses a ground breaking technology known as solar collectors, is user friendly, innovative, aesthetically pleasing and will let you capture and convert more sunlight into electricity than any
Provide the value proposition and positioning statement	<ul style="list-style-type: none"> Our system is more user friendly, innovative, efficient and aesthetically pleasing Our system is easy to install and is virtually maintenance free Our ground breaking solar panel technology will let you capture and convert more sunlight into electricity Our insulation design allows the tank to maintain high water temperatures longer than most competitive products

Outline how this product concept aligns to strategic objectives	<ul style="list-style-type: none"> • Key management initiative is to increase market share through upgrading current product mix • This product concept aligns to the current corporate vision
Describe go to market plans	<ul style="list-style-type: none"> • Refer to Product Roadmap <ul style="list-style-type: none"> ○ Design and Develop solar collector systems: Q1 ○ Beta Test solar collector systems: Q2 ○ Design, develop and beta test app: Q3 ○ Launch and Delivery: Q4
Provide a summary financial analysis	<ul style="list-style-type: none"> • Initial financial analysis disclosed the following: <ul style="list-style-type: none"> ○ IRR: 98% ○ NPV @ 15%: \$3,376,810 USD ○ ROI: 40% in Year 1
Provide a summary risk assessment	<ul style="list-style-type: none"> • Initial risk assessment: Design and development delays, Supply chain issues, Distribution channel issues, Cost overruns, Slow customer adoption rates
List any open issues	<ul style="list-style-type: none"> • Management is currently recruiting two new developers to overcome a potential skill and capacity issue. They are confident the issue will be resolved. • Potential funding shortage. It's expected to be resolved in the near term as well.