Austen Conrado – Business Case

Business Case Component	Components Defined
Summarize the marketing need and opportunity	 The solar-powered heater and furnace market is valued at \$3.7 billion in 2022, projected to grow to \$4.01 in 2023, and grow to \$7.71 billion by 2032. Estimated 8.5% compound annual market growth from 2023 - 2032. There is growing demand for energy efficient water heaters and furnaces with energy costs rising. Solar heaters are predicted to save an individual 50-80% off the heating bill.
Define the primary competition	 Competition is high in the market, main competitors are: General Electric Rheem Manufacturing Racold Sun Pad Bosch
Define product capabilities	 Easy install application that provides for easy customer management of the system High-efficiency solar cells that can convert more sunlight into electricity. Bifacial solar panels that can capture sunlight from both sides and increase energy output. Flexible solar panels that can be installed on curved surfaces. Transparent solar panels that can be used as windows or skylights and generate power without blocking light. SRU's installation design allows the tank to maintain high water temperatures longer than competitors.
Summarize the Product Vision	 SRU's new product is to utilize new technology for easier customer management, develop longer heater life periods, maximize energy use, and create a more environmentally friendly product
Provide the value proposition and positioning statement	 The SRU heaters offers a quality product with at least 10% savings over competitor products. SRU offers a more user friendly, innovative, environmentally conscious, and aesthetically pleasing solar-powered water heating system.
Outline how this product concept aligns to strategic objectives	 Key goal is to increase SRU current market share by 20%. Reduce customer installation waiting times by at least 50%. SRU systems will reduce carbon dioxide emissions that corresponds to 100 planted trees a year.
Describe go to market plans	Q1:

	 Design and develop multiple commercial and residential solar collector systems. Identify and procure multiple water tank and storage options compatible with SRU solar collection systems. Finalize all supply chain and distribution system contracts. Evaluate the current product mix. Determine which products will remain and which will be retired.
	 Q2: Beta test commercial solar collection systems. Design and develop residential solar collection systems. Finalize water tank and storage options. Procure initial inventory to support systems launch. Begin retirement activities for systems to be phased out of the product mix.
	 Beta test residential solar collector systems. Design, develop, and beta test app prototype for commercial systems. Design residential system management console. Finalize commercial solar systems for launch. Finalize system retirement activities.
	 Pinalize and launch commercial system app. Launch commercial solar water heating systems. Beta test residential console. Design, develop, and beta test app prototypes for residential systems. Prepare to launch residential systems and app in Q1.
Provide a summary financial analysis	Internal Rate of Return: 98%Net Present Value at 15%: \$3,376,810
Provide a summary risk assessment	 Design and development delays may be costly to fine tune the product. Supply chain issues due to heavy supplier competition may delay design and development. Distribution channels issues may delay product launch. Cost overruns are a risk by overspending on product testing features. Slow customer adoption rates can impact payback on the product and predictions.
List any open issues	 Potential skill and capacity issue for the development of the app. Potential funding shortage.