

## Austen Conrado Capstone Project Product Concept Document

Product Concept Document Template for:	
Recommended Entry	Considerations
Market Problem or Opportunity	<ul style="list-style-type: none"> <li>• Energy costs are rising and there is a growing demand for energy efficient water heaters or furnaces. US Dept. of Energy predicts solar water heaters will save an individual 50-80% off their annual heating bill.</li> <li>• Extreme climate conditions are driving the need for more energy efficiency and functional heating systems.</li> <li>• Government mandates restricting greenhouse emissions are forcing consumers to constantly seek water heating and furnace upgrades to reduce the carbon footprint.</li> <li>• Conventional water and heating systems are becoming less supportable as the industry is transitioning to more environment friendly solutions.</li> </ul>
Market Segments	<ul style="list-style-type: none"> <li>• Home or apartment owners</li> <li>• Commercial businesses</li> <li>• Individuals seeking environmentally friendly heating solutions.</li> </ul>
Key Financials	<ul style="list-style-type: none"> <li>• Preliminary cost analysis estimates an 40% ROI in Year 1</li> <li>• Increase the SRU current market share by 20%.</li> </ul>
Market Window	<ul style="list-style-type: none"> <li>• The key is to market the product in the summer months and launch the product in the fall to prepare for winter installations.</li> <li>• The fall is the best moment to launch the product across all online platforms such as Amazon, Home Depot, Lowes, Walmart, and Costco to reach consumers that are thinking about the brutally cold winter that will be approaching.</li> <li>• It can take a few weeks to several months for competitor installations, whereas due to SRU's simplified product nature, installation time and costs will be reduced.</li> </ul>
Competitive Landscape	<ul style="list-style-type: none"> <li>• Competitors include General Electric, Rheem Manufacturing, Racold, Sun Pad, and Bosch.</li> <li>• Competitors are well established in the market and able to create substitute products in a timely manner.</li> <li>• The entire solar powered water heating market are competing for the same suppliers offering like materials.</li> <li>• Competition solar powered heaters require professional installation with large price tags and can be delayed from weeks to half a year.</li> <li>• Competition strategy is to provide quality product with at least 10% savings over competition, decrease installation time by at least 50%, utilize SRU insulation design the maintain high water</li> </ul>

	temperatures longer than most competitive products and improve efficiency by 25%.
Main Features and Functionality	<ul style="list-style-type: none"> <li>• The concept is to create a solar powered water heater that offers multiple solar collection and water tank and storage options.</li> <li>• Solar collector options include evacuated tube or flat plate solar collectors.</li> <li>• Water tank and storage options include only solar, conventional water heater, or instant water heater options.</li> </ul>
Key Differentiators	<ul style="list-style-type: none"> <li>• SRU already has a product lines in the solar powered-water heating market.</li> <li>• SRU has an established supply chain consisting of multiple material suppliers and distribution channels.</li> <li>• SRU's system has fewer components than competitors.</li> </ul>
Go to Market Logistics	<ul style="list-style-type: none"> <li>• The primary distribution channels are online sales through Amazon, Home Depot, Lowes, Walmart, and Costco</li> </ul>
Business Success Measurements	<ul style="list-style-type: none"> <li>• 40% ROI in Year 1.</li> <li>• Reduce customer installation waiting time by at least 50%.</li> </ul>