Report

**Sample Only**

This document was submitted by students in a previous class. Their requirements were different from yours. We offer it only as a sample of what a project was for that class. Copying this document, in whole or in part, and submitting the result as your own work, would be a violation of the honor code.

**Revision 1**

**SOLAR**

1. Problem Definition

We want to be able to understand how fuel price and the increasing efficiency in solar technology impact profit, demand and cost of home and business solar energy installations. This information is critical to setting the strategic planning agenda for the company. Some of the changes on the model include a reassessment of the input/output streams and parameters as listed below. Our new input streams are fuel price, solar panel efficiency increase and hiring. In terms of the Output stream, we are now calculating profits, total cost and cost per unit sold (support costs) and may add others as we see fit. Finally, we have also changed the timeline from 12 quarters to 12 years.

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| --- | --- | --- |
| **INPUT STREAMS** | **Parameters** | **OUTPUT STREAMS** |
| Oil price stream | * Demand (defined relationship between price of oil and cost of panels | Revenue stream |
| Cost of panels ($/kw) | * Employee Service Rate (number of customers employees in each category can service) * Employee wages | Total Cost stream |
| Hiring Stream | * Equipment service rate (number of customers that can be served by each unit of equipment) * Equipment cost & Depreciation rates | Support cost stream (Cost per unit sold)  Equipment cost & depreciation Streams |
|  | * Cost of panels * $/kw rate of change (technology improvement) |  |
|  | * Utilities costs * Rent * Warehousing costs |  |

2. Who does what

Data Collection & Analysis

Historic Solar Energy Data for the last 10 years ()

Model Creation & Testing

Input streams data

Technological Advancement Formula ()

Fuel Price Data/Function ()

Cost Sheet Schedule

Installation Costs ()

Operational Costs ()

Administrative Costs ()

Product Overhead Costs ()

Warranty Costs ()

Revenue Stream Schedule ()

Project Integration

Financial Statements ()

User Guide ()

Reference Manual ()

Recommendations ()

Checker – Formatting, final corrections and overview ()

Final Report (All)

3. Refined Schedule and Budget

**Planning**  
20 hours. Each team member is expected to contribute 5 hours brainstorming and planning how to address the business objectives of Sun Corp.

**Modeling**  
24 hours. We expect that generating the models and their respective components will take a total of 24 hours.

**Documents**  
58 hours. About 20 pages of documents are required for all items: Midpoint status report, final report, reference guide and user guide. Since a lot of analysis, writing and formatting is required, we expect the hours per document will be as follows: Midpoint status report: 20 hours, Final report: 16 hours, Reference and user guides: 20 hours.

**Execution**

8 hours. Our models will be used to explore the two scenarios: a market in which there are increasing fuel prices, and a market with decreasing fuel prices. As a result of our observations, our model behavior will allow recommendation strategies to apply in one of the possible scenarios.

The total hours for the project is estimated to be 110 hours.

**SCHEDULE**

**MILESTONE 1 – Idea generation and proposition**

The business objective of the Sun Corp will be discussed in order to identify the inputs, the parameters and the output. The deliverable is the project proposal. Milestone 1 will be completed by October 23, 2008.

**Milestone 2 – Data Collection & analysis**

Data will be collected in order to analyze Sun Corp.’s costs, expenses and the demand for solar energy system installations. The deliverable is the midpoint status report. Tasks included: Data collection on Solar Energy industry focusing on the historical data for the increasing efficiency of watts delivered per solar panel throughout the years. In addition, government tax incentives that currently exist and are being considered will also be researched. Data should be collected and analyzed by November 8, 2008.

**Milestone 3 – Model creation and testing**

Here we will compile our input streams and structure the financial statements of the business. At this time we will also develop the necessary graphics to evaluate the information within the model.

**Milestone 4 – Project Integration**

The user guide and the reference guide will be created. Recommendations will be made for using the model. Final touches will be made to models and project documentation.

**Milestone 5 – Final Presentation**

The model will be ready for final presentation. Other deliverables will be in the final report, finalized user and reference guides. Final checks and approval of material.