Prepared for:  
ITS221 Project Management   
Helena College

Prepared by:  
Calista Crouse

# Helena Community Solar Installation Project

## Project Budget

Purpose

This document outlines the estimated budget for the Helena Community Solar Installation Project. It provides a detailed breakdown of projected costs across all project phases, ensuring alignment with funding availability and enabling effective cost control.

Budget Summary

| **Category** | **Estimated Cost (USD)** |
| --- | --- |
| Project Management | $20,000 |
| Design & Engineering | $35,000 |
| Permits & Approvals | $10,000 |
| Site Preparation & Civil Works | $40,000 |
| Equipment (Solar Panels, Inverters, Batteries) | $150,000 |
| Installation & Construction Labor | $80,000 |
| Electrical & Grid Connection | $30,000 |
| Testing & Commissioning | $15,000 |
| Community Engagement & Outreach | $5,000 |
| Contingency (10%) | $38,500 |
| **Total Estimated Budget** | **$423,500** |

Detailed Cost Breakdown

**A. Project Management**

* Planning and scheduling: $8,000
* Reporting and documentation: $4,000
* Risk management activities: $3,000
* Communication and coordination: $5,000

**B. Design & Engineering**

* System design: $20,000
* Engineering studies (load, environmental impact): $15,000

**C. Permits & Approvals**

* Local building permits: $5,000
* Environmental clearances: $3,000
* Grid connection application fees: $2,000

**D. Site Preparation & Civil Works**

* Land grading and clearing: $15,000
* Foundations and mounting structures: $25,000

**E. Equipment Procurement**

* Solar panels (high efficiency): $100,000
* Inverters and batteries: $40,000
* Mounting hardware and accessories: $10,000

**F. Installation & Construction Labor**

* Electrical work: $40,000
* Panel installation labor: $40,000

**G. Electrical & Grid Connection**

* Cables and connectors: $10,000
* Grid connection and switchgear: $20,000

**H. Testing & Commissioning**

* System testing: $7,500
* Final commissioning and inspection: $7,500

**I. Community Engagement**

* Public meetings and informational sessions: $3,000
* Educational materials and outreach: $2,000

**J. Contingency**

* Risk buffer for unforeseen costs (approx. 10% of total budget): $38,500

Funding Sources

| **Source** | **Amount (USD)** |
| --- | --- |
| City of Helena Grants | $150,000 |
| State Renewable Energy Incentive | $100,000 |
| Community Contributions | $50,000 |
| Private Donations & Sponsors | $75,000 |
| Contingency Reserve | $48,500 |
| **Total Funding** | **$423,500** |

Budget Management Approach

* **Monthly reviews** will be conducted to compare actual spending against budget forecasts.
* **Change requests** for any budget adjustments will follow the established change control process.
* The Project Manager, in coordination with the Program Manager and Project Sponsor, will be responsible for authorizing expenditures and monitoring cash flow.
* All costs will be tracked using the project accounting system, with reports shared at steering committee meetings.

Approval

| **Role** | **Name** | **Signature** | **Date** |
| --- | --- | --- | --- |
| Project Sponsor | Katherine Langley |  |  |
| Project Manager | Marcus Whitaker |  |  |
| Program Manager | Elena Morales |  |  |