

Graded Case Study 1, Part III

Project Planning

For project planning purposes, Liu distributed the project scope statement below as the requirements documentation for the team and as primary input to the project charter. Because the project was expected to have a short duration, she decided that a work breakdown structure would be unnecessary.

Project Scope Statement:

Fabricant's proposed industrial lighting retrofit project will aim to identify and replace the most energy-intensive lighting fixtures in all office and production workspaces in order to achieve significant cost savings and reduce energy consumption. This project will include detailed financial analysis and energy usage baseline modeling to ensure success and continuous efficiency improvement going forward.

The initial cost estimate for this project is \$310,000, which is expected to be offset by incentives and rebates of \$245,000.

Specific Deliverables

1. Comprehensive energy audit of each building;
 - Document existing lighting fixtures and types, including housings, dimensions, and method of installation that must be addressed as part of retrofit recommendations
 - Measure all existing lighting levels of each space and functions/personnel that operate there
- Recommendations for targeted lighting systems and cost-effective replacement technologies
 - Determine final quantity, type, and location of existing fixtures, lamps, and ballasts to be replaced
 - Identify areas that will have occupancy controls or motion detectors to turn off lights when space is unoccupied
 - Provide total number of recommended lighting components and related costs
- Life cycle cost analysis and economic evaluation that factors in cost, maintenance cost, and utility cost over the expected life of the building lighting retrofit
- Waste management plan for disposal of hazardous materials, submitted in accordance with EPA guidelines
- Procurement of necessary retrofit materials and electrical components
- Detailed demolition and installation requirements, including procedures to shut down electric, disarm fire alarm system, remove materials from property, and protect computer and other equipment
- Completion of all necessary permit applications and certificates
- Plan to comply with all Occupational Safety and Health Program requirements (containment of dust, debris, contaminants)
- Submission of drawings and construction phase schedule
- Completion of Phase 1 lighting replacement: Corporate offices
- Completion of Phase 2 lighting replacement: Production shop offices and break rooms
- Completion of Phase 3 lighting replacement: Production floor
- Completion of Phase 4 lighting replacement: Warehouse and parking lots
- Installation of sensors and motion detectors
- Delivery of computer model with baseline energy usage and automated tracking system
- Submission of project close-out documentation

Before you move on to the next section of the case study, identify the problems and/or issues that you'll need to include in your analysis. Document this information, and consider how you will integrate it into your evaluation of the project.