Cost Contingency Plan

1 Introduction

When estimating the cost for a project, product or other item or investment, there is always uncertainty as to the precise content of all items in the estimate, how work will be performed, what work conditions will be like when the project is executed and so on. These uncertainties are risks to the project. Some refer to these risks as "known-unknowns" because the estimator is aware of them, and based on experience, can even estimate their probable costs. The estimated costs of the known-unknowns is referred to by cost estimators as cost contingency.

The term cost contingency should not be used as a catch-all to cover ignorance. Cost contingency is designed to cover items of cost which are not known exactly at the time of the initial budget, but which will occur on a statistical basis.

2 Our Approach

When calculating the risk analysis and contingency factor ratings we will take account of:

- Known Contingencies: It includes risks or events that are identifiable and measurable during the project's planning phase. For instance, equipment failures and supplier issues come under it.

- Unknown Contingencies: These include unpredictable circumstances and unforeseen events that cannot be predicted, measured, or anticipated in advance, like cyclones, wars, political instability, and economic recession.

Our approach is:

- Our project is relatively simple in nature, so there is no requirement to utilise advanced techniques such as Monte Carlo analysis, for example

  - We will aim to reduce the impact of contingency – see Section 3 below.

  - We will look at the contingency factors relevant to our project – see Section 4 below

  - We will determine our Financial Budget Set Aside – see Section 5 below

  - but modify it to involve contingency factor ratings – see Section 6 below

3 Reducing the Impact of Contingency

Reducing contingency costs while maintaining project flexibility is part of our strategic planning and risk management. The keyways we are aiming to minimise unnecessary contingency expenses are:

3.1 Improve Risk Assessment & Prevention

- Detailed Planning – we will conduct a risk analysis to identify potential issues upfront, reducing the need for excessive contingency funds.
- Supplier Vetting – We will choose reliable contractors and suppliers with a strong track record to minimise unexpected costs.
- Early Procurement – We will aim to order materials early to avoid price fluctuations and delays.

3.2 Optimise Budget Allocation

- Break Down Costs – We will aim to pinpoint high-risk areas that truly need contingency reserves instead of applying a blanket percentage.

- Use Phased Spending – We will allocate funds incrementally, only releasing contingency funds when absolutely necessary.
- Negotiate Fixed-Price Contracts – We will secure, wherever possible, fixed pricing for labour and materials to prevent unexpected cost escalations.

3.3 Enhance Project Efficiency

- Preventative Maintenance – We will look to maintain existing heating systems before installation to reduce repair risks.
- Improve Communication – We will keep contractors, suppliers, and church leaders well-informed to avoid misunderstandings and delays.
- Flexible Scheduling – We will aim to plan buffer time strategically, so delays don't translate into emergency expenses.

3.4 Utilise Alternative Funding & Cost-Saving Measures

- Apply for Grants – We will offset some costs with external funding.
- Community Support & Donations – We will engage the congregation in fundraising or seek sponsorships.
- Reuse & Repurpose Materials – If possible, we will salvage existing equipment or refurbish parts instead of purchasing entirely new systems.

3.5 Confidence in Obtaining the Correct Initial Budget Costing

Confidence in obtaining the correct initial budget costing for our church heating project requires a structured approach. To increase accuracy and minimise surprises, our approach consists of:

- Supplier & Contractor Quotes – Get at least three quotes.
- Benchmarking with Similar Projects – Research works in other churches for comparison.
- Break Down Costs by Category – Equipment and labour

3.6 Taking into Account Time Delays

The Office for National Statistics (ONS) predicts that average Consumer Price Index (CPE) inflation rate will reach 3.2% in 2025, driven by factors like higher energy prices and the effects of Budget policies.

Inflation is expected to gradually decline, falling to 2.1% in 2026 and back to the 2% target between 2027 and 2029 as energy price growth normalizes and the output gap closes.

4 Contingency Factors

Many factors contribute to the need for a budget contingency. Some common examples are poor risk assessment, scope creep, repairs and maintenance, project timeline changes, supply chain issues, poor project management, faulty equipment, unplanned emergencies, and more.

As our project aligns closely with the construction industry, we have looked to this sector to help us to compile a comprehensive list of contingencies that can help us mitigate risks during our church heating project:

4.1 Technical & Equipment Contingencies

- Backup Heating: Temporary portable heaters in case of system delays.
- Unexpected Faults: Contracts with rapid-response repair teams.
- Energy Supply Failures: Alternative energy sources like batteries or backup generators.

4.2 Regulatory & Compliance Contingencies

- Safety Checks: Conduct extra inspections before project completion.
- Permit Delays: Apply for permits early and track progress.
- New Regulations: Ensure system compatibility with future standards.

4.3 Community & Stakeholder Contingencies

- Service Adjustments: Temporary space for gatherings if heating disruptions occur.
- Communication Plan: Notify congregants about potential schedule changes.
- Emergency Action Plans: Procedures for handling major failures post-installation.

4.4 Financial Contingencies

- Budget Overruns: Allocate extra for unexpected costs
- Unplanned Expenses: Emergency repair funds in case of unexpected issues.
- Alternative Supplier Costs: Backup suppliers to prevent price hikes.

4.5 Schedule & Timeline Contingencies

- Project Delays: Buffer time for unexpected weather, material shortages, or contractor issues.
- Supply Chain Disruptions: Identify alternative vendors in advance.
- Flexible Work Schedules: Plan phased installation to prevent church disruptions.

5 Contingency Factor Rating

For each item, we will calculate the contingency factor rating by using the following formula:

$$\text{Contingency factor rating (£'s)} = \frac{A \times (1 + B)}{C \times D} \text{ : where}$$

- A = Quotation price from the preferred supplier (£'s);

- (1 + B) = 1 plus accumulative CPI figure (%) for appropriate anticipated year works will be completed
  Supplied by the Office for National Statistics.

- C = Confidence in the quoted price (%).
  Where a fixed price has been negotiated, the value of C will be 100%

- D = Confidence in the quoted timescale (%).
  Where a fixed price has been negotiated or is for materials only, the value of D will be 100%

6 Financial Budget Set Aside

Construction contingency is a financial buffer set aside to cover unexpected costs during a project. The typical contingency percentage varies based on project type and complexity. For our project we believe that an appropriate figure would be 10% of the original budget plus the contingency factor rating.

This reserve will help manage unforeseen expenses like material specification fluctuations, site conditions, or design changes.