

Instruction Sheet: Cost-Benefit Model VERBUND

The Cost-Benefit Model is used for evaluating projects based on their overall impact. To assess the anticipated added value of a project, the model considers not only financial factors but also the dimensions of "Environment," "Society," and "RIO" (Risk, Innovation & Opportunity).

Functionality

1. **General Project Characteristics (e.g. Project Description):** These are for documentation purposes only.
2. **Project Focus:** Users can specify whether the project emphasizes a certain area (e.g., societal aspects). This selection adjusts the result by assigning a higher weight to the chosen aspect.

Example Default: Each submodel result is weighted at 1.

Example Societal Focus: The societal submodel is weighted at 1.5, while the other two submodels (Environmental & RIO) are weighted at 0.75.

3. Entering Values into the Models:

- 3.1. **Financial Submodel:** This model stands independently and is not included in the overall score. It provides a financial overview alongside the scores for the three non-financial submodels. Users can input assumed project values, with the option to test different combinations. The model calculates averages from these results to derive key financial metrics (e.g., Cash Flow, ROI).
- 3.2. **Non-Financial Submodels (Societal, Environmental, RIO):** Each submodel comprises various factors. Users use a dropdown to rate whether the project has a "very negative," "negative," "neutral," "positive," or "very positive" impact on each factor. These ratings correspond to values ranging from -2 to 2.

Example Question: "What expected impact will Project X have on Health and Safety?"

Each factor includes a description to guide selection based on qualitative thresholds. Additionally, users can add comments to each factor, which are displayed in the final result to justify their assessments.

4. **Methodology:** Each factor (e.g., Health and Safety) is assigned a weight based on literature research by the model's creators. The sum of all factor weights within a submodel equals 1 (100%). Input values are multiplied by their respective weights.

Example Calculation: A project negatively impacts Health and Safety, which has a weight of 0.2. The resulting value for Health and Safety is: $0.2 \times (-1) = -0.2$

5. **Results:** Once all factors are evaluated, users can generate results for individual submodels or all models combined. Results can be downloaded as a PDF. The output is a value between -1 and 1. Values above 0 are considered positive, indicating a recommendation to proceed with the project based on its estimated implications.