

WORLD ALLIANCE
for EFFICIENT SOLUTIONS

by **SOLARIMPULSE**
FOUNDATION



EFFICIENCY ASSESSMENT GUIDELINES FOR EXPERTS

I. GENERAL RULES

Transparency

Decisions must be based on the expert's intuition, built on his/hers experience either about the sector, region of application, or both. Feedback shall be communicated in a concise manner and if possible backed up by documented evidence (hyperlinks to publications) to ensure that applicants receive objective and adequate feedback on the outcome of the assessment.

Format

All comment must be written in English. Experts should ensure they keep a neutral and objective tone in their comments that will be systematically shared to the member for feedback.

Exigence

The Solution Submission Form provided for the assessment of the solution is to be taken as a basis of information that should be - if necessary - backed up by personal research and by asking specific questions to the member via the online secured chat. Experts should ensure they have all the elements in hands before completing their assessment form on the platform and are thus strongly encouraged to use the chat.

Confidentiality

All proposals and related data, knowledge and documents must be kept confidential.

Speed and efficiency

A candidate solution should be evaluated as swiftly as possible and within 3 weeks of receipt, without compromising quality or breaking the above written underlying principles.

Flexibility

Experts can decide to rate only part of the criteria. To do so, they should systematically select the lowest level of confidence for the criterion they want to exclude from their assessment. The score for the concerned criterion will not be taken into account while comment could be used as complementary qualitative feedback for final deliberation discussions on the solution within the World Alliance.

II. DELIVERABLES

SCORING EACH CRITERION

Criterion scores shall correspond to your own estimation as to the credibility and relevance of the given arguments and information.

1 — Poor

The SSF fails to properly address the criterion OR there are serious inherent weaknesses in the submission

2 — Fair

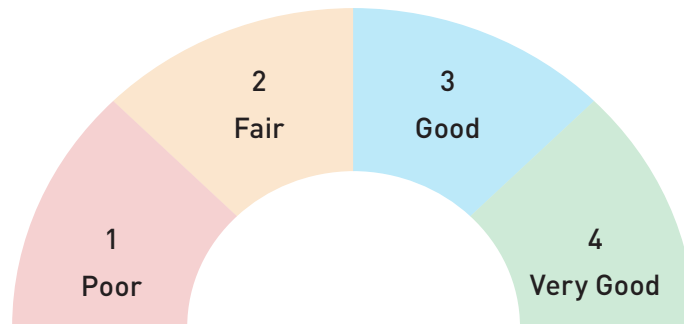
The SSF broadly addresses the criterion but there are significant weaknesses

3 — Good

The SSF addresses the criterion well but with a number of shortcomings

4 — Very good

The SSF addresses the criterion very well with possibly a very small number of acceptable shortcomings



N.B.: Note that you can choose to leave a criterion without a rating if you do not feel confident enough to assess it.

SCORING LEVEL OF CONFIDENCE

This score shall reflect your confidence level and certainty in the rating you provided for each criterion.

Not Confident

My judgement can only be based on intuition due to lack of information and/or the divergence between my domain of expertise and this criterion.

Not Very Confident

Part of my judgement is based on my own logical reasoning because of lack of information and/or limited knowledge I have to assess this criterion.

Somewhat Confident

The given information and my background allow me to confidently assess this solution, but some aspects remain unclear.

Very Confident

The given information and my background allow me to fully assess this solution.

PROVIDING COMMENTS

For each criterion, you shall comment the score given by challenging the solution provider's argumentation and give your own judgement of pros and cons as justification.

For each confidence level (optional), you should support the reason(s) for that level of confidence and – in case of low confidence score – specify whether it is due to your level of expertise or on the possible lack of information provided.

III. HOW WE USE THE RATINGS

▼
The assessment/ratings you submit will serve as a basis for the attribution of the Solar Impulse “Efficient Solution” label by the World Alliance Selection Group (WASG) to this solution.

For the criteria

TECHNOLOGICAL FEASIBILITY AND ENVIRONMENTAL & SOCIO-ECONOMIC BENEFITS

we calculate the mean value of the scores to obtain an Impact Score.

Impact score must be ≥ 3

For the criterion

ECONOMIC PROFITABILITY

Score must be ≥ 3

or

Belonging to {2; 3}

In this case, it must be supported with comments presenting external limits (inflexible regulations, weak government incentives...) as the cause of a low score, and no significant limits related to the business model and competencies of the Member.

TECHNOLOGICAL FEASIBILITY



I. DEFINITION

This criterion captures the ability of the solution to be credible (based on a resilient technology or concept) and captures if the solution is already, or has the potential to be, scaled up and deployed in the real world (vs. in a laboratory environment) without adding constraints to the final user.

Key variables to capture the performance on this criterion are:

- ▶ **Flexibility (ability to adapt to the final user)**
- ▶ **Competitiveness / Added value for the market**
- ▶ **Market potential / Scope of implementation**
- ▶ **Technical and operational feasibility**
- ▶ **Resilience**
- ▶ **Social acceptance**



II. GUIDING QUESTIONS

In Section 2. Application

- ▶ **Is the targeted market estimation plausible?**
- ▶ **Does the solution bring added value to the targeted market?**
- ▶ **Is the business opportunity well identified by the solution's owner?**
- ▶ **Would the solution face opposition for social or cultural reasons?**

In Section 3. Technical Data

- ▶ **Does the solution rely on a credible and resilient technology or concept?**
- ▶ **Is the information provided on the operational functioning of the solution in context complete, coherent, relevant and plausible?**
- ▶ **Does the solution add significant constraints to the final user?**
- ▶ **Does the solution provider seem conscious of the weaknesses of its solution (well described, quasi-exhaustive list) compared to the competition?**
- ▶ **Does the entity seem to be capable to iterate and innovate?**

ENVIRONMENTAL & SOCIO-ECONOMIC BENEFITS



I. DEFINITION

This criterion captures the solution's ability to have successfully demonstrated, at least:

One direct positive impact on the environment – referring to the scope of the following elements: energy use, CO₂ emissions, water use, materials used, air quality, ecosystem preservation. The type(s) of impact(s) presented should be relevant to the application sector of the solution.

AND

A direct economic benefit – considered in the form of % of annual monetary savings to its final user, or any stakeholder that could benefit directly from the application of the solution.

Or

An indirect economic benefit that encompasses hidden economic¹ or social² gains for society.

Without any significant negative impact found elsewhere in the solution's lifecycle.

¹ savings on public health or waste management expenses, increase in a region's GDP...

² enhancing equity, creating/securing jobs, strengthening social inclusion and cohesion, promoting transparency...



II. GUIDING QUESTIONS

For each impact (environmental, economic & social) the central question is:

Does the solution's implementation and application in the described context – in comparison to all quoted references of industry standards – have a positive impact on the considered element, and no significant negative impacts (that could have been overlooked by the solution provider) on another element, stakeholder or in a part of the value chain.

For example:

In Section 4.1 Environmental Impact

- ▶ **Are the presented positive environmental impacts relevant to the challenges of the sector of application of the solution? e.g.: a reduction in water use would be of lower importance compared to CO₂ emissions avoided, energy use, and positive air quality impact for a solution in the transport sector.**
- ▶ **Is the chosen reference relevant to capture the added value of the solution?**
- ▶ **Are the described impacts plausible and justified by numbers?**
- ▶ **Do you foresee any important negative impact that was underestimated or simply omitted?**

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Experts should not consider the total/global impact size of the solution to rate this criterion, but rather judge if the incremental functional unit of the solution presents more benefits than drawbacks in a certain market context compared to a set of references.

ECONOMIC PROFITABILITY



I. DEFINITION

This criterion captures the potential of a currently non-profitable solution to become, profitable within a 5-year period, with regard to its business model, its positioning relative to its competition, the innovativeness of the idea, and the resources and experience of the team.

IMPORTANT

The evaluation of this criterion should consider and analyze **the regulatory constraints/ external hurdles that could be overcome with the help of the World Alliance (e.g.: lack of deployment partnerships or investments, regulatory constraints or competition that could be modified/unbalanced by institutional efforts)**. Since the main goal is to bring solutions to relevant partners, investors and institutions, the experts should not penalize the score of the solution because it might face regulatory challenges but still develop in the comment what could be those challenges.



II. GUIDING QUESTIONS

In Section 6. Business Case

- ▶ **Does the entity's current deployment, strategy, approach and business model allow it to take financial advantage of its environmental and socio-economic benefits described in the previous criteria?**
- ▶ **Does the entity seem to have the resources, experience and knowledge to reach their economic goals?**
- ▶ **Is the solution provider well aware of the external regulatory, market and social threats to its solution (well described, quasi-exhaustive list)?**
- ▶ **Does the breakeven market size and timeframe seem reachable?**