

# **Assessment Guidelines for Experts**

Solar Impulse Foundation

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Version	Date	Changes
V01	12.2018	no changes
V02	06.2019	Removed numerical rating and changed to binary system (yes/no); Removed Senior Expert Role, Removed minimum 2 experts assigned per Solution and possibility to assess < than 5 criteria; Rephrasing of the questions in each criteria; Updated Criterion 4 to include multiple selection list; Introduced clear deadline for assessments process; Introduced minimum length of characters (250) for each criteria response; Included practical Examples on the Criterion 4.
V03	08.2019	Updated Criterion 4 with 5 bullet points where individual selection is required.
V04	02.2020	Removed possibility of reopening assessments; Removal of following steps in the process: (1) Solution presented to the Internal Deliberation Committee for vote and (2) Solution presented to Chairman of the Foundation for final rejection; Updated deadlines around assessments process; Included Conceptual Considerations;
V05	10.2021	Updated minimum length of characters (400) for each criteria response; Rephrasing of the questions in each criteria; Removed practical Examples on the Criterion 4, Included new feedback sections; Introduced Useful points/guidance for each criterion; Removed Conceptual Considerations; Included information about EC SME2 Equivalence; Introduced Label Update Program (2022); Introduced NDA for Experts;

Table 1: Document’s historical versions.

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This document has been created to support your assessment of Solutions seeking the Efficient Solution Label.

To support the Experts during the assessment process, a real-time chat is also available to ask questions directly to the Solar Impulse Foundation (SIF) Expert Team. The SIF Team remains also available via email ([expert@solarimpulse.com](mailto:expert@solarimpulse.com)) or reachable via phone call.

Experts are also invited to consult the Label Standards, which contains more detailed information on the overall selection process, as well as the Label use.

# Chapter 1

## Introduction

### 1.1 Context

Following the success of the first solar flight around the world, Bertrand Piccard set the challenge of selecting 1000 Solutions to protect the environment in a profitable way. Today, the Solar Impulse Foundation (SIF) has reached that milestone and is now focusing on bringing those Solutions to governments, companies, and institutions across the globe. The key areas of focus of SIF are (i) helping anyone search efficient Solutions (ii) helping companies and public authorities achieve their environmental targets (iii) driving investment in clean technologies and matching investors with efficient Solutions providers. Along with these new projects, SIF will focus on increasing its Efficient Solutions portfolio to cover more geographical areas and Sustainable Development Goals (SDGs).

### 1.2 The Efficient Solution Label

The Solar Impulse Efficient Solution Label is designed to shed light on existing Solutions that are both clean and profitable. The Label is awarded to products, services, and/or processes that combine credible environmental and economic performance, which can outperform the mainstream options in its market. The Label is a trademark representing the Foundation's mission of selecting Solutions that can protect the environment in a profitable way and bring them to decision makers to encourage the adoption of more ambitious environmental targets and policies. The decision to grant the Label is based on a rigorous assessment performed by external independent Experts. The development of stringent selection criteria has resulted in the Solar Impulse Label being internationally recognized and endorsed by several institutions, states, and cities around the world.

## Chapter 2

# Aim and Methodology

A key aim of the Solar Impulse Foundation is to identify Solutions that are both clean and profitable and attribute them the Solar Impulse Efficient Solution Label. This is achieved through a trustworthy and verified methodology based on a rigorous assessment performed by external independent Experts (you). In particular, you will assess the Solutions submitted against five criteria – Credibility of Concept, Scalability, Environment Benefits, Client’s Economic Incentive, and Seller’s Profitability. The assessment will take place online, with your feedback collected in the form of YES/NO selection and comments. More details are provided in this document in the coming sections.



## Chapter 3

# Overall Selection Process

The assessment process (i.e. Experts evaluating Solutions) is part of the Solution's selection process. The diagram below depicts the main steps for a Solution, from submission to obtaining the final outcome. The details of the assessment process concerning Experts' evaluations are further detailed in the paragraphs below.

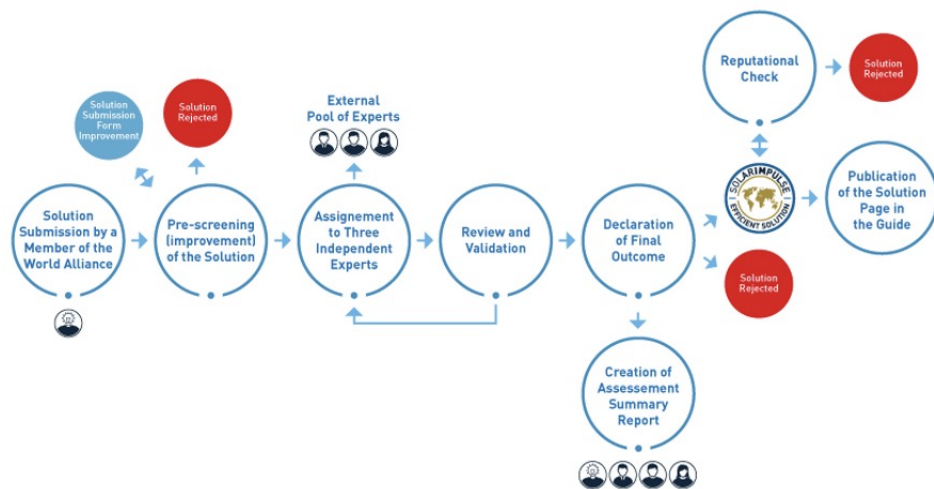


Figure 3.1: Selection process for the Solar Impulse Efficient Solution Label.

## Chapter 4

# Deliverables For Experts

### 4.1 Deadlines and Expectations for the Assessment Process

Once a Solution is assigned to an Expert for assessment, he/she will be given the opportunity to read the submission in its full length and then accept or decline the assignment accordingly. Experts are expected to:

- Accept or decline a Solution assigned to them **within 5 days** from the assignment date (For instance, assignment date occurs on the 01.10.2021 Experts is expected to respond to the invitation up to 06.10.2021).
- Complete the assessment **within 15 days** from the assignment date (For instance, assignment date occurs on the 01.10.2021 Experts is expected to respond to the invitation up to 16.10.2021).

If an Expert fails to comply with the above-mentioned deadlines, his/her assessment will be archived (not further considered for evaluation).

*Special cases:* if, during the assessment, the Expert requests additional information about the Solution, a deadline extension may be provided. This request for additional information should be addressed to the innovators via the chatbox (a tool that will be explained further in this document in Section 6). Given that it might take some time to gather all the information, we strongly advise that Experts not to seek information close to the submission deadline. Once the information has been provided, the Expert is encouraged to finish the assessment at her/his earliest convenience. Please notice that Innovators are strongly encouraged to respond to the questions in the chatbox within 3-5 days maximum.

## 4.2 Areas of Expertise

By accepting the assessment, the Expert assumes full responsibility and it is understood that the Solution falls in his/her area of expertise. *Please note that if the Solution is too far outside the Expert's area of expertise, he/she should decline the invitation to assess it.* Similarly, if the Expert is aware that he/she will not be able to assess the Solution within the given deadline, he/she should not accept the invitation to assess it.

## 4.3 Confidentiality and Personal Information

The Solution providers (Innovators) are asked to provide non-confidential information only. As a precaution and to allow the Solar Impulse Foundation to stay in control of the information flow of the selection process, Experts are asked to keep all information received as confidential/sensitive and to delete any records after a certain period of time (one month) upon completion of the task.

In addition, to retain the integrity of the process, the identity of which Experts are assigned to a Solution remains confidential. In this sense, we kindly ask you not to provide any personal details (i.e., name, email address, phone number etc.) with the innovators while your assessment is still open.

*Special case:* If an entity considers appropriate to disclose more confidential information, a Non-Disclosure Agreement (NDA) can be drafted between the Member and the SIF, as well as between the SIF and the Experts involved in the assessment process. In such case, only Experts who have previously signed the NDA available on the Dashboard will be assigned to the Solution. It is important that all the stakeholders involved remain aware that adding this step might cause significant delays in the assessment process.

**Important:** We have created an “Expert Taskforce” willing to work under NDA, therefore “NDAs Solutions” will be assigned ONLY to Experts who are part of the taskforce (working under NDA). If you wish to be part of this taskforce do not hesitate to let us know.

## Chapter 5

# Usability of Assessments

Once all the three Experts have submitted their Assessments, the Solar Impulse Foundation team will review and validate their work. Experts are expected to perform Assessments according to the following requirements, and the SIF retains the right to invalidate assessment in the following cases (see Table 5.1 in the next page). In order to avoid misapplication of the guidelines, Experts should take the following into considerations:

- Please be aware that once your assessment has been submitted, the Solar Impulse Foundation team cannot modify it (e.g. editing, spell check etc.). We therefore ask you to review your comments carefully before submission.
- Please avoid using sentences such as “it is not clear”, “I do not have the information” etc. This might leave the impression that you have made a decision about the Solution without having enough information.
- The ‘additional feedback’ section should be used to provide comments on wider issues that the Innovator may wish to consider. This section should not contain open questions, but instead should be used as a space to provide extra insights or wider feedback on issues relating to the criterion in question. We strongly recommend using the additional feedback section when possible, as this is very valuable for innovators.
- If you have asked questions through the chatbox, please do not submit your assessment before receiving answers to your questions. Your deadline will be extended to wait for the Innovators’ answers.
- Please save your assessment (and questions) offline to avoid losing your content in case of any errors with your web browser).
- We advise using Google Chrome throughout your assessment. We advise not to use Internet Explorer, as some issues have been noted when using the chatbox through this web browser.

Requirement	Assessment invalidated when ...
Assessments must be carried out in English, regardless of whether the Expert and the Innovator both speak another language.	Comments are written in any language other than English.
The justification for each answer should provide a clear, fair, and unbiased statement, which is accessible and meaningful to the readers of the report.	Inappropriate language (unprofessional, defamatory or offensive) has been used.
Experts must accept Solutions only if falling into their area of expertise.	The Expert clearly highlights in his/her comments/questions that the Solution falls out of his/her area of expertise.
The comment box, nor the additional feedback section, should not contain open questions and/or uncertainties about the Solution. Any questions must be asked via the chatbox.	The Expert states any lack of information about the Solution without having used the chatbox.
The yes/no judgment must be back up with a coherent, constructive justification in the comment box. Each justification must correspond to its respective criterion and must not contain plagiarisms.	The Expert's justification: (1) Is an obvious copy-and-paste of what the Solution provider has written, (2) Is copy-and-pasted across different criteria; (3) is not responding to the respective criterion; (4) is not aligned with the yes/no selection.
Conceptual considerations (see Chapter ??) must be taken into account.	The Expert rejects a Solution based on the fact that the respective is not a novelty.
The justification in the comment box must be of sufficient length – a min. of 400 characters (approx. 60 words).	The justification is below 400 characters or contain copy-paste to reach 400 characters.

Table 5.1: Assessment's requirements and reasons for invalidation.

## Chapter 6

# Chatbox

If an Expert has any questions or needs additional information during the assessment process, he/she must contact the innovator via the chatbox which is accessible any time during the evaluation.

Please note:

- Experts are expected to wait for the answer from the Innovator before submitting the assessment. Respectively, Innovators are given a deadline in which they must answer Experts' questions, after which their Solution will be archived.
- Experts are encouraged to ask questions early on in their assessment of a Solution, but if the innovator has not responded to questions by an Expert's deadline, an extension will be granted to that Expert.
- Experts should not contact the innovator via phone call, private messages, personal email or any other tool that might compromise the anonymity of the reviewing system.
- The chatbox conversation history, while anonymous, will be also visible to the other Experts assessing the same Solution.
- Experts are encouraged to save their questions in an offline document before submitting it via the chatbox. In case there is a submission problem, they can send the same it via email to [expert@solarimpulse.com](mailto:expert@solarimpulse.com).
- Experts should not mention their name during interaction with the Innovator in the chatbox.

## Chapter 7

# Steps After the Experts' Assessment

### 7.1 How the Assessment Evaluation is Used

Once three usable assessments are completed and validated by SIF's Team, a final outcome can be determined. Effectively, while the comments of the experts are a fundamental part of the assessment process, the decision is made based on the yes/no selection. A few examples are provided in Figure 7.1 below. The following deliberation rules are applied:

- **Labeled:** A Solution is Labeled (awarded the Solar Impulse Efficient Solution Label) when it has received a minimum of two "YES" answers from two different Experts on all five criteria; meaning that all five criteria must have a majority of "YES".
- **Rejected:** A Solution is rejected when it has received at least two "NO" answers from two different Experts on one or more criteria.

Note: Since its first version, the assessment process has evolved from an ordinarily scaled four-way data questionnaire (used in 2018-2019) to binary data (yes/no). While the binary method is more simplistic, it allows to remove bias from personal perception of ratings, as well as issues related to accuracy of averaged results and final output.



	E1	E2	E3
Criterion 1	●	●	●
Criterion 2	●	●	●
Criterion 3	●	●	●
Criterion 4	●	●	●
Criterion 5	●	●	●

	E1	E2	E3
Criterion 1	●	●	●
Criterion 2	●	●	●
Criterion 3	●	●	●
Criterion 4	●	●	●
Criterion 5	●	●	●

	E1	E2	E3
Criterion 1	●	●	●
Criterion 2	●	●	●
Criterion 3	●	●	●
Criterion 4	●	●	●
Criterion 5	●	●	●

Figure 7.1: Examples of potential outcome (Labeled or rejected) based on Experts' evaluation. E1: Expert 1, E2: Expert 2, E3: Expert 3.

## 7.2 Outcome and Publication

The grant date of the Solar Impulse Efficient Solution Label is the date when the SAFs relative to the candidate Solution are officially reviewed and validated by the SIF Team. Both positive and negative outcomes will be communicated to both the Member and the Experts in written format (via email). Both rejected and Labeled Solutions receive feedback in the form of an Assessment Summary Report (ASR) which compiles the three usable assessments performed by the Experts assigned to the Solution.



## Chapter 8

# Assessment Structure

The assessment methodology is designed to evaluate candidate Solutions against five criteria:

- 1) Credibility
- 2) Scalability
- 3) Environmental Benefits
- 4) Client's Economic Incentive
- 5) Seller's Profitability

The details of what is to be considered in the assessment of each criterion by the Experts can be found in the next paragraphs. All criteria are structured with a response (a YES or NO selection) and an open question, as shown in the next page.

**Criterion 1 - Credibility:** Can the technology behind the Solution be constructed and/or operated as designed?

YES

NO

The Solution is based on a mobile aeroponic irrigation system which optimizes the space and allows to maximize natural light use with a controlled-climate system (based on a machine learning algorithm). Aeroponics technology has been around, in one form or another, since at least the late 1980s. The technology is simple, credible, and well-known for being applicable for the type of crops described (lettuce and aromatic "leafy" plants).

**Criterion 2 - Scalability:** Are the activities and processes required to produce/operate and distribute/deliver the Solution feasible at its intended scale? If the Solution is already fully commercialized, can this scale be maintained in the future?

YES

NO

Each aeroponic irrigation system can be built up according to customer's need. It is certainly scalable as the materials (for instance supports and lighting setups), as well as macro / micro- nutrients, or grow mediums, or water can be easily obtained in large quantities. The company should be able to ensure a reliable procurement of these materials when scaling up.

**Criterion 3 - Environmental Benefits:** Can the Solution deliver environmental benefit(s) versus the mainstream alternative? Consider the entire lifecycle (production, distribution, use and disposal stages).

YES

NO

This solution allows three key savings (i) water, (ii) energy, and (iii) CO<sub>2</sub>. The environmental impact of cultivating lettuce/aromatic plants using aeroponic culture is lower as it consumes significantly less water (30% less) compared to both traditional cultivation systems and hydroponic systems. The automated system ensures a full control on plant growth, including a correct nutrient distribution and light adjustment. This allows to maximize the production and reduce energy consumption.

**Criterion 4 - Client's Economic Incentive:** Is the total cost of ownership of the Solution lower (or equal) to the mainstream alternative? Consider foreseeable regulatory changes within 5 years; specific actions planned to reduce the cost of the Solution; and additional socio-economic benefits.

YES

NO

Aeroponic systems can be expensive to set up due to the nature of the equipment involved. However, once the system is set up, it is cheaper than a traditional garden/soil farm to operate, especially considering that the average yield can be up to ten times higher than using the conventional methods. The price per square meter compared to a like-for-like system (hydroponic) is not significantly different (approx. 50 USD more) and depending on the setup/location. Therefore, the total cost of ownership is lower and comparable to other options available on the market.

**Criterion 5 - Seller's Profitability:** Can the Solution be profitable for the seller within 5 years? If the Solution is already profitable, can this be maintained in the future? Consider both factors specific to the Solution (e.g., business case, business model) and wider developments/trends in the targeted market.

YES

NO

The target of 5 to 8 projects to generate a profit seems reasonable, also considering that the company has secured (i) a case study in Paris (ii) built a commercial operating greenhouse in France, and (iii) signed a contract to supply one of the largest sandwich manufacturers in Europe. The Innovator identified clients willing to buy at that price and I think the company has a potential to be profitable in the next 5 years.

Figure 8.1: Examples of Solution Assessment Form (SAF) filled-in.

**Feedback Session:** We would like to hear more about your opinion on this Solution and kindly ask you to answer the questions below. **Any comments in this section will not be considered for the outcome for this Solution (i.e., labeled or rejected)**, but will instead be shared with the innovator behind the Solution as an additional feedback and advice. These comments will be included in the Assessment Summary Report alongside your comments on the five assessment criteria and the outcome for the Solution (i.e., labeled or rejected). *Please provide single feedback addressing the questions below:*

- What are the weaknesses of the Solution, and how could these be overcome?
- What are the strengths of the Solution that could be exploited to maximize its impact?
- Do you have any advice to aid the implementation of the Solution?
- Do you have any wider recommendations for the innovator to explore in more detail?

One of the strengths of this Solution is that the technology behind it has been around since 1980s, and all supplies needed for its production can be easily found in large quantities. If the company aims the internationalization of the Solution, it then should care to establish sustainable (and strategic) relationships with key suppliers to avoid any liability that would result in short supply, impacting then the price. Beyond the water and energy savings, Aeroponic systems have the potential of reducing soil pollution as they are usually healthy enough to resist to pests, therefore requiring less pesticides. In these systems, growth happens much faster and occupies less space than mainstream crops. This should be a competitive advantage to be explored in the marketing strategy of the product.

Figure 8.2: Examples of Solution Assessment Form (SAF), feedback section.

## 8.1 Criterion 1

The first criterion, Credibility, is used to determine the technical viability of the idea behind the Solution, The Solution should be feasible and operatable in the real world, meaning there are no insurmountable technical obstacles for its implementation in the real world.

### Question and Practical Example

**Criterion 1** - Credibility: Can the technology/concept behind the Solution be constructed and/or operated as designed? **YES NO**

*«The Solution is based on a mobile aeroponic irrigation system which optimizes the space and allows to maximize natural light use with a controlled-climate system (based on a machine learning algorithm). Aeroponics technology has been around, in one form or another, since at least the late 1980s. The technology is fairly simple, credible, and well-known for being applicable for the type of crops described (lettuce and aromatic “leafy” plants).»*

## 8.2 Criterion 2

While criterion 1 considers the technical credibility of the proposed Solution, criterion 2 (‘Scalability’) assesses the potential to be scaled up and deployed in the real world at its intended scale. This takes into consideration the wider practicalities of producing and operating a Solution, such as the supply chain, distribution and commercialisation.

### Question and Practical Example

**Criterion 2** - Scalability: Are the activities and processes required to produce/operate and distribute/deliver the Solution feasible at its intended scale? If the solution is already fully commercialised, can this scale be maintained in the future? **YES NO**

*«Each aeroponic irrigation system can be built up according to customer’s need. It is certainly scalable as the materials (for instance supports and lighting setups), as well as macro / micro- nutrients, or grow mediums, or water can be easily obtained in large quantities. The company should be able to ensure a reliable procurement of these materials when scaling up.»*

### 8.3 Criterion 3

The environmental benefit of a Solution is ultimately driven by the different phases of the lifetime of the product itself: production, transportation and distribution, as well as use and disposal phase. This section captures the Solution’s potential to enable a direct or indirect positive impact on the environment compared to the mainstream alternative identified.

**The mainstream alternative is considered as the alternative to the Solution which currently serves a large share of the market (at least 40%) in the same geographical context.**

A full life cycle assessment (LCA) is not mandatory for the innovator to provide; however, the innovator must at least complete the Solution Environment Impact (SEI) tool provided to them in the application. In some cases, additional documents documenting the quantified environmental benefits of a Solution (such as an expanded case study) are permitted (e.g. for software-based Solutions). We try to ensure that the mainstream alternative provided by the innovator is a realistic and fair choice. However, if an Expert feels that the wrong mainstream alternative has been presented by the innovator, then Experts are free to discuss this with the innovator in the chatbox. Experts should judge the environmental credentials of a Solution against what they, in their professional opinion, deem, to be the most realistic mainstream alternative. Useful points to consider for criterion 3:

- Are the data and assumptions used to calculate the environmental benefit reasonable?
- Can these environmental benefits be sustained in the long-term?
- How substantial are the environmental benefits?

A Solution offering only a small environmental benefit over the mainstream alternative can be considered for the Efficient Solution Label, but there should be a clear quantitative demonstration of the environmental benefits delivered. If a Solution only offers a small environmental benefit over the mainstream alternative, Experts should use their informed judgment to consider whether the Solution can make a worthwhile positive impact in the intended market and intended scale.

## Question and Practical Example

<p><b>Criterion 3</b> - Environmental Benefits: Can the Solution deliver an environmental benefit(s) versus the Mainstream Alternative? Consider the entire life-cycle - production, distribution, use, and disposal stages.</p> <p><b>YES NO</b></p>
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*«This Solution allows three key savings (i) water, (ii) energy, and (iii) CO2. The environmental impact of cultivating lettuce/aromatic plants using aeroponic culture is lower as it consumes significantly less water (30% less) compared to both traditional cultivation systems and hydroponic systems. The automated system ensures a full control on plant growth, including a correct nutrient distribution and light adjustment. This allows to maximize the production and reduce energy consumption.»*

## 8.4 Criterion 4

The Criterion 4 captures the capacity of a Solution to deliver an economic incentive for the client. In this section the Expert should focus on both the quantifiable and hidden, direct or indirect economic savings/added value that the Solution brings to the client purchasing and using it. In doing so, the total cost of ownership for the Solution should be compared to the total cost of ownership for the mainstream alternative.

Overall a Solution should create direct savings (purchase price is cheaper than mainstream alternative) or indirect savings (in the form of return on investments) for the client over its lifetime. **However, there are a few exceptions where Solutions effectively are MORE expensive than the mainstream alternative today, but have the potential to become cheaper given the right conditions.** This may occur when a Solution is at a particularly early stage in its development, or in markets with an un-level playing field (e.g. subsidies for unsustainable mainstream options).

In these cases, to be considered for the Label, innovators must provide either a) a clear, detailed and quantified plan for how they will reduce the price of their Solution to that of the mainstream alternative within 5 years, or b) how specific changes in policies/regulations in the next 5 years will level the Solution's costs with that of the mainstream alternative. Additionally, Solutions can often deliver wider societal improvements with hidden economic benefits, such as improved human health, enhanced biodiversity or increased gender equality. These can be considered alongside direct and indirect economic benefits. Useful points to consider for criterion 4:

- Total cost of operation/use (i.e. whole lifetime) for Solution and mainstream alternative
- Hidden economic benefits (e.g. cleaner air leading to reduced health costs)
- If the Solution is currently more expensive, is there a clear plan in place to reduce costs?
- Are there clear regulatory changes likely to occur in the next five years which will impact the price of the Solution and/or mainstream alternative?

### Question and Practical Example

**Criterion 4** - Client's Economic Incentive: Is the total cost of ownership/use of the Solution less than or equal to the Mainstream Alternative? Consider foreseeable regulatory changes within five years, specific actions planned to reduce the cost of the Solution, and additional socio-economic benefits. **YES NO**

*«Aeroponic systems can be expensive to set up due to the nature of the equipment involved. However, once the system is set up, it is cheaper than a traditional garden/soil farm to operate, especially considering that the average yield can be up to of ten times higher than using the conventional methods. The price per square meter compared to a like-for-like system (hydroponic) is not significantly different (approx. 50 USD more) and depending on the setup/location. Therefore, the total cost is lower and comparable to other options available on the market.»*

## 8.5 Criterion 5

Criterion 5 captures the capacity of a Solution to generate profits for the seller in the short term, regardless of the marketing strategy and the novelty of the product. In this section, the Expert should focus on the credibility of the price announced by the Innovator and the existence of a market for the Solution at this price considering the business model.

Overall a Solution should effectively generate profits for the seller, regardless of the nature of the entity selling it. For instance, if the company behind the Solution is a social business or a non-profit organisation (who for instance reinvests 100% of its profits to cover its operating costs), it shouldn't hamper the potential of actually generating profits. If the Solution is already profitable, Experts should give an assessment of the future financial sustainability of the Solution based on the business plan, information relating to the company, and the market analysis for the Solution.

If the Solution is not yet profitable, Experts should give an assessment of the potential of the seller's future profitability based on the projections for profitability, the business plan for the future of the Solution, and any market analysis provided by the innovator. Useful points to consider for criterion 5:

- Is there a clear plan to grow or maintain sales?
- Are there wider changes in the market which are likely benefit the Solution?
- Are the figures and assumptions provided regarding profitability reasonable?
- Can the Solution succeed financially against its competitors in its intended market?

### Question and Practical Example

**Criterion 5**– Seller's Profitability: Can the Solution be profitable for the seller within five years? If the Solution is already profitable, can this be maintained in the future? Consider both factors specific to the Solution (e.g. business case, business model), and wider developments/trends in the targeted market.

*« The target of 5 to 8 projects to generate a profit seems reasonable, also considering that the company has secured (i) a case study in Paris (ii) built a commercial operating greenhouse in France, and (iii) signed a contract to supply one of the largest sandwich manufacturers in Europe. The innovator identified clients willing to buy at that price and I think the company has a potential to be profitable in the next 5 years. »*



## 8.6 Additional Feedback Section

To allow Experts to provide wider comments, recommendations or advice to innovators, an additional feedback section is provided at the end of the assessment. Any comments in this section do not influence the overall outcome for a Solution (i.e. labeled or rejected), but will still be shared with the innovator behind the Solution. This is where Experts can give their input and guidance on points that the innovator should consider to aid the future development of their Solution, such as:

- What are the weaknesses of the Solution, and how could these be overcome?
- What are the strengths of the Solution that could be exploited to maximise its impact?
- Do you have any advice to aid the implementation of the Solution?
- Do you have any wider recommendations for the innovator to explore in more detail?

## Chapter 9

# Conceptual Considerations

### **Novelty of Solutions**

The Efficient Solution Label serves to recognise Solutions which deliver environmental benefits over the mainstream option on the market whilst operating at a profitable level. The evaluation process should not penalize Solutions based on the lack of novelty. It is not a requirement for a Solution applying for the Label to be a cutting-edge innovation (something fundamentally new and game-changing). Solutions can be modifications of existing technologies; more efficient versions of existing technologies; technologies which are already commonly adopted but still provide a more sustainable option than mainstream, polluting alternatives (e.g. solar panel solutions); or brand new, innovative products, processes or services. Geographical context should also be considered. For example, a well-known Solution in Europe can represent a major breakthrough if applied in a different setting (e.g. different geographical location) and therefore bring significant environmental and social economic benefits as well as profits.

### **Indirect environmental benefits**

A Solution should not only rely on non-measurable or barely quantifiable indirect benefits. Indirect benefits can be considered in the assessment for the Efficient Solution Label, but the application from the innovator must show an effective way to track and measure these benefits or a plan to reach mass adoption. Without this, it is not possible to assess whether real environmental benefits can be delivered.

### **Solutions offering small environmental benefits**

A Solution offering only a small environmental benefit over the mainstream alternative can be considered for the Efficient Solution Label, but there should be a clear quantitative demonstration of the environmental bene-

fits delivered. If a Solution only offers a small environmental benefit over the mainstream alternative, Experts should use their informed judgment to consider whether the Solution can make a worthwhile positive impact in the intended market and intended scale.

## Chapter 10

# Exceptions in the Assessment Process

In some cases, Experts may receive an invitation to assess a Solution which does not follow the normal assessment process.

### 10.1 European Commission SME2 - Equivalence

In collaboration with the European Commission (EC), the Solar Impulse Foundation has created an ‘equivalence’ between the EC’s Accelerator Pilot Phase-2/SME Instrument Phase-2 and the criteria of the Solar Impulse Efficient Solution Label. The evaluation performed for the EIC Accelerator program is highly similar to the evaluation performed by the Experts from the Solar Impulse Foundation. Indeed, the former addresses 4 out of the 5 main criteria that the Solar Impulse Label embodies in its definition of “Efficient Solution” including technical, environmental and economic performances of products, processes and services. As such, for Solutions applying for the Efficient Solution Label which have already been through the Accelerator Pilot Phase-2/SME Instrument Phase-2 scheme will only be assessed on criterion 3: Environmental benefits.

### 10.2 Label Update Program

The eligibility requirements for the Efficient Solution Label have evolved over time, and as such, some Labelled Solutions may no longer meet the standards upon which newly-submitted Solutions are judged. The Label Update Program was launched to uphold quality of the Label by having Solutions go through the complete labeling process every three years, if they so wish. This will not only give them continued credibility, but also account for any changes the company may have undergone. The Label Update Program does not aim to remove the Label from Solutions; rather, it is a way of

adding another level of accreditation to Solutions, which will be represented by the granting of another label that will be placed by the one previously acquired. Experts may therefore receive invitations to assess Solutions which have in the past already received the Efficient Solution Label. Experts will be made aware if a Solution they are assessing is re-applying for the Label through the Label Update Program. Assessments for these Solutions should be carried out in exactly the same way as for Solutions which are applying for the Label for the first time. If an Expert is assessing a Solution which is re-applying for the Label and considers that the Solution no longer meets the requirements for the Label, they should feel free to reflect this in their assessment (i.e. by marking “no” for the relevant criteria).