

Efficient Solutions Label Standards

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 two experts assigned per solution and possibility to assess < than five 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 five bullet points where individual selection is required.
V04	02.2020	Removed possibility of reopening assessments; Removal of the 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; Included information about EC SME2 Equivalence;
V05	10.2021	Improved Eligibility criteria and rephrased thematic and sectors; Introduction of an ad-hoc committee to evaluate eligibility for special cases; Included more clear deadlines and requirements for re-submission after rejection; Included more details about the external reputational check; Included GDPR; 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 in SAF; Introduced NDA for Experts; Included information about hybrid manual and automatic match-making; Introduced Label Update Program (2022); Added information about Label misuse; Introduced clear distinction label on digital VS physical products (2021); Launched clear guidelines for label on physical products; Updated information about external audit process;
V06	11.2021	Solution Explorer and information update;

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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 any individual search for efficient Solutions (ii) helping companies and public authorities achieve their environmental targets (iii) driving investment in clean technologies by 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, while outperforming 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

General Principles of Labeling Process

The Solar Impulse Efficient Solution Label can be granted to any solution that fits within the scope defined in Section 2.1 and has been assessed in accordance with the selection process described in Chapter 3. The Solar Impulse Foundation's team reserves the right to judge if the quality and completeness of information gathered on a solution applying for the Label is sufficient to be sent to Experts for the evaluation.

Each candidate solution will be assessed by three independent Experts on five criteria: Credibility of Concept, Scalability, Environment Benefits, Client's Economic Incentive, and Seller's Profitability. The result of the three independent Experts' assessments (completed in accordance with the Assessment Guidelines) will serve as a decision on whether to grant the Solar Impulse Efficient Solution Label.

2.1 Eligibility Criteria

To be considered for evaluation, applications must fulfill the eligibility criteria described in the paragraphs below. Applications, from now on referred to as solutions, that do not meet the eligibility criteria and still proceed with the application process will be rejected. It is highly recommended to contact SIF if applicants are unsure of the eligibility of their solution(s). Solutions can also be rejected during the pre-screening process and not reach the Experts' assessment if (i) the English composition is not of sufficient quality to permit a clear understanding of the information provided and/or if (ii) the level of information is deemed to be insufficient or incomplete. The following eligibility criteria apply under all circumstances:

1. **Nature of the Solution:** A Solution must be a product (physical, digital, or financial product), a service, a process, or a combination of

the above (See Appendix A for more details). A financial product is considered a Solution given that the provider:

- i incorporates the Principles for Responsible Investment (PRI);
- ii can prove the full traceability of its proceeds;
- iii selects investment projects contributing to one or more of the five SDGs identified (SDG 6, SDG 7, SDG 9, SDG11, SDG 12);
- iv promotes long-term considerations in contrast to a short-term approach. This will be evaluated by SIF on a case-by-case basis.

2. **Ownership of the Solution:** A Solution must be developed and/or be partially/fully owned¹ by a Member of the World Alliance.

3. **Contribution to the Sustainable Development Goals (SDGs):** A Solution must provide environmental benefits and contribute to one or more of the five following SDGs: SDG 6, Clean Water and Sanitation; SDG 7, Affordable and Clean Energy; SDG 9, Industry Innovation, and Infrastructure; SDG 11, Sustainable Cities and Communities; and SDG 12, Responsible Production and Consumption.

4. **Maturity Stage:** A Solution must be already commercialized (available on the market) or aiming to be commercialized within five years. Therefore, the Solution should belong to the minimum maturity stage of Technology Readiness Level (TRL²) 6-7, falling within the following stages of maturity:

- Prototype testing 1:1 in lab: The Solution has been conceptualized and validated /or in improvement in an experimental environment or “laboratory” at scale 1:1 (or high-fidelity representation³ when 1:1 scale is not achievable/viable before initial commercialization for a given technology). - corresponding to TRL 6-7.
- Prototype testing in the real world: The Solution has been tested in its “final” version with a pilot/demonstration project in real life conditions. For a technology - corresponding to TRL 7-8.

¹SIF defines “owner” as the entity which possesses a part of or the whole of intellectual property rights.

²According to the European Commission, "Technology Readiness Levels (TRLs) are indicators of the maturity level of particular technologies. This measurement system provides a common understanding of technology status and addresses the entire innovation chain. There are nine technology readiness levels; TRL 1 being the lowest and TRL 9 the highest."

³These prototypes must be able to confidently assess whether an idea met the requirements including functional, operational and/or manufacturing requirements.

- Initial market commercialization The Solution has been commercialized in an initial market - corresponding to TRL 9.
 - Small scale commercialization: The Solution has been commercialized in the market and started to test its scalability in real conditions with external support and involvement - corresponding to TRL > 9.
 - Medium and large-scale commercialization: The Solution is fully market ready and widely commercialized with clear outcomes of its impact measurable - corresponding to TRL > 9.
5. **Economic Competitiveness & Profitability:** To be eligible for the Label, a Solution must present one or more economic incentives to its targeted clients over its lifetime. When compared to a Mainstream Alternative⁴ the Solution needs to present a lower purchasing price or a lower total cost of ownership (i.e., all costs associated with operating over its lifespan). A Solution could also be considered a “better alternative” if its implementation can generate measurable societal gains⁵.

Please note: Members are required to provide enough information, including a solid business plan and supporting documents, to prove that the break-even point can be reached within five years. In addition, solutions belonging to TRL 6-7 or 7-8, and/or are not yet profitable are eligible for the Label but will be asked to provide a greater level of information regarding their business plan, forecasts, and financial plans to support their plan to reach profitability.

6. **Uniqueness & Similarity:** To be eligible for the Label, a solution must present one or more clear differences from Labeled Solutions previously submitted by the same Member. The Solar Impulse Foundation team reserves the right to make decisions on the solution’s uniqueness and similarity. As a result:
- A Solution that is considered significantly similar to a previously Labeled Solution from the same applicant (e.g. no significant differences in the target sector and in the technology used) cannot be considered in scope for the application process and must be grouped under the same label previously awarded. The two Solutions would be grouped in a unique Solution Explorer page and showcase a unique Efficient Solution Label.

⁴The alternative to the Solution which currently serves a large share of the market, at least 40% in the same geographical context.

⁵For instance: A Solution increasing air quality and thus reducing healthcare costs due to respiratory and/or other non-communicable diseases.

- A solution that is considered an update and or upgrade (e.g. proved out-perform a previous version, or contain significant technical differences) of a previously Labeled Solution can be eligible for the Label Update Program (LUP) and potentially qualify to obtain a second Label if successfully passing the LUP. The two Solutions would be grouped in a unique Solution Explorer page and showcase two Efficient Solution Labels.
- A solution that is considered significantly different to a previously Labeled Solution from the same applicant (e.g. significant differences both in the targeted clients and mainstream alternative) can be considered as a new solution and apply to potentially obtain its own Label. The two Solutions would be considered distinct, therefore each Solution would have its own Solution Explorer page and their own Efficient Solution Label.

The Solar Impulse Foundation will determine internally in which category a potential duplicate falls into and will brief the innovator on the corresponding steps to take.

2.2 Additional Conceptual Considerations

In addition to these five eligibility criteria, further considerations apply:

Nature of the Solution & Rationale:

- It is not a requirement for a solution applying for the Label to be a cutting-edge innovation (something fundamentally new and game-changing). A well-known, state of the art solution in one region can represent a breakthrough if applied in a different setting (e.g., different geographical location), bringing significant environmental and social economic benefits as well as profits. Therefore, a correct selection of Mainstream Alternative and a good contextualization of the geographical area for implementation is crucial in the solution's presentation. This will allow the Experts who perform the assessment to be able to critique, analyze, and make sound judgments about the validity of the claims and information put forward by the Applicants.
- Consulting services⁶, documents about best practices, and political/regulatory initiatives are not considered to be eligible.

Environmental Benefits:

- When the main environmental impact (benefits) of the solution is generated solely by the manufacturing process and/or its component(s) [i.e., materials], it is preferable that the Applicant own the intellectual property rights for the component(s). Applications falling within this category will be handled on a case-by-case basis.
- A Solution should not only rely on non-measurable or hardly quantifiable indirect benefits, meaning those impacts which are not immediately correlated with the Solution's implementation but induced as a result of the Solution's impact pathway. The application must show an effective way to track and measure these benefits or a plan to reach mass adoption.

Economic Competitiveness & Profitability:

- A solution can be owned by a social business or not-for-profit entity if the solution can be commercialized and can effectively generate profits.

⁶The provisioning of services by an independent contractor by means of consultations.

- A Solution must prove it is not or will not be reliant on subsidies/grants. It must disclose the percentage of their financing that comes from these sources as well as their long-term plan to step away from these and become independently profitable. In the case of the Mainstream Alternative being subsidized or the recipient of grants, the Applicant must provide evidence of the extent to which the Mainstream Alternative benefits from these schemes, explain how this affects their own profitability projections, and why this has forced them to also seek out subsidies/grants.

- Solutions which are currently more expensive than the Mainstream Alternative, but have the potential to become cheaper, given the right conditions, may be considered for the Label. In these cases, Members must provide either:
 - i a clear, detailed, and quantified plan for how they will reduce the price of their Solution to the same or a lower price than the Mainstream Alternative within five years;
 - and/or**
 - ii how specific changes in policies/regulations in the next five years will level the Solution's costs to that of the Mainstream Alternative. Applications falling within this category will be handled on a case-by-case basis.

2.3 Thematic & Sectors

Due to the moral positioning of the Foundation and its Chairman, the following sectors of industry are considered out of scope:

- **Nuclear Power (fission)** - with exception of Solutions offering alternative and safe waste treatment and containment technology. Applications falling within this category will be handled on a case-by-case basis.
- **Armaments & Military** - The Solution should not be intended for military applications.
- **Genetically Modified Organisms (GMOs)** - with exception of Solutions where GMOs were in some way used in the manufacturing of the product but are not present in the final product (e.g., GMOs used to optimize existing biochemical pathways to produce enzymes).
- **Oil & Gas (O&G) Industry** - with exception of Solutions which improve the environmental performance of the O&G sector without contributing to its growth or longevity. Ultimately, Solutions directly relating to or supporting the continuation or growth of the O&G sector are not considered for the Efficient Solution Label.
- **Recreation** - Recreation is intended as any activity whose main objective is “fun” and relies on a disposable income or higher-than-average economic resources to be carried out. If solutions are part of a market that is of “mixed use,” [e.g., plane travel is used for both recreation (traveling for vacation) and general transportation] their eligibility will be handled on a case-by-case basis to ensure that the use of the solution does not increase the portion of the mixed-market that is purely recreational.
- **Consumerism**⁷ - Solutions that are aimed at increasing consumerism are not considered for the Label. The development of new markets or business models, through the commercialization of solutions that deliver consumer value in more eco-efficient or socially beneficial manners without rebound effects (requiring proof by the Applicant) can be considered for the Label.
- **Single Use Plastic (SUP)**.
- **Nudging/Full Dependency on Consumer Behavior** - A Solution cannot depend on influencing, modifying, or introducing behavioral

⁷SIF defines consumerism as the idea that increasing the consumption of goods and services purchased in the market is always a desirable goal and that a person’s well-being and happiness are fundamentally dependent on obtaining material possessions.

changes (that cannot be consistently measured/monitored) to achieve its environmental benefits.

2.4 Implications of Eligibility Criteria

Applications are occasionally submitted for prospective solutions where it is not immediately clear whether the solution complies with the above rule(s). Any solution with a clear and obvious direct involvement in one of the above sectors will not be considered for the Efficient Solution Label. Most complications relating to potential breaches of charter occur when a solution is (i) indirectly related to one of the above thematic/sectors, or (ii) directly related to one of the above thematic/sectors but with unique features, such as significant environmental benefits, which may merit its consideration for the Label. As such, an ad-hoc committee will be convened to deliberate on these solutions to reach an agreement about their compliance with the Charter.

Chapter 3

Labeling Process

The diagram below depicts the main steps of the selection process, which are further detailed in the paragraphs below.

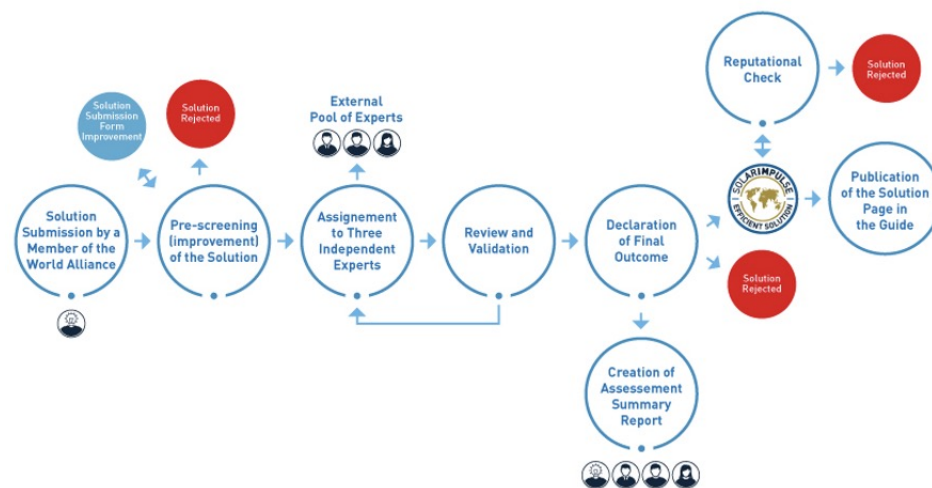


Figure 3.1: Selection process for the Solar Impulse Efficient Solution Label.

3.1 Member Profile Creation

As a first step, the Applicant is required to become a Member of the World Alliance For Efficient Solutions. This step requires them to log into the [Web-site](#) and create a Member profile by completing the company profile, reading the [Submission Rules and Conditions](#) and signing [Membership Agreement](#). By signing the Membership Agreement Members commit to the Charter, Statutes, and Core Values of the World Alliance (see Section [F.1](#)). Once the profile is created the SIF Team checks and validates the Member profile.

3.2 Submission & Pre-Screening

Once the Applicant has verified the fulfillment of the Eligibility Criteria and has completed the Member profile, the official submission of their solution for the Labeling process can begin. The applicant has access to the Member Dashboard which allows him/her to manage the application as well as other features linked to their profile. In the section “Submit a Solution” the applicants can start filling in the Solution Submission Form (SSF). Once the SSF is initiated, applicants have 30 days to complete the application.

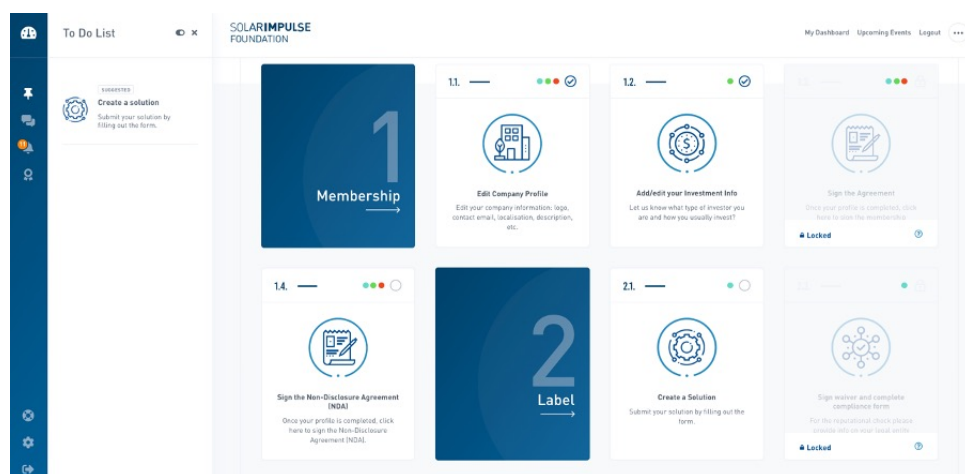


Figure 3.2: Applicant’s (Member) Dashboard.

At this stage, several pieces of information are requested through the SSF as well as additional information regarding compliance. The applicant can complete their application in multiple sessions. To support the application process, a chat is available to ask questions directly to the Technical Team. The SIF Team is also available via email (solution@solarimpulse.com) or phone call.

Once the application is completed and submitted, the SIF Team reviews the information provided (“pre-screening” of the solution) to check for quality and completeness. At this stage, SIF reserves the right to reject those candidate solutions which do not meet a minimum standard of quality, detailed/relevant information, and are not within the eligibility scope. Candidate solutions that do not enter into the eligibility scope and fail to pass the pre-screening stage will be directly informed of the negative outcome of their application and of the specific reason that resulted in such outcome by SIF’s Team.

Solutions rejected at this stage are welcome to re-apply after six months (depending on the reason for the rejection). In case of reapplication, appli-

cants are required to amend the missing information or show that progress has been made compared to the initial proposal. After the SSF is deemed to be complete, compliance information is complete, and the liability waiver has been signed, the solution can be assigned to the external independent Experts for evaluation.

3.3 Confidentiality

During the application process Members are requested to not disclose any sensitive or confidential information in the SSF. Nevertheless, if an entity considers it appropriate to disclose more confidential information, a Non-Disclosure Agreement (NDA) can be drafted between the Member and SIF, as well as between the SIF and the Experts involved in the assessment process. In such a case, only Experts who have agreed to sign an NDA will be assigned to the solution. It is important to notice that adding this step might cause significant delays in the evaluation process.

3.4 External Reputational Check of Entities

During the application process, Members are requested to provide information on their legal entities as well as sign a Liability Waiver Declaration. The Solar Impulse Foundation shall be authorized to request any information that it deems useful and necessary during the submission process to allow for such reputation check. The collected information shall solely be used to verify the compliance of the Member with the Charter of the World Alliance and shall not be taken into account during the selection process.

By signing the Liability Waiver Declaration Members authorize SIF, as well as any third party appointed by SIF, to perform an external reputational check based on private and public background information, documents and/or materials that the Member provided in the Solution Submission Form and in the Compliance Form (the "Background Information"). This step is mandatory in order for SIF to ensure that all legal entities submitting a solution for the Label are compliant with its Ethical Charter (already signed by the Solution's provider and agreed to when registering as a Member) and all applicable laws and regulations.

The reputational check is performed by a third party appointed by SIF, namely BNP Paribas (Suisse) SA, working under strict Non-Disclosure Agreement (NDA). BNP Paribas (Suisse) SA will process the Background Information for the Reputational Check and may retain this data for a maximum period of 10 years in compliance with the General Data Protection Regulation (EU) 2016/679 (GDPR). Should a Solution be found "not compliant" with SIF Ethical Charter before, during, or after the Labeling process, the Member and its Solution shall be removed from the portfolio of

Solutions and from the World Alliance for Efficient Solutions.

IMPORTANT: The Reputational Check will be performed after the Outcome Date (i.e. the Labeling date) and will be implemented with retroactive effect. In case the outcome of the Reputational Check is negative, SIF retains the right, at its sole discretion, to withdraw the Solar Impulse Efficient Solution Label with immediate effect and shall inform the Member in writing (via email). As a consequence of such withdrawal, the Solution will be removed from the portfolio (as well as any and all documents or materials associated to it) and the Member will no longer be allowed to present themselves as holding the Solar Impulse Efficient Solution Label or use the Solar Impulse Efficient Solution Label logo in any editorial content or in any other manner.

3.5 Assignment to Independent Experts

Applications, (referred to as solutions below), must be assigned to three Experts in a process called matchmaking. The matching process is designed to impartially assign the Experts to solutions that match their field of expertise in order to ensure a competent evaluation.

An algorithm has been developed and implemented as of 2020 for this purpose, along with manual actions and checkpoints. On a daily basis, the algorithm screens the pool of solutions that require Experts as well as the Experts who are currently available (not assigned to other solutions) and performs the matching. To reduce the residence time of solutions in the assigning phase, priority is established based on the solution's validation date. For each solution, the list of SDGs, sectors, and sub-sectors identified by the applicant in the SSF during submission are retrieved. The lists are then matched with the Experts' years of experience in the respective SDGs, sectors, and sub-sectors. To be eligible for assignment, an Expert must:

- Have at least five years of experience in the SDGs of the solution and at least three years in the relevant sectors and sub-sectors;
- Not have been recently assigned or undertaking another assessment;
- Not be part of the same organization as the solution;
- Be available (e.g. not on vacation, sick leave);
- Not belong to the blacklist¹ of excluded companies.

3.6 Experts' Evaluation Process

Once a solution is assigned to three independent Experts, the evaluation process (assessment) begins. The assessment methodology is designed to evaluate candidate solutions against five criteria: Credibility, Scalability, Environmental Benefits, Client's Economic Incentive, and Seller's Profitability. More information on the criteria as well as deliverables for Expert can be found in Appendix C.

¹**Blacklist:** a list of Entities, and consequently a list of Experts associated with the those Entities, that are not assigned to a specific solution because of potential conflict of interest/competition.

3.7 Exchange of Information during the Assessment Process

During the assessment process, Experts have access to the online chat box tool via their secured profile on the Solar Impulse website. The aim of this tool is to allow Experts to further exchange information with the Applicants in anonymous format. All messages posted on the chat box will be accessible to all Experts assigned to the solution. Conversations are saved and could be used during the assessment review process to contextualize the answers in the SAFs. The Experts and the Member must not contact each other via any other means of communication (phone calls, personal email etc.); should this occur, the assessment from the Expert who made contact outside of the chat box will be invalidated and a new Expert will be assigned to the solution.

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

3.8 Review & Validation

Once all the three Experts assigned to the solution have completed and submitted their assessments, SIF's Team will review and validate their work. In order to ensure that the Labeling process remains objective, unbiased, and completely independent, the evaluation of Experts' work (carried out by SIFs Team) is kept to a minimum. This step is purely used to verify whether the Experts correctly applied the Assessment Guidelines.

In this regard, SIF retains the right to fully invalidate assessments where:

- The comments are written in any language other than English;
- Inappropriate language (defamatory, offensive or abusive) has been used;
- The Expert(s) clearly highlight in their comments that the solution falls out of their area of expertise;
- The Expert(s) leave open questions that clearly highlight their lack of knowledge/expertise;
- The Expert(s) states information about the solution is missing without having used the chatbox to seek further information;
- The Expert's justification is an obvious copy-and-paste of what the Member has written in the Solution Submission Form (SSF);
- The Expert(s) copy-and-paste their justification across different criteria (e.g. Expert provides the exact same justification -comment - for Criterion 1 and Criterion 2);
- The Expert's justification does not correspond to the respective criterion (e.g. commenting on issues relevant for Criterion 4 in the comment box for Criterion 5; or not referring to any of the criteria at all);
- The Expert rejects a solution based on the fact that the respective is not a novelty;
- The Expert's comments for a criterion are not aligned with the judgment ('yes' or 'no') for that criterion (i.e. negative comments but a 'yes' judgment).

In the case of any misapplication of the Guidelines, the Expert's entire assessment is considered unusable (and is consequently archived) and the solution is re-entered into the assessment process and re-assigned to a new Expert.

3.9 Declaration of Final Outcome

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 the image 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.

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.

3.10 Pathways for Re-submission After Rejection

Solutions rejected after Experts’ evaluation will have the opportunity to re-submit their SSF after six months from the notification of their outcome. During this period of time the Member is expected to address all observations obtained from the assessment process available in the ASR. During the reapplication process, Members are allowed to duplicate the previous submission and reuse some of the content (if deemed to be relevant). However, applicants are required to amend the information or show effectively that progress has been made compared to the previous submission. Upon reapplication, SSF’s will be prescreened by SIF’s Technical Team. At this stage, SIF reserves the right to reject those candidate Solutions which did not sufficiently improve or do not meet the standards.



	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	●	●	●

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

Chapter 4

Label Use and Communication Rights

In addition to the Assessment Summary Report (ASR) Labeled Solutions will have access to a communication toolkit, available through their Member Dashboard, which contains the Solar Impulse Efficient Solution logo in several versions. Members are encouraged to communicate about the SIF Efficient Solution Label on both digital and physical materials within the guidelines provided by SIF.

Intellectual Property: The Efficient Solution Label logo is the intellectual property of the Solar Impulse Foundation. The trademark should not be altered, copied, reproduced, or used without receiving prior written permission from SIF.

4.1 Promotion on Digital Material

A series of tools to communicate around the Label via digital/social media is available via the SIF Member's dashboard. The Label Logo on digital material must adhere to the following guidelines:

- Always use the version containing the date of labeling;
- Cannot be used on a product which was not evaluated through the SIF Efficient Solution Labeling process;
- Cannot be associated with a sub-product or derived product;
- The Label does not endorse or accredit the company, only the Labeled Solution;
- Must not be altered.



Figure 4.1: Example of a logo with the month and year of Labeling

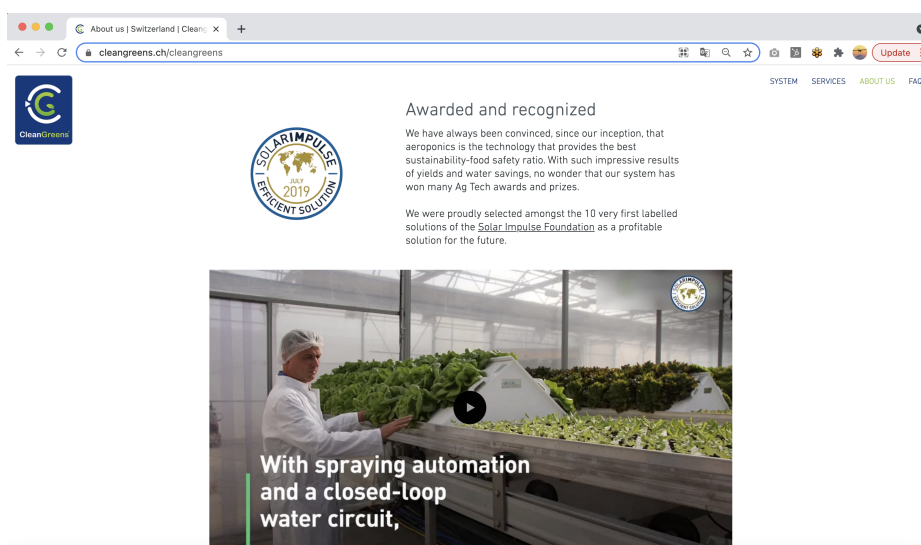


Figure 4.2: Example of Promotion on Digital Material with the dated version of the logo.

4.2 Promotion on Physical Packaging of Products

To boost the adoption of the Efficient Solution Label, SIF launched a new program in September 2021 which encourages the use of the Efficient Solution Label logo printed on physical products or their packaging.

The aim of this program is for the Label to be recognized as an independent and trusted product award that reinforces the message that Solutions to protect the environment in a profitable way exist today. The printed Label logo signifies that the products have been verified against the SIF Standards. The printed Label logo must meet all the conditions mentioned above for digital material (with the exception of the first point above), the guidelines of retailer(s) where they may be sold, and comply with the laws governing labeling in the targeted market. In addition, the printed Label logo must adhere to the following guidelines:

- Must use the un-dated version of the Label logo which includes the TM symbol;
- Must be placed on the front face of the packaging/product and be visible to the consumer;
- Should (preferably) be positioned near the left or right bottom edge or corner;
- Must always appear as an independent mark, be less prominent than the brand, and positioned away from the brand name/logo;
- Must be used at a size that is in proportion with the size of the packaging and the other elements on the front face;
- Must be used in association with the SIF Disclaimer [placed somewhere on the packaging, but not necessarily in conjunction with the label].



Figure 4.3: Example of the un-dated version of the Logo with TM symbol.



Figure 4.4: Example of Promotion on Physical Packaging of Products with the un-dated version of the logo with TM symbol.

4.2.1 Disclaimer on Physical Products

The Efficient Solution Label is valid for a three year period, after which Solutions should be reassessed. For more information visit <https://solarimpulse.com>

4.2.2 Artwork Approval

Written approval must be received from the SIF team prior to printing or distributing any packaging/product that displays the SIF Efficient Solution Label logo. Members are requested to double check artwork before submitting to keep re-submissions to a minimum as errors will delay the approval process. All requests must be submitted via solution@solarimpulse.com

4.3 Duration

Products can be labeled with the SIF Efficient Solution Label logo starting from the day they receive their label (labeling date) up to three years' time. After this time, Labeled Solutions will maintain the right to promote their Solution using the Label (dated version) on their digital materials, but will lose the benefit of using the Label (un-dated version with TM symbol) on physical products (e.g. packaging). As a result, to maintain the right to use the Label on physical products, Solutions will have to apply, and successfully pass, the Label Update Program (more information in the following paragraph). While the Solution can keep using the Label (dated version) on their digital materials, Members are highly encourage to update their award after three years time.

4.4 Solution Explorer

Labeled Solutions will be added to the Solution Explorer on their date of labeling. The Solution Explorer is a one-of-a-kind search engine that helps businesses, public authorities, and communities navigate through 1000+ Efficient Solutions. The Solution's profile page will contain information that are extracted from the public information section in its application (SSF). During the submission stage, applicants review their information and provide an optimal image to display on their Solution's profile page - a preview tool is available to review and validate the visuals.

4.5 Corrections & Retractions

4.5.1 Corrections of Published Content

The following categories on a Solution's profile page on the Solar Impulse Foundation's website [<https://solarimpulse.com/solutions-explorer>] are eligible for correction and post-publication [after the labeling date] updates.

- General information on the Solution's profile page:
 - Solution Name;
 - Subtitle;
 - Images/Video;
 - Identification¹;
 - Company Information/Company Profile²;
 - Looking For;
 - Target Client Profile;
 - Tags;
 - Sectors - Value Chain Application;
 - Related Topics;
 - Implementation Stories;
 - Complementary Solutions.
- Implementation stories: an online-only update of information that relates to success stories. It shows real-world examples of Solutions implemented by businesses and governments.
- Addendum: generally published when significant additional information crucial to the reader's understanding of the Solution has come to light following publication of the Solution's profile page.

Members are invited to submit their request and changes through 1000solutions@solarimpulse.com.

Important: Information regarding Label Logo, Label Date, Maturity Stage, Environmental Benefits, Financial Benefits, and Activity Region cannot be modified after the labeling date. These elements provide a summary of the information provided in the Solution Submission Form, and were reviewed and validated by the external independent Experts in the context of the

¹**Identification:** only if the meaning/purpose is not completely changed.

²**Company Information/Company Profile:** only if legally registering the business under a new name (marketing purpose). If changes are due to company merging or acquisition, the Solution must reapply.

labeling process. As such, this information cannot be modified after the labeling date unless a new submission is created either in the context of the Label Update Program (see Section 4.6) or in the form of a new application.

4.5.2 Removal of Published Content

In exceptional circumstances, SIF reserves the right to remove a Solution's profile page, video, or other content from SIF's online platforms and social media accounts. Such action may be taken when the following conditions are met:

- i SIF has been advised that content is defamatory; infringes a third party's intellectual property right, right to privacy, or other legal right; or is otherwise unlawful;
- ii a court or government order has been issued, or is likely to be issued which requires removal of such content;
- iii when the integrity of SIF is substantially undermined owing to errors in the conduct, analysis, and/or reporting around the Solution or the Solution's owner;
- iv the content is not aligned with the Core Values of the World Alliance and SIF Efficient Solutions Label Standards.

Removal with retroactive effect may be temporary or permanent, and will be accompanied by a statement explaining why the content has been removed. Bibliographic metadata (e.g. title and authors) will be retained for internal use in the SIF database.

SIF is committed to maintaining the integrity of the SIF Efficient Solutions Label and the Solution Explorer, therefore it thoroughly investigates concerns that are directly raised by Experts, Members, and/or externals. Members are always given an opportunity to respond to the concerns raised. SIF may consult with experts in the course of an investigation. Depending on the seriousness of the issues, the following outcomes are possible:

- If the application is still in process it may be rejected without proceeding to the next steps;
- If the application has already successfully passed the assessment and has been published online, depending on the nature and severity of the issues, the Solution's profile page may be retracted.

While SIF is committed to addressing post-publication issues swiftly, investigations typically take some time to reach a conclusion given the complexity of the discussions and the need to potentially consult with experts.

4.6 Label Update Program (LUP) as of 2022

In 2022, as part of SIF’s continued commitment to upholding the value, credibility, and impact of its Label, the Label Update Program (with retroactive effect) will be introduced. The Label Update Program (LUP) aims at introducing a process for already-Labeled Solutions to reaffirm their association with SIF as well as receiving an official confirmation that their solution still meets SIF standards. Four months before the three year renewal date, Labeled Solutions will be invited to follow the same application procedure as Solutions applying for the first time, with the possibility of partially using parts of their former application to speed up the new submission process. After successfully passing this process, they will then receive an updated Label they can display alongside their previously-obtained Label.

If a Member chooses to not accept SIF’s invitation to go through the LUP, they will continue to hold the original Label they received, as well as any acquired in the past. However, they will not actively receive the majority of benefits provided by SIF to Labeled Solutions. The LUP is key in maintaining the credibility of the Label to investors, partners, and affiliated government entities. As SIF continues to grow and evolve, we are committed to ensuring our Labeled Solutions continue to have a strong, positive impact in the world.

Along with the LUP, SIF operates yearly checks in order to ensure that the Labeled Solutions are active and up to date. In the case where a Solution fails to prove that it is still operational and is in line with the information provided with SIF during the application process, SIF retains the right to withdraw the Solar Impulse Efficient Solution Label granted to that Solution, as well as, its World Alliance Member status.



Figure 4.5: Example of label received in 2021 and updated label.

4.6.1 Misuse

The use of the Efficient Solution Label logo outside the cases described in the sections above is considered an infringement, entitling SIF to take legal action. SIF actively monitors the use of the SIF Efficient Solution Label

logo and will take appropriate action to protect its integrity. Members of the World Alliance are encouraged to notify SIF if any suspected misuse is identified. In the event of misuse of the Efficient Solution Label logo, the case will be processed through SIF's complaints procedure and the following procedure will be implemented:

- The report of the misuse will be logged, the company/organization responsible will be contacted in writing and/or by telephone, and the complaint investigated.
- Where appropriate, corrective action will be taken. The time-frame will depend upon the medium in which the violation appeared and the severity of the violation/misuse.
- Follow-up action will be conducted to ensure the misuse has halted.

Failure by the Member to take the required action may result in the removal of their Solution from the portfolio, suspension or termination of the Membership, and/or legal action.

In the event the Efficient Solution Label logo is misused by a third party, the infringement will also be processed through the complaints procedure. The organization will be notified that the product(s) must be withdrawn from sale and the promotional materials removed from circulation and/or its website with immediate effect.

Chapter 5

External Audit - *Ernst & Young (EY)*

Ernst & Young (EY) collaborates with the Solar Impulse Foundation (SIF) to provide expertise in securing the robustness of the Labeling processes - which is the backbone of the Foundation's mission to select and support clean and profitable projects worldwide. EY's contribution focuses primarily on challenging the concept behind the Label selection process - including the choice of evaluation criteria, eligibility, and expert's format of involvement – helping concretely shape and improve the future of the Efficient Solution Label.

SIF collaborated with EY, in order to perform a thorough review of the first version of the Labeling process (December 2018). EY assessed the appropriateness of the Standards regarding its relevance, exhaustiveness, reliability, objectivity and its clarity. Through an external audit, EY reviewed all the various tools deployed for the implementation of the Labeling Process, tested a representative sample of Solutions that had been through the whole process, and concluded that the Labeling process was implemented in accordance with the principles and operating rules described in this document (Standards). A new audit is scheduled for the end of 2021 - the standards for the Solar Impulse Efficient Solution Label and its correct application, will be subjected to certification and validation by the EY independent external auditor on a recurrent basis.

All stakeholders involved in the Labeling process (i) the Solution's providers - Applicants of the World Alliance, (ii) the external independent Experts, and (iii) the Solar Impulse Foundation's team should be made aware and take note of these standards.

Chapter 6

Equivalence

In the scope of its collaboration with the European Commission (EC), the Solar Impulse Foundation sought to leverage the network and expertise of the European Innovation Council (EIC) Accelerator Pilot Phase-2 / SME Instrument Phase-2 to create an equivalence between the EC selection process and criteria of the Solar Impulse Efficient Solution Label. This is possible due to the fact that the evaluation performed by the Experts from European Commission for the EIC Accelerator program is highly similar to the evaluation performed by the Experts from the Solar Impulse Foundation.

The EIC Accelerator program addresses four out of five the 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.

Therefore, the purpose of this section is to (i) explain and justify a partial equivalence between a Solution selected by the EIC Accelerator Pilot Phase-2 / SME Instrument Phase-2 and the Solar Impulse Efficient Solution Label; (ii) present an adapted procedure for those projects entering the selection process of the Solar Impulse Efficient Solution Label.

6.1 EIC Accelerator Background Information

The European Commission (EC) EIC Accelerator program provides grant-only support as well as support in the form of blended finance for selected applicants. The companies able to apply are individual for-profit SMEs established in an EU Members State or a Horizon 2020 associated country.

The EIC Accelerator Pilot Phase-2 builds on the previous SME Instrument Phase-2 program of the EC and follows the same selection rules. For the purpose of this section, we will refer to the SME Instrument Phase II official documentation.

All the selected Solutions that reached a certain score after Experts’

examination receive either funds or the Seal of Excellence of the EC if no funds are available. Awardees of the EIC Accelerator Seal of Excellence or funding recipients are complying with the minimum rating requirements for equivalence with the Solar Impulse Label.

6.2 Eligibility

To apply for the Phase-2 of the EIC Accelerator Pilot:

- Applicants must be for-profit SMEs, including young companies and start-ups, from any sector;
- Applicants must be established in an EU Member State or a Horizon 2020 associated country. Following the cut-off date of 5 June 2019, only individual for-profit SMEs established in an EU Members State or a Horizon 2020 associated country can apply;
- Regarding the solution, there are no set topics, but negative impacts on climate and the environment should be avoided;
- If the activity concerns a primarily technological innovation, a Technology Readiness Level (TRL) of 6 or above is required for primarily technological innovation or the equivalent for non-technological innovation.

In light of the elements stated above, the Solar Impulse Label's eligibility scope demonstrated to be:

- More selective in terms of
 - i the type of Solution (a service, physical or financial product, industrial process, technology which must be commercialized by a Member of the World Alliance/Applicant);
 - ii areas of applications (see Section Eligibility);
 - iii maturity level (prototype at scale in lab may not yet be reached at an early stage TRL 6).
- Less selective in terms of
 - i the origin of the company submitting the Solution (worldwide versus EU and associated countries)

and

 - ii the size of the company submitting the Solution (for-profit individual SMEs versus all-size for-profit entities).

As a result, no strict equivalence can apply in this step. Thus, the eligibility should be evaluated systematically for Solutions coming from EIC Accelerator Pilot program as for any of the applying Members of the World Alliance.

6.3 Selection Criteria

EIC Accelerator Pilot Phase-2 proposals are evaluated based on three criteria, Excellence, Impact, and Implementation. The criteria are divided into several sub-criteria that are separately evaluated and rated by the Experts. Amongst them, seven can be used to justify the equivalence with Solar Impulse Efficient Solution Label.

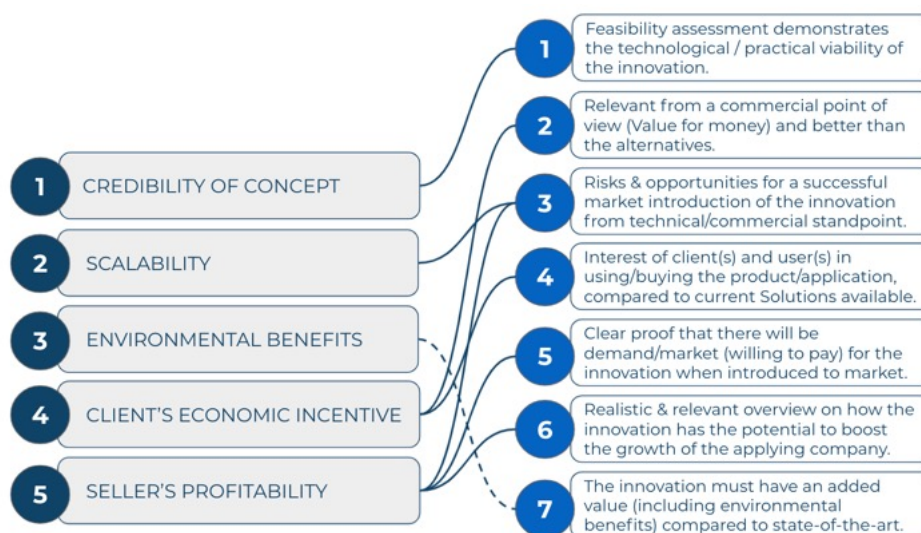


Figure 6.1: Solar Impulse Efficient Solution Criteria (left), EIC Accelerator Pilot Phase-2 sub-criteria (right).

In particular :

- The Credibility is addressed by sub-criterion (1), where the EC evaluators assess, based on the proposal's feasibility study, if the Solution can demonstrate a technological and practical viability. Assuming that it relies on a sound concept and can be operated as designed in the real world, it covers the notions of this Solar Impulse Label's criterion 1.
- The scalability is addressed by sub-criterion (3), where the EC evaluators assess the ability of the Applicant to take the Solution to market

from a technical point of view. This is understood as the Solution being able to be implemented technically at scale in the targeted market, and thus, it covers the notions expected to be verified in this Solar Impulse Label criterion 2.

- The Environmental Benefits are briefly raised in sub-criterion (7) as an appreciation of the Applicant's ability to thoroughly describe the benefits (social, environmental, technical etc.) of its Solution compared with state-of-the-art reference Solutions. Thus, it does not cover the notions of demonstrated incremental environmental benefit that is expected to be evaluated in the criterion 3 in the context of the Solar Impulse Efficient Solution Label. However, it informs on the relevance of using the Applicant's EIC Accelerator Pilot Proposal Submission Form as a valuable and complete set of information on the potential environmental impact of the Solution compared to a set of Mainstream Alternatives.
- The Client's Economic Incentive is addressed jointly by sub-criteria (2) and (4), where the evaluators assess the ability of the Solution to provide value for money and an interest from clients to buy it compared to alternatives (i.e. references). This fits with the Solar Impulse fourth criterion 4, where a Solution is required to be
 - i cheaper, in the short term
 - or**
 - ii long term compared to alternatives
 - or**
 - iii to provide value for money / economic incentive for clients or society (e.g. improving air quality, opening new markets etc.)
 - or**
 - iv to become cheaper than the reference after a change in regulation that is reasonably foreseeable in the next five years in the targeted region(s) and sector(s) of implementation.
- The Seller's Profitability is addressed by sub-criterion (3), (5) and (6), where the EC evaluators assess the potential success of a market introduction of the Solution and the fact that the price at which the Solution would be commercialized could respond to the target customers' willingness to pay. Finally, the notion of potential profits made from commercializing the Solution is translated as a potential to boost the growth of the applying company evaluated in sub-criterion 6. This is understood as the Solution being able to be commercialized profitably at a credible price at which customers would be willing to purchase it, and this verifies the notions covered in this Solar Impulse criterion 5.

Four out of the five Solar Impulse Efficient Solution Label's criteria can be considered as common between the two assessment processes (namely: Credibility , Scalability, Client's Economic Incentive, and Seller's Profitability). As a result, **Environmental Benefits shall be evaluated to ensure the Solution is compliant with the Solar Impulse Efficient Solution Label's criterion.**

6.4 Experts & Matchmaking

In the EIC Accelerator Pilot Phase-2 program, proposals are evaluated remotely by four Evaluators with complementary profiles chosen amongst the pool of 2,500 experts available in the EC database. Selected evaluators must have at least five years of experience in the main sector of the Solution, and minimum of three years of experience in the specific field of the proposal.

This selection is done through a keywords matchmaking where experts select and rate three keywords in a list of fields, the Applicant also selects and rate three keywords regarding the core of its proposal. Each Expert evaluates all the criteria independently. As a result, an equivalence with the Solar Impulse Efficient Solution Label can be made based on the common grounds of Experts profile and matchmaking process.

6.5 Deliverables for Evaluators

In the EIC Accelerator Pilot Phase-2 assessment process, when an evaluator identifies significant shortcomings, they must reflect this by awarding a lower score for the sub-criterion concerned. There is no possibility to request further information or clarification once the proposal is assigned to the evaluator. For each sub-criterion, the proposals are given scores of zero (0) to five (5) with a Solution of one decimal, as follows:

- (0) The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information (unless the result of an 'obvious clerical error').
- (1) Poor: the criterion is inadequately addressed or there are serious inherent weaknesses.
- (2) Fair: the proposal broadly addresses the criterion but there are significant weaknesses.
- (3) Good: the proposal addresses the criterion well but with a number of shortcomings.
- (4) Very good: the proposal addresses the criterion very well but with a small number of shortcomings.

- (5) Excellent: the proposal successfully addresses all relevant aspects of the criterion; any shortcomings are minor

The main difference between the two processes is that the experts of EIC Accelerator Pilot Phase-2 provide ratings whereas Solar Impulse Label experts provide binary scores (YES/NO answers). Following the meanings of the ratings from the EIC Accelerator Pilot, **we consider that the ratings above or equal to 3.5/5 are sufficient to be worth a YES in the Solar Impulse Efficient Solution Label process.**

6.6 Outcome of the EIC Proposals' Assessment

In the EIC Accelerator Pilot Phase-2 selection process the overall consensus score for each proposal is calculated as follows:

- Each evaluator scores each of the three award criteria from 0 to 5. Scores with a resolution of one decimal place may be given.
- The consensus score at the level of the three evaluation criteria is the median score¹ of the scores given by each of the four evaluators and the quality threshold is 4 out of 5.
- The weighting for each of the three criteria is 1/3.
- The overall consensus score is the sum of these three separate scores and the quality threshold is 13 out of 15 with a resolution of two decimals.
- A proposal must pass all quality thresholds (per criteria and overall) in order to be included in the ranking.

¹The median is the arithmetic mean of the two "middle" scores of the four evaluators, e.g. median of scores 1; 5; 7; 10 is $(5+7)/2 = 6$.

	Evaluators				Median	Weight	Weighted Criteria
	1	2	3	4			
Impact	5	5	5	4.5	5 / 5	1/3	5 / 5
Excellence	5	3	4	4	4 / 5	1/3	4 / 5
Implement.	3	2	4	5	3.5 / 5	1/3	3,5 / 5
Threshold Criteria (≥ 4)	→				X < 4		
Threshold Weighted Sum (≥ 13)	→						X < 13
⇒ PROPOSAL NOT RANKED							

Figure 6.2: Example of scoring and thresholds. Source: H2020 Guide for Applicants.

In the EIC Accelerator Pilot Phase-2 a qualitative assessment will be provided for each sub-criterion (unweighted median score):

- Very Good to Excellent (4.5 – 5)
- Good to Very Good (3.5 – 4.49)
- Fair to Good (2.5 – 3.49)
- Insufficient to Fair (1.5 – 2.49)
- Insufficient (0-1.49)

After the evaluators' assessment, applicants not invited to a Step 2 interview receive an Evaluation Summary Report (ESR) with the scores obtained and a qualitative assessment with respect to each of the aspects considered under each of the three award criteria. Each applicant invited to an interview in Step 2 receives an invitation and a report at the end of Step 2 with an A/B mark and an additional qualitative assessment related to both Steps 1 and 2. Only applicants passing all thresholds and receiving an "A" mark will be considered for funding. Applicants meeting all thresholds but not receiving funding will receive a "Seal of Excellence".

6.7 Conclusions

In the context of the SIF Label and EIC-SME2 equivalence, a Solution will be granted the Solar Impulse Efficient Solution Label under the following conditions:

- The solution was granted funding or a Seal of Excellence in the scope of the European Innovation Council (EIC) Accelerator pilot Phase-2 / SME Instrument Phase-2 program within the past five years;
- The solution is owned by an entity Member of World Alliance for Efficient Solutions;
- The solution fits in the Solar Impulse Efficient Solution Label eligibility scope at the time of the European Innovation Council (EIC) Accelerator pilot Phase-2 / SME Instrument Phase-2 program application;
- The solution obtained an overall rating of 3,5/5 minimum to the seven sub-criteria presented in Section 6.3 given by the EC evaluators. Meaning: the Solution successfully validates four criteria (Credibility, Scalability, Client's Economic Incentive, and Seller's Profitability) out of the five Solar Impulse Label Criteria through the up mentioned equivalence, without further need of Solar Impulse voluntary Expert's assessment;
- The solution successfully validates the Solar Impulse Label Environmental Benefits criterion after assessment by three independent Solar Impulse voluntary Experts.

6.8 Equivalence Procedure

The following procedure in three steps can be applied for Solutions that were granted funding or a Seal of Excellence in the scope of the European Innovation Council (EIC) Accelerator pilot Phase-2 / SME Instrument Phase-2 program:

- The entity must become a Member of the World Alliance and send its (1) Seal of Excellence Proof or the pages of the Grants Agreement Document with EC ID number, (2) its Proposal Submission Form, and (3) its Evaluation Summary Report.
- The entity has to create a solution online and fill-in part of the section 1, 2, 4 and 6 of the SSF;
- The SIF's team has to verify:
 - a. Whether the proposal fits the Solar Impulse Efficient Solution Label's eligibility scope (equivalent to pre-screening step);
 - b. Whether the Evaluation Summary Report displays a minimum overall rating of 3,5 out of 5 to the seven sub-criteria presented in

section “Criteria” given by the EC evaluators. It implies that the 7 sub-criteria shall be rated with a score range of Very Good to Excellent (4.5 – 5) or Good to Very Good (3.5 – 4.49) in assessment report;

- The Proposal Submission Form must be assigned to three independent Solar Impulse voluntary Experts in order to evaluate the environmental benefits criterion. This evaluation is performed through a YES/NO question and justification in line with the regular Solar Impulse Efficient Solution’s evaluation process. The Solution automatically validates the other four remaining criteria (Credibility, Scalability, Client’s Economic Incentive, Seller’s profitability) of the Solar Impulse Efficient Solution Label as per equivalence.



Figure 6.3: Example of Seal of Excellence from EIC Accelerator – SME Phase II. Source: H2020 Guide for Applicants.

Horizon 2020

Call:

Topic:

Type of action:

Proposal number:

Proposal acronym:

Table of contents

Section	Title	Action
1	General information	
2	Participants & contacts	
3	Budget	
4	Ethics	
5	Call-specific questions	

How to fill in the forms

The administrative forms must be filled in for each proposal using the templates available in the submission system. Some data fields in the administrative forms are pre-filled based on the previous steps in the submission wizard.

Figure 6.4: Example of Proposal Submission Form. Source: H2020 Guide for Applicants.

Grant Agreement number: [insert number] [insert acronym] [insert call identifier]

H2020 Model Grant Agreements: H2020 MGA EIC Accelerator — Mono: v5.0 – 22.07.2019



**MODEL GRANT AGREEMENT FOR THE
HORIZON 2020 PROGRAMME¹
EIC PILOT ACCELERATOR GRANTS²
(H2020 MGA EIC ACCELERATOR — MONO)**

Introductory remark

The EIC Accelerator actions replace the SME Instrument Phase 2 actions.

H2020 MGA EIC Accelerator — Mono deviates from the General MGA — Mono as follows:

- Background information in Preamble
- Article 2 (for EIC Accelerator blended finance: special provisions concerning linked action)
- Article 5.2 (specific provisions on reimbursement rate)
- Article 13 (specific provisions on subcontracting)
- Article 17 (for EIC Accelerator blended finance: special information obligation concerning linked action)
- Article 19: regular progress meetings
- Article 20 (periodic reports for additional pre-financing with fixed reporting periods)
- Article 21 (additional pre-financing payments, no interim payments)
- Article 23a-31 (for EIC Accelerator blended finance: special IPR options)
- Article 26.3 (ownership of results, rights of third parties)
- Article 36 (for EIC Accelerator blended finance: special option for confidentiality vis-à-vis EIC SPV)
- Article 49, 50 (for EIC Accelerator blended finance: special suspension and termination grounds for linked action)
- Article 55a (reorientation of the action – special amendment with automatic GA suspension)

- > **Footnotes in blue will not appear in the text generated by the IT system for signature (since they are internal instructions only).**
- > **Text in grey indicates that text which appears in the H2020 General MGA does not apply in this grant agreement.**
- > **For options [in italics, in square brackets]: the applicable option must be chosen in the IT system. Options not chosen will automatically either not appear or appear as 'not applicable'. Options chosen will appear in italics without brackets and without the Option title (to allow beneficiaries to easily spot that a specific rule applies).**

¹ Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) ('**H2020 Framework Programme Regulation No 1291/2013**') (OJ L 347, 20.12.2013 p.104).

² EIC Accelerator funds innovation projects (such as demonstration, testing, prototyping, pilot lines, scale-up studies, miniaturisation, design, performance verification and market replication) to develop and bring to market new products, services and business models that could drive economic growth.

Figure 6.5: Example of Grants Agreement Document with EC ID number.
Source: H2020 Guide for Applicants.

Document Ref. Ares(2019)4957151 - 29/07/2019

Proposal Evaluation Form		
	EUROPEAN COMMISSION Horizon 2020 - Research and Innovation Framework Programme	Evaluation Summary Report - step 2

Call: H2020-SMEInst-2018-2020-2
Type of action: SME-2
Proposal number: 881319
Proposal acronym: Mimica Touch
Duration (months): 24
Proposal title: Next generation food expiry label that both reduces food waste and improves food safety
Activity: EIC

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	MIMICA LAB LTD	UK	1,896,420	100.00%	1,327,494	100.00%
Total:			1,896,420		1,327,494	

Abstract:
 Around the world, upwards of 1.3 billion tons of food is wasted annually. This means that one-third of all food produced in the world for human consumption never reached the consumer's table. Every year, consumers in rich countries waste almost as much food (222 million tonnes) as the entire net food production of sub-Saharan Africa (230 million tonnes). Food losses and waste amounts to roughly €582 billion in industrialized countries and €265 billion in developing countries. In the EU, around 88 million tonnes of food waste are generated annually with associated costs estimated at 143 billion euros. Around 40% of people waste food because of confusing food labelling. The 'best before' date, that is the recommended last consumption date, is often confused with the 'use by' date, intended for foods that are highly perishable (such as fresh meat or dairy products).
 Mimica Touch is a next generation food expiry label that both reduces food waste and improves food safety. It provides accurate, real-time indication of the product's freshness. The label is low-cost and can be attached to any size and shape package; enough to be deployed across the supply chain, from production to the consumer's fridge. It therefore not only significantly reduces food waste but also increases profitability and savings for producers, retailers and consumers. The key objectives of the development are to optimise the formulation for meat products; scale-up production to the annual capacity of +10m units; validate the Mimica Touch design through testing on 10.000 meat packages from 3 secured meat producers.

Evaluation Summary Report

Evaluation Result

Status: B

Form information

Evaluation Result:
 - Status A = Funded
 - Status B = Not Funded

Step 1 scoring:
 - Overall Consensus Score appears weighted
 - Criteria scores appear unweighted

For more details on the weighting of scores and thresholds please see the [applicant guidelines](#)

Indicative Appraisal Scale per Sub-Criterion:
 - Very Good to Excellent (4.5 - 5)
 - Good to Very Good (3.5 - 4.49)
 - Fair to Good (2.5 - 3.49)
 - Insufficient to Fair (1.5 - 2.49)
 - Insufficient (0-1.49)

Step-2 Jury Score

Status: **B**

Disclaimer: The comments below refer to the jury's assessment based on the interview.

Implementation: The Team

Does the team have the capability and motivation to implement the innovation proposal and bring it to the market?

The team has entrepreneurial spirit and the necessary scientific skills. However, the team lacks full comprehension of the value chain impact of this technology. The jury has doubts about the need and workability of a high proportion of management vs total staff (year 1 post project 6 out of 17 and year 5 post project 10 out of 38).

Impact: Commercial strategy

Are the business model and commercialization strategy well thought through? How sound are the financial planning and projections?

The commercial strategy does not take into account the consumer's perspective - the jury has perceived the current strategy as putting liability

Figure 6.6: Example of Evaluation Summary Report (ESR). Source: H2020 Guide for Applicants.

Appendix A

Examples of Solutions

1. **Physical Product:** a tangible good, physical object, merchandise, that is produced, and sold, and shipped to the customers. For instance, bio-based, recyclable, and renewable next generation packaging material that enables sustainable brands to replace plastics in their packaging.
2. **Digital Product:** an intangible good electronic/digital tools, systems, devices, and resources that generate, store or process data. For instance, a modular IoT system for urban flood and overflow alleviation which avoids infrastructure costs and disruption and reduces environmental impacts.
3. **Financial Product:** any financial initiative instrument, mostly a financial investment, for example, a share, stocks, or mutual funds. For instance, a digital investment opportunity offered by a platform which matches corporations with carbon-negative projects.
4. **Process:** all the procedures involving chemical, physical, electrical or mechanical steps to aid in the manufacturing, distribution, or disposal of an item or multiple items. For instance, a process for marking plastic packaging with digital watermarks to enable automatic sorting in recycle centers and create value add-on across the supply chain.
5. **Service:** a combination of processes and functions, for instance software, hardware, networks, telecommunications and electronics to support the Client's system or routine maintenance. For instance, an online marketplace that matches car owners sharing their asset with drivers that need a car but do not own one.
6. **Product & Process:** the optimization of an existing or new process which is achieved through (or thanks to) a "physical" or "digital" product. For instance, a water purification system which uses highly

efficient advanced oxidation with ozone, ensuring micro pollutant and toxicity elimination.

7. **Product & Service:** an existing or new system such as: supplying a public need such as transport, communications, or utilities such as electricity and water, or a routine action such as maintenance or repair work, which is performed through (or thanks to) a physical or digital product. For instance, an active fleet management service with e-bikes including high end e-bikes, maintenance, communication, training/support, and gives companies a tool to adapt and develop a clean and cheap mobility.

Appendix B

Evaluation Criteria

1. **Credibility:** This section is used to determine the technical viability of the idea behind the Solution, ensuring the principles behind the Solution are aligned with the current theoretical knowledge. This section considers the technical requirements of the proposed Solution and captures its ability to be credible (based on a resilient technology or concept). Responds to the question: *Can the technology/concept behind the Solution be constructed and/or operated as designed?*
2. **Scalability:** This section considers the Solution's potential to be scaled up and deployed in the real world (vs. in a laboratory environment) without additional constraints or insurmountable technical obstacles for its implementation. Responds to the question: *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?*
3. **Environmental Benefits:** This section captures the Solution's potential to have a measurable positive impact on the environment compared to the Mainstream Alternative identified – the Mainstream Alternative is the alternative to the Solution which currently serves a large share of the market (at least 40%) in the same geographical context. In order to reduce the process complexity, a simplified screening tool, the Solution's Environmental Impact (SEI), is provided. While a Life Cycle Assessment (LCA) is not a strict requirement, information can be used to speed up the completion of the SEI. Responds to the question: *Can the Solution deliver an environmental benefit(s) versus the Mainstream Alternative? Consider the entire life cycle - production, distribution, use, and disposal stages.*
4. **Client's Economic Incentives:** This section captures the capacity of a Solution to deliver an economic incentive for the client. Both the quantifiable and hidden, direct, or indirect economic savings that the

Solution brings to the client purchasing and using it should be taken into account. An Efficient 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. Responds to the question: *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.*

5. **Seller's Profitability:** This section 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 credibility of the price announced and the existence of a market for the Solution considering the business model is crucial. Overall an Efficient 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 organization (who for instance reinvests 100% of its profits to cover its operating costs), it shouldn't hamper the potential of actually generating profits. Responds to the question: *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.*

Appendix C

Deliverables for Experts

Assessments are performed online via the Solution Assessment Form (SAF). Each SAF (one for each of the three independent Experts) needs to be completed and submitted within fifteen days after the Expert was officially assigned the Solution . In addition, Experts must be able to complete all the five criteria, should that not be the case the Expert must decline the invitation to assess the Solution within five days from assignment date. For each of the five criteria Experts are expected to perform assessments according to the following principles:

- The comment is written in English;
- The answer YES/NO must be coherent and properly justified in the comment box; The justification in the comment box must be of sufficient length – minimum 400 characters (approx. 60 words);
- The comment box should not contain open questions and/or uncertainties about the Solution. Experts must ask any clarifying information to the Applicant via chatbox and wait for the respective answer before submitting the assessment;
- The justification to the answers should provide a clear, fair, and unbiased statement, which is accessible and meaningful to the readers of the report;
- The comment box should contain enough justification to be considered a valuable feedback to the Applicant. Details of the questions asked as well as wider instructions and rules for completing assessments can be found in the Assessment Guidelines for Experts.

Appendix D

Acronyms & Abbreviations

Table D.1: List of acronyms and abbreviations

Abbr.	Meaning
ASR	Assessment Summary Report
EY	Ernst & Young
ESR	Evaluation Summary Report
EU	European Union
EC	European Commission
EIC	European Investment Centre
GDPR	General Data Protection Regulation
GMOs	Genetically Modified Organisms
IoT	Internet of Things
LCA	Lyfe Cycle Assessment
LUP	Label Update Program
NDA	Non Disclosure Agreement
O&G	Oil and Gas
PRI	Principles for Responsible Investment
SAF	Solution Assessment Form
SDGs	Sustainable Development Goals
SEI	Solution Environmental Impact tool
SIF	Solar Impulse Foundation
SME	Small and Medium-sized Enterprises
SSF	Solution Submission Form
SUP	Single Use Plastic
TRL	Technology Readiness Level
TM	Trade Mark
UN	United Nations

Appendix E

Aim & Objectives of the SIF

The aim of SIF is to federate the actors in the field of clean technologies and shed light on existing efficient Solutions to fast-track their implementation. Therefore, its key objectives are as follows:

- Ensuring the continuous development of the World Alliance for Efficient Solutions, an independent, Swiss not-for-profit association, which gathers Members that work together to create synergies, share knowledge and build relationships that speed-up the implementation of clean and profitable Solutions which have the potential to address the environmental challenges of today.
- To identify Solutions that are both clean and profitable and potentially grant them the Solar Impulse Efficient Solution Label; through a trustworthy and verified methodology based on a rigorous assessment performed by external independent Experts and audited by EY.
- To offer support and services to the Members of World Alliance for Efficient Solutions free of charge, as well as foster the implementation of the Labeled Solutions, thanks to the continuous support of SIF Partners who provide operational funding to the World Alliance.

Appendix F

World Alliance (WA) for Efficient Solutions Charters

The WA for Efficient Solutions was created at the initiative of the SIF following the success of the first solar airplane flight around the globe to federate the main actors in the field of sustainability and clean technologies and promote profitable Solutions to protect the environment. This Charter lays out the principles and values which guide the World Alliance. All its Members accept to comply with this Charter and are held accountable to it, for as long as their relationship with the WA exists.

F.1 Core Values of the World Alliance

All Members agree and accept to be held accountable to the following principles and values carried by the World Alliance:

- To work to improve the quality of life on Earth for all by tackling the challenges facing global society;
- To support Solutions that are logical, more than just ecological; i.e. efficient Solutions that would make sense even if climate change was not a factor;
- To embody a pioneering spirit, embrace new ways of thinking and doing to push back the boundaries of what is possible; and
- To recognize the World Alliance as an independent group of global actors, not bound by the interests of any nation, government, institution or industry.
- To adhere to the United Nations Sustainable Development Goals.

Appendix G

United Nations Global Compact Principles

All Members agree to conduct their professional activities to the highest standards of honesty, integrity and fairness, in accordance with the United Nations Global Compact and its principles (see Figure 13.1).

All Members confirm that their executive management team Members support the above commitment.

G.1 Intellectual Property Compliance

All Members confirm that they commit to respect intellectual property rights of others.

G.2 Compliance with Laws

All Members acknowledge that the World Alliance is committed to carrying out its activities and promoting efficient Solutions in compliance with all applicable laws and regulations, including anti-bribery, anti-corruption, counter-terrorism financing and anti-money laundering laws and regulations, as they may apply to the World Alliance; and that the World Alliance is committed to operating in conformity with economic or trade sanctions, restrictive measures, embargoes and asset freezing measures that are enacted, administered, imposed, or enforced by the Swiss Government, the European Union, the U.S. Department of the Treasury's Office of Foreign Assets Control and any other authority, by which the World Alliance is bound. All Members understand that the World Alliance will not enter into relations or will terminate any relations with a Member whose activities or affiliation would put the World Alliance in breach of any applicable laws and regulations by which it is bound.



Figure G.1: UN Global Compact Principles. Source: www.unglobalcompact.org

G.3 Decisions of the World Alliance

All Members understand that all decisions and resolutions made by the World Alliance, in particular all decisions made by the Presidency and/or the Committee pursuant to the Articles of the Statutes of the World Alliance, shall be final, conclusive and binding on all persons, including the relevant Member(s) and that the World Alliance will in particular decide, in its sole discretion, whether to retain a proposed efficient Solution or not. The Members undertake to comply with all decisions and resolutions made by the World Alliance.

Appendix H

References

- EC, 2014. SME instrument Phase 1 Administrative forms (Part A)
Research proposal (Part B).
- EC, 2013. Horizon 2020 20–20.
- https://doi.org/10.3850/978-981-07-3353-7_k006
- <https://www.unglobalcompact.org>