

1. Preamble

1.1. Agreement

Solution Submission Form summary

The Solution Submission Form (SSF) consists of 2 parts. You are first requested to fill in and submit the first part which will help the Foundation define if your solution can be listed in our Solution Explorer. If successful, your solution will be listed and you will have access to the second part, which you will be able to fill out to apply for the Solar Impulse Label.

Please note that Solutions that are updating their Solution through the Label Update Program have direct access to the whole Submission Submission Form (Part 1 and 2) since their Solution is already labelled and on the Solution Explorer.

Agreement signature

By submitting my solution(s) to be assessed for the World Alliance 1,000 Efficient Solutions Portfolio, I agree to (...).

☐ I CONFIRM MY AGREEMENT WITH THIS DECLARATION

References and sources

Please remember that, throughout all this application form and each time you are referring to or using information and data to support your argumentation, you shall mention your references and sources.

(1) Public Information

Public Information

The elements inserted in this section are public and will be used to create your Solution's profile page on the Solar Impulse website.

(2) Information with restricted access

Information not shared publicly, is to be used for the Expert's evaluation only

The aim of this Section is to allow the Experts to clearly picture, and therefore understand the nature of the Solution being described, what it does, and how it works. You must include qualitative and quantitative information that can be described precisely and measurably.

2. Solution's brief

2.1. General information ●

Name & Website

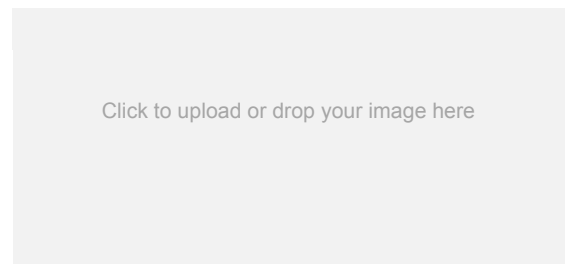
To help us identify your solution throughout the assessment process, please provide the following information

SOLUTION'S OFFICIAL NAME

(This can not be the same as the company name)

SOLUTION'S WEBSITE LINK

Solution Header Image



Videos

Once labelled, this video will be used to create your Solution's profile page on the Solar Impulse website, the video must be:

- About the Solution NOT the company;
- High quality and professional (no home-made);
- From a public domain (e.g. youtube link);
- In English or with English subtitles.

VIDEO

Photos

Once labelled, these pictures will be used to create your Solution's profile page on the Solar Impulse website, photos must be:

- About the Solution NOT the company;
- High quality and professional (not home-made);
- Print quality (up to 10 MB per picture);
- .jpg or .png.

PICTURE 1

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PICTURE 2

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PICTURE 3

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How would you describe your Solution in one sentence, in simple terms?

The information must be comprehensible to a non-expert audience (general public).

- It should ideally be 90 characters (min. 70 max. 120)
- Example: “A *heat exchanger using solar power to (pre)heat domestic water in buildings*”

ONE SENTENCE DESCRIPTION

PITCH DECK **(Restricted Information, will not be used publicly)** 

Please upload a general Pitch Deck describing your Solution and your Company in a few pages

Select file for upload

BROWSE

Solution description:

Please describe your Solution in 1 paragraph for the general public.

PUBLIC SHORT DESCRIPTION

Please describe briefly the main environmental benefit of the Solution for our team to assess the eligibility of your Solution.

ENVIRONMENTAL BENEFIT

Please describe briefly the main economic benefit of the Solution for our team to assess the eligibility of your Solution.

ECONOMIC BENEFIT

What is your client buying? The Solution is a:

Natures selected



*when online you will visualise the three key categories to select from: product, process, and service.

Solution tagging

Those tags will be used to filter your Solution on our Solution Explorer, in addition to identifying the experts that will assess your Solution in case you apply for the Solar Impulse Label. Please only select the most relevant tags.

*when online you will visualise the tagging options

What is the state of maturity of your Solution?

Please note that if you do not have a prototype yet at 1:1 Scale for your Solution, you cannot be eligible to obtain the label nor to be featured on the Solutions Explorer.

TRL 4 / 5 - Prototype validation

Technology conceptualised and validated in a "laboratory" environment

TRL 6 / 7 - Prototype demonstration 1:1

The Solution has been tested and demonstrated in its operational or lab environment at a 1:1 scale

TRL 8 - System complete and qualified

The solution has reached its final version and its commercialisation is imminent.

TRL 9 / CRI 2 - Commercial Trial Small Scale

The solution has been commercialised at a small scale

TRL 9 / CRI 3-4 -Commercial Scale Up / Multiple Commercial Applications

The solution has achieved a "Market Proven" status

TRL 9 / CRI 5-6 - Market Competition Driving Widespread Deployment / "Bankable" Grade Asset Class

The solution has achieved a "Market Leader" status

Maturity selected



In which geographical areas the Solution is currently available (tested) or sold?

REGIONS

Regions selected



*when online you will visualise a list of individual countries as well as continents.

2.2. Public success story ●

Implementation Story:

Please give an example of a specific implementation story with a client worth sharing (mandatory for the label application if the maturity of your solution is at or above TRL 9).

- By documenting an implementation story of your Solution, it will be more appealing to adopters on our Solution Explorer and your Solution page will get more traction.
- If you have multiple case studies, please choose one to consider here. You will be able to register more case studies from your Dashboard for us to display on our website.
- If useful, this information might be displayed in our implementation case studies map (so make sure the information provided is not confidential)!

Implementation Story Title

REGION (List of countries to select from)

Client

Implementation Date

Description

Please describe the implementation story and feel free to add the environmental and financial impact of your implementation story, a photo and any testimony you might have from a client.

Photo

Click to upload or drop your image here

Link: Please insert any links you might have (articles, web pages) that show your implementation story (Optional)

IMPACT AND RESULTS

Please describe the impact and results of your implementation story:

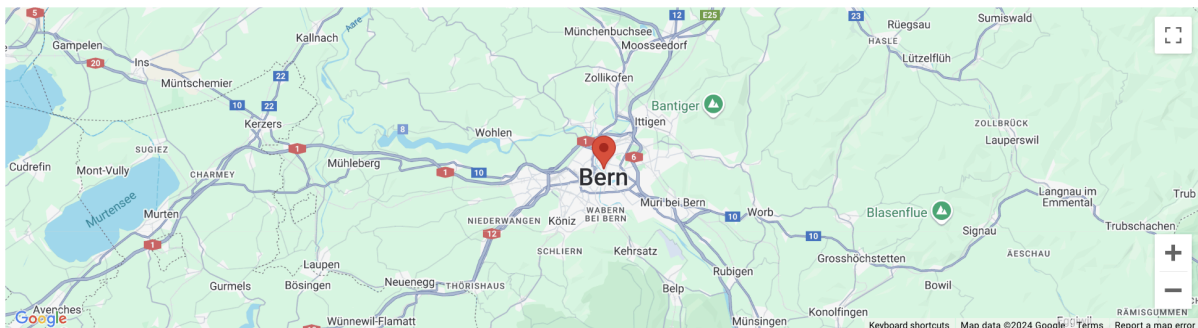
- From an environmental Impact point of view (yearly Tons CO2eq saved, materials/waste saved, energy impact, etc..)
- From an economic point of view (monthly savings, payback time, ROI, etc..)

Location of the implementation:

Please indicate where this solution has been implemented.

TYPE THE IMPLEMENTATION ADDRESS

OR DRAG THE MARKER ON THE LOCATION



CITY

REGION

GRANTS:

GRANTS, RECOGNITIONS OR FUNDING

Are there any specific grants or recognitions, or funding you have acquired for your Solution in general? (All TRLs)

Attachments

You can upload here attachments to back up your answers.

Please make sure that all the attachments are in English, are in common formats (excel, PDF, png/jpeg) and that you mention the attachments in your written answer.

Select file for upload

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3. PREAMBLE FOR THE LABEL

3.1. SIF Label ●

SIF Label Submission

In the following sections, you are asked for more detailed information about your Solution to have it evaluated, first internally and then by our external independent experts, to potentially obtain the Solar Impulse Efficient Solution Label. The Label is awarded based on 3 main criteria, each represented by a section below. Please note that while you fill the following sections (3 to 6), you should also check sections 1 and 2 to ensure they are still up to date.

Solutions Submission form & Quality control

A minimum level of quality and level of information is required in the Solution Submission Form, the Solar Impulse Foundation will reserve the right to request more information, rewrite, or reject an application before the expert assessment if the file does not meet the expected level of quality.

Writing Style.

The submission will undergo evaluation by independent experts who will use specific criteria to determine whether or not to award the Efficient Solution label. Consequently, the information presented should not have a marketing focus but should instead be directed towards the assessors who are experts in the field. The provided information should be in-depth, pertinent, and comprehensive, with supporting evidence such as sources (links or references) and, when required, attached documents.

Mainstream Alternative

A clear definition of the mainstream alternatives (what your Solution aims to replace) serves as the foundation for evaluating the solution's strengths, challenges, and potential impact. The mainstream alternative is the main alternative to the Solution which currently serves a large share of the market, at least 40% in the same geographical context. Once you've identified and described your mainstream alternative, use this reference to compare and discuss various aspects of your solution. The chosen reference should remain consistent throughout the submission form and will be the basis for evaluating different criteria for the label.

Documents Upload

Throughout the submission process sections, you will be able to upload documents that contain relevant information on your solution as “supporting documents” to accompany and support your answer in the relevant fields.

Experts Chatbox

During the evaluation process, after your submission form has been reviewed and validated by the SIF Team and is sent to Experts for Assessment, Experts may engage in anonymous online chats (through the Solar Impulse Foundation website) with you to gather more details about the Solution. Quick responses expedite the evaluation. Confidentiality rules apply to these chats, and information sharing through other channels is discouraged due to confidentiality concerns.

External Review of the Labelling Procedure

If you are applying for the Solar Impulse Efficient Solution label, your solution submission and its assessment can be reviewed externally by an audit company, in order to ensure the rigorous, complete, valid and impartial enforcement of the labelling procedure by the Solar Impulse Foundation.

Expert Pool restrictions

You are given the possibility to signal some of the listed entities below if you consider there is a risk of conflict of interest, a relational issue or any reason you consider relevant. These will be excluded from the Expert Pool as a consequence. Keep in mind that each entity you blacklist represents a number of Experts that won't be able to assess your solution, i.e. an additional time delay for your solution to undergo the whole application process.

Restriction selected



*when online you will visualise a list of all the entities our Experts belong to.

It is important to note that we onboard new experts every week and that we cannot guarantee that the above list is up to date. Write here the name in capital letter separated by a coma of entities (not listed above) you do not want to be assessed by specifically.

FURTHER RESTRICTIONS

Please type in

4. Feasibility & Scalability

4.1. Technical credibility ●

Describe how your solution functions and its technical aspects (operating principles, type of technology, etc..).

TECHNICAL ASPECTS

Please make sure you include any technical document/patents you have showing how the solution functions.

In order to enhance the credibility of your Solution, mention the internal expertise and supporting networks that helped develop your Solution.

HUMAN ASPECTS

4.2. Scalability & Business Environment ●

Provide details about your total market size, including the Total Addressable Market (TAM), Serviceable Addressable Market (SAM), and Share of Market (SOM). Explain how you arrived at these market size estimates and any assumptions used in the calculations. Also, please elaborate on your go-to-market strategy (plan to deliver your unique value proposition to customers and to achieve a competitive advantage).

MARKET ANALYSIS

What is the mainstream alternative currently used on the market that your solution aims to replace? This alternative should represent the most widely used alternative currently (at least 40% of your potential client's current usage). It will be the reference for comparison of the environmental impact and price comparisons in the next sections. For example, the mainstream alternative for a solar panel is usually not installing a solar panel and using electricity from the grid.

MAINSTREAM ALTERNATIVE

What other alternatives are currently available in the market, and how does your solution distinguish itself from its closest competitors?

BUSINESS OPPORTUNITY

What is your strategy for scaling up your Solution? Explain any partnerships or distribution channels that you will leverage to acquire and retain customers as you scale up.

STRATEGY

Attachments

You can upload here attachments to back up your answers.

Please make sure that all the attachments are in English, are in common formats (excel, PDF, png/jpeg) and that you mention the attachments in your written answer.

Select file for upload

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4.3. **Public Technical Facts** ●

What are the two key technical facts about your solution that are simple for the general public to understand and valuable to share?

For example: the smallest unit can meet 4 medium-sized households' needs in vegetables all year round

KEY TECHNICAL FACT 1

KEY TECHNICAL FACT 2

KEY TECHNICAL FACT 3 (OPTIONAL)

5. Environmental impact

5.1. SEI ●

We employ an Excel-based tool to estimate a Solution's environmental impact relative to its mainstream alternative(s). In order for us to make this estimation, you are requested to fill the fields below and upload any other relevant environmental impact documents you might have.

If a recent complete third-party Life Cycle Assessment (LCA) or Environmental Product Declaration (EPD) is available, the fields below can be skipped, and these documents can be uploaded instead.

After the initial submission, the Solar Impulse team will estimate the Solution's Environmental Impact (SEI) using the Excel tool (SEI Excel File Example Product). During the subsequent review phase, you will be able to view the provided estimation and make improvements if needed. Finally, you will upload the SEI (.xlsx) for expert assessment.

Please be aware that the results generated can only be used publicly on the Solution's page of the Solar Impulse website. These results are not a substitute for a full third-party Life Cycle Assessment (LCA), however, they may be reused internally by the Solution provider.

Please provide a description of a typical case study of your Solution and compare its environmental impact to the mainstream alternative that you have described in the sections above. Please note that the case study can be the same one used in SSF part 1.

TYPICAL CASE STUDY ENVIRONMENTAL IMPACT DESCRIPTION

What are the main materials involved in the production of the Solution and of the Mainstream Alternative (if the mainstream alternative was used) for the case study? Please list the main materials and their approximative weights, for both the Solution and the Mainstream Alternative. If known, please also mention the energy consumption needed for the manufacturing of your solution. For example: to produce the 4 units installed, the following materials are used (approximation): X kg of Steel (stainless), X kg of Aluminum, X g of Copper, X g of Glass, X g of Silicone, X g of Rubber, also XkWh of electricity was needed for the assembly process, for the 4 units.

PRODUCTION PHASE

Please describe where the main materials listed in the Production phase entry are produced and how they are transported, during their whole life cycle

TRANSPORT

Please list the main resources consumption (energy, water, etc...) during the use phase, for the solution and the mainstream alternative in the context of the case study.

USE PHASE

Please describe how the materials listed in the Production phase entry are disposed of (recycled, landfill, re-used, etc..)

DISPOSAL PHASE

Attachments

You can upload here attachments to back up your answers.

Please make sure that all the attachments are in English, are in common formats (excel, PDF, png/jpeg) and that you mention the attachments in your written answer.

Select file for upload

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5.2. Public Environmental Impact Facts

What are at least two Environmental Impact facts about your solution that are simple for the general public to understand and valuable to share? (Please note that we require at least 2 facts in total, which can both be under a single category that you can select below)

Make sure that all the public key facts you show here are explained in the answers provided above. Those sentences are to be used publicly in your Solution page if the label application is successful.

- ☐ A - REDUCES GHG EMISSIONS BY EITHER DECREASING DIRECT ENERGY CONSUMPTION OR GENERATING CLEANER ENERGY.
- ☐ B - REDUCES GHG EMISSIONS NOT DIRECTLY RELATED TO DIRECT ENERGY USAGE REDUCTION / PRODUCTION
- ☐ C - HAS A POSITIVE IMPACT ON BIODIVERSITY/LAND USAGE
- ☐ D - ENABLES WATER SAVINGS
- ☐ E - HAS POSITIVE IMPACT ON AIR POLLUTION / HUMAN HEALTH
- ☐ F - REDUCES WASTE STREAMS, IMPROVES CIRCULARITY / AVOIDS RESOURCE DEPLETION
- ☐ G - OTHER

*In the platform, you will be able to select a category and document one or two facts for the category selected. Here, feel free to directly write at least 2 environmental impact facts below

PUBLIC FACT 1

PUBLIC FACT 2

PUBLIC FACT 3

6. Economic Incentive

6.1. Price & Economic Benefits ●

Explain in as much detail as possible the client's economic incentives (Price, ROI, Payback time, etc..) for your Solution and how it compares with the mainstream alternative. It is highly recommended to upload a document (excel sheet or PDF) describing a case study with the financial aspects for your client and provide sources.

It is highly recommended to upload a document (excel sheet or PDF) describing a case study with the financial aspects for your client and provide sources.

CLIENT'S ECONOMIC INCENTIVE

What is the initial capital intensity of your Solution for its adopters? Please elaborate.

By initial capital intensity, we mean what approximative percentage of the total cost of ownership of your Solution is happening when the Solution is purchased/installed, compared to the operating costs of the Solution through its lifetime.

For example, a PV panel has a *High Capital Intensity* (>50% of the total cost) since installing PV panels requires a large investment, and the operating costs are less important. On the other hand, a software as a service program based on subscription has *No or very limited capital investment* (<10% of the total cost) since the solution is paid every month while it is used.

A - No or very limited capital investment (<10% of the total cost)

B - Limited initial capital intensity (10-30% of the total cost)

C- Medium capital intensity (30-50% of the total cost)

D- High Capital intensity (>50% of the total cost)

Capital Intensity Elaboration

Attachments

You can upload here attachments to back up your answers.

Please make sure that all the attachments are in English, are in common formats (excel, PDF, png/jpeg) and that you mention the attachments in your written answer.

Select file for upload

BROWSE

6.2. Public Economic Facts

What are at least two economic facts about your solution that are simple for the general public to understand and valuable to share? Please select one of the options below and write your 2 facts under that option.

Make sure that all the public key facts you show here are explained in the answers provided above. Those sentence are to be used publicly in your Solution page if the label application is successful.

☐

A - IS DIRECTLY CHEAPER THAN THE MAINSTREAM ALTERNATIVE

☐

B - HAS A LOWER TOTAL COST OF OWNERSHIP COMPARED TO THE MAINSTREAM ALTERNATIVE (WITH A GIVEN PAYBACK TIME)

*In the platform, you will be able to select a category and document one or two fact for the category selected. Here, feel free to directly write at least 2 environmental impact facts below

KEY ECONOMIC BENEFIT 1

KEY ECONOMIC BENEFIT 2

KEY ECONOMIC BENEFIT 3 (OPTIONAL)