

Tech4Good Project Assessment Guide

Overview

Proposals must clearly articulate the impact of the project and how it will be measured, using Primary and Secondary Impact Assessments. Applicants are encouraged to take the free online course on IEEE ILN, "Project Assessment, Monitoring and Evaluation" for how to implement monitoring and evaluation best practices at all stages of a project. Please note that you are not required to submit a Project Assessment Matrix, although it is highlighted in the training.

The Primary and Secondary Impact Assessments are based on the **Sustainable Development Goals (SDGs)** and their associated indicators. A full list of seventeen (17) SDGs are at the heart of the <u>United Nations' 2030 Agenda for Sustainable Development</u>, which "provides a shared blueprint for peace and prosperity for people and the planet." (*Read more about the SDGs here*.) Four (4) SDGs were selected for the Tech4Good projects that are most relevant to the mission of IEEE Humanitarian Technologies: #2 (Zero Hunger), #6 (Clean Water & Sanitation), #7 (Affordable & Clean Energy), and #9 (Industry, Innovation, and Infrastructure).



All SDGs include a list of "targets," which are specific desired outcomes that support their corresponding goal. For example, **SDG #7: Affordable & Clean Energy** includes five targets, including:

Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.

Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.

Click here to view the full list of <u>SDG 7 Targets</u>.

All SDG Targets include a list of "indicators," which are specific, observable, and measurable characteristics that can be used to show changes or progress made towards the overall target. For example, **SDG #7, Target 7.1** includes the following two indicators:

Indicator 7.1.1: Proportion of population with access to electricity.

Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology.

Primary Impact Assessment

First, each proposal must select one of the following Technology Impact Categories, depending on the project's scope:

- 1. Agricultural technology (SDG 2: Zero Hunger)
- 2. Water, Sanitation, and Hygiene (WaSH) technology (SDG 6: Clean Water & Sanitation)
- 3. Clean Energy and Sustainable Power (SDG 7: Affordable & Clean Energy)
- 4. Information and Communications Technology (ICT) and Digital Connectivity (<u>SDG 9: Industry, Innovation, and Infrastructure</u>)

Depending on the selected Technology Impact Category, each proposal must then specify **one** specific indicator that is relevant to the project context, outcomes, and scope. They include:

Agricultural technology (SDG 2: Zero Hunger)

- **Indicator 2.1.2:** Prevalence of moderate or severe food insecurity in the target population, based on the Food Insecurity Experience Scale (FIES)
- Indicator 2.3.1: Volume of production per labor unit by classes of farming/pastoral/forestry enterprise size
- Indicator 2.3.2: Average income of small-scale food producers, by sex and indigenous status
- **Indicator 2.4.1:** Proportion of agricultural area under productive and sustainable agriculture

Water, Sanitation, and Hygiene (WaSH) technology (SDG 6: Clean Water & Sanitation)

- Indicator 6.1.1: Proportion of target population using safely managed drinking water services
- **Indicator 6.2.1:** Proportion of target population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water
- Indicator 6.3.1: Proportion of domestic and industrial wastewater flows safely treated

Clean Energy and Sustainable Power (SDG 7: Affordable & Clean Energy)

- Indicator 7.1.1: Proportion of target population with access to electricity
- **Indicator 7.1.2:** Proportion of population with primary reliance on clean fuels and technology
- **Indicator 7.2.1:** Renewable energy share in the total final energy consumption, within target population

Information and Communications Technology (ICT) and Digital Connectivity (SDG 9: Industry, Innovation, and Infrastructure)

 Indicator 9.c.1: Proportion of target population covered by a mobile network, by technology

Other (If you have a compelling project proposal that does not fit into the four specified Technology Impact Categories):

Please select the SDG, target, and indicator that is most relevant to your project, write it out here separated by commas (for example: "SDG 4: Quality education, Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship, Indicator 4.4.1: Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill")

For the selected indicator, the applicants must specify the following:

- 1. First, proposals must provide information about the baseline. A baseline is the value before the project has started (it is the value in the indicator that you want to change). For example, if a proposal aims to provide solar electricity to a community, the applicants would select "Indicator 7.1.1: Proportion of target population with access to electricity." Then, their baseline could be the number of households currently without electricity. In addition to providing the current baseline value, applicants must also describe how they determined this value either by measuring (e.g., counting or surveying the community) or their method for estimating the value. Applicants will be asked:
 - a. What is the current baseline value for this indicator? (up to 30 words)
 - b. Briefly describe how you determined this value. (up to 30 words)
- 2. Next, proposals must provide their target outcome related to their selected indicator, i.e., what is the goal after the project is completed? Continuing the solar electricity example, the applicants would specify the number of households that are expected to receive electricity from the project. The applicants must also specify how they plan to determine this value. Applicants will be asked:
 - a. What is the target value for this indicator? (up to 30 words)
 - b. Briefly describe how you will plan to estimate this value. (up to 30 words)
- 3. Lastly, proposals must specify how their target will be maintained after the project is concluded. For example, how can the team justify that the same number of households will retain their

access to solar electricity? This involves planning for maintenance and management of the implemented technology. The applicants will be asked:

 At the conclusion of this project, who will be responsible for ensuring the indicator remains at its achieved level? And, what will they do to ensure the project is sustainably managed? (up to 100 words)

Secondary Impact Assessment

Next, proposals must provide a Secondary Impact category, which must also be described by the SDGs. Secondary impacts are indirect impacts that are caused by a project that occur later in time or are farther removed in distance, but are still reasonably foreseeable. For example, providing internet connectivity to local businesses could have the secondary impact described by SDG 8: Decent work and economic growth, or improving agricultural production that leads to improved nutrition could have the secondary impact described by SDG 3: Good health and well-being. Applicants should review the SDGs and their targets to determine the most reasonable and foreseeable secondary impact depending on their project's scope. Proposals will be required to select one from the following list:

- SDG 1: No poverty
- SDG 3: Good health and well-being
- SDG 4: Quality education
- SDG 5: Gender equality
- SDG 8: Decent work and economic growth
- SDG 10: Reduced inequalities
- SDG 11: Sustainable cities
- SDG 12: Responsible consumption and production
- SDG 13: Climate action
- SDG 14: Life below water
- SDG 14: Life on land
- SDG 16: Peace, justice, and strong institutions
- SDG 17: Partnerships for the goals

Applicants will then be asked to describe how your project will have this secondary impact. It is recommended that proposals be as specific as possible, using SDG targets and indicators. For example, if the selected secondary impact is SDG 12: Responsible Consumption and Production, the applicants should specify which target is most relevant, such as Target 12.2 (achieve sustainable management and efficient use of natural resources). *View the full list of SDGs and indicators.*