As an innovator and entrepreneur, you understand the importance of conducting monitoring and evaluation (M&E) of the use and performance of your clean energy solution (CES) in order to measure its effectiveness and communicate your results to customers, beneficiaries, partners, funders, potential investors, and other stakeholders. This guide will help you to strengthen the ways in which your M&E activities measure and monitor benefits for women, men, boys, and girls. Throughout the various stages of your M&E work this guide will prompt you to consider ways to strengthen gender integration. On the last page, you will find an illustrative list of gender-descriptive indicators for you to assess the impact of your CES on women and men.
WHY DOES INTEGRATING GENDER INTO M&E MAKE COMMERCIAL SENSE?

*Gender-Smart M&E can help you to achieve the following:*

- Improve your market entry strategies, tailoring them to male and female customers
- Improve market uptake of your product by both male and female consumers and product responsiveness to their demands
- Collect outcome and impact-level data on how your CES creates improvements in the quality of life and well-being of women and men
- Assist in securing funding from investors who focus on inclusive development
- Acquire information about what may be a successful future model or product design to consider for development

BEST PRACTICES FOR INTEGRATING GENDER IN M&E OF CES

In order to understand which efforts are appropriate and whether they translate into improved social and economic wellbeing for both men and women, gender-smart M&E should be employed throughout all phases of M&E. For the purposes of this guide activities are broken into three phases: 1) M&E System Design; 2) M&E Plan Implementation; and 3) Using M&E Results.
**PHASE 1: M&E SYSTEM DESIGN**

During the design of your M&E system, it is important to ensure that gender analysis informs your M&E Plan, selection of performance indicators and Theory of Change—that is the logical path that leads you to your desired results. Any baseline or pilot study should be based on methodologies that include gathering data from potential male and female CES users by male and female data collectors.

**Some important questions to ask yourself include:**

- Does the Theory of Change and stated project objective(s) address the needs of both men and women?
- Does the M&E Plan Narrative describe specific results related to gender equality that are expected as a result of technology adoption?
- Does the evaluation plan articulate barriers specific to women and men for the uptake of your CES?
- Does the evaluation plan include questions that examine the effectiveness or impact of your intervention, including how it impacts women, men, boys, and girls at the farm, household, or individual level?
- Does the M&E plan include sex-disaggregated data? (See Phase 2: M&E Plan Implementation)
- Does the M&E Plan include outcome-level gender equality indicators that go beyond “bean-counting” to measure change? (See table of illustrative gender equality indicators)
- Is there an adequate budget for collecting any data for gender-specific indicators at regular intervals, including collection of quantitative data from surveys and qualitative data via interviews, focus groups, storytelling, or case studies?
- Are both male and female targeted beneficiaries identified, with expected benefits to be measured for women, men, boys, and girls?
- Does the baseline study include social and gender analysis using qualitative and quantitative indicators to measure improvement later on? Does the study include interviews, focus group discussions, social and community mapping, or other data collection methods with both women and men?
- Does the baseline study include review of existing data and studies regarding gender equality in the country and community where the CES is tested, piloted, and marketed? (Existing resources include FAO’s Gender and Land Rights Database, Human Development Index, Guide on Gender Mainstreaming Energy and Climate Change Projects, World Bank’s eAtlas of Gender, World Bank’s Gender Data Portal)
- Does the M&E staff involve both men and women in the planning of M&E activities, data collection, and analysis? Are they trained on gender-inclusive M&E methods?
Some important questions to ask yourself include:

• Are all indicators that collect data about people involved in or benefitting from the project disaggregated by gender?

• Do you analyze the already-collected data in ways that offer a better understanding of the technology’s impact on male and female users?

• Do monthly, quarterly, and annual reports include sex-disaggregated and gender descriptive data for performance indicators?

• Do your pilot studies, mid-term evaluations, and end-of-project evaluations include qualitative and quantitative data collection and analysis about gender equality at the outcome and impact level?

• Does your mid-term performance evaluation provide evidence that the technology has a positive impact on both women and men? If not, does it help to identify challenges that need to be overcome in order to do so?

• Are qualified male and female data collectors trained on gender inclusive data collection? Do they understand the purpose of collecting qualitative and quantitative data regarding gender equality?

• Are team members who analyze and report the collected data trained on gender equality considerations in data analysis? Are you collecting regular case studies and stories on the impact of your CES technology? (See Gender Equality Impact Case Study Guide)
When collecting data on beneficiaries:

- Disaggregate the data by sex of the individuals. Consider disaggregating by marital status and sex of legal landowner holding title in addition to sex of the beneficiary.

- Define “beneficiary.” Family farms are operated with labor inputs by multiple family members, including male-headed households with female spouse(s) and children from monogamous and polygamous marriages. When data is collected only about the household “head” this prevents learning about how the CES technology and its use impacts other productive household members. Consider, where possible, collecting data about individuals within beneficiary households to understand the whole picture of how your CES technology impacts time, labor, and benefits for all members who are part of an economic unit.

When collecting data on individuals within the technology supply chain:

- Disaggregate the data by sex of the individuals.

- Consider collecting qualitative and quantitative data about interactions between male and female professionals and beneficiaries of both sexes.

- Consider collecting information on the effect that female professionals in the supply chain has on the CES uptake by women.

When collecting sex-disaggregated data about persons who attend trainings or demonstrations on the technology:

- Consider collecting additional qualitative and quantitative data on the quality and the nature of participation of women attending the events. For those who attend, are they actively participating, asking questions, and making decisions? How are they treated by male attendees? Collecting this information can help design better marketing/outreach strategies to expand CES technology uptake.

When collecting data on change in income attributed to use of a CES:

- Consider collecting data on who, male or female, within the household makes decision about how any observed increase in income is used.
Collecting good data is only the beginning—using data about how your CES technology is positively impacting the quality of life, well-being, incomes, and productivity for male and female farmers, as well as small and medium enterprises, can be powerful and profitable.

**Some important questions to ask yourself include:**

- Are you routinely capturing and assessing the data and beneficiary stories about how your CES technology is making a positive impact in the lives of both women and men?

- Are you using data to identify the challenges behind the uptake of the CES by either male or female farmers, and making changes accordingly?

- Are you strengthening your marketing and outreach materials to make a strong business case to potential customers, clients, and investors based on evidence of its positive impact on gender equality?

- Are you actively disseminating information about what in your CES works or does not work for male and female beneficiaries with other organizations working in the field?
ILLUSTRATIVE INDICATORS THAT MEASURE OUTCOME-LEVEL CHANGES IN GENDER EQUALITY

(SEE: CGIAR 2012, UNIDO 2014, FAO CORE GENDER INDICATORS)

CAPACITY-BUILDING
- % women of total professionals, engineers, technicians working as full-time and part-time staff
- % women of total receiving training in CES technology use or operation & maintenance
- Number of women-owned businesses and % of total adopting the CES technology
- Number of women and % of total individuals facilitating technology outreach (e.g., leading demonstrations and community trainings, expanding sales)
- Women’s and men’s satisfaction with CES technology (reliability, affordability, convenience, etc.)

VOICE & RIGHTS
- % change in number of household decisions influenced by women
- Number of female farmers reporting increased feeling of self-efficacy
- Number of women and % women with access to ‘powerful business networks’ such as ‘formal or informal communications networks that share entrepreneurship information, including social (networking) settings’ and the extent to which they are able to utilize them
- Number of women and % women individuals in leadership and decision-making processes who are actively serving as mentors to other women
- Number of male and female members of community associations and organizations (e.g., irrigation, farmers, fisheries, credit groups) and the % women in decision-making positions
- Number of rural women’s organizations that advocate with government agencies and elected representatives on women's needs, interests, and priorities (e.g., as producers or consumers)
- Number of rural women’s organizations contracted to deliver program or project activities and services

ECONOMIC EMPOWERMENT
- Number of new unskilled, technical, management, and supervisory jobs occupied by women
- Number of new enterprises owned or managed by women using the target CES technology
- Income increase for women and men as a direct result of CES technology
- % change in productivity by women and men after adoption of CES technology
- Number of women and % women who receive access to financing for the CES technology
- Amount of credit accessed by female farmers as a result of the project
- Number and % women who receive land titles under project, e.g., where sole or joint ownership or usage right is recorded on land title documents
- Number and % women-owned land under irrigation
- Number and % women who own or co-own enterprises that have newly established direct linkages with other chain actors, including consumer markets
- Time saved by women and girls on collecting biomass fuels or water
WELL-BEING

- Number and % women and men farmers who consider themselves better off as a result of using the CES technology
- Number and % beneficiaries who report that their children have more (in quality or quantity) nutritious food to eat as a result of using the CES technology
- Number and % beneficiaries who report that their girl/boy children are missing less school as a result of using the CES technology

SOURCES AND ADDITIONAL RESOURCES:

ADB (2013). Tool Kit on Gender Equality Results and Indicators.
FAO Gender and Land Rights Database.
Human Development Index.
FAO. Core gender indicators for assessing the socio-economic status of the agricultural and rural population.
USAID (2010). Guide to Gender Integration and Analysis- Additional Help for ADS Chapters 201 and 203.
World Bank eAtlas of Gender.
World Bank Gender Data Portal.

POWERING AGRICULTURE: AN ENERGY GRAND CHALLENGE FOR DEVELOPMENT

This product was made possible through the support of the Powering Agriculture: An Energy Grand Challenge for Development Partners, which comprise the United States Agency for International Development (USAID), the Swedish Government, the German Federal Ministry for Economic Cooperation and Development (BMZ), Duke Energy, and the Overseas Private Investment Corporation (OPIC).
Further information about Powering Agriculture can be found at PoweringAg.org