

# Guidance for a gender-responsive Technology Needs Assessment







# **Guidance for a gender-responsive Technology Needs Assessment**



**Author:** Jiska De Groot

**Editors:** Sara Trærup and Lucy Gregersen, UNEP DTU Partnership

**Reviewers:** Ala Druta; Elenita Daño, Action Group on Erosion, Technology and Concentration; Shanar Tabrizi, UNFCCC Climate Technology Centre & Network; and Verona Collantes, UN Women.

Communications advice by Mette Annelie Rasmussen, UNEP DTU Partnership.

Frederiksberg Bogtrykkeri printed the publication in Nordic eco-label certified paper.

Cover photo credit: Morondava, Madagascar, Woman in Malagasy with her family. Nok Lek/Shutterstock.com

**Disclaimer**

Mention of a commercial company or product in this document does not imply endorsement by UNFCCC, UN Environment or the author. The use of information from this document for publicity or advertising is not permitted. Trademark names and symbols are used in an editorial fashion with no intention on infringement of trademark or copyright laws. The views expressed in this publication are those of the author and do not necessarily reject the views of the United Nations Framework Convention on Climate Change or the United Nations Environment Programme. We regret any errors or omissions that may have been unwittingly made.

**2018**

ISBN: 978-87 93458-39-0

**UNEP DTU Partnership**  
Copenhagen, Denmark  
[www.unepdtu.org](http://www.unepdtu.org)

# Contents

<b>Introduction</b> .....	<b>4</b>
How to use this guide.....	5
<b>PART 1. Gender concepts relevant to Technology Needs Assessments</b> .....	<b>7</b>
Gender and gender responsiveness.....	7
Gender analysis: general principles and procedures.....	10
Gender and climate in the Sustainable Development Goals.....	11
<b>PART 2. Incorporating gender into Technology Needs Assessments</b> .....	<b>14</b>
Setting up and preparing for the TNA Process.....	15
Step 1. Technology Needs Assessment.....	16
Gender analysis in the background assessment.....	16
Accounting for gender issues during stakeholder consultation.....	19
Identification and prioritization of technologies.....	20
Step 2. Barrier Analysis and Enabling Frameworks.....	25
Step 3. Technology Action Plans.....	28
<b>Conclusion</b> .....	<b>34</b>
<b>References</b> .....	<b>36</b>

# Introduction

Gender equality is a goal in its own right, but it is also vital in relation to mitigation and adaptation to climate change. Effective mainstreaming of gender issues into climate change mitigation and adaptation requires planning and resources to ensure that general principles are translated into action. This guidance will describe a step-by-step approach for countries to follow in mainstreaming gender issues into their Technology Needs Assessments (TNAs). The guide aims to provide practical guidance on how to address systematically existing and potential gender inequalities specific to the climate change adaptation and mitigation objectives set out in TNAs.

Climate change affects women and men differently, as in all countries it has a greater impact on those sections of the population that are most reliant on natural resources for their livelihoods and/or have the least capacity to respond to natural hazards, such as droughts, landslides, floods and hurricanes. Furthermore, women commonly face greater risks and burdens from the impacts of climate change in situations of poverty, the majority of the world's poor being women.

Because women are hit the hardest by dramatic shifts in climate systems, their mortality from climate-related disasters is higher than that of men. Furthermore, compared to men, women's domestic burdens (e.g. collecting firewood and water) increase substantially with various manifestations of climate change (Aurora-Jonsson 2011). Similarly, women tend to rely more on natural resources for their livelihoods. Any decline in land and biomass productivity as a result of climate change will therefore affect

women more than men, especially in rural areas. It is also harder for poor women than for poor men to recover their economic status and welfare. As with climate change, development initiatives can affect male and female beneficiaries in vastly different ways because of these gender differences and inequalities. If gender dynamics are not specifically taken into account, women often encounter obstacles to participating in, and benefiting from, development projects.

Women's unequal participation in decision-making processes and labour markets compound inequalities and often prevent them from contributing fully to climate-related planning, policy-making and implementation. Nonetheless women can significantly contribute to combating climate change as knowledgeable leaders of climate change adaptation and mitigation initiatives just as much as men can (GCF 2018). As it is, women can (and do) play a critical role in responding to climate change due to their local knowledge and leadership of, for example, sustainable resource management and/or sustainable practices at the household and community levels. Women also play key roles in promoting new technologies and facilitate their implementation. Because women are agents of transformation at societal level, their participation at the political level has, therefore, resulted in greater responsiveness to citizen's needs in climate change adaptation and mitigation solutions. More locally, women's inclusion in leadership roles has led to improved outcomes for climate-related projects and policies. Indeed, if policies or projects are implemented without women's meaningful participation, existing inequalities may be increased and effectiveness decline.



Rice farmers working on rice terrace fields, Oliver S/ Shutterstock.com

To ensure that men and women can benefit equally from actions set out in TNAs and that gender inequalities in activities and outcomes are reduced or eliminated, gender differences need to be taken into account throughout the entire TNA process and its outcomes. By systematically mainstreaming gender issues into the TNA, it will be possible to ensure that women and men have equal opportunities in relation to the Technology Action Plans (TAPs) that are planned to come out of the TNAs, as well as contributing to achieving their countries' Nationally Determined Contributions (NDCs) and the Sustainable Development Goals (SDGs). The guidebook will help the TNA teams to take gender issues into account when deciding their technology priorities and conducting their barrier analyses, as well as integrating these issues into their TAPs and project ideas. The purpose of this guidance is thus to equip TNA national coordinators and consultants with the necessary knowledge of gender-sensitive approaches to enable them to integrate gender issues into their adaptation and mitigation technology assessments. The guide also points to a range of materials that can be used to address gender issues in their assessments. The guidebook does the following:

- Introduces some of the main gender concepts used in discussions of climate change and introduces the key aspects of gender-responsive TNAs that teams need to take into account when taking a gender-sensitive approach.
- Presents a practical approach to addressing these elements across the different steps in a TNA process.

## How to use this guide

This guidebook is divided into two parts. Part I familiarizes the reader with gender concepts and demonstrates the relevance of gender issues to climate change adaptation and mitigation, as well as to the relationship between gender and climate in the Sustainable Development Goals. When adopting a gender approach in a TNA, the TNA teams must understand the various gender-related barriers and constraints to the uptake and diffusion of technologies prioritized by countries. Phase II of this guidance is exclusively focused on the TNA process and provides the reader with gender-mainstreaming guidance for each step in the TNA process with reference to gender equality concepts and principles.

The guide should be read from beginning to end, as in Part I it provides basic concepts concerning gender mainstreaming in climate change activities and in Part II demonstrates step by step the practical application of this framework in a TNA.

# PART 1

## Gender concepts relevant to Technology Needs Assessments



## Gender and gender responsiveness

Effective gender-mainstreaming in respect of climate change mitigation and adaptation in developing countries requires planning and resources to ensure that general principles are translated into action. Adopting a gender-responsive approach includes:

- Analysis of the differential impacts of proposed interventions on women and men respectively
- Full recognition of women’s and men’s different needs, based on consultations that purposely seek advice from both women and men
- Recognition of the respective potential of women and men to play an active role in contributing to climate change adaptation and mitigation
- Recognition of the need to tackle institutional barriers that limit women’s participation in climate change mitigation and adaptation planning and implementation
- Recognition of the potential of women and men to participate in technology transfers
- A focus on context-specific gender-mainstreaming that is anchored in local systems.

Relevant gender-related terms and their definitions are presented in Table 1.

Table 1. Definitions of relevant gender-related terms (Global Goals 2018a; UN 1997)

TERM	DEFINITION
<b>Gender</b>	The social, behavioural and cultural attributes, expectations and norms associated with being male or female. This is a set of culturally specific characteristics defining the social behaviour of women and men, boys and girls, and the relationships between them.
<b>Gender mainstreaming</b>	The process of assessing the implications for women and men respectively of any planned action, including legislation, policies or programmes, in all areas and at all levels. This is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and social spheres so that women and men benefit equally and inequalities are not perpetuated. The ultimate goal is to achieve gender equality.
<b>Gender analysis</b>	Gender analysis examines the relationships between females and males, their respective access to and control of resources, and the constraints they face relative to each other. Gender analysis involves a critical examination of how differences in gender roles, activities, needs, opportunities and rights or entitlements affect men, women, girls and boys in certain situations or contexts. A gender analysis should be integrated into all sector assessments or situational analyses to ensure that gender-based injustices and inequalities are not exacerbated by interventions and that, where possible, greater equality and justice in gender relations is promoted.
<b>Gender assessment</b>	An assessment that sets out to identify the needs of women and girls in all their diversity and in relevant contexts.

Table 1. Definitions of relevant gender-related terms (Global Goals 2018a; UN 1997)

TERM	DEFINITION
<b>Gender roles</b>	The social and behavioural norms that, within a specific culture, are widely considered to be socially appropriate for individuals of a specific sex. These often determine the traditional responsibilities and tasks assigned to men, women, boys and girls (see gender division of labour). Gender-specific roles are often conditioned by household structure, access to resources, specific impacts of the global economy, conflicts and disasters, and other locally relevant factors such as ecological conditions. Like gender itself, gender roles can evolve over time, in particular through the empowerment of women and the transformation of masculinities.
<b>Gender equality</b>	Ensuring that the different behaviours, aspirations and needs of women and men are considered, valued and favoured equally.
<b>Gender equity</b>	The process of being fair to women and men. To ensure equity, measures often need to be taken to compensate (or reduce) disparities derived from historical and social disadvantages that prevent women and men from otherwise operating on an equitable basis. Equity leads to equality.
<b>Gender responsive</b>	Due consideration being given to gender norms, roles and relations and to addressing inequalities generated by unequal norms, roles and relations through remedial action beyond creating gender awareness.
<b>Gender sensitive</b>	Raising awareness and consideration of gender norms, roles and relations without necessarily addressing inequalities generated by unequal norms, roles or relations through remedial action beyond creating gender awareness.
<b>Women's empowerment</b>	The ability and agency of every woman to shape her own destiny, exercise her own rights and make her own choices. Women's empowerment has five components: women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, both nationally and internationally.

Gender responsiveness is thus not about women but about the relationship between women and men. For example, gender responsiveness in the context of climate change acknowledges the reproductive tasks of women at the household level and that these give women a heavier burden in dealing with climate change-related health impacts than men. Remedial action focused on women can lighten this burden.

Why is it important to take gender into account in a process like the TNA? Gender mainstreaming is, first and foremost, a process that can help TNA country teams integrate gender issues into their assessments at all levels. Gender analyses are a way in which TNA teams can a) understand how gender roles, responsibilities and inequalities may affect the effectiveness of the TNA process and the sustainability of its results; and b) design and implement technology projects inclusively, that is, in such a way that they will close gender inequality gaps in climate-related technology transfer and implementation, so that both women and men benefit from development and are equitably empowered.

Gender-mainstreaming of this process will thus result in better outcomes because:

- Women and men experience climate change differently, as gender inequalities persist around the world, affecting the ability of individuals and communities to adapt.
- Recognizing the important contributions of women as decision-makers, stakeholders, educators, carers and experts across sectors and at all levels can lead to successful, long-term solutions to climate change.
- By mainstreaming gender issues into climate policy and action, climate approaches will be more efficient, effective and equitable by providing broader and shared benefits to address the needs of women and men.
- Women have become proven leaders in achieving more equitable and sustainable solutions to climate change. Across sectors, women's innovations and expertise have transformed lives and livelihoods, as well as increasing climate resilience and overall well-being.
- Global negotiations have increasingly reflected the growing understanding of gender issues in climate decision-making over the last eight years. Continued progress towards gender equality can help achieve successful climate action.

To achieve these better outcomes, COP23's Gender Action Plan sets out five priority areas for gender, including:

- capacity-building, knowledge-sharing and communication so that gender can be integrated systematically into all areas of work
- gender balance, participation and women's leadership
- coherence
- gender-responsive implementation and means of implementation
- monitoring and reporting

This guide therefore focuses on designing activities and achieving tangible outcomes to meet the gender goals of TNAs.

## **Gender analysis: general principles and procedures**

It is impossible to integrate gender equality into projects or activities without clearly understanding gender issues within the targeted population (Global Goals 2018a). Conducting a gender analysis in TNAs is a systematic way to identify key context-specific issues and factors that contribute to gender inequalities in the sectors under consideration. Gender analysis may consist of primary or secondary research, or be a combination of both.<sup>1</sup> Conducting a gender analysis will enable TNA teams to understand the implications of gender for climate change mitigation and adaptation and to design appropriate interventions (through the TAPs) that can benefit all members of a community. It also allows the TNA teams to develop indicators to improve their assessments of how their TAPs will engage with or impact on different groups.

Gender analysis attempts to answer at least three key sets of questions:

1. What are the gender-based inequalities, discriminations and denials of rights in each context? How do these issues intersect with other factors of discrimination such as age, ethnicity, disability and class?

<sup>1</sup> Primary research involves the gathering of new data, i.e. when data about a particular subject is collected for the first time. Secondary research is a research method which involves the use of existing data.

2. How will gender relations influence the effectiveness and sustainability of the project activity or result? How can project processes and activities be designed to reduce inequalities and increase equality?
3. How will the proposed results affect the relative status of women and men? Will they exacerbate or reduce inequalities?

By asking the above questions, gender analysis explores individual, relational and structural factors in both the public and private spheres, as individuals are likely to experience gender differently, or to have different roles, within different groups or relationships which are relevant to climate change adaptation and mitigation.

## Gender and climate in the Sustainable Development Goals

The Sustainable Development Goals (SDGs), which embrace a universal approach to the sustainable development agenda, were launched at the UN Sustainable Development Summit in New York in September 2015. There are two goals that are of explicit relevance to the present guide. One is SDG 13, which requires urgent action to be taken to combat climate change and its impacts. It is therefore at the core of the TNA remit. SDG 13 has several key targets, as shown in Table 2.

Secondly, and central to the present guide, is SDG 5, which focuses on achieving gender equality and empowering all women and girls. SDG 5 requires that women and girls everywhere must have equal rights and opportunities and be able to live free of violence and discrimination. SDG 5 has a number key targets, as shown in Table 3.

Table 2. Key targets of SDG 13

<b>SDG 13</b> <b>Climate Action</b> <b>Targets</b>	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
	Integrate climate change measures into national policies, strategies and planning.
	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
	Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.
	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.

Table 3. Key targets of SDG 5

<p><b>SDG 5</b></p> <p><b>Gender Targets of the Sustainable Development Goals</b></p>	End all forms of discrimination against all women and girls everywhere.
	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.
	Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.
	Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.
	Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.
	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.
	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.
	Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.
	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

The Gold Standard, a certification body for climate action, is to ensure that sustainable development impacts are delivered alongside climate action. It has also released a Gender Equality Framework that could inform TNAs in their project development stages, as the Gold Standard enables developers and funders of climate projects to maximize contributions to empowering women and girls (IISD 2018), thereby addressing gender inequalities. The Gender Equality Framework sets out gender-sensitive requirements and guidelines to ensure that gender equality is integrated into project design, that gender impacts are assessed and that projects pro-actively address gender gaps. An important link between the TNA and the Global Standard for the Global Goals is that all project impacts towards the Sustainable Development Goals can be quantified, which can provide new sources of funding (Global goals 2018b), including for high-impact TAPs. However, this is not mandatory for TNAs. For TAPs seeking full Gold Standard certification, it is essential that they take into account the Mandatory Gender-Sensitive Requirements, which are mandatory for all types of project seeking Gold Standard certification<sup>2</sup>. They include compliance with the Gender Safeguarding Principles and Requirements and the implementation of gender-sensitive stakeholder consultations (Global Goals 2018a).

<sup>2</sup> More information on the Gender Equality Framework set out by the Gold Standard can be found online here: <https://globalgoals.goldstandard.org/100-gs4gg-gender-equality-requirements-guidelines>

# PART 2

## Incorporating gender in the Technology Needs Assessment



Part II of this guide is focused on two key areas of activity to ensure integration of gender objectives in TNAs:

1. Institutionalization of gender-mainstreaming by the TNA team in order to create the long-term capacity to address gender issues in climate change adaptation and mitigation and to ensure that such issues are included in project documents.
2. Implementation of actions, including conducting gender analyses in considering technology options, agreeing on gender-specific goals in the TNA, and integrating gender issues into TAPs and throughout TNAs.

This will help ensure that both women and men can benefit from climate change adaptation and mitigation technologies and that gender inequalities in project activities and outcomes will be reduced or eliminated. Because gender issues are different across countries, regions, sectors and types of technology, a systematic gender analysis of technologies assessed in the TNA will reveal gender-differentiated climate change needs and priorities, as well as gender inequalities in terms of opportunities and outcomes. Gender mainstreaming in the TNA can therefore redress these problems within the context of climate change.

This part of the guidance will assist TNA teams in incorporating gender into their assessments step by step.

## Setting up and preparing for the TNA Process

This section describes TNA guidance in the preparation of the TNA process. To achieve the objectives, outputs and expected outcomes of this process, participating countries have formed national TNA teams. As with the entire TNA process, it is important that gender is also mainstreamed into the composition of the national TNA team.

There are two key aspects that need to be considered in setting up and preparing the TNA process:

1. **Composition of the TNA team in relation to gender.** More specifically, it is important to ensure that there is a good gender balance in the TNA team. What roles are fulfilled by men and women respectively in the TNA process, and how might this affect outcomes? To illustrate, during stakeholder consultations or interviews, women from certain groups might not feel comfortable responding to questions from men. This shows the importance of TNA teams having a good balance of both men and women to cover their various tasks.
2. **The gender expertise present in the country team, including setting up a TNA National Steering Committee** to ensure that gender targets are met nationally. Selecting team members with knowledge of gender equality issues is therefore a crucial first step to mainstreaming gender in the TNA.

Table 4 gives examples of the criteria that TNA countries can include in the selection of the TNA team and/or national consultants.

Table 4. Examples of gender-specific criteria to be taken into account in selecting TNA teams and/or national consultants (adapted from UNIDO 2015, Meyers and Jones 2012)

<b>Diversity, skills and expertise of relevance to the TNA sector</b>	Familiarity with gender analysis tools and processes.
	Strong communication skills and the ability to liaise with various stakeholders, including government officials.
	Familiarity with gender analysis tools and methodologies in the specific area of intervention.
	A minimum of five years practical experience in the fields of gender equality and gender mainstreaming.
	Formal training in gender analysis and gender planning, and demonstrated expertise in mainstreaming gender into projects and programmes, especially in the specific area of intervention.
	A thorough understanding of the gender context in the country concerned, and experience working with government institutions and international or non-governmental organizations supporting gender and development work in the specific area of intervention.

As with the selection of the TNA team, it is important that the relevant stakeholders have a) a good gender balance, and b) that there is gender expertise in the sectoral working groups. Once the process of prioritizing sectors has been completed through the participatory process, the TNA team will identify or select skilled and knowledgeable consultants with expertise in gender issues for each of the prioritized sectors. For example, if a prioritized sector is energy, it is important to attract a consultant with proven expertise in both gender and energy issues. Table 4 can be used to provide guidance.

## Step 1. Technology Needs Assessment

### Gender analysis in the background assessment

This section feeds into the first step in the TNA step-by-step guidebook to the sector background analysis. Gender also needs to be taken into account in describing priority sectors as a background to identifying and prioritizing technologies in the next steps of the TNA process. There are several areas in which gender mainstreaming needs to be considered. This section first describes gender analysis as a way to identify gender issues in the sector background study. The section then continues by systematically identifying areas for gender inclusion in prioritizing technologies for climate change mitigation and adaptation.

An important step in the TNA process is to complete the background research. In the context of gender-mainstreaming in the TNA, this involves a review of the current literature, reports and policy documents in order to understand the gender context in which the TNA is operating. During this review, the team will investigate different kinds of documents in order to obtain national and sector-relevant information regarding gender.

Key questions that need to be answered in the gender assessment of the TNA background are:

***Where does the TNA sit with existing country policies, strategies and best practices for climate change and gender?***

- What are the legally binding gender-related international and regional human rights instruments, commitments and policies that have been signed by the country<sup>3</sup>?
- Are there any government programs relevant to the project that address gender inequalities?
- Are there any relevant gender indicators that are regularly monitored nationally, e.g. by the National Bureau of Statistics or by an agency reporting on national development plans? Or are there existing gender and climate policies available – such as the International Union for Conservation of Nature’s climate change and gender action plans or country gender profiles (UNIDO, 2014)?
- Are there any existing gender and climate policies in the country?

At sector level, the following key question needs to be asked:

***How does the TNA process relate to gender equality processes nationally for each of the chosen sectors and subsectors, and how can the TNA help achieve gender goals in specific sectors and sub-sectors?***

To answer this question, the TNA team will conduct background gender research and align the TNA objectives with existing national policies, strategies and best practices. These include Nationally Determined Contributions, National Adaptation Plans, Energy Plans, National Communications, etc. Before the technology factsheets are produced, TNA teams will thus review existing planning documents and their preparation. This review engages in analysis of the gender aspects of, for example, targets, previous projects, national communications and strategies for each of the sectors and sub-sectors. It is important that the gender-related background assessment is fully integrated into the sector background study to be conducted as part of the TNA. Where this process involves desktop analysis, for example, by drawing directly on existing analyses and/or national planning or strategy documents, information about gender targets and goals needs to be included in the analysis.

Integrating gender issues into the desk reviews will help the TNA team gather sex-disaggregated, qualitative and quantitative background information as base information to complement the results and findings of participatory processes (Meyers and Jones 2012). This can help ensure that the technologies to be selected within the sectors have the potential to contribute to gender equality. Sources of information in this review that relate to gender include statistics and reports from government departments and ministries in relation to different sectors, government policy documents, third-party gender studies, sector specific reports, and qualitative reports and quantitative surveys from the World Bank, the United Nations and other parties. Table 5 shows different documents relevant to the gender analysis at various levels.

3  
See for example the Universal Human Rights Index, available at: [www.universalhumanrightsindex.org](http://www.universalhumanrightsindex.org).

Table 5. Gender analysis of background information (Meyers and Jones 2012)

	What type of documents to review?	How do these documents help you in mainstreaming gender issues?
<b>International level</b>	<p>SDG implementation documents (e.g. in relation to SDG 5 on gender equality; but also corresponding goals such as SDG 13 on climate change, SDG 7 on Energy, SDG 1 on Poverty, SDG 6 on Water and Sanitation, and SDG 11 on Sustainable Cities).</p> <p>UNFCCC documentation</p>	<p>International contextual information on gender and other development goals that are of interest to the TNA's objectives.</p>
<b>National level International level</b>	<p>Quantitative and qualitative data, including demographic and health surveys, country data from World Bank, UN and governments, gender analyses and assessments, and research papers relating to gender and climate change.</p>	<p>Quantitative and qualitative contextual information on gender dynamics in the country concerned, including national gender and development priorities, e.g. how gender is reflected in relevant policies, national sectoral plans, poverty reduction strategy papers and five-year plans, as well as internationally, e.g. the Sustainable Development Goals, and in particular Goal 5 on gender equality, and how this is translated to the national level.</p>
<b>Sectoral level</b>	<p>Programme, project or organizational documents relating to TNA sectors, gender baseline studies reports for TNA sectors, monitoring and evaluation plans and reports for TNA sectors, barrier and opportunity reports for TNA sectors.</p> <p>Third-party gender studies, gender analyses, assessments and research papers.</p>	<p>Understanding the gender context in which TNA sectors are identified; understanding the gender dynamics in the adaptation and mitigation sector and whether and how gender issues have been integrated into planning in the sector.</p> <p>Qualitative, contextual information on gender within the TNA sectors.</p>

This analysis ensures that the TNA team knows what the gender benefits are of the key mitigation and adaptation sectors they have selected. In addition, the gender aspects in each country will help the TNA team identify specific criteria for gender equality that can be applied during the technology selection and prioritization processes, as well as the development of the TAP.

**Gender specific outputs:**

- Integration of gender issues into the description of the national context in the form of a written summary of development priorities and goals intended for distribution to stakeholders and for inclusion in the TNA report on the Identification and Prioritization of Technologies.
- Inclusion of gender expertise in the constitution of sectoral work groups.

## Accounting for gender issues during stakeholder consultation

This section describes all the steps involved in drawing up the TNA in which stakeholders are consulted. Crucial in taking gender into account in the selection of sectors is a good understanding of the differences between men and women not only to help understand and prioritize gender issues, but also to effectively identify technologies that can make the most sustainable impact. Because there may be large differences in the availability of information by sector and technology, and because stakeholders will be able to provide valuable input, technologies should be prioritized through a simple participatory process. Fields such as governance, the environment and rural development may offer more information than sectors such as industry, transport or infrastructure. Often, dispersed information is available in decentralized offices, municipal or district plans and other documents (UNIDO 2014).

The TNA process will therefore involve consultation with relevant stakeholders. It is important to ensure that the stakeholder consultation process is gender-sensitive in both process and content. This means that a) the perspectives of both women and men need to be sought during the consultation process to ensure that both have an opportunity to voice their opinions; and b) gender issues should be treated as part of both sector and technology selection.

Key questions that the TNA process needs to ask when doing stakeholder consultation are:

- What measures and actions need to be put in place to ensure the equal participation of women and men in stakeholder consultations? How should inputs and insights from women and men be sought out, listened to, considered, addressed and documented?
- Is it necessary to make any specific arrangements to ensure that all constituencies are engaged in the consultation, for example, speaking to women and men separately having focus groups for women and focus groups for men before gathering them together to ensure their meaningful participation, and adapting the timing of consultation activities to men's and women's respective work schedules (Global Goals 2018c)?

The full set of guidelines for conducting gender-appropriate stakeholder consultation makes provision for equal participation by women and men<sup>4</sup> (Global Goals 2018c). The TNA teams can use the Gold Standard Stakeholder Consultation and Engagement Procedure, Requirements & Guidelines as guidance in conducting high-quality stakeholder engagement processes. Furthermore, the TNA website<sup>5</sup> provides further guidance on stakeholder engagement.

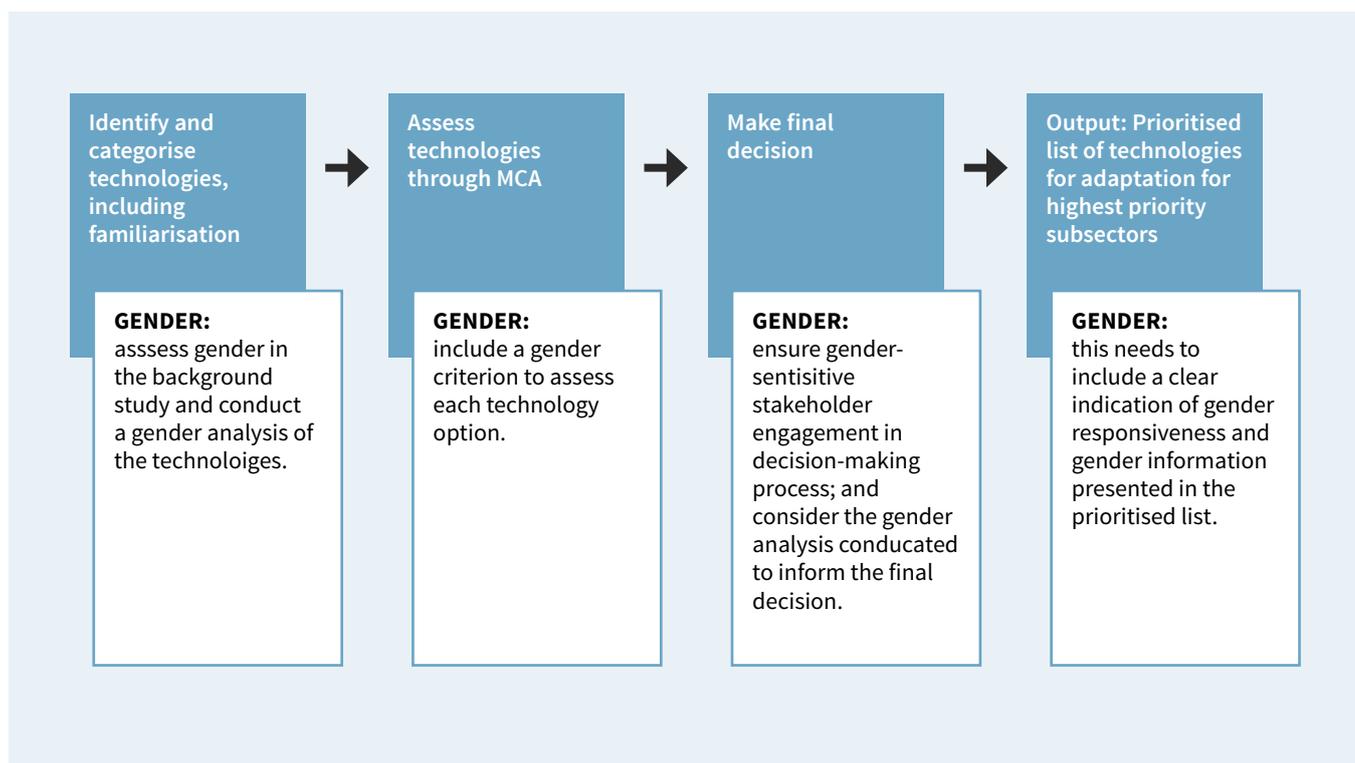
## Identification and prioritization of technologies

The prioritization of technologies within the selected priority sectors is the first analytical step in the TNA process. The conclusions of this step appear in TNA reports as the first project deliverable. Gender issues will also need to be reported on in the TNA report, including the outcome of the gender analysis conducted as part of technology prioritization, as well as sex-disaggregated data, showing how gender was taken into account as part of the multi-criteria analysis (MCA).

<sup>4</sup> The guidelines can be found online at: <https://globalgoals.goldstandard.org/100-gs-4gg-stakeholder-consultation-requirements-guidelines>

<sup>5</sup> The TNA website can be found online at: [www.tech-action.com](http://www.tech-action.com)

Figure 1. Gender included in the process of technology prioritization



All members of the national TNA Team should be involved in this step under the direction of the TNA coordinator and eventually with a gender consultant working closely with the national consultants, who will have a firm grasp of how to conduct an MCA. In the previous steps the TNA team has already been established based on technical skills, as well as a) achieving a gender balance in the team, and b) considering the gender expertise available. This team, together with relevant experts and stakeholders, will engage in the MCA (See Figure 1).

The next sections will discuss how gender can be taken into account in each of the technology prioritization sub-steps.

### Identifying technology options

This activity is generally referred to as the development of technology factsheets. The most important part of this activity is their preparation, as well as preparing information for inputting into the MCA template. As the technology factsheet asks information on the technology's potential to contribute to gender equality, this information needs to be sought.

Important questions to be considered in this process (and integrated into the fact sheet) are:

1. Does this technology have the potential to address gender inequalities?
2. How can it contribute to achieving gender equality? What is the expected magnitude of the impact?

It is important that different gender relationships and roles in relation to the prioritized technologies are explored in this process. Women and men typically fulfil different roles and responsibilities depending on the context and the country, which impact on the different ways in which people approach, adopt and have access to technologies, though technologies also impact on women and men differently. To illustrate, although in many countries women are heavily involved in food production and agriculture, in some areas they do not own the land, though it is often used as collateral for a loan to invest in technology. Gender roles in society will therefore affect who has access to funding and who has not. As a result, women are often excluded from decision-making and action on access to and the use of land and resources that are critical to their livelihoods. Virtually no role is exclusively performed by just women or men. Nonetheless, because women often have a lower social status than men, women tend to have less confidence, less influence and less involvement in the design of, decisions regarding or engagement in climate change mitigation and adaptation interventions.

This is a largely qualitative assessment that will be informed by a) existing documents, and b) expert input. There is a range of relevant sources of information, including technology and sectoral experts, existing studies and documentation. The Regional Centres can be contacted to assist in the identification of sector and technology-specific information where this relates to the TNA country level. The relevance of gender in respect of all options should be presented to and discussed with relevant stakeholders to ensure that the proposed technologies have the potential to address gender inequalities and have buy-in from stakeholders and beneficiaries of the technology. An important step in taking gender issues into account is to require gender-inclusive consultation processes with a wide range of stakeholders in ways that can ensure the equal and effective participation of women and men in them, and that factor gender issues fully into comprehensive social and environmental impact assessments (Global Goals 2018c).

***Gender-relevant output of the establishment of the decision-making context:***

- A country-specific gender information section needs to be completed when preparing the technology factsheets. This is essential to ensure that each technology is assessed for its potential to address gender inequalities.

***Incorporating gender into the Multi-Criteria Analysis***

Please refer to the TNA guidance on multi-criteria analysis, which can be found on the [tech-action.org](http://tech-action.org) website.

***Identifying criteria***

As part of the criteria-setting for the Multi-Criteria Analysis (MCA), gender also needs to be incorporated. This will a) institutionalize gender into the TNA process, and b) help assess what makes one technology option better than another or worthier of implementation. Therefore, a gender criterion needs to be formulated against which each technology option will be assessed to ensure that gender features as part of the assessment. This gender criterion can depend on the national context and priorities, as well as on international guidelines, and it may differ between adaptation and mitigation technologies. The gender criterion can express the expected performance indicator of the technology against a specific gender objective and reflects sex-disaggregated targets.

Table 6. Sample criteria for mitigation (Sri Lanka TNA), energy sector, gender incorporated

CATEGORY		CRITERIA	
<b>Costs</b>		Cost of Energy Conversion Facility	
<b>Benefits</b>	<b>Economic</b>	Local Economic Benefit	
		Local Share of Technology	
		<b>Social</b>	
		Direct Employment	
		<b>Potential for Gender Impacts</b>	
		Skill and Capacity Development	
		Energy Security	
	<b>Environmental</b>		GHG Emissions Reductions
			Positive Local Environmental Impacts

The suggested criterion is the technology’s **potential positive contribution to achieving gender equality**. Table 6 show how the gender criterion can be assessed alongside other economic, social and environmental considerations in choosing a technology.

However, this can be informed by more specific gender criteria that the TNA teams in their technology assessment can use, outlined in Table 7.

**Gender relevant output emerging from this step:**

- A country-specific gender criterion to be included in the set of criteria for each technology.

**Scoring and weighting**

For more detail on scoring and weighting, see the TNA guidance on Multi-Criteria Analysis. Technology options are evaluated based on the selected criteria. The gender assessment of each of the technologies will inform the assessment of this criterion, which is then included in the performance matrix. The scoring for the gender criterion should reflect the strength of the technology in achieving gender equality.

The input for scoring each technology comes from the technology fact sheets and relevant stakeholders, including the sectoral working groups, consultants, validation workshops and desktop studies. The teams need to determine themselves how much weight they will give to this criterion and in their stakeholder engagement figure out what the scoring should be. However, to ensure that gender is accounted for in any TNA assessment, gender should have a minimum weighting of 5%. Table 8 shows some examples of different criteria weights for the energy sector within the field of mitigation, where gender has been included.

**Gender-relevant output for incorporating gender into the Multi-Criteria Analysis**

- Application of the assessment of the potential positive contribution to gender equality of a technology in the MCA recommended at a weighting of a minimum of 5%.

Table 7. Examples of gender criteria for the TNA

INDICATORS	DESCRIPTION
<b>Increased resilience to climate change</b>	Number of poor women and men with increased resilience to climate change (e.g., use of climate-resilient crops and farming techniques, improved land management, clean technologies, increased knowledge and strengthened networks on climate change issues, number/percentage of women-headed households with a resilient home)
<b>Access to low-carbon energy or transport solutions</b>	Number of (female-headed) households/people with improved access to low-carbon energy or transport solutions and infrastructure
<b>Time-saving and reduced drudgery</b>	Time saved in collecting and carrying water, fuel and forest products due to environmentally sustainable and climate change adaptation activities
<b>Casualties</b>	Sex-disaggregated number of casualties from natural disasters
<b>Community benefits from climate-resilient management</b>	Number of communities and the percentage of women in these communities benefiting from effective, climate-resilient watershed management
<b>Access to finance for climate change solutions</b>	Number of female entrepreneurs with adequate access to finance for low-carbon and climate-resilient investments
<b>Employment</b>	Number of women and men with increased employment and income due to climate change adaptation or mitigation activities (e.g., improved energy facilities and services, improved farm productivity, etc.)

## Step 2. Barrier Analysis and Enabling Frameworks

This section feeds into the Barrier Analysis and Enabling Frameworks guidebook.

As part of providing a detailed understanding of the barriers facing the technologies in each country, a barrier analysis will be conducted, which, in addition to examining the standard barriers identified, should include analyses of a) the gender-related barriers facing the technologies in each country, and b) a clear analysis of what rules, regulations and incentives are required to overcome gender-related barriers. The latter is called the ‘enabling framework’.

During the barrier analysis, gender features specifically in the social and economic domains. Therefore, when this activity is conducted, specific attention needs to be paid to gender when discussing social and economic barriers. Table 9 lists some examples of the barriers that may be encountered for each of the types of goods discussed in the barrier handbook.

Table 8. Example of criteria weights for mitigation, energy sector, gender included

CATEGORY		CRITERIA	WEIGHT
<b>Costs</b>		Cost of Energy Conversion Facility	18
<b>Benefits</b>	<b>Economic</b>	Local Economic Benefit	18
		Local Share of Technology	7
		<b>Social</b>	Direct Employment
		<b>Potential for Gender Impacts</b>	<b>7</b>
		Skill and Capacity Development	7
		Energy Security	12
	<b>Environmental</b>	GHG Emissions Reductions	8
		Positive Local Environmental Impacts	12
			<b>Total</b>

When going through the list of issues during this analysis, it is important to include a range of stakeholders alongside expert opinion in order to ensure that gender has been taken sufficiently into account in this phase. This is best achieved in sectoral working groups in which gender is presented alongside other relevant information.

Following the analysis of gender-related barriers within the broader barrier analysis process, by implementing specific policies and activities, the enabling framework will scale up climate change mitigation and adaptation activities that will improve gender equality. A few examples of how such barriers may be addressed through enabling frameworks are shown in Table 10.

Incorporating gender into the enabling framework means that TNA teams need to think about how an enabling environment can be created in which gender equality is increased alongside the implementation of climate change adaptation and mitigation measures. This may include regulation, market-creation/stimulation, gender-specific support such as subsidies and quota, and financing. The enabling environment is therefore broader than just the implementation of technology, as it also includes the capacity of various stakeholders (e.g. decision-makers and practitioners).

To ensure gender issues are taken into consideration in this process, the inclusion of gender expertise in the facilitated workshop that is part of the barrier analysis and enabling framework is essential.

Table 9. Examples of possible gender-related barriers that can be encountered during the barrier analysis

Type of goods	Example of technology	Possible barrier	Gender-responsive approach
<b>Consumer goods</b>	Improved biomass cooking stove	Success in stimulating demand depends on consumer awareness and acceptance, which may be low among women using the stove, as it requires a change in behaviour.	e.g. campaign raising awareness of the health and climate benefits of improved biomass cooking stoves targeting women, who are usually the cooks in the household.
<b>Capital goods</b>	Small hydropower plants	Relatively high capital cost, which makes it difficult for women to access, as they often have less access to capital.	e.g. provide subsidies for women who have less access to finance.
<b>Publicly provided goods</b>	Mass transport system	Public ownership or ownership by large companies, in which women are often under-represented.	e.g. ensure representation of women in ownership, for example, by setting quotas.
<b>Other non-market goods</b>	Daily and seasonal weather forecast for agriculture through mobile phones	Ownership of cell-phones: among the poor, men generally have the main access to the phone.	e.g. delivery mode, for example, via radio; promote uptake of mobile phones among female subsistence farmers.

Table 10. Addressing gender-related barriers through enabling frameworks

Enabling environment element	Areas of influence	Examples of barriers addressed
<b>National macro-economic conditions</b>	Tax, subsidies and tariff regime subsidies	High costs of capital and interest rates; addressed by providing subsidies to women to access finance for technology.
<b>Human, organisational and institutional capacity</b>	Capacity-building programmes for organisations and institutions	For gender purposes, ensure that the capacity-building programme is representative of both genders. This can be achieved by, e.g., using gender quotas.
<b>Research and technological capacity</b>	Publicly funded research, development and training programmes	Often there is low representation of women in science, technology, engineering and mathematics (STEM) degrees. To be addressed by stimulating women to take up STEM degrees, e.g. by marketing the area and creating an incentive structure.
<b>Social and cultural</b>	Information dissemination, outreach and awareness-raising campaigns	Promote awareness-raising in a gender-sensitive manner, e.g. by targeting women and men in their respective areas of interest.

### Step 3. Technology Action Plans

This section feeds into the Technology Action Plan guidebook.

The preparation of Technology Action Plans (TAPs) is the final step in the TNA process. TAPs support the implementation of the prioritized technologies in the country with the aim of achieving the local climate and development benefits identified earlier in the TNA process (UNFCCC & UNEP DTU Partnership 2017). It is therefore crucial that the TAPs are gender-mainstreamed, as the TAP specifies how to introduce measures to implement technology, who is responsible, when, and how to secure funding. The TAP thus provides an important opportunity to ensure that gender is incorporated into the implementation of technology in the TNA country.

To achieve this, the TAP needs to provide tangible evidence that the project will actively contribute to achieving specific gender equality, such as that set out in SDG 5. This includes the provision of evidence that the proposed implementation of technology covers the overall social context from a gendered perspective (Global Goals 2018a).

The goals of incorporating gender into the TAP are:

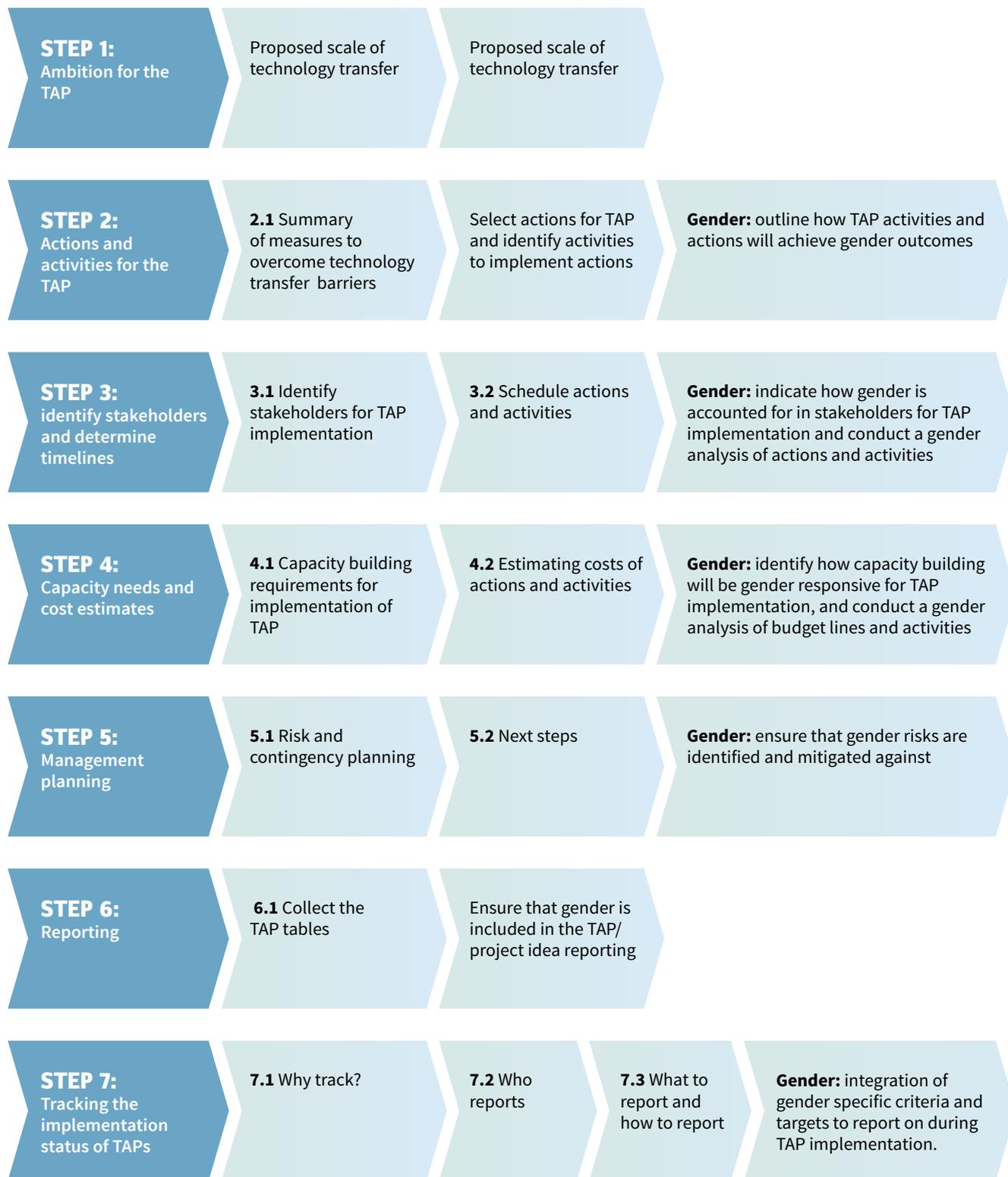
- to identify a set of concrete gender-related actions needed for the successful implementation of technology in the country
- an indicative budget for gender-mainstreaming as part of an investment proposal for each technology, which can be considered for funding by potential public and/or private funders.
- to ensure that these two goals are achieved when developing their TAPs, TNA teams need to report on gender issues in all components of the TAP. Figure 2 shows the different steps involved in the TAP, together with what ‘taking a gender approach’ in the TAP looks like.

**As a first step** in drawing up the TAP, the scale and ambition of the envisaged technology transfer is discussed, which should include a well-defined ambition for gender as well. As this will already have been discussed during the TNA consultations in relation to gender, gender-related issues can be presented alongside other ambitions by focusing on the specific sector to which the technology belongs.

**The second step** in the TAP is to identify and characterize the actions needed to realize this ambition, including a timeframe, the required resources, and an inclusive, multi-stakeholder process. The gender-related steps in this process are:

- a) Descriptions of barriers and of measures to overcome barriers, in which the gender-related barriers identified in the Barrier Analysis and Enabling Framework are revisited and included in the TAP.
- b) The selection of actions that refer to the gender-related measures identified during the Barrier Analysis and Enabling Frameworks. It is important to include the most important gender-related measures in the TAP. Important gender questions that can be considered in formulating the ambition for the TAP are:

Figure 2. Technology Action Plan steps (UNEP DTU Partnership 2017)



- How will women and men be targeted and reached?
- Are there any women’s groups, associations or NGOs in the country that the project can partner with?
- Is the project responding to gender-differentiated patterns of the division of labour, wage gaps, etc.?
- How will the activities and services of the project benefit women and men?
- Is the project likely to have adverse effects on either women or men?
- How will the project affect relations between women and men?
- How will the project ensure that women and men have equal access to the opportunities and services that the project provides?
- How can the project ensure and enhance women’s participation in the activities or services provided by the project (UNIDO 2014)?
- Are there any policies or cultural or social factors that are either inhibiting or supporting women’s participation or engagement in the project or their being beneficiaries of it?

c) Identifying gender-related activities for the selected actions, that is, the specific things that need to be done to make an action work in the context of gender. An example of an action could be Action #1: Expand Access to Finance for Women, so that they can buy the proposed technology (relevant in countries where women lack access to finance for climate change adaptation and mitigation technologies).

d) Develop project ideas in which the potential gender equality benefits are discussed and presented as part of the presentation of the technology.

**The third step** covers how to identify the stakeholders to be involved in the implementation of the *actions*, as well as scheduling and sequencing the specific *activities*. To ensure that gender is accounted for, it is essential that several questions are asked when identifying stakeholders. These include:

- Do key stakeholders include individuals or groups (e.g. ministries of women and/or social affairs, a committee or membership organization that promotes gender equality, women’s rights or the empowerment of women)?
- Is there a balanced gender representation among key stakeholders?
- Is there at least one stakeholder who has the necessary skills and expertise to provide a gender perspective and/or gender perspectives?
- Are stakeholders willing to seek women’s participation during the implementation (UNIDO 2014)?

At this stage, it is also essential to use a gender lens:

- a) Who will be involved in carrying out the various activities, based on the questions above?
- b) When will the activities take place, including the scheduling and sequencing of specific activities? It is essential that a gender perspective is incorporated into the activities from the beginning.
- c) What resources will these stakeholders need to gender-mainstream implementation of the technology?



Engineer planning project. Monkey Business Images/Shutterstock.com.

**The fourth step** has two key areas in which gender needs to be accounted for in the TAP, including:

1. Capacity-building requirements for implementation of the TAP, which provides an excellent opportunity for the TNA team to ensure that a gender perspective is thoroughly mainstreamed into the TAP. As the consultants and stakeholders will be keenly aware of the respective skills of men and women and the tools needed for TAP implementation to succeed, they can provide important inputs and set gender-specific targets for capacity-building. As part of this effort, the TAP needs to specify how it will ensure that:
  - women's and men's distinct capacities and skills are considered and utilized
  - women and men have equal access to project resources, services and capacity-building
  - women and men benefit equally from the training sessions and all the other services offered by the project (UNIDO 2014)
  - budgeting and financial allocations should reflect resources and activities that take account of gender considerations in the TAP process and implementation.

2. Estimating the cost of *actions* and *activities*, which involves developing a TAP budget that includes gender. It is important that gender analyses are conducted of the individual budget items.

**The fifth step** covers handling risks, contingency planning, next steps and reporting. The main gender issues in respect of management planning are:

- How will risk be handled in relation to gender (e.g. if a specific gender organization that had planned to be involved in the implementation of the technology is no longer available, or the costs of gender mainstreaming are higher than expected)?
- Contingency planning: for each gender-related uncertainty, it is important that a contingency plan be drawn up to address the risk (e.g. a ‘backup’ gender organization may be approached).

As part of the management planning of the TAP, it is essential to ensure the equal participation of women and men in the project management arrangements and as the project’s beneficiaries, partners and key stakeholders. In addition, women and men need to have an equal voice in project decision-making, and coordination is needed among key development actors to enhance gender mainstreaming further and promote gender equality and/or the empowerment of women.

**The sixth step** is to collect Steps 1-5 into a series of tables, which will be accumulated in a spreadsheet. This is intended to report and track TAP implementation status. The gender-mainstreaming activities described in this guide and the specific actions identified need to be accounted for in the spreadsheet.

Table 11. Examples of gender-responsive outcome-level indicators that can be included in the TAP

Action	Example of indicator	Making it gender-responsive
<b>Increased use of low-carbon transport</b> - Mitigation	Increased number of passengers (women and men) on trips and increased amounts of freight using low-carbon transport	As women are more frequent users of public transport, the target in terms of increased use by women should be set proportionately to the (higher) baseline.
<b>Strengthening institutional and regulatory systems for climate change adaptation-responsive planning and development</b> - Adaptation	Number of gender-friendly policies, institutions, coordination mechanisms and regulatory frameworks that improve incentives to develop climate resilience and their effective implementation	The target for this indicator can specify that policies, institutions, coordination mechanisms and regulatory frameworks should be gender-responsive and ensure the equal participation of women (GCF 2017).

**The seventh and final step** is to track implementation of the TAP. It is essential that the gender-relevant indicators developed as part of the TAP process are carefully monitored and reported on in order to document the impact of and progress with achieving gender goals. The Green Climate Fund's practical manual to support the integration of gender equality into climate change interventions and climate finance can provide additional information on gender mainstreaming in project plans (GCF 2017). Some examples of gender-responsive outcome-level indicators that can be included in the TAP are shown in Table 11.

To operationalize the activities set out in the TAP, a Gender Action Plan can be developed that details the constraints and opportunities for women and men respectively identified during the gender analysis and indicates how these can be fully integrated into the project design. The plan should include:

1. a set of gender-responsive actions that will address the needs of vulnerable women and men in climate action
2. a clear set of gender performance indicators and sex-disaggregated targets against which progress will be measured
3. presentation of gender-responsive development impacts (GCF 2017).

# Conclusion



Workshop in Othide village.  
Neil Palmer/ CIAT.

This guidebook presents practical guidance on how to address systematically existing or potential gender inequalities specific to the TNA and its climate change adaptation and mitigation objectives. It presents a step-by-step approach for TNA teams to follow in making their TNAs gender-responsive.

In order to summarize this guidebook, Table 12 provides a checklist that TNA teams can use to ensure that gender is taken into account in each part of the TNA.

Table 12. A gender-responsiveness checklist for TNA teams

TNA activity	Integrated gender? Y/N	
<b>STEP 1. Sector and Technology Prioritization</b>	<b>Composition of TNA team</b>	
	<b>Step 1. Identify and categorize technologies</b> , including familiarization <ul style="list-style-type: none"> <li>Assess gender in the background study and conduct a gender analysis of the technologies</li> </ul>	
	<b>Step 2. Assess technologies through MCA</b> <ul style="list-style-type: none"> <li>Gender: include a gender criterion to assess each technology</li> </ul>	
	<b>Step 3. Make final decision</b> <ul style="list-style-type: none"> <li>Gender: ensure gender-sensitive stakeholder engagement in decision-making process, and take into account the gender analysis conducted to inform the final decision</li> </ul>	
	<b>Output:</b> Prioritized list of technologies for adaptation for highest priority subsectors. * This needs to include a clear indication of gender responsiveness and gender information presented in the prioritized list	
<b>STEP 2. Barrier Analysis and Enabling Frameworks</b>	<b>Gender-related barriers and corresponding enabling frameworks</b> to be identified for each of the technologies	
<b>STEP 3. Technology Action Plans</b>	<b>Step 1. Aim of the TAP</b> Indication of how gender will be considered in the TAP	
	<b>Step 2. Actions and activities for the TAP</b> Outline how TAP activities and actions will achieve gender outcomes	
	<b>Step 3. Identify stakeholders and determine timelines</b> Indicate how gender is accounted for in stakeholders for TAP implementation, and conduct a gender analysis of actions and activities	
	<b>Step 4. Capacity needs and cost estimates</b> Identify how capacity-building will be gender-responsive during TAP implementation, and conduct a gender analysis of budget lines and activities	
	<b>Step 5. Management planning</b>	
	<b>Step 6. Reporting</b> Ensure that gender is included in the TAP/project idea reporting	
	<b>Step 7. Tracking the implementation status of TAPs</b> Integration of gender-specific criteria and targets to be reported on during TAP implementation	

## References

- Aurora-Jonsson, 2011. Virtue and vulnerability: discourses on women, gender and climate change. *Global Environmental Change*, 21, 744–751.
- Global goals, 2018a. Gold standard for the global goals gender equality requirements & guidelines. Available online at: <https://globalgoals.goldstandard.org/100-gs4gg-gender-equality-requirements-guidelines/>, accessed 15 November 2018.
- Global goals, 2018b. Frequently Asked Questions: Gold Standard Global Goals. Available online at: <https://www.goldstandard.org/articles/faq-gold-standard-global-goals>, accessed 15 November 2018.
- Global goals, 2018c. Stakeholder Consultation Requirements: Guideline. Available online at: <https://globalgoals.goldstandard.org/100-gs4gg-stakeholder-consultation-requirements-guidelines/>, accessed 15 November 2018.
- Green Climate Fund (GCF), 2017. Mainstreaming gender in Green Climate Fund projects: a practical manual to support the integration of gender equality in climate change interventions and climate finance. Green Climate Fund: Yeonsu-gu. Available online at: [https://www.greenclimate.fund/documents/20182/194568/Guidelines\\_-\\_GCF\\_Toolkit\\_Mainstreaming\\_Gender.pdf/860d1d03-877d-4c64-9a49-c0160c794ca7](https://www.greenclimate.fund/documents/20182/194568/Guidelines_-_GCF_Toolkit_Mainstreaming_Gender.pdf/860d1d03-877d-4c64-9a49-c0160c794ca7), accessed 15 November 2018.
- Green Climate Fund (GCF), 2018. Mainstreaming gender. Available online at: <https://www.greenclimate.fund/how-we-work/mainstreaming-gender>, accessed 6 November 2018
- IISD, 2018. Gold Standard launches Gender Equality Framework. Available online at: <http://sdg.iisd.org/news/gold-standard-launches-gender-equality-framework/>, accessed 15 November 2018.
- Meyers, L, Jones, L., 2012. Gender analysis, assessment and audit manual & toolkit for use by ACDI/VOCA staff and consultants in completing gender studies. ACDI/VOCA: Washington D.C. Available online at: <http://www.acdivoca.org/wp-content/uploads/2016/07/ACDI-VOCA-Gender-Analysis-Manual.pdf>, accessed 14 November 2018.11.19
- UN, 1997. General Assembly Fifty-second session: Report on the Economic and Social Council for 1997. Available online at: <https://www.un.org/documents/ga/docs/52/plenary/a52-3.htm>, accessed 15 November 2018.
- UNFCCC & UNEP DTU Partnership, 2017. Enhancing Implementation of Technology Needs Assessments: Guidance for Preparing a Technology Action Plan, UNEP DTU Partnership: Copenhagen. Available online at: [tech-action.org](http://tech-action.org).
- UNIDO, 2015. Generic terms of reference for gender expert (project design). Available online at, [https://www.unido.org/sites/default/files/2015-09/ToR\\_Gender\\_Expert\\_Design\\_Generic2\\_0.pdf](https://www.unido.org/sites/default/files/2015-09/ToR_Gender_Expert_Design_Generic2_0.pdf), accessed: 15 November 2018.
- UNIDO, 2014. Guide on gender mainstreaming energy and climate change projects. United Nations: Vienna. Available online at: [https://www.unido.org/sites/default/files/2015-01/Guide\\_on\\_Gender\\_Mainstreaming\\_ECC\\_0.pdf](https://www.unido.org/sites/default/files/2015-01/Guide_on_Gender_Mainstreaming_ECC_0.pdf), accessed 15 November 2018.



# TNA TECHNOLOGY NEEDS ASSESSMENT

This guidebook is produced as part of the GEF-Funded Global Technology Needs Assessment (TNA) Project, which is implemented by UN Environment and UNEP DTU Partnership. The guidebook will be used by national TNA teams, which consist of stakeholders from government, non-government organisations, private sector and others.

The guidebook familiarizes the reader with gender concepts and demonstrates the relevance of gender issues to climate change adaptation and mitigation, as well as to the relationship between gender and climate in the Sustainable Development Goals.

The guide is focused on two key areas of activity:

- Institutionalization of gender-mainstreaming by the TNA team in order to create the long-term capacity to address gender issues in climate change adaptation and mitigation and to ensure that such issues are included in project documents.
- Implementation of actions, including conducting gender analyses in considering technology options, agreeing on gender-specific goals in the TNA, and integrating gender issues into Technology Action Plans and throughout TNAs.

**More information about the global Technology Needs Assessment Project can be found at:**

**[www.tech-action.org](http://www.tech-action.org)**

**Follow us on Twitter @UNEPDTU**