

**Gender, Mitigation and Technology:
Briefing¹ for the Ninth meeting² of Technology Executive Committee
Bonn, Germany, 18–21 August 2014**

The Technology Executive Committee and the Climate Technology Centre and Network, strive to facilitate the effective implementation of the Technology Mechanism, under the guidance of the COP. The committee meets twice a year to decide on the new technology stream to close the pre-2020 emissions and ambition gaps. While these discussions are critical building blocks in responding to climate change, there is little acknowledgement of the social dimension of these technologies or the existing methodologies available to address these social considerations. It is important that technological developments in response to climate change take into account “women’s specific priorities and needs and to make use of their knowledge, and expertise, including indigenous knowledge and traditional practices” to ensure an appropriate and effective adaptation strategy. (UN Women, 2012)

Furthermore, COP decisions [2/CP.17](#) and [14/CP.18](#) affirm that the CTCN’s mission is to facilitate the preparation and implementation of technology projects and strategies, taking into account **gender considerations**, to support action on mitigation and adaptation and enhance low emissions and climate-resilient development. Additionally, decision [25/CP.19](#) mandates the CTCN, in executing its modalities and procedures, to work in conjunction with the Technology Executive Committee to ensure coherence and synergy within the Technology Mechanism, with the intention of accelerating the development and transfer of technology, taking into account **gender considerations**.

Gender, Mitigation and Technology: Crosscutting Issues

In every society, women and men have distinct socially constructed responsibilities, knowledge and needs which are essential to addressing the effects of climate change. Climate change magnifies existing inequalities, in particular, gender inequality. Mitigation targets, adaptive technology initiatives and response plans should be rights-based, inclusive and equitable so that both women and men can have access to, and benefit from, the implementation, development and transfer of such initiatives.

Overcoming Barriers to Women’s Engagement in the Value Chain

A gender-sensitive approach to mitigation and climate-related technology policies and projects requires a paradigm shift that recognizes women’s human rights as well as their contributions to climate change responses, and promotes the development of new opportunities for women in the mitigation and technology sectors. Women have a right to be active participants in the value chain of climate responsive technologies and beneficiaries of economic opportunities that may arise from enhanced mitigation initiatives. In order to achieve the above, it is necessary to overcome a series of barriers to facilitate women’s engagement in the sector. For example,

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² **Meeting Agenda/ Key Documents:** http://unfccc.int/ttclear/templates/render cms_page?TEC_meetings
Live WEBCAST: http://unfccc4.meta-fusion.com/kongresse/tec09/templ/ovw_small.php?id_kongressmain=274

technology innovation and use is widely viewed as ‘men’s work’. However, in many developing countries, it is traditionally women’s work to gather wood, provide food, and generate income for their own and their children’s needs. It therefore makes sense to enlist women in designing and producing locally-appropriate energy technologies, customized to fit their household and income needs (ENERGIA and WEDO, n.d.) Even in countries where there is educational parity at the higher levels of education, women’s participation in science, technology, engineering and mathematics (STEM) remains relatively low to that of men. (ECLAC, 2013)

Case study:

In Bangladesh, the Grameen Shakti programme began building small solar projects in rural areas and established technical training center run by female engineers that have trained more than 3000 rural women to assemble, install, maintain and repair solar systems. (Karlsson, G. et al. 2013)

Mitigation in the Transport Sector

Mass transport systems should be designed taking into account women and men’s differentiated mobility patterns and purchasing power. To address the differentiated energy and transportation needs of women and men mitigation policies should build on gender-sensitive methodologies. Mass transport systems should incorporate women’s mobility patterns in the design of new and efficient transportation routes, allowing women to have better access to basic services (i.e. education, health, etc.) and to local markets. The mitigation initiatives for the transport sector need to deal with energy and fuel efficiency. Bus Rapid Transit Systems (BRS) are receiving a large amount of attention by Parties, as they are perceived to require lower financial investment and have higher operational efficiency than the majority of public transport systems. (UNEP, 2014) BRS can be implemented in a gender-responsive manner, using mobility patterns of women and men in the design and identification of public transport routes and the identification of cost-effective rates for these routes. Moreover, it is possible to apply different gender needs in the design of the BRS systems to increase the safety and satisfaction of clients (see box below).

Case Study:

The TransMilenio, a Clean Development Mechanism (CDM) registered initiative, featured special chairs for women and children, and separate doors for pregnant women and vulnerable passengers. It also supported an awareness campaign against sexual harassment in buses. TransMilenio has increased women’s participation in the labor force, establishing goals for hiring women and supporting women’s involvement in non-traditional activities, such as fare collection. (Karlsson, G. et al. 2013)

Mitigation in the Energy Sector

Gender-mainstreaming is still relatively rare in energy and climate change policies, initiatives and institutions. ENERGIA produced a handbook for guidance on how to mainstream gender in the energy sector which offers tools and methodologies, as well as examples of gender-sensitive projects (ENERGIA, 2011). Important elements for gender-mainstreaming are: i) conducting gender audits of decision-making and management processes; (ii) engaging gender experts to assist with institutional and project-level gender mainstreaming plans; (iii) collecting gender-disaggregated data; (iv) incorporating gender-sensitive budgeting and accounting approaches; and (v) using gender-based indicators and evaluation procedures. (Karlsson, G. et al. 2013) Top-down, market-based energy policies generally overlook the fact that at least 1.3 billion people globally lack basic electricity access and 2.6 billion lack clean cooking facilities and therefore must rely on traditional fuels and inefficient technologies. (IEA 2013) Small-scale renewable energy and energy efficiency projects deliver benefits to local communities, including

the reduction of: (i) *drudgery*, particularly of women traditionally in charge of firewood collection, (ii) *respiratory illnesses*, (iii) *physical and sexual attacks* on women during firewood and water collection, etc. These projects which substitute traditional fuels address the need to reduce short lived climate pollutants, reducing black carbon released into the atmosphere, which has an important effect on the cryosphere regions. (UNEP, 2014)

Case Study:

In Nepal the Biogas Support Programme (BSP) received CDM Credits for widespread production of household biogas plants; meanwhile the Pakistan Domestic Biogas Programme (PDBP) has also been registered as a CDM programme of activities. BSP's gender action plan includes targets for *promoting women's* ownership of biogas digesters and for *training women* to build and manage biogas digesters. The project has reduced women's fuelwood collection, improved cooking and health conditions, lowered carbon dioxide emissions and given women more time to engage in income-generating activities. (Biogas Sector Partnership, Nepal, 2009). PDBP's gender action plan focuses more on training women to use and maintain the biogas plants securing the efficiency of the technology over a longer period of time; contribute to knowledge on energy issues affecting women, and, enabling women to use the time saved by the use of biogas plants in entrepreneurial activities. (Rural Support Programme Network, 2010)

Additional Analysis of TEC Briefing Papers for 9th Meeting

TEC Brief on Technologies for Adaptation-Water

The TEC Brief Technologies for Adaptation-Water identifies the threat of climate change to water safety and security. Technologies for adaptation have been defined as “the application of technology in order to reduce the vulnerability, or enhance the resilience, of a natural or human system to the impacts of climate change.” (UNEP, 2011) While the policy brief takes into account various important aspects, including interrelated issues, locational sensitivity, engaging citizens, knowledge management and community based adaptation, there is no acknowledgement of the importance of a gender-responsive approach to the design, development and implementation of technologies for adaptation. In most parts of the world, women and girls are responsible for collecting water for cooking, cleaning, health and hygiene, and (if they have access to land) growing food. (WEDO, 2003) Increasingly limited water supplies, poor service delivery and pollution are jeopardizing women's health, education and economic opportunity. This has negative consequences on their livelihoods and the wellbeing of their families. To enhance resilience to climate change, water technologies for adaptation should take into account differentiated gender roles and needs to ensure adaptation projects cater to both household and productive requirements.

TEC Brief on Technologies for Adaptation-Agriculture

The TEC Brief Technologies for Adaptation-Agriculture acknowledges the importance of implementing technologies to ensure “[s]ustainable and effective identification, application, adoption, and diffusion of technologies for adaptation” to decrease the risk of maladaptation. (UNEP, 2011) This policy brief identifies the need to manage agricultural resources with an understanding of its ecosystems and human communities. It does not, however, identify the importance of a gender-responsive approach or analysis. In the agricultural sector, rural women in least developed countries are the principal staple food producers. This sector is highly exposed to risks of drought and potential rain pattern changes thus, a gender-responsive approach to agriculture is essential to maximizing the effectiveness of adaptation and mitigation policies.

References

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