



WOMEN IN SUSTAINABILITY,
ENVIRONMENT AND
RENEWABLE ENERGY



BOOSTING WOMEN-LED CLIMATE ADAPTATION A WISER PERSPECTIVE

An initiative by



CONTENTS

Foreword	03
Introduction	04
About WiSER	05
Roundtable Insights: Education and Training	06
Expert Voice: HH Sheikha Shamma bint Sultan bin Khalifa Al Nahyan President and CEO of UAE Independent Climate Change Accelerators (UICCA)	07
Roundtable Insights: Protecting Biodiversity and Ecosystems	08
Expert Voice: HE Khadeeja Naseem Minister of State for Environment, Climate Change and Technology, Republic of Maldives	10
Roundtable Insights: Policies	11
Expert Voice: Damilola Ogunbiyi CEO and Special Representative of the UN Secretary-General for Sustainable Energy for All and Co-Chair of UN-Energy	12
Roundtable Insights: Food Security and Access to Agritech	13
Expert Voice: HE Sarah Ryglewski Minister of State to the Federal Chancellor, Germany	14
Roundtable Insights: The Clean Energy Transition	15
Expert Voice: HE Dr Nawal Al Hosany Permanent Representative of the UAE to the International Renewable Energy Agency (IRENA)	16
Roundtable Insights: Infrastructure	17
Expert Voice: Marie Lam-Frendo CEO, Global Infrastructure Hub	18
Roundtable Insights: Finance	19
Expert Voice: Ines Rocha Managing Director, Impact & Partnerships, European Bank for Reconstruction and Development (EBRD)	20
Conclusion & Key Findings	21
Acknowledgements	26
References	28

Women Must be at the Vanguard of Climate Adaptation

Climate change is no longer a problem to be solved in the distant future. The world is already grappling with dramatic fluctuations in average temperature, shifts in the seasons and the increased frequency of extreme weather events¹. From heatwaves in Europe to devastating floods in Pakistan and uncontrollable wildfires in the USA; the impacts of climate change are clear for all to see.

Although climate change has significant impacts on all of us, it is essential to view it through a lens of gender and be inspired by the resilience of women and girls who face the brunt of its effects. Despite representing the majority of the world's poor, women have shown remarkable strength in adapting to environmental challenges and utilizing threatened natural resources² creatively.

Around the world, they are at the forefront of building solutions and progressing sustainable development. Whether it's in farming communities or in the renewable energy field, women are using their ingenuity and hard work to create lasting change.

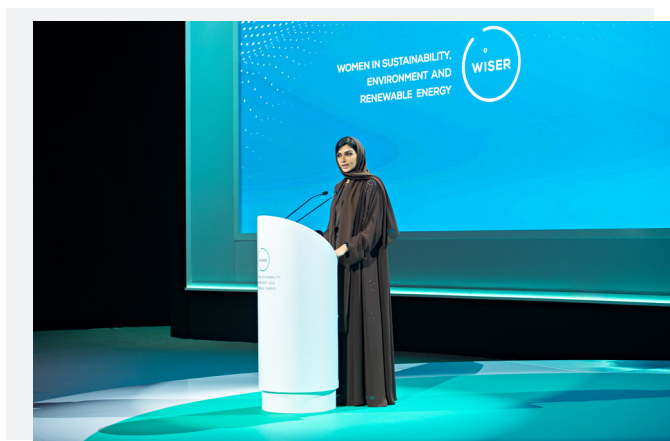
Here in the UAE and around the world, women are demonstrating the bold innovation and courageous leadership we need to build a climate-resilient and sustainable future for all. More women than ever before are going to college, taking up leadership roles, and joining the renewable energy and sustainability industries. But more needs to be done to recognize their work and boost their leadership role in climate adaptation. Otherwise, we risk losing a unique opportunity to supercharge the transition to a more sustainable world.

As we look towards the future, we must remember that the next seven years are critical. The United Nations has declared this the 'decade of action,' and we must make significant progress to safeguard the planet's future. The upcoming COP28 conference, to be hosted in the UAE this year, presents a critical opportunity for leaders to come together and take bold and decisive action to address climate change and promote inclusive sustainable development.

Women will continue to play a pivotal role in addressing climate challenges, with female leaders at the forefront of driving progress and effecting change. It is essential that we support one another and celebrate our remarkable achievements together.

This report provides a window into the WiSER Forum's discussions led by sustainability experts across technology, policy and education. It highlights some of the most urgent challenges and opportunities for women to accelerate climate adaptation efforts. The Forum's speakers shared thought-provoking insights on potential avenues to increase the involvement of women in protecting ecosystems and developing climate adaptation policies, and increasing their access to key resources like education, food, energy, and finance – issues at the heart of the sustainability agenda.

The WiSER Forum white paper is a powerful call to action that should inspire change and increase understanding of the issues facing women in contributing to climate action. It is my hope that this white paper will spark conversations, initiatives, and partnerships that will drive meaningful progress, and serve as a guide to policymakers, educators, and leaders in the private sector on how to create more inclusive and sustainable practices that involve women. By prioritizing the participation and empowerment of women in climate adaptation, we can build more resilient and equitable societies that are better prepared to face the challenges of climate change.



Dr Lamya Fawwaz

Executive Director of Brand and Strategic Initiatives at Masdar and Program Director of WiSER

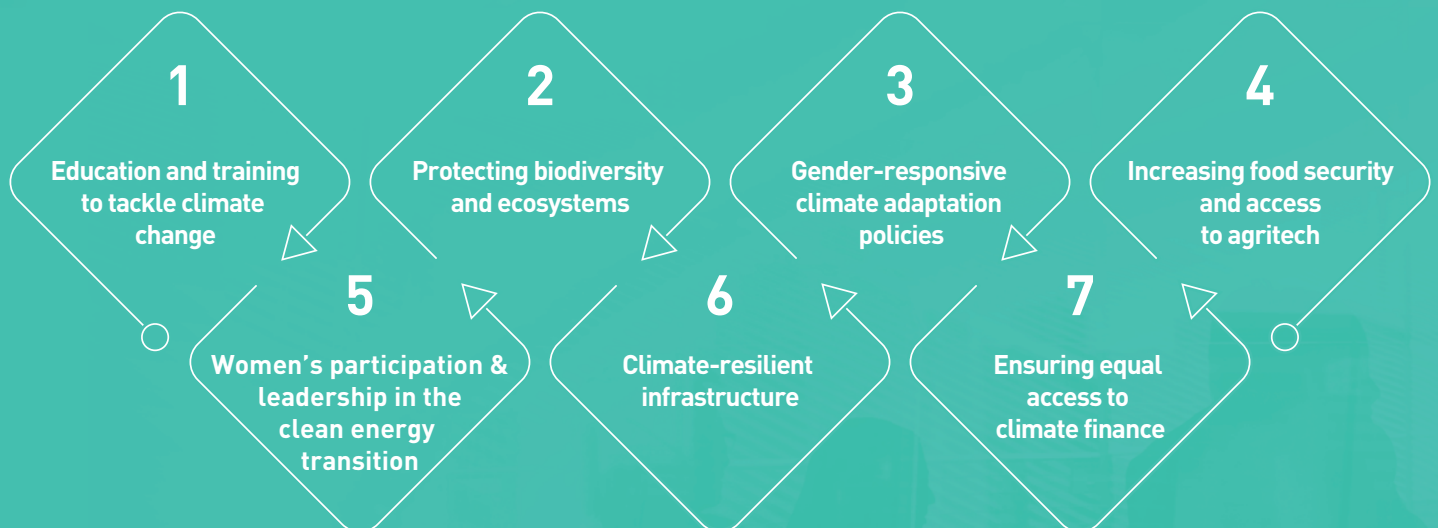
Introduction

When it comes to tackling climate change, the roles of mitigation and adaptation have come under sharp focus. This will certainly be the case when the UAE hosts the United Nations Conference of the Parties (COP28) in November and December 2023.

While mitigating carbon emissions is important for managing current scenarios, there is a major global shift and focus on adaptation, especially in developing countries and fragile communities. And within the adaptation discussion, the role of women – not just as beneficiaries, but as change agents – must be given due attention.

Historically, women have developed knowledge and skills related to water harvesting and storage, food preservation and rationing, and natural resource management¹. Women tend to operate with the larger community in mind, beyond protecting the interests of their families.

Tapping into the time and talent of women and increasing the leadership role of women in climate adaptation was core to the discussions at the WISER Annual Forum 2023. The complex issue of adaptation was approached from various perspectives through seven roundtables featuring interlinked topics, listed below:



The focus of the WISER Annual Forum 2023 was to create a shared learning environment, agree on aligned implementation and share best practices. This white paper captures the key talking points and findings of the forum. While the paper identifies the challenges present in the ecosystem, the real focus is on identifying actions and outcomes to deliver progress and change.



About WiSER

Women and girls are crucial to building a more sustainable future. Women in Sustainability, Environment and Renewable Energy (WiSER) is a global platform that champions women as leaders of sustainable change. It was launched in 2015, on the sidelines of the UN General Assembly, by the global clean energy powerhouse Masdar.

Aligned to the UN Sustainable Development Goals (SDGs), WiSER was born from a recognition that more needs to be done to support current and future generations of women sustainability leaders.

WiSER does this by providing training and mentorship programs for young professional women. The WiSER Pioneers Program empowers women to gain leadership skills through the lens of sustainability. Participants also broaden their horizons by attending international climate summits and networking events.

To create lasting change, it's important to get multiple stakeholders on board. Throughout the year, WiSER's events bring together influential global figures to formulate solutions to urgent sustainability problems.

Building awareness and community links is also key. The WiSER Cares Program sent a team of young professional women to live in, and learn from, a rural, off-grid community in Rwanda. They gained a deeper understanding of energy access issues, which they can use to advance sustainability in their respective fields.

Founding partners



Roundtable Insights

Education and Training



Understanding climate change is the first step toward tackling it. The roundtable titled ‘Education and training to tackle climate change’ explored this topic from both the perspective of the developed world and of the developing world. The discussion was moderated by Katarina Hasbani, Partner and Global Director of Strategy and Advisory, AESG, and Maria Flouda, Founder and Managing Consultant, Sustainability Switch Consultancy.

Education and training can empower people to understand climate change, its impact on their lives and what they can do about it. However, around the world, women and girls are often being denied access to even basic education. Even though evidence shows the multiple benefits that educating girls can bring, around 129 million girls are out of school, according to UNICEF^{iv}. Moreover climate change literacy rates (how people understand the causes and effects of climate change) were 12.8 percent lower for women than men, a 2019 pan-African study found^v. This figure is concerning, given women’s increased vulnerability to climate change.

Before COVID-19 struck, there were an estimated 388 million women living in poverty. The pandemic may have pushed an additional 47 million women and girls into extreme poverty and further widened the gender poverty gap^{vi}. Further, an estimated 11 million girls who dropped out of school during the pandemic may never return to classes, according to UNESCO^{vii}.

The roundtable discussion identified two key challenges. The first was women’s exclusion from decision-making around education – both as receivers and deliverers. The other issue was misinformation and misunderstanding of what climate change means for developing and developed countries, as well as for different industries.



The participants agreed that by taking decisive action, progress could be made. This includes ensuring parental guidance, recruiting more women teachers, educating boys to treat girls as equals, creating literature that is inclusive and free of gender stereotypes, providing climate change education to workers at all levels of an organization, and introducing the topic in early education.

Initiatives to address these challenges, in the public and private sectors are already underway. The UN Education for Sustainable Development (UN ESD) has implemented a framework that aims to increase the contribution of education to building a more just and sustainable world^{viii}. UN ESD takes a cross-disciplinary and systemic approach that links gender equality to specific gendered challenges related to each of the SDGs. At COP27, the International Renewable Energy Agency (IRENA) in collaboration with the UAE Government, announced the Energy Transition Education Network (ETEN). By engaging with multiple stakeholders, the network aims to advance energy education for social transformation and to train the energy transition workforce^{ix}.

For education to truly unlock women’s potential to lead climate adaptation, action plans need to be implemented and their impact measured. Actively engaging women at every step of the process and ensuring equality in decision-making about education will have a transformative and multiplier effect.

Around **129** million girls are out of school, according to UNICEF

Climate change literacy rates were **12.8%** lower for women than men, a 2019 pan-African study found

Expert Voice



HH Sheikhha Shamma bint Sultan bin Khalifa Al Nahyan

President and CEO of UAE Independent Climate Change Accelerators (UICCA)

Combatting climate change requires collaboration from various stakeholders. What is the role of independent and non-partisan accelerators like UICCA?

When we look at the effects of climate change across the globe, it's clear that the impact is not limited to just one country or region. In fact, there is a distinct disparity between the highest contributors to the problem, and those most vulnerable and therefore most greatly impacted. Recognizing that climate change is a borderless challenge is the first step. The second is to build connections and enable dialogue between all stakeholders involved – be it governments, businesses or individuals – to find ways to work together toward our common goal.

The UAE Independent Climate Change Accelerators (UICCA) serves as a bridge between the public sector, private sector and civil society, in collectively driving our nation's transition to a green economy. By making enabling policy recommendations, facilitating access to finance and supporting the growth of region-specific innovation, the UICCA aims to create an environment that can develop tangible solutions to achieve the UAE's Net Zero ambitions.

With the UAE set to host COP28, what are the initiatives being planned by UICCA as part of the pathway to it?

With regard to innovation, the UICCA is actively engaging with promising climate-tech entrepreneurs across the globe, who are building technology that can be adapted to meet the Middle East's needs. Similarly, we believe there is considerable talent here in the UAE that, with the right level of support, can provide home-grown technologies that could be scaled globally. We are also encouraging inter-governmental cooperation through a series of roadshows and high-level events to be rolled out in the lead-up to COP28.

Ultimately, it is important that all entities that are playing a role in driving the UAE's success in hosting COP28 look beyond the conference, with a focus on implementing long-term strategies that can ensure the continuity of actions taken over the next year.

Based on your experience, what role does the education and training of women play in tackling climate change?

Today, gender equality and the climate crisis are two of the most prevalent challenges facing humanity. In fact, there is a direct correlation between the escalation of climate change and the increasing threat to the livelihoods, health and safety of the female population, with the United Nations reporting that approximately 80 percent of people displaced by climate change are women¹.

This is especially true in politically unstable countries, where women historically have relatively limited access to information and resources compared to men, and are more vulnerable to systemic violence. However, women also have the capacity to be highly effective agents for change and promoters of adaptation and mitigation, if they are given the opportunity.

Making up 51 percent of the world's population and wielding substantial purchasing power, women across the globe have demonstrated incredible ambition in tackling climate change – from developing wind and flood-resistant housing foundations in Bangladesh², to creating seed banks that protect biodiversity in Nicaragua³. With the right level of education, training and empowerment, the efforts we have seen at the grass-roots level have the potential to be amplified tenfold.

Roundtable Insights

Protecting Biodiversity and Ecosystems



Biodiversity refers to the rich variety of plant and animal life on our planet. Its deterioration has a direct impact on climate change and this dual crisis is not gender-neutral. This roundtable discussion, moderated by Kathleen Swalling, Managing Director, Maritime Strategy and Legal Advisor at Nature Based Solutions, explored the impact of this important subject on women and how women are leading efforts to address it.

Biodiversity loss is one of the world's biggest dangers, according to the World Economic Forum's Global Risks Report 2022^{xi}. UN Secretary-General António Guterres explains that "We are losing our suicidal war against nature, hence biodiversity and ecosystems need to be given the same international protection as the climate." The roundtable attendees representing government, business and non-governmental (NGO) sectors echoed the same sentiment. They acknowledged that while women are the most affected, women also have a significant opportunity to create a positive impact.

Globally, women depend more on natural ecosystems, yet their contribution is often overlooked. They also have less access to ownership of natural resources. The roundtable participants identified two key challenges that highlighted how women, in particular, are adversely affected by biodiversity loss. The first struggle is around balancing career and childcare. This predicament is faced by women across the world and at all levels of society.

As women are primary caregivers, they usually prioritize protecting their family, managing the home and providing childcare. This can limit their capacity to contribute actively toward biodiversity protection.

The second key concern was around social and cultural norms. Women in many parts of the world, especially in indigenous communities, are the first to experience the devastating impacts of climate change. For example, drought forces women and girls to walk further in search of water. On average, in developing countries, females carry 20 liters of water per day over six kilometers. The lack of this vital resource can cause girls to drop out of school to support their families^{xv}. Similarly, flooding and the erosion of farming and fishing grounds can ramp up financial pressure on underprivileged families, which also can prompt girls to abandon education and marry early.



Women are often invisible partners in decision and policy-making, both in informal and formal scenarios, which aggravates the problem. The challenge exists across multiple levels, so the solution too needs to be implemented at various levels. Today, we see a number of examples of women and girls across all levels of society responding with solutions. In rural Sudan, a group of women, confronted by drought, formed a 'Women's Farmers Union' to improve food security in their communities. The Green Belt Movement, launched by Nobel laureate the late Dr Wangari Mathaai, has seen over 45 million trees being planted in Kenya since 1977. The movement provided women with a source of employment and gave them new skills.^{xv}

While these serve as positive examples of action at the grassroots level, women are also driving progress in the corridors of power. For example, in the UAE, the Ministry of Climate Change and Environment is headed by HE Mariam Bint Mohammed Almheiri. The UN Climate Change High-Level Champion for the COP28 Presidency and President of the International Union for Conservation of Nature (IUCN), is HE Razan Al Mubarak. The Secretary General of the Environment Agency - Abu Dhabi (EAD) is HE Dr Shaikha Salem Al Dhaheri.

These accomplished leaders are great role models for other women. The important role that nature plays in protecting our planet was highlighted by HE Razan during an interview with ADSW Talks. "We need to protect our wild spaces, and restore our degraded habitats, so that nature can be our ally in our fight against climate change," she said.

Women can lead biodiversity conservation if they are given the time and resources to do so. This means supporting women by sharing the burden of unpaid care work, promoting equal rights, access to support networks and ownership and control over land. By acknowledging the benefits women bring to the table, we can expedite the progress toward solving the climate crisis.

“

We need to protect our wild spaces, and restore our degraded habitats, so that nature can be our ally in our fight against climate change.

”

- HE Razan Al Mubarak,
UN Climate Change High-Level Champion for the COP28
Presidency and President of the International Union for
Conservation of Nature (IUCN)

Expert Voice



HE Khadeeja Naseem

Minister of State for Environment,
Climate Change and Technology,
Republic of Maldives

How do you see the active involvement of women in government roles being an accelerator toward climate adaptation?

The climate crisis is gendered, and in a climate-vulnerable country like the Maldives, this puts women and girls at an elevated risk. The resident populations of the outer islands in the Maldives are predominantly women, children and the elderly. Men migrate for work to tourist resorts or are gone for weeks at a time on fishing expeditions, resulting in one of the highest shares of female-headed households in the world. While it is unfortunate that cultural and economic circumstances make women in general vulnerable as a group, women also have the capacity to make change. As governments have a key role to play in facilitating positive change in times of crisis, valuing women's voices within government spaces will result in significant multiplier effects. This will contribute toward building climate resilience and sustainability not only for women, but for the communities that they belong to and for the generations to come. In the Maldives, we currently have three women in leadership roles within this space.

As one of the lowest-lying countries in the world, the 1,200 islands that make up the Maldives are especially vulnerable to rising sea levels. What initiatives are being taken to build resilience?

The Maldives Nationally Determined Contribution (NDC) has placed adaptation and resilience building on an equal footing with mitigation. Most national and sectoral plans now recognize climate change as one of the main priorities. Through the integration of climate change into national and sectoral plans, we aim to mainstream climate change into all our development work to strengthen climate resilience at the local level. With many of our islands eroding at alarming rates, we have been implementing coastal protection and flood mitigation measures in inhabited islands. As we traditionally relied on groundwater and harvested rainwater for potable use, the destruction of our freshwater from saltwater intrusion has become a threat to our water security. To combat this, we are now establishing water supply networks in all of our inhabited islands. Protecting our natural environment through the conservation of coral reefs and mangroves is another initiative we prioritize toward building our resilience.

Protecting biodiversity and ecosystems is critical. What lessons from the Maldives do you think will prove useful for other developing countries?

The threats to biodiversity and ecosystems require global efforts to address. At our end, we prioritize the protection and conservation of our biodiversity and ecosystems. We are aiming to protect at least one island, one reef, and one wetland from each atoll in the Maldives. At present we have 79 protected areas, three UNESCO Biosphere Reserves and two Ecologically and Biologically Significant Marine Areas (EBSAs). Under the Maldives Red List initiative, we have assessed the turtle and coral species. Mangrove species are currently under evaluation. As a small island nation fully dependent on coastal and marine areas, it is our hope that our conservation efforts will be taken as an example globally.

Roundtable Insights

Policies



When it comes to bringing about systemic change, effective policies are vital. But too often they fail to take gender into account. The roundtable discussion, titled 'Gender-responsive climate adaptation policies,' was moderated by Mucha Hazel Nyandoro, CEO of Manelith.

Whether it is food, water, energy, education, finance, or any other vital issue, applying a gender lens to addressing it is critical. This needs to start at the policy level. Policymakers have a key role to play in addressing gender inequalities while fostering environmentally and socially sustainable economies. A whole-of-government approach and integrated policy framework are needed to mainstream gender into all policies, including budgets, procurement and regulatory initiatives^{xvi}.

In this context, the roundtable participants identified three main areas to tackle. These were awareness, representation, and the data gap. In many forums, policymakers prove that they are not aware of gender as a decisive factor in designing solutions and policies. The lack of representation of women at the policy level is a key reason. This is proved by the fact that women occupy just one-third of decision-making positions under the UN Framework Convention on Climate Change, and only 15 percent of environment ministers are women.

Around the world, just one-third of 192 national energy frameworks include gender considerations, and gender is rarely considered in climate financing^{xvii}. The data gap further augments the situation. Data gap refers to the lack of reliable and statistically viable data on the gender aspect in the context of climate adaptation.

Through collaborative action, these challenges can be suitably addressed. To raise awareness and increase female representation, the panelists proposed several tactics. One was to create platforms to hear women's voices, particularly from marginalized communities, which will help enable understanding of on-ground issues and support building responsive policies. Investing in social services, like childcare, maternal and paternal leave, and creating space and time for breastfeeding will enable more women to manage their time and energy better and participate actively in the climate dialogue.

Closing the data gap concerning gender will provide a more accurate picture of where social support needs to be directed. Governments and organizations can address this by applying empathy and awareness of gender issues when designing data collection programs.

In summary, the roundtable participants unanimously recognized that climate change does affect women differently. Therefore, the most important and immediate measure is to ensure that climate adaptation policymaking is "gender-aware." Further, increasing women's representation at the governmental level will benefit society as a whole.

Countries that had a higher representation of women in government passed more stringent climate change policies, a 2019 study found^{xxiii}



Expert Voice



Damilola Ogunbiyi

CEO and Special Representative of
The UN Secretary-General for Sustainable
Energy for All and Co-Chair of UN-Energy

How can women's participation be increased in building gender-responsive climate adaptation policies?

Gender inequality coupled with climate change is one of the greatest challenges humanity is confronted with. Due to a lack of information, mobility, decision-making, and access to resources and training, women are less likely than men to survive extreme events. We therefore need to ensure women and girls are fully equipped with the knowledge and understanding of what is needed to tackle climate and environmental crises.

When it comes to climate adaptation policies, it is important to recognize that men and women have different coping and adaptive capacities and strengths. Therefore, for policies to be fully gender-responsive, we should bring women's perspectives to the challenge, forge a more innovative path forward, and build climate adaptation solutions that fully address their specific needs and challenges. This can only be done if the policy formulation process employs integrated approaches that include expert analysis, robust evidence and data, and public participation that has women's input.

National legal and policy frameworks on climate change need to incorporate gender equality considerations and frame women as agents of change, decision-makers, and participants in climate action and disaster risk management, with rights to the equitable sharing of benefits.

Could you highlight the role of organizations in contributing towards gender-aware policies?

As gender cuts across many sectors, the input of different stakeholders is vital. Governments are in partnership with a wide variety of social actors including trade unions, civil society organizations, professional bodies, and the media to name a few. Academia, research institutions, NGOs, and the private sector have played a critical role in conducting research and developing strategies that have gone a long way in formulating policies.

In many countries, civil society and NGOs continue to play a key role in monitoring progress and demanding accountability from the government, when it comes to the implementation of gender-focused policies. Development partners and UN bodies have provided technical expertise, capacity building, and financial support that has resulted in the design, implementation, and monitoring of policies.

What are some of the policy-related best practices that have created real impact?

We have seen governments setting up gender focal points in line ministries and agencies to undertake gender mainstreaming and collect data. This has vastly improved data collection, disaggregation, and gender-related research in collaboration with the central statistical offices and research and science institutions. Through gender mainstreaming and public participation, we have seen national action plans and national strategies being developed. These strategies are then able to be funded, implemented, and monitored.

One specific area where women are underrepresented is in climate negotiations. For example, men continue to lead the negotiations and deal-making at COPs. Targeted mentoring programs such as SEforALL's Women and Youth at the Forefront program, equip women with the right skill set and network to engage in high-level decision-making and actively shape the global climate agenda.

Roundtable Insights

Food Security and Access to Agritech



Women are responsible for half the world's food production. With climate change impacting agricultural yield, it is imperative that women are empowered to lead the mission to increase food security. This roundtable discussion explored the different facets of this problem and offered practical solutions. It was moderated by Pradnya Haldipur, Vice President of Development and Communications and Acting Co-President, Institute for Sustainable Communities, and Tony Verb, Co-Founder, Carbonless Asia.

For many families struggling to put food on the table, 2023 could be another challenging year. A record 349 million people across 79 countries are facing acute food insecurity – up from 287 million in 2021^{xxi}. In most developing countries women produce between 60 to 80 percent of the food. Yet, they continue to be regarded as home producers or assistants on the farm, and not as farmers and economic agents on their own merit. Women receive a small fraction of assistance for agricultural investments; women in Africa receive less than 10 percent of small farm credit and 1 percent of the total credit from the agricultural sector^{xx}.

The world needs to produce more food than ever. Traditional agriculture cannot cope with this demand, given the unpredictable and ever-changing weather patterns that are affecting yield. Agritech is emerging as a potential solution, but it needs to be available for those who need it the most.



Evidence indicates that if women had the same access to productive resources as men, they could increase yields on their farms by 20 to 30 percent. This would reduce the number of hungry people in the world by around 12 to 17 percent^{xxi}. Empowering women through land access and ownership, training in relevant agritech solutions, financial support and ensuring they can play an active role in policy and decision-making, were some of the solutions discussed. Creating a climate-impact fund that will support women by providing capacity, finance and network support was strongly proposed by experts.

As one example of agritech, institutions like the Graphene Engineering Innovation Centre (GEIC) are creating a unique pipeline of capabilities to fast-track graphene and other 2D materials' potential. Graphene consists entirely of carbon atoms and has the potential to enhance the performance of different materials and alleviate carbon footprint^{xxii}. James Baker, Chief Executive Officer, Graphene@Manchester, The University of Manchester, shared examples of how graphene could support sustainability. "These include, as examples, the use of graphene enhanced "hydrogels" in place of conventional soils or peat to enhance vertical farming," he said. "Through membrane technologies it could also support the provision of clean drinking water, or the reuse of wastewater in the future".

The discussion concluded by acknowledging that food security is a critical global issue. A lot more food needs to be produced, using a lot less energy. Through the active engagement of women, and by suitably leveraging agritech, this crisis can be averted.

Increasing women's access to agricultural land, livestock, education, technology, and finance

could lift up to 150 million people out of hunger^{xxiii}.

Expert Voice



HE Sarah Ryglewski

Minister of State to the
Federal Chancellor,
Germany

How can women's participation be increased in contributing towards food security?

To overcome food and nutrition insecurity it is necessary to sustainably transform agriculture and food systems. This transformation must include changing existing power relations, gender stereotypes and established norms. Germany pursues a feminist development policy that focuses on women and girls for its agri-food development projects by applying gender-transformative approaches.

For example, in one project in India, community gardens were set up by women's self-help groups on community land because local women wanted to fight the chronic malnutrition that particularly affects women and young children in India. These gardens help to provide the community with nutritious fruits and vegetables all year long and proved to be crisis resistant during the COVID-19 pandemic. Through the success of these gardens, women have gained more self-confidence and now attend community meetings to address their problems and find solutions together.

Could you highlight the role of collaboration between countries in accelerating the implementation of adaptation initiatives, particularly in agriculture?

Responding to global challenges such as climate change calls for joint international action on adaptation. Resilience to climate shocks must be developed by taking a common approach. This applies particularly with regard to global agri-food systems that are subject to cross-border climate and adaptation risks. Collaboration between countries allows stakeholders to jointly identify, implement and finance cross-border adaptation solutions, monitor and evaluate their effectiveness and achieve synergies and cost savings. Successful adaptation initiatives need strong stakeholder engagement, the pooling of a wide range of expertise and resources, and the sharing of information and data. For that purpose, Germany, as G7 Presidency, launched the Global Alliance for Food Security with the World Bank in 2022. This is a prime example of a successful network that draws on collaboration between countries and other stakeholders to react quickly and in a coordinated manner to the food security crisis. It also laid the groundwork for a sustainable transformation towards resilient agri-food systems.

What are some of the policy-level changes being implemented in Germany to support gender parity and climate adaptation?

Climate change is noticeable in Germany as well. The hot and extremely dry summer of 2018 and the devastating floods of 2021 are just two recent examples. The German Government aims to substantially strengthen its current climate adaptation policy in the course of this legislative term. We plan to pass a climate adaptation strategy with measurable targets as well as a climate adaptation law. In March 2022, we introduced an action programme for adaptation to climate change to support local communities, for instance through capacity building and expert consultation.

In order to boost the share of women in leadership positions, Germany introduced regulations for private companies and the federal civil service in 2015 and further tightened such regulations in 2021. The federal civil service is now obliged to reach gender parity in leadership positions by the end of 2025. Even though the proportion of women in these top jobs is increasing, currently only 39 percent are held by women. So, clearly, there is no time to rest to achieve this goal.

Roundtable Insights

The Clean Energy Transition



Delivering on the clean energy transition is vital to combating climate change. But if women are not fully included, this could also turn into a missed opportunity to redress gender imbalances and deploy the skills and talents of a group that represents half the global population.

The roundtable discussion, moderated by Wendy Lam, Advisory Director, Climate Technology Solutions, Baker Hughes, and Ameera Khalid, Host and Producer, Inspiring UAE Women Podcast, explored the opportunities and challenges associated with this transition.

Studies have shown that 80 percent of those displaced by climate change are women and girls. However, women are often unable to play an active role in addressing climate change in general, and the energy transition specifically, due to deep-seated challenges. For a start, the representation of women in the energy sector is low. Women represent 32 percent of the workforce in renewables and just 22 percent in the oil & gas sector^{xxiv}.

One challenge is that joining the workforce may be viewed as a distraction, compared with the responsibilities of looking after a family. Even if women do choose to work, the energy sector is not viewed as a preferred option as it is perceived to be male-dominated.

The choice of subjects to study is also greatly influenced by gender stereotypes. Young girls are less likely to be encouraged to take science, technology, engineering and mathematics (STEM) subjects.

Another challenge is the lack of access to funding for women. In developing countries, in particular, women are more likely to be denied funding than a man due to a lack of trust in a woman's business continuity given her household duties. The lack of role models and access to female mentors discourages women from viewing the clean energy transition as a relevant opportunity.

Too often, young girls don't aspire to be leaders in the energy industry, simply because they don't see role model leaders. To counter this, more mentorship programs should be established. Professor Mercedes Maroto-Valer, director of Industrial Decarbonization Research and Innovation Centre (IDRIC) is creating an initiative to reduce cultural and psychological bias against women in the clean energy industry. A series of short videos titled 'You Can't Be What You Can't See', is being produced, featuring female role models and showing how they are critical to the energy transition.

Samar Al Hameedi, Vice President, Sustainability & Environment, Social and Governance, Abu Dhabi National Oil Company (ADNOC), said, "The work that the UAE is doing to empower women is quite evident. When it comes to women in utilities, ADNOC has a lot to say as we have three women CEOs across divisions, as well as more women in technical positions than ever before."

Within the clean energy transition, women play a multi-faceted role. Women are the primary consumers of household energy in both developing and industrialized nations. They are responsible for many family purchases related to energy, are skilled business owners in the energy sector, and are active lobbyists for environmentally-friendly energy sources. Acknowledging the important role that women play and creating the required supportive network can greatly accelerate women's leadership in the clean energy transition.

Studies indicate women bring fresh perspectives and improve workplace collaboration. Increasing the number of qualified women in leadership can also improve performance.^{xxv}



Expert Voice



HE Dr Nawal Al Hosany
Permanent Representative
Of the UAE to IRENA

In your opinion, what is the most important challenge to be tackled in enabling climate adaptation efforts?

One of the most important challenges is education. By educating and empowering global citizens, we can ensure that they are equipped to act to mitigate and adapt to the impacts of climate change. Mobilizing climate finance is another important challenge. One way to do this is through initiatives like the Energy Transition Accelerator Finance (ETAF) platform, which can help to bring together investors, governments, and other stakeholders to invest in clean energy and other climate-friendly projects.

From an IRENA perspective, how do you view women's participation and leadership in the global clean energy transition?

Women's participation and leadership in the clean energy transition is essential for achieving an inclusive and sustainable future. IRENA states that increasing women's participation in the energy sector could add up to US\$5 trillion to the global economy by 2030. However, despite these clear benefits, women remain under-represented in the energy sector. According to IRENA, women comprise only 32 percent of the renewable energy workforce. More needs to be done to include more women in the global energy transition. We must work to remove barriers and create opportunities for women to access education, training, and employment in the energy sector.

The UAE has been playing a pioneering role in implementing legislative reforms for gender parity. What positive impact are you witnessing because of these efforts?

In the UAE, we are committed to increasing women's participation in the energy and climate sectors. We have implemented policies and initiatives to promote the participation of women in decision-making and leadership positions, and to provide them with access to education and training opportunities.

One key initiative in this regard is the UAE Gender Balance Council, which works to promote gender equality and the inclusion of women in leadership positions in the private and public sectors. The "Gender Balance Law," which was issued on March 8, 2021, represents a significant step forward in the UAE's efforts to promote gender equality. Masdar's launch of the Women in Sustainability, Environment, and Renewable Energy (WiSER) platform has also increased the participation of women in the energy and climate sectors by providing them with access to training and education programs, as well as networking and mentoring opportunities.

The UAE's efforts to promote gender equality and the inclusion of women in decision-making and leadership positions have been recognized by international organizations. In 2021, the UAE was ranked first in the Arab world and second globally in the World Economic Forum's Global Gender Gap Report.

Roundtable Insights

Infrastructure



Over the past decade, climate events have caused severe damage to infrastructure. This has a cascading effect as it displaces communities, affects jobs and increases vulnerability.

The roundtable discussion on climate-resilient infrastructure, moderated by Lamé Verre, Head of Strategy, Innovation & Sustainability Energy Customer Solutions at SSE PLC & Board Co-chair of Lean-in Equity & Sustainability, and Himaya Quasem, Senior Writer, Masdar, explored how this challenge could also present opportunities for women's leadership.

Last year, there were 10 climate-fueled extreme weather events, each of which caused damage valued at over US\$3 billion^{xvii}, principally to infrastructure, in addition to devastating loss of life.

With climate change-related events increasing in severity, it is now imperative to update and build infrastructure that is resilient to extreme weather shocks.

According to the Organization for Economic Cooperation and Development (OECD), the defining characteristic of climate-resilient infrastructure is that it is planned, designed, built and operated in a way that anticipates, prepares for, and adapts to changing climate conditions.

There is an important gender dimension to climate-resilient infrastructure. Men and women may have differing needs for infrastructure services – for example, access to piped water can support female empowerment in societies where women are typically responsible for collecting water.

Women and men are also affected differently by the impacts of climate change, including disruption to infrastructure^{xviii}. During disasters women may have specific needs. For example, cyclone shelters should be designed with separate toilets for men and women and spaces that allow mothers to breastfeed in privacy.

The roundtable featured participants across various sectors, including government, infrastructure, finance, energy and not-for-profit. The participants agreed that it is essential to include women at the planning, building and management stages of infrastructure projects. As women are generally more used to considering their families' needs, they could bring a more holistic perspective to projects at the design stage. This could result in infrastructure being built that meets the needs of a wider section of society.



The discussion steered around understanding the status quo and the challenges faced by women in striving for climate-resilient infrastructure. The participants explored the environmental, social and financial aspects of the challenges while keeping a keen focus on opportunities and solutions. While the challenges are profound, there are significant opportunities to accelerate impact, spanning from policy-making and financing to implementation.

Diversity at the design and policy level was cited as one of the best ways to incorporate innovative ideas and gender perspectives in the initial stages. Encouraging girls to take up STEM subjects could create the required skill pool for the next decade.

While infrastructure is considered a male-dominated industry, creating a conducive environment for women to take up careers in this field can accelerate the journey toward building climate-resilient infrastructure. Marie Lam-Frendo, CEO of Global Infrastructure Hub, shared an example where its workforce started at 30 percent women four years ago and is now at 70 percent. This was achieved by implementing simple policy changes in recruitment, such as more parental leave.

The past few years have brought about unprecedented challenges with COVID-19, global high inflation, global supply chain issues, the energy crisis, and real threats to economies and livelihoods. Now is the time to ensure we build firmly in the direction of climate-resilient infrastructure, making sure gender inclusivity remains top of the agenda. Making infrastructure resilient to climate change is a means to achieving more resilient societies. To achieve this, it is important to guarantee women's meaningful participation at all levels, assuring their needs and perspectives are systematically taken into account.

Expert Voice



Marie Lam-Frendo
CEO, Global Infrastructure Hub

How important is the role of the private sector in building climate-resilient infrastructure?

More private capital is urgently needed to build climate-resilient infrastructure at the scale and speed required to address climate change. In 2017 the Global Infrastructure Hub (GI Hub) forecast a global investment gap of US\$0.7 trillion a year. Now it's over US\$3 trillion a year with potential to grow higher as the world grapples with economic turmoil, geopolitical tensions, and climate change. It's a worrying reminder of what the public sector has not been able to achieve alone.

Our latest Infrastructure Monitor report shows that overall private investment in infrastructure projects remains stagnant for the eighth year running. Addressing this stagnation and scaling up private investment in infrastructure is more important now than ever before. The GI Hub is supporting global, coordinated action by governments to achieve this. Another important role that the private sector plays in this area, is building the capacity and capability needed to deliver climate resilient infrastructure. This involves strengthening the technical and institutional capacity of countries to adopt and apply new or innovative approaches to sustainable infrastructure development.

What opportunities does the climate-resilient infrastructure domain present to various stakeholders, particularly women?

The UN has found that women are more vulnerable than men to the impacts of climate change. Having access to climate-resilient infrastructure presents numerous opportunities for women, providing them with essential services and creating economic opportunities.

Studies show that women, particularly in emerging economies, save more for the education of their children. Having access to infrastructure will create opportunities for women to save more, fuel the economy, and strengthen their children's education.

What initiatives are being taken by your organization in promoting women's increased participation?

Diversity is a core commitment for the GI Hub, and our team's diversity contributes significantly to our culture and the high performance of our organization. The GI Hub's Board has a strong commitment to ensuring that women are represented equally across the organization. As a result of this commitment, 75 percent of our leaders, 80 percent of our organization, and 50 percent of our Board are women.

Another way in which we have promoted women's increased participation in the infrastructure sector is by having no pay gap and offering equal parental leave to support women returning to work. More generally, we make sure that throughout our events, programs, and initiatives there is a balance of genders. Diversity in infrastructure development and delivery remains critical to ensuring infrastructure serves us all equally.

Roundtable Insights

Finance



Climate finance aims to provide the much-needed cash flow toward mitigation and adaptation efforts. The roundtable discussion titled ‘Ensuring equal access to climate finance’ moderated by Fatimah Bello, Founder and Managing Partner, SWD Futures (SWD), and Cinzia Chiriack, Head of ESG Regulatory Affairs, Bloomberg LP, closely examined the untapped opportunity in applying the gender lens to climate finance.

The past decade saw growing momentum, where public and private climate finance almost doubled, with a cumulative US\$ 4.8 trillion in climate finance committed between 2011-2020. However, reaching climate objectives will require climate investment to increase at least seven times by the end of this decade, as well as the alignment of all other financial flows with the Paris Agreement objectives^{xviii}.

Women and girls who are most vulnerable to the effects of climate change often lead the way in developing innovative climate solutions. Finance is critical to bringing these climate solutions to life. However, women are constrained in accessing climate finance due to factors such as education, lack of asset ownership, perceived risk, social norms and lack of gender-friendly schemes, among others.

According to the OECD, climate-related Official Development Assistance (ODA) that is dedicated to gender equality as the “principal” objective is only 0.04 percent of all climate-related ODA^{xix}.



Equal access to climate finance for women is crucial to addressing the unique perspectives and needs of each group. Equal opportunities and women’s empowerment programs could also benefit from climate finance. To optimize the effectiveness and long-term viability of initiatives, funding methods must address structural disparities and ensure equal access to resources. The roundtable discussion elaborated on opportunities and strategies for improving access to climate finance for women.

The participants unanimously expressed the urge to promote climate financing industry principles, standards and measures, both at global and regional levels. This will enable resources to be allocated to areas where the need is greater and toward the relevant sustainable development goals. All the actors within the financial ecosystem like endowment funds, government banks, private sector banks, multi-lateral development banks, development funds, private sector funds, impact investors and family offices need to incorporate the gender lens into their financing frameworks.

Examples of best practices were shared by the participants. Abu Dhabi Global Markets (ADGM) plans to issue a Sustainable Finance Regulatory Framework, which includes the region’s first comprehensive regulatory framework for ‘green’ investment funds, and an innovative framework for ‘climate transition’ investment funds.

COP27 ended with a historic deal to create a ‘Loss and Damage Fund’, to provide financial assistance to climate-vulnerable countries. HE Dr Dena Assaf, the United Nations Resident Coordinator for the UAE, said, “The funding committee needs to have equality, with women represented at the decision-making level.” Ensuring equal access to climate finance is not just about meeting a moral obligation to the worst-affected group, it is also about maximizing the opportunity to drive transformative social and economic progress in the wake of the climate crisis.

Expert Voice



Ines Rocha

Managing Director, Impact & Partnerships,
European Bank for Reconstruction and
Development (EBRD)

What is the role of financial institutions in ensuring gender-equal access to climate finance?

Over the past 20 years, international efforts on climate change have increasingly adopted a focus on ensuring the active participation of women in shaping solutions in line with their specific needs. It is important to note that women's participation varies across different industries. While women are over-represented in the agricultural sector, they are under-represented in the green energy sectors and in climate leadership. Financial institutions have a key role to play in assessing the market requirements and ensuring gender equal access to climate finance through policy-level changes and implementation of initiatives.

EBRD is an international financial institution with an established strategy for the promotion of gender equality and the equality of opportunity strategy, recognizing that gender equality is central to countries' transition toward becoming well-functioning, sustainable market economies. In fact, by reversing the underlying dynamics of gender inequality, such as reduced access to skills, employment, finance and services, the EBRD region could add several hundred billion to its regional GDP. However, persistent gender inequalities hinder the capacity of women, communities, and economies to adapt to and mitigate climate change.

There is a strong business case for the gender equality and climate action nexus. As active economic and social actors, women are key agents of change in the green transition. Firms that invest in promoting female talent, green tech and green skills will have a competitive advantage.

Which key aspects of adaptation are focus areas for EBRD?

Investing in gender-smart climate investments is an opportunity that we at EBRD cannot miss. The opportunity for climate finance is valued at US\$23 trillion in emerging markets alone by 2030, following government pledges to the Paris Agreement. Gender-lens investing, too, is growing quickly. From 2018 to 2020, US\$7 billion was invested with a gender lens in over 200 businesses in the developing world by the G7 development finance institutions, with another US\$3 billion mobilized by private investors.

EBRD has various initiatives in adaptation, just energy transition, capacity building among others. EBRD is directly involved in ensuring that greening the financial systems in our countries of operations reaches female entrepreneurs and homeowners. For example, as part of EBRD's Green Economy Financing Facilities, EBRD has supported more than 400 women across our region to make their businesses greener and their homes more energy efficient through intermediated green finance accompanied by bespoke technical assistance.

We build our partner financial institutions' capacity to serve the female segment as an untapped market potential. Last year, we organized trainings in Morocco, Kazakhstan, Egypt, Armenia, Georgia and Tajikistan. With tailored gender mainstreaming activities, Tajikistan's Private Finance Initiatives (PFIs) were able to increase the share of female green loan clients from 28 percent in 2018 to 40 percent as of 2021. In Kazakhstan, the results of the closing year were even more impressive: as of 2022, the share of female sub-borrowers stood at 66 percent.

Conclusion & Key Findings

COP 28 to be hosted in the UAE will be a significant milestone marking the highly anticipated Global Stocktake, which will be a comprehensive review of the progress made toward meeting the Paris Agreement goals. Climate adaptation has been identified as a key focus area for COP28. Thought leaders from various sectors, who gathered at the WiSER Annual Forum 2023, were unanimous in their verdict that empowering women to lead climate adaptation will accelerate the world's journey toward a more sustainable future.

Similar to the 17 SDGs, which are intricately connected, the roundtable topics discussed at the WiSER 2023 forum were found to have strong links and synergies. Many common themes, shared opportunities and collaborative initiatives emerged amongst the roundtable discussions.

Some of the common challenges included the lack of social support, apprehension in pursuing careers in unfamiliar industries, absence of women at decision-making levels and a lack of gender-focused schemes.

Despite the diversity of the topics and participants the opportunities, outcomes and proposed solutions had similarities. These included promoting inclusivity across the value chain, bringing diversity into decision-making, enabling women to drive climate education, designing gender-aware policies and unleashing the power of collaboration. These have been discussed in detail in the key findings section.

Research suggests that women are often better leaders in times of crisis. When empowered to actively participate in disaster planning and emergency responses, women showcase a unique knowledge and the skillset that allows communities to recover more quickly and effectively^{xxx}. By shifting focus from women as beneficiaries to women as enablers, results can be achieved. While climate change is a crisis, it also presents an opportunity to put women at the forefront, and to empower them to play a leadership role in adaptation. The WiSER Annual Forum intends to act as the platform to enable this transition through education, engagement and empowerment.

WiSER Annual Forum 2023

Key Findings

Bring diversity into decision making

Unless women have a seat, and a strong voice, at the decision-making table, gender-aligned changes will be tough to implement. The UNSDG 5 on Gender Equality has a target to “ensure women’s full and effective participation, and equal opportunities for leadership at all levels of decision-making in political, economic and public life.”

The roundtable participants pointed to various studies that prove diversity enables better decisions. Through structured training and systemic capacity building, women can be empowered to confidently sit at the decision-making table. This will ensure that women’s perspectives are truly represented, and the ‘right’ measures are put in place.

Policies and practices must be implemented to ensure barriers to women’s participation at decision-making levels are removed. This includes initiatives to counter prejudice and discrimination against women.

Empower at all levels

The widespread benefit of women’s empowerment cannot be experienced unless it happens at all levels. Participants at the roundtable highlighted that women are not a homogenous group, and their needs differ according to their circumstances. While women in indigenous communities might want better access to water, women in the corporate sector may seek mentorship from female role models. Hence, efforts must be focused on promoting inclusivity and empowerment across the board.

Many countries are now putting in place efforts to truly empower women in their communities. HE Hessa bint Essa Buhumaid, the UAE’s Minister of Community Development, illustrated her country’s achievements. On the economic front, the number of licensed companies owned by women has reached 80,025, with over 32,000 businesswomen managing projects worth more than US\$10 billion. She also drew attention to the success of Emirati women in the space sector, where women made up 34 percent of the Emirates Mars Mission Hope Probe team and 80 percent of the probe’s scientific team^{xxxi}.

Position women as change agents

Historically, development programs have viewed women as beneficiaries of aid. However, the role of women as change agents should not be underestimated. Across roundtable discussions, the participants highlighted the untapped potential of engaging women in designing, deciding, and creating development programs. For example, women can be put at the forefront of driving climate education, rather than just being recipients of it.

Indonesia Women’s Earth Alliance Grassroots Accelerator empowers local women to protect their communities and ecosystems from environmental threats like palm oil extraction, plastic pollution, and sea-level rise. Through a four-month training program, women leaders work in interconnected sectors of ecosystem protection, land rights, Indigenous and local wisdom, gender equity, and movement building^{xxxii}.

Similar to the above, initiatives are being implemented around the globe where women are taking the lead. These community-driven approaches benefit the environment and position women as change agents. This puts the power in their hands.

WiSER Annual Forum 2023

Key Findings

Enhance inclusivity in the energy transition

The clean energy transition presents a golden opportunity for creating meaningful impact by enhancing inclusivity. The UNSDGs 7 (affordable, reliable and sustainable energy) and 5 (gender equality) clearly focus on this. The roundtable participants reiterated that women have a variety of roles to play – as consumers, job seekers, job providers, clean energy entrepreneurs, innovators, facilitators, influencers, decision-makers and leaders.

During the discussion, global and regional best practices were discussed, including IRENA's framework for a just and inclusive energy transition. This serves as an inclusive, multi-stakeholder platform that brings together public, private, intergovernmental and non-governmental actors that share a common interest in specific aspects of that transition^{xxviii}.

As countries seek to accelerate their energy transitions to meet their development and climate objectives, conditions are conducive for women to play a pivotal role in the energy transition.

Sensitize men

Although women represent half the global population, the numbers shift when it comes to leadership roles. Overall, the global share of women in leadership roles as illustrated in the World Economic Forum's gender gap report is only 31 percent^{xxix}.

This shows that the agenda of women's empowerment cannot be fulfilled without the active participation of men. The roundtable discussions highlighted the importance of sensitizing men. By creating awareness around the challenges and issues that women face, men can play an enabling role at home and in the workplace.

Initiatives like 'HeForShe' have men standing in solidarity with women to create a bold, visible and united force for gender equality. The men of HeForShe aren't on the sidelines. They're working with women and with each other to build businesses, raise families, and give back to their communities. True success lies in walking the journey together, and not by alienating men.

WiSER Annual Forum 2023

Key Findings

Unearth value of lived experiences

Lived experiences refer to personal knowledge about the world gained through direct, first-hand involvement in everyday events rather than through representations constructed by other people. In the context of climate change, this becomes very relevant. Mostly policies, procedures and development programs are designed by people sitting far away from the reality on the ground. They often fail to consider the feedback of stakeholders who are closest to the situation.

In climate change-related events women are among the most affected, and can devise relevant, contextual and innovative solutions. The roundtable participants emphasized that stories and experiences from communities should be an integral part of climate adaptation solution design.

While data is important, lived experiences complement it by bringing an element of social reality. Sharing lessons is critical for ensuring that finite funding for climate change adaptation is deployed where it is needed most and where it can have most impact^{xxxv}. Unearthing the value of lived experiences will ensure that relevant and contextual policies are created and implemented.

Design gender-aware policies

Gender-aware policies are designed to respond to the needs and interests of women and men. Most policy creation is done at the government level and then cascaded to other sectors, including corporate. Research suggests that gender balance in the political sphere promotes gender balance in the overall workforce^{xxxvi}.

Participants emphasized that gender-aware policies need to be implemented across all sectors. Some of the best practices shared include reference to the UAE's gender balance council, corporates introducing women-friendly workspaces and policies on paternity leave. There was unanimous agreement that women's interests cannot be protected until women are represented at the policy-making table.

Gender mainstreaming is increasingly gaining traction. Through the integration of a gender-equality perspective across all policy actions, governments and organizations are able to ensure that the interests of all stakeholders are protected.

Upskill for green jobs

The clean energy transition will usher in opportunities and challenges for the workforce. There will be investments and jobs around the world. By 2030, there could be over 38 million jobs in the renewable energy sector, according to a report by IRENA and the International Labor Organization^{xxxvii}.

The challenges will come from disruptions to the traditional energy workforce while ensuring a proper alignment of skills with new jobs to capitalize on the clean energy opportunity^{xxxviii}.

Participants discussed the changing energy landscape, clearly acknowledging that skillsets of the past will not be suitable for the future. If women are to capitalize on the opportunities arising from renewables, they will require upskilling.

Upskilling for green jobs can be done as a collaborative initiative amongst stakeholders like governments, international agencies and the private sector. Through structured and systemic capacity-building programs, women can become an integral part of the green workforce.

WiSER Annual Forum 2023

Key Findings

Accelerate equitable financing

Economies must collectively invest at least US\$1 trillion in energy infrastructure by 2030 and US\$3 trillion to US\$6 trillion across all sectors per year by 2050 to mitigate climate change by substantially reducing emissions. In addition, a further US\$140 billion to US\$300 billion a year by 2030 is needed to adapt to the physical consequences of climate change, such as rising seas and intensifying droughts^{xxxx}.

With demand for climate funding increasing steeply, and supply unable to keep pace, the estimated global gap in financing, for both adaptation and mitigation, is widening. Participants highlighted that small-scale entrepreneurs, and women in particular, find it difficult to access climate finance. Hence, the equitable distribution of available funds is crucial.

Implementation of sustainable finance frameworks, that have gender as a primary focus, can go a long way in ensuring women get a fair chance at obtaining funding. Organizations like the Green Climate Fund (GCF) are already taking gender into account when deploying funds.

Unleash the power of partnerships

The UN SDG 17 is about revitalizing global partnerships for sustainable development. The 2030 agenda is universal and calls for action by all countries – developed and developing – to ensure no one is left behind^{xxxx}.

Discussions across all roundtables focused on collaboration, partnerships, and collective efforts. The WiSER Annual Forum – which brought together over 120 influential figures from around the globe – was referenced as a positive example of the power of partnership. With all eyes set on COP28, collaboration and partnerships will be a mainstream discussion.

As this report shows it is important to bring people from different walks of life together to discuss solutions. For example, connecting women farmers with scientists and policymakers with business leaders, can provide the catalyst needed to address complex, costly and urgent problems.

Acknowledgements

WiSER would like to thank the speakers, moderators and WiSER Pioneers who participated in the 2023 WiSER Annual Forum. The insights gathered from the Forum were instrumental in shaping this report.



H.H. Sheikh Shamma bint Sultan bin Khalifa Al Nahyan
President and CEO of UAE Independent Climate Change Accelerators (UICCA)
United Arab Emirates



H.E. Sarah Ryglewski
Minister of State to the Federal Chancellor
Germany



H.E. Khadeeja Naseem
Minister of State for Environment
Climate Change and Technology
Republic of Maldives



Sheikh Dr. Majid Al Qassimi
Founding Partner, SOMA MATER



Nigel Topping
UN Climate Change
High Level Champions for COP26
United Kingdom



H.E. Dr. Nawal Al Hosany
Permanent Representative of the UAE to
IRENA International Renewable Energy
Agency (IRENA)



H.E. Dr. Dena Assaf
UN Resident Coordinator for the UAE
United Nations



Catherine Stewart
Canada's Climate Change Ambassador
Government of Canada



Damilola Ogunbiyi
Chief Executive Officer and Special
Representative of the UN Secretary-General
for Sustainable Energy for All and Co-Chair of
UN-Energy



Laila Mostafa Abdulatif
Director General
Emirates Nature - WWF



Omar Fayed
Founder and Chief Executive Officer
Earth Space Technical Ecosystem Enterprises
(ESTEE SA)



Haifa Al Kaylani
President & Founder
Arab International Women's Forum



Habiba Al Marashi
Co-founder & Chairperson
Emirates Environmental Group



Dr. Scott Kennedy
Co-Founder & Chief Executive
ClearSky Power



Eng. Zeinab Bashier
Founder and Chairwoman
Z For Sustainable Development.



Sonia Weymuller
Co-Founder & General Partner
Venturesouq (VSG)



Oliver Renwick
Managing Director
ESTEE Arabian Gulf



Alison Silewicz Fleming
Managing Director
Sasena LLC



Nadja Haakansson
Managing Director, Africa
Siemens Energy



Ines Rocha
Managing Director, Impact & Partnerships
European Bank for Reconstruction and
Development (EBRD)



Kathleen Swalling
Managing Director, Maritime Strategy
and Legal Advisor
Nature Based Solutions



Fatimah Bello
Founder and Managing Partner
SWD Futures (SWO)



Amruta Kshemkalyani
Founder and Managing Director
AK Sustainability Advisory



Fatema Al Nuaimi
Chief Executive Officer
ADNOC LNG



Tayba Al Hashemi
Chief Executive Officer
ADNOC Sour Gas



James Baker
Chief Executive Officer
Graphene@Manchester, The University of
Manchester



Dr. Nashwa Al Ruwaini
Chief Executive Officer & Board Member
Pyramedia Productions



Franco Atlassi
Chief Executive Officer, Siemens Smart
Infrastructure, Middle East
Siemens



Mucha Hazel Nyandoro
Chief Executive Officer
Manelish



Marie Lam-Frendo
Chief Executive Officer
Global Infrastructure Hub



Ingrid Orozco
Chief Executive Officer
Ulead International



Monica Fonseca
Chief Executive Officer and Creative Director
MF Bullets



Maryam Al Mansoori
General Manager
Rebound Plastic Exchange



Ritsuko Nakayama
General Manager, Diversity & Women
Inclusion/CSR/PR Dept.
Japan Cooperation Center Petroleum (JCCPP)



Dr. Eiji Iwamatsu
General Manager, Al Khobar Office
Japan Cooperation Center Petroleum (JCCPP)



Sophie Hildebrand
Chief Technology Officer
ADNOC



Khouloud Al Nuwais
Chief Sustainability Officer
Emirates Foundation



Hanane El Gana
Chief Sales Officer
Energie Excellence du Maroc (EEM)



Marjan Faraidooni
Chief of Education and Culture and Chief
Human Resources Officer
Expo City Dubai



Dr. Steven Griffiths
Senior Vice President, Research and
Development, Professor of Practice
Khalifa University of Science and Technology



Norm Gilsdorf
Senior Consultant
Honeywell Global High Growth Regions



Fatemah Din
Senior Vice President, Strategic Growth
Initiatives - MENASA
SkyPower Global



Eileen O'Connor
Senior Vice President for Communications
Policy, and Advocacy
The Rockefeller Foundation



Daniela Schoepfner
Vice President, Finance
Siemens Energy Middle East



Christina Struller da Costa
Vice President Corporate Affairs, Indian
subcontinent, Middle East, and Africa (ISMEA)
UPS



Hanan Al Hadhrani
Vice President, Commercial and Project
Finance
Abu Dhabi National Energy Company (TAQA)



Fatima Al Shaygi
Vice President, UAE Asset Management
Center Unit (IACCU)
Abu Dhabi National Energy Company (TAQA)



Samar Al Hameedi
Vice President, Sustainability & ESG
ADNOC



Pradnya Haldipur
Vice President of Development and
Communications & Acting Co-President
Institute for Sustainable Communities



Gauri Singh
Deputy Director General
International Renewable Energy Agency
(IRENA)



Helena McLeod
Deputy Director General, Head of the Green
Growth Planning & Implementation Division
Global Green Growth Institute (GGGI)



Helle Kristoffersen
President of Strategy and Sustainability,
Member of the Executive Committee
TotalEnergies



Anne-Marie Choho
Directrice Générale, Executive Vice-President
Société d'études techniques et économiques
(SETEC)



Wendy Lam
Advisory Director, Climate Technology
Solutions
Baker Hughes



Hanan Al Yafei
Executive Director, Responsible Investing
Mubadala Investment Company



Monique Ntumngia
Founder & Executive Director
Green Girls Organisation



Tony Verb
Co-Founder & Executive Director
Carbonless Asia



Sandra Helayel
Director for Government Engagement,
Gulf & Levant
GE Corporate



Dina Storey
Senior Director
UAE Independent Climate Change
Accelerators (UICCA)



Malakeh El Hajj
Director of Knowledge and Innovation
Abdulla Al Ghurair Foundation for Education



Dr. Ebtesam Almazrouei
Director of the Artificial Intelligence-Cross
Center Unit (IACC3)
Technology Innovation Institute (TII)



Dr. Hosni Ghedira
Director of Research Engagement
Mohamed bin Zayed University of Artificial
Intelligence (MBZUAI)



Stephanie Asgill
Director of Sustainability & Gender Equality
Dubai Holding



Junko Takeda
Director, Senior Executive Officer
Cosmo Energy Holdings Co., Ltd.



Nicole Iseppi
Director of Energy Innovation
Booz Earth Fund



Eng. Amal Saleh Albraiki
Strategic Planning Sector Executive Director
Department of Energy



Dr. Shamma Ahmed AlMalek
Strategy Development Director
Department of Energy



Sheikha Al Mazrouei
Acting Executive Director - Integrated
Environment Policy & Planning
Environment Agency - Abu Dhabi



Katarina Uherova Hasbani
Partner and Global Director of Strategy
and Advisory
AESO



Swapna Gupta
Partner
Avana Capital



Zoe Knight
Group Head, Centre of Sustainable Finance
and Head of Climate Change MENAT
HSBC



Clare Dalton
Head of Delegation to the United Arab
Emirates
International Committee of the Red Cross
(ICRC)



Sirivan Chaleuxnay
Head, Energy Industry BD - EMEA/APAC
Amazon Web Services



Mariam Al Qubaisi
Head of Sustainability & Business Excellence
Ethihad Aviation Group



Lamé Verre
Head of Strategy, Innovation & Sustainability,
Energy Customer Solutions
SSE Energy Customers Solutions



Belinda Scott
Head of Sustainability
Gulf International Bank



Nadia Boumeziout
Head of Sustainability & Information
Governance
Zurich International Life, Middle East



Cinzia Chiriac
Head of ESG Regulatory Affairs
Bloomberg L.P.



Khaula Bin Buti
Head, Quality Assurance, Innovation Team
leader and ESG Committee Member
ADNEC Group



Ayako Endo
Deputy General Manager, Company Planning
& Management Dept.
ENEOS Corporation



Fatima Al Yamahi
Manager, Flight Dynamics
Al Yah Satellite Communications Company
(Yahsat)



Maitha Mohamed Al Hameli
Section Manager, Marine Assessment and
Conservation
Environment Agency Abu Dhabi (EAD)



Iva Ilieva Hamel
Resident Representative, United Arab
Emirates
World Bank Group



Maria Flouda
Sustainability, Quality and OHS Founder and
Managing Consultant
Sustainability Switch Consultancy



Angela Homs
Founder
Ignite Partners



Abigail Kima
Host and Producer
Hali-Hewa Podcast



Ameerah Khalid
Host and Producer
Inspiring UAE Women Podcast



Mona A. Salem
Senior Advisor
Environment Agency - Abu Dhabi (EAD)



Anuki Batiashvili
Advisor to Chief Executive Officer
Georgian Energy Development Fund (GEDF)



Lola Fernandez Flores
Senior Investment Associate
VentureSouq (VSO)



Lawratou Bah
Program Assistant Manager
NAMA Women Advancement Establishment



Dr. Samah Alsayed
Program Officer, Renewable Energy
Education
International Renewable Energy Agency
(IRENA)



Eng. Adhari Obaide Al Sarkal
Awareness & Behavioral Change Specialist
Department of Energy



Suha Al Mubarak
Senior Policy Specialist, Policy & Legal
Financial Services Regulatory Authority
(FSRA), Abu Dhabi Global Market (ADGM)



Fatima Al Hallami
Climate Negotiator
Office of the UAE Climate Change Special
Envoy



Masumi Klein
Japanese Conference Interpreter



Himaya Quasem
Senior Writer
Masdar (Abu Dhabi Future Energy Company)



Shalom Iboh
Field Engineering Operator
Notore Chemicals Industries, Plc
WISER Pioneer



Marialicia Jauregui
Life Cycle Assessment Expert
ZF Division E (Electromobility)
WISER Pioneer



Noor Sakr
Business Development Engineer
FAWAZ Group
WISER Pioneer



Noora Albalooshi
Assistant Scientist, Fisheries
Management
Environment Agency - Abu Dhabi
WISER Pioneer



Erika Niino-Esser
Business Developer & Technical Specialist
thyssenkrupp Industrial Solutions
WISER Pioneer



Michelle Sebastian
Regional Sensing Manager - Middle East,
Turkey, Africa
Hills Middle East LLC
WISER Pioneer



Fatima Al Suwaidi
Shutdown Planning Engineer
ADNOC Offshore
WISER Pioneer



Reem Al Kuwaiti
Contract Engineer
ADNOC Offshore
WISER Pioneer



Mengjia Gao
Medium-Long Term Solutions Manager
(Project Finance - ESG)
Eihad Credit Insurance (ECA)
WISER Pioneer



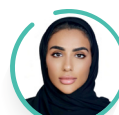
Sonia Sanchez
Research Analyst
Zero Carbon Ventures
WISER Pioneer



Hajar Ben Charrada
Manager, Strategy & Generation Portfolio
Management
Abu Dhabi National Energy Company (TAQA)
WISER Pioneer



Fatmah AlHefelti
WISER Pioneer



Haya Alameri
Business Performance Analyst
TRAFECO - Abu Dhabi
WISER Pioneer



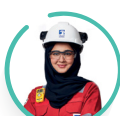
Hind Althosani
Control Engineer
Abu Dhabi Distribution Company
WISER Pioneer



Amina Sadoui
Operational Finance Associate
General Electric - GE Gas Power part of GE
Verona
WISER Pioneer



Akbobe Abilkaikyzy
Research Assistant
Mohamed bin Zayed University of Artificial
Intelligence (MBZUAI)
WISER Pioneer



Maryam Sajwani
Senior Instrumentation and Control engineer
ADNOC
WISER Pioneer



Nicole Bahati
Professional Intern
Africa Improved Foods
WISER Pioneer



Marwa Alraeesi
Senior Engineer
Dubai Electricity and Water Authority
WISER Pioneer



Iman Ustadi
Head Negotiation
Office of the UAE Climate Change Special
Envoy
WISER Pioneer



Yasmin Fansa
MENA Sustainability Lead
PepsiCo
WISER Pioneer

REFERENCES

- i. UNFCCC. (2022). United Nations Climate Change. Retrieved from <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction>
- ii. Osman-Elasha, B. (2019). United Nations. Retrieved from <https://www.un.org/en/chronicle/article/womenin-shadow-climate-change>
- iii. <https://www.ohchr.org/en/stories/2022/07/climate-change-exacerbates-violence-against-women-and-girls#:~:text=It%20is%20estimated%20that%2080,High%20Commissioner%20for%20Human%20Rights>
- iv. (2021). Retrieved from UNICEF: <https://www.unicef.org/education/girls-education#:~:text=Despite%20evidence%20demonstrating%20how%20central,of%20upper%2Dsecondary%20school%20age.>
- v. <https://reliefweb.int/report/world/africa-s-first-continent-wide-survey-climate-change-literacy-finds-education-key>
- vi. UN Women - Rebuilding for Resilience. (n.d.). Retrieved from UN Women: https://www.unwomen.org/en/hq-complex-page/covid-19-rebuilding-for-resilience?gclid=Cj0KCQiA_P6dBhD1ARIsAAGI7HCSolSLfnzsDMb8hrP_KmvaZ_vdxuC4lDpveF1GGhYsNbLz79yf0caAop9EALw_wcB
- vii. <https://www.weforum.org/agenda/2020/10/girls-school-africa-developing-nations-gdp>
- viii. (n.d.). Retrieved from UNESCO: <https://en.unesco.org/themes/education-sustainable-development/toolbox>
- ix. IRENA. (2022, November). IRENA. Retrieved from <https://www.irena.org/News/articles/2022/Nov/IRENAs-New-Network-Advances-Education-on-Energy-Transition>
- x. (2018). Retrieved from BBC: <https://www.bbc.com/news/science-environment-43294221>
- xi. ADPC: Case Study on Building Safer Communities in South Asia. (2007). Retrieved from http://www.adpc.net/v2007/IKM/ONLINE%20DOCUMENTS/downloads/2008/3_CaseStudyShelterL.pdf
- xii. Slow Food: Indigenous Women in Nicaragua forging future with food sovereignty. (2020). Retrieved from Slow Food: <https://www.slowfood.com/indigenous-women-in-nicaragua-forging-a-future-with-food-sovereignty/>
- xiii. Forum, W. E. (2022). Global Risks Report 2022.
- xiv. https://wedo.org/wp-content/uploads/Gender_and_Biodiversity_WED0.pdf
- xv. Wangari Maathai: Death of a visionary - BBC News
- xvi. OECD. (2022). "Supporting women's empowerment through green policies and finance". Paris: OECD Publishing.
- xvii. Retrieved from United Nations: <https://press.un.org/en/2022/wom2213.doc.htm>
- xviii. Gender and climate change: Do female parliamentarians make difference? - ScienceDirect
- xix. Retrieved from United Nations: <https://www.wfp.org/global-hunger-crisis#:~:text=A%20record%20349%20million%20people,survive%20in%20famine%20like%20conditions.Nations,U.> (2022, March). United Nations Meetings coverage and press releases. <https://press.un.org/en/2022/wom2213.doc.htm>
- xx. US AID's office of Women in Development . (2018). Food Security and Gender. Washington DC.
- xxi. UN Women. (n.d.). Retrieved from UN Women : Facts and Figures: <https://www.unwomen.org/en/news/in-focus/commission-on-the-status-of-women-2012/facts-and-figures#:~:text=Evidence%20indicates%20that%20if%20these,around%2012%20to%2017%20percent.>
- xxii. Sustainability | Graphene | Graphene Flagship [graphene-flagship.eu]
- xxiii. FAO - News Article: Closing the gender gap in agriculture
- xxiv. UNDP. (2022). To be just, the energy transition must include and empower women: UNDP Blog. Retrieved from UNDP: <https://www.undp.org/blog/be-just-energy-transition-must-include-and-empower-women>
- xxv. <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/women-in-the-workplace>
- xxvi. World Economic Forum . (2023, Jan). Retrieved from 10 costliest climate disasters of 2022: <https://www.weforum.org/agenda/2023/01/10-costliest-climate-disasters-of-2022/>
- xxvii. OECD. (2018). Climate-resilient Infrastructure, OECD Environment Policy Paper No. 14. Paris: OECD.
- xxviii. (2021). Retrieved from Climate Policy Initiative: <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-a-decade-of-data>
- xxix. OECD. (2022). "Development Finance for Gender-Responsive Climate Action". Paris: OECD Publishing .
- xxx. Schueman, L. J. (2021). One Earth. Retrieved from One Earth : Why are women key to solving the climate crisis?: <https://www.oneearth.org/why-women-are-key-to-solving-the-climate-crisis/#:~:text=Women%20are%20the%20most%20impacted,are%20disproportionately%20felt%20by%20women.>
- xxxi. Arabian Business : UAE Making Significant Progress in Empowering Women. (2022, June). Retrieved from Arabian Business: <https://www.arabianbusiness.com/politics-economics/uae-making-significant-progress-in-empowering-women-at-legislative-institutional-strategic-levels>
- xxxii. One Earth. (n.d.). One Earth: Five Climate Solution Projects around the world powered by Women. Retrieved from One Earth: <https://www.oneearth.org/five-climate-solution-projects-around-the-world-powered-by-women/>
- xxxiii. IRENA. (2021). IRENA. Retrieved from <https://www.irena.org/How-we-work/Collaborative-frameworks/Just-and-Inclusive-Energy-Transition>
- xxxiv. <https://www.weforum.org/reports/global-gender-gap-report-2022/in-full/2-4-gender-gaps-in-leadership-by-industry-and-cohort/>
- xxxv. Ross Westoby, M. F. (2020). Sharing Adaptation Failure to Improve Adaptation Outcomes. One Earth. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590332220304322#bib7>
- xxxvi. Women Deliver. (2021). Retrieved from <https://womendeliver.org/investment/strengthen-womens-political-participation-decision-making-power/>
- xxxvii. <https://www.irena.org/publications/2022/Sep/Renewable-Energy-and-Jobs-Annual-Review-2022>
- xxxviii. International Energy Agency. (2022). Skills Development and Inclusivity for Clean Energy Transition.
- xxxix. IMF. (2022). Retrieved from IMF: How to scale up private climate finance in emerging economies: <https://www.imf.org/en/Blogs/Articles/2022/10/07/how-to-scale-up-private-climate-finance-in-emerging-economies>
- xxxx. UN : Global Partnerships. (2020). Retrieved from UN: <https://www.un.org/sustainabledevelopment/globalpartnerships/#:~:text=Goal%2017%20is%20about%20revitalizing,private%20sector%2C%20and%20civil%20society.>



wiser@masdar.ae
masdar.ae

📧 f wiser.masdar
in WISER Network