

Powering Equality

Women's entrepreneurship transforming
Asia's energy sector



Copyright © *United Nations Environment Programme (2020). Powering Equality: Women's entrepreneurship transforming Asia's energy sector. UNEP, Bangkok.*

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The United Nations Environment Programme would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme.

Editors: Amy Reggers, Prashanthi Subramaniam, Parimita Mohanty, Annette Wallgren

Cover: Invisible Ink

The editors would like to extend their gratitude and acknowledge the valuable contributions that Soma Dutta and Sheila Oparaocha of ENERGIA-International Network for Gender and Sustainable Energy have made in moving this publication from idea to actualization. We are grateful for Ms. Dutta who is instrumental in authoring and guiding this publication and Ms. Oparaocha for bringing her experience and strategic guidance to this endeavour.



Acknowledgments to the external reviewers Karan Sehgal (International Fund for Agricultural Development (IFAD)), Anjali Garg (International Finance Organization (IFC)), Tharinya Supasa (ASEAN Centre for Energy), Sandy Fajrian (ASEAN Centre for Energy), Iqlima Fuqoha (ASEAN Centre for Energy), Akbar Swandaru (ASEAN Centre for Energy), Lana Zaman (UN ESCAP Energy Division), Karina Kolbrún Larsen Climate Technology Centre & Network (CTCN)), Joyashree Roy (Asian Institute of Technology (AIT)) and Inkar Kadyrzhanova (UN Women).

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.

Foreword	03	
Acronyms	05	
Key messages	06	
Introduction	09	<ul style="list-style-type: none"> • About EmPower • In this publication
Gender, energy and climate in global sustainable development agenda	15	
Women and renewable energy entrepreneurship: rationale	23	<ul style="list-style-type: none"> • Why invest in women's entrepreneurship in renewable energy • Investing in women's entrepreneurship in renewable energy: macro level gains • Investing in women's entrepreneurship in renewable energy: a business case
Unpacking women's entrepreneurship programmes	37	<ul style="list-style-type: none"> • Barriers faced by women as entrepreneurs selling clean energy products and services • An overview of business models and strategies • Case studies • Coordinated, multi-partner programming: ENERGIA's WEE programme • Connecting locally embedded entrepreneurs with technology suppliers: IFC Lighting Asia/ India • UNEP-UN Women EmPower: Women for Climate-Resilient Societies. • Solar based irrigation in Bangladesh: IDCOL • Building a cadre of women solar engineers through technology demystification: Barefoot college, India • Reaching renewable energy to the last mile: Kopernik's Wonder Women, Indonesia • Mobilizing local finance for women entrepreneurs: WEE Nepal • Building on rural women's traditional skills: Cambodia Improved cookstoves programme • Tiered accountability and vertically integrated supply chain: Sakhi Unique Rural Enterprise, India • Lessons from women's entrepreneurship programmes
The way forward in a post COVID world	61	<ul style="list-style-type: none"> • Actions for national and local governments • Actions for donors and inter-governmental organizations • Actions for development practitioners and civil society • Actions for private sector and finance institutions
Conclusions	69	
References	71	



Photo: Vidura Jena Bahadur / UN Women

Foreword

With less than a decade left to achieve the Sustainable Development Goals, we are at an inflection point. COVID-19 has brought mass unemployment alongside an extreme economic downturn. Though our headlines are now dominated by the pandemic, the climate crisis has never gone away. This pandemic is merely a preview of the potential upheaval that climate change can bring.

In times like these, inequality, especially in developing economies, continues to exacerbate. It is women, often the backbone of vulnerable communities, who are expected to shoulder the burden of survival and recovery.

The energy sector presents one of our biggest opportunities to change this status quo and build resilience for all. By 2030, renewable energy sources are likely to power over 60% of new access to electricity. New ways of delivering energy through off-grid and mini-grid systems are democratizing access to electricity and is giving women and vulnerable communities, new economic freedoms.

While we have seen great jumps in electrification across the Asia-Pacific region, last-mile consumers in many rural areas are still falling through the cracks. As we aim to build back better from the pandemic, women's businesses in the energy sector can help scale up decentralized energy systems to reach these communities and power households and essential services. From influencing purchasing decisions to accessing new and often impenetrable markets to diversifying the sector, women are vital agents of change. We need to invest in their experience and leadership in championing for a renewables-based recovery.

This will require innovation, but we don't have to reinvent the wheel. Asia and the Pacific boasts of a wealth of experience in growing enterprises for climate action. "Powering Equality: Women's entrepreneurship transforming Asia's energy sector" is an initiative by the joint UN Environment Programme-UN Women project- EmPower: Women for Climate-Resilient Societies to capture the evidence and lessons that make the case for investing in women-led energy enterprises and supply chains. The report considers various business models spanning across sectors like agriculture, WASH, public infrastructure, nutrition and the policy environment that can reinforce this.

This recovery is presenting an opportunity to double down on the fight against climate change and make the new normal a better one. We must seize this opportunity while we can and empower women entrepreneurs for a resilient future.



Dechen Tsering

Regional Director and Representative
for Asia and the Pacific, United Nations
Environment Programme

Acronyms

A breakdown of acronyms you will encounter throughout this publication.

APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BDS	Business development services
CREE	Community Rural Electrification Entities
GBA	Global Banking Alliance for Women
DREA	Decentralized renewables for energy access
GHG	Greenhouse gases
ICT	Information and communication technologies
IDCOL	Infrastructure Development Company Limited
IFC	International Finance Corporation International Finance Corporation
MSME	Micro, small and medium enterprises
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NDC	Nationally determined contributions
NGO	Non- governmental organization
REDD	Reducing emissions from deforestation and forest degradation
RE	Renewable energy
SDC	Sustainable Development Goal
SME	Small and medium enterprises
STEM	Science, Technology, Engineering and Mathematics
SURE	Sakhi Unique Rural Enterprise, India
UNEP	United Nations Environment Programme
WEE	Women's Economic Empowerment programme of ENERGIA

Key messages

This publication examines energy access and the need to strengthen the livelihoods of the poor, especially women, in Asia. More critical today than ever before, as governments prepare to deal with the economic and human crisis that COVID 19 has brought with it, promoting women's entrepreneurship in renewable energy provides a unique opportunity to achieve inclusive growth and climate resilience.

- 01** Achieving SDG7, i.e. universal access by 2030 to affordable, reliable, sustainable and modern energy services, is essential for achieving other SDGs, including those related to gender equality, health, poverty reduction, climate and environment. Vice-versa, gender equality and women's empowerment are fundamental to achieving universal energy access.
- 02** In developing countries, women bear most of the responsibility for household tasks such as collecting water and firewood, cleaning and washing, bearing 60-80% of unpaid domestic work globally. At the same time, as informal workers and entrepreneurs, women are earning less, saving less, and holding more insecure jobs. Since the outbreak of COVID 19, unpaid care work in homes is increasing due to social distancing practices, school closures and home schooling, heightened care needs of older and sick people, and more cooking being done at home.
- 03** The energy sector is experiencing a fundamental shift towards a renewable, decarbonized energy system. Moving forward, decentralized renewables for energy access (DREA) systems will play a pivotal role in meeting universal energy goals.
- 04** DREA systems provide good opportunities to open new economic potential for the poor, unlock resilient livelihoods for communities,

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_13814

