KEY POINTS

"Increasing access

women and girls —

—UN-Energy, The Energy Challenge for Achieving the Millennium Development Goals, 2005, p.8

in health, education and

productive activities."

to energy brings

major benefits to

Access to better energy services can improve women's social, economic and political status — reducing the time and effort involved in household chores, providing better health and educational conditions, expanding income-generating opportunities, and easing their participation in public affairs.

At the same time, greater sensitivity to gender issues increases the effectiveness of energy programmes and policies, as well as other types of development activities that involve energy use, by ensuring that the needs and concerns of both men and women are taken into account.

Availability of kerosene or liquefied petroleum gas, improved stoves, electricity, and mechanical power significantly improves the quality of life for women in rural areas and relieves them of much of the difficult, unpaid work currently required to care for

Modern Fuels and Technology Options for Meeting

More efficient stoves or solar cookers

Biomass briquettes

Biogas or bioethanol produced in biomass digester

Mechanical power for water pumping, household and commercial enterprises, and transportation

Diesel generators

Wind turbines

Hydro-electric generators

Solar photovoltaic panels

Hybrid generating systems

Women's Needs for Energy

Cooking, heating, food processing

Liquefied petroleum gas (LPG) or kerosene

Windmills, water mills or solar pumps

Motors run on liquid fuel (gasoline, diesel or biofuel)

Lighting, communications, refrigeration, and health, education and social services

Electrical grid

EMPOWERING WOMEN

Decision-makers often view their energy related choices as gender neutral, however men and women are affected differently by energy policies wherever their home, work and community roles differ. Economic development policies thought to be gender blind may actually reinforce gender inequalities. For example, small amounts of electricity at home in the evening hours may improve the quality of life for some members of the family, allowing them to read or watch television, while for women, it may simply extend the burdens of the working day into the evening hours when they would otherwise be able to rest.

Attention to these sorts of differing interests is needed in order to achieve effective and equitable distribution of energy and development services. Using a 'gender mainstreaming' approach ensures that the different impacts of an action or policy for men and women are evaluated so that gender inequality is not perpetuated.

Participants in National Energy Policy Forum, Zambia, 2001

Sub-sector	Total No. of Participants	No. of Women Participants	Percentage of Women
Wood Fuel	35	4	11%
Renewable Energy	31	1	3%
Petroleum	31	1	3%
Coal	22	3	14%
Electricity	39	3	8%
Energy Conservation	36	3	8%
Source: Chandi, 2001			

As the table above shows, women are often under-represented in discussions about energy policies. Increasing the number of women involved in energy policy decisions is one way of improving the likelihood of women's concerns being taken into account.

WOMEN AS ENERGY ENTREPRENEURS

The Upesi Rural Stoves Project in Kenya promoted the adoption of more efficient stoves in rural areas. Its goal was to improve the living and working conditions of women in rural households by enabling a significant number of them to benefit from fuel saving wood-burning stoves. By working with interested women's groups and involving them in the design and field testing of the stoves, the project was able to take advantage of women's knowledge and experience. Besides training women in stove production, distribution and installation, the project focused on improving their marketing skills. Benefits to families in the project areas included improved health and time savings for users of the more efficient stoves, as well as relief from the pressures caused by wood fuel scarcity.

—From "Upesi Rural Stoves Project in Kenya" by Beatrice Khamati Njenga in Generating Opportunities: Case Studies on Energy and Women (New York: UNDP, 2001)

"Empowered women can be some of the **most** effective drivers of development."

—UN Secretary-General Kofi Annan, Report: In Larger Freedom: Towards Development, Security and Human Rights for All, 2005, paragraph 40

Beijing Platform for Action, adopted at the Fourth World Conference on Women 1995

Paragraph 249. Women remain largely absent at all levels of policy formulation and decision-making in natural resource and environmental management, conservation, protection and rehabilitation, and their experience and skills in advocacy for and monitoring of proper natural resource management too often remains marginalised in policy-making and decisionmaking bodies, as well as in educational institutions and environment-related agencies at the managerial level.

CSD 9 Decision, adopted by the UN Commission on Sustainable Development, 2001

Paragraph 36. The Commission recommends, in particular, international cooperation in the following areas:....(7) Supporting the international endeavours to promote equal access and opportunities for women in relation to energy, including credit facilities and involvement in energy policy decision-making processes.

Johannesburg Declaration on Sustainable Development, adopted at the World Summit on Sustainable Development, 2002

Paragraph 20. We are committed to ensuring that women's empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium Development Goals and the Plan of Implementation of the Summit.

2005 World Summit Outcome, adopted by the UN General Assembly September 15, 2005

Paragraph 58. We remain convinced that progress for women is progress for all....we resolve to promote gender equality and eliminate pervasive gender discrimination by...(e) Ensuring equal access of women to productive assets and resources, including land, credit and technology.







Fact Sheet on **Energy, Gender** and Sustainable Development





MEETING THE MDGs

Empowering Women, Fighting Poverty

Recognising the importance of women's full participation in development initiatives, the Millennium Development Goals adopted by the UN General Assembly in 2000 set international targets for promoting gender equality and empowering women. In addition, empowerment of women is a cross-cutting issue that is critical for poverty alleviation and achievement of the other Millennium Development Goals.

Energy for Achieving Development

Access to energy, too, is a critical factor for achieving the development goals relating to poverty alleviation, improvements in health and education, and environmental sustainability — as well as the empowerment of women. Energy services such as lighting, cooking, heating and cooling, water pumping, refrigeration, transportation and communications are essential for economic growth and social advancement, and increased access to these services can help women move towards greater equality and empowerment.

Gender Roles Hold Women Back

In many places, traditional gender roles, financial subordination, lack of education, and social constraints limit women's ability to improve their economic and political status. Typical divisions of labour keep women in the home with responsibilities for everyday household maintenance tasks and child rearing, restricted in their ability to earn their own money and engage in civic activities. When women do engage in farming or business, they are often constrained by laws or social discrimination that prevent them from owning land, borrowing money, gaining access to natural resources, or receiving training and extension services.

Energy for Women's Needs

Because of these socially-determined roles and constraints, lack of energy has a disproportionate impact on women and girls who are living in conditions of poverty in rural areas, or in 'informal' urban settlements. Although access to more modern energy alternatives will not necessarily lead to greater equality in gender roles, it can at least relieve some of the most burdensome and unhealthy aspects of their daily lives and expand the development options available to women, their families and their communities.

Photo Credits: Cover photo, UNDP; top inset, ENERGIA Photo Library; middle inset, IFAD/L. Dematteis; bottom inset, GTZ. Interior photos: ENERGIA.

HOW ARE GENDER AND ENERGY RELATED TO THE MILLENNIUM DEVELOPMENT GOALS

MDG 1 Eradicate Extreme poverty and hunger

Since more women than men are living in poverty, ensuring that women's energy needs are met will reduce women's burdens in providing food and water for their families, and improve their ability to earn income.

Achieve universal primary education

Girls are more likely than boys to be kept home from school because they are needed to help their mothers with the burdens of gathering fuel and water and performing domestic and agricultural chores, or because there is not enough money to send them.

1DG 3

Promote gender equality and empower women

Better access to energy services frees women from extreme household drudgery, increases their educational and employment possibilities, and allows them to participate more fully in community and political affairs.

MDGs 4, 5 and 6 Reduce child and maternal mortality and combat infectious diseases

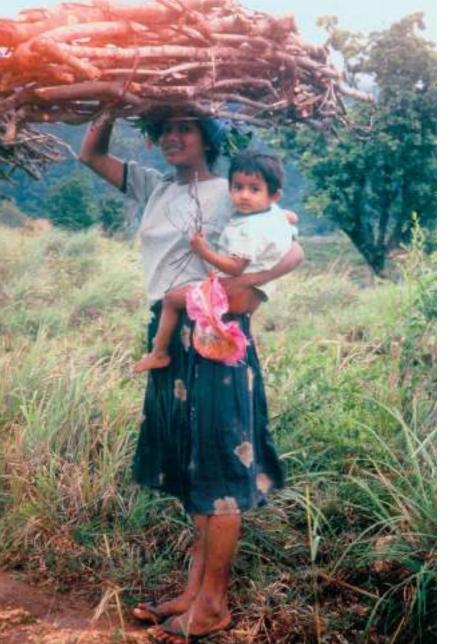
Cleaner cooking fuels and improved stoves reduce respiratory illnesses that affect women and children. Pumped water from clean sources, and/or energy for purifying water, reduces the spread of water-borne diseases associated with child mortality. Energy services allow health clinics to have lights, water pumps, refrigeration for drugs and vaccines, medical instruments, fans and sterilisers.

MDG 7 Ensure environmental sustainability

Women, especially in rural areas, affect the sustainability of land and natural resources in their traditional roles as managers of wood and biomass fuel supplies and related environmental resources.

"Throughout their entire
life cycle, women's
daily existence and long-term
aspirations are restricted by
discriminatory attitudes,
unjust social and economic
structures, and a lack of
resources in most countries
that prevents their full
and equal participation."

—Fourth World Conference on Women, 1995, Beijing Platform for Action, paragraph 38



WOMEN'S WORK

- The poorest women in the world are employed in agriculture, or 'informal' work which is generally unregulated, insecure, and poorly paid, often dangerous, and undercounted in employment statistics.
- "Women remain in primarily sex-segregated jobs with lower pay and less job security....And even as they take on more responsibilities in the paid employment sector, they remain the primary caretakers of their families."
 - —UNIFEM, Progress of the World's Women 2002, p.30
- Women produce between 60 and 80% of the food in most developing countries and are responsible for half the world's food production.
- "Given women's heavy workload on and off the farm, technologies that ease the burden on women should be made more broadly available...[to] ease labor and improve agricultural processing and productivity."
 - —UN Millennium Development Report, Task Force on Hunger, 2005, p.106
- Women's unpaid work includes: performing daily maintenance tasks, such as shopping, food preparation, cooking, laundry, and housecleaning; raising and caring for children; growing food and caring for livestock; making or acquiring household goods such as pottery, clothing, and medicines; caring for the sick, elderly and disabled; and providing voluntary community services for schools and other organisations.

"There are those who hold that there is a strong relationship between unpaid labour and the impoverishment of women. ... The measurement of unpaid labour would show an important difference in household income between households with a person devoted to domestic work and care-giving (maleheaded households) and households without which must assume the private costs associated with this work (femaleheaded households)."

—Social Watch, Unkept Promises, 2005, p.21

In What Ways Are Women in Developing Countries Particularly Affected by Lack of Energy Services?

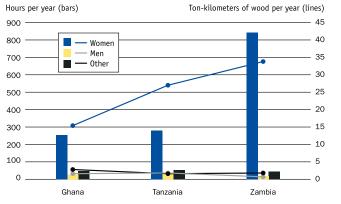
- They grow food, maintain households, raise children, and operate small-scale enterprises without mechanical or electrical equipment or modern fuels.
- They have to find, collect and carry water and traditional fuels such as wood, charcoal, and agricultural wastes.
- They suffer health problems from hauling heavy loads, working over smoky fires, and giving birth without adequate health care facilities.
- They lose out on education and employment opportunities due to their household burdens.

"The time women and girls spend on routine tasks can be reduced dramatically if the appropriate infrastructure is in place."

—UN Millennium Project, Task Force or Education and Gender Equality, 2005, p.66

Women Are the Primary Collectors of Fuelwood

Hours spent and volume collected by sex in Ghana (1989), Tanzania (1989) and Zambia (1991)

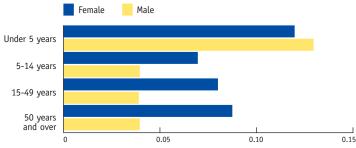


Note: "Other" hours and "Other" volume include children's collection of fuelwood and various combinations of men's, women's and children's collection efforts.

Source: Maimberg Calvo 1994

Women in rural areas rarely have access to motor vehicles, or even carts or draft animals, to help them transport their loads. In addition to the time and physical exertion involved in gathering fuel, women must worry about falls, threats of assault and snake bites during fuel gathering.

Acute Respiratory Infections by Gender in Central Kenya



Source: M. Ezzati, H. Saleh and D.M. Kammen, 2000

Indoor air pollution from burning coal, wood and traditional biomass fuels is a significant source of particulate pollution in rural homes and 'informal' urban settlements/slum areas. Smoke from traditional cooking and heating methods contains dangerous amounts of toxic substances that contribute to respiratory disease, cancer and eye problems. Every year more than 1.6 million, mainly women and children, die from illnesses linked to indoor air pollution.

Airbourne Emissions for Household Cooking Stoves, India (g/mj delivered energy)

uel	co ₂	N ₂ 0
P Gas	126	0.002
Biogas	144	0.002
Kerosene Kerosene	138	0.002
Vood fuel	305	0.018
rop Residues	565	0.028
harcoal	710	0.018
Oung cake	875	0.022

Source: US Environmental Protection Agency

Cleaner cooking options to replace traditional fuels not only improve living conditions for women and children currently exposed to high levels of indoor air pollution in smoky homes, but also reduce emissions of pollutants and carbon dioxide affecting wider atmospheric conditions.

