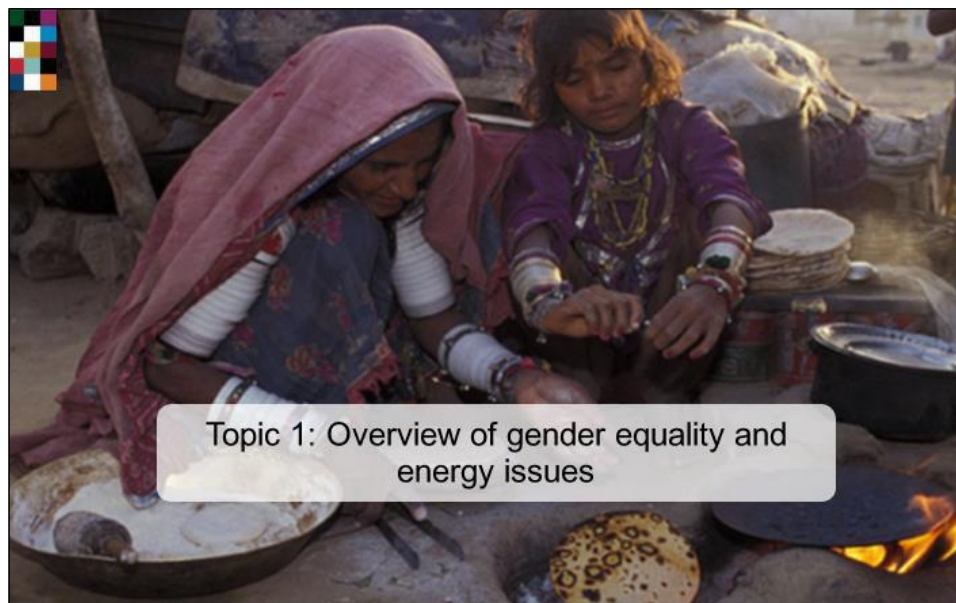


## Overview

Welcome to the e-module on Gender and Energy. This is the Third Module of the e-Course on Gender Equality and Development.

We will begin our discussion with an overview of gender equality concepts, a brief introduction to the energy sector, and the importance of energy for gender equality and development.



### Does gender equality matter for development?

There are many dimensions of gender equality, including basic human rights, education and health, and access to jobs and livelihoods for women and men.

Broadly speaking, gender equality matters for development for two reasons:

- Gender equality is a core development objective in itself, because it's an *intrinsic human right*. Development should result in fewer gaps in well-being between women and men.
- Gender equality also matters as an *instrument for development*, as it can enhance economic efficiency and improve other development outcomes in three ways through:
  - Increased productivity;
  - Improvements in the welfare of families and children; and
  - By making institutions more inclusive and representative



### Some gender gaps have narrowed

In the last decades, women's lives have improved greatly. Even though gender roles are embedded in culture and traditions, and these roles tend to change gradually with education and exposure to different lifestyles, women throughout the world have made rapid gains in human rights, in education and health, and in labor force outcomes.

But progress has not been even in all countries or for all women, or in all dimensions of gender equality.

For example,

- the likelihood of women dying during childbirth in Sub-Saharan Africa and parts of South Asia is still comparable to that in Northern Europe in the 19th century; also,
- the increased participation of women in the labor force throughout the developing world has not translated into equal employment opportunities or equal earnings for men and women.



## Gender inequality

Gender inequality still persists around the world in three key domains:

- In the accumulation of human and physical capital **endowments**, including education, health, land, and other assets such as financial resources that women and men accumulate during their lifetimes;
- In the use of these endowments to take up economic opportunities and generate income. Access to **economic opportunities** determines how endowments and time generate income and consumption; and third
- In the use of these endowments to take actions affecting individual and household well-being. In this course, we will refer to **agency** as the process by which an individual, woman or man, makes choices and translates these into desired outcomes. These choices include: control over resources, decision-making over family formation, control over movement, freedom from violence, and the ability to have a voice in society.



## Energy and development

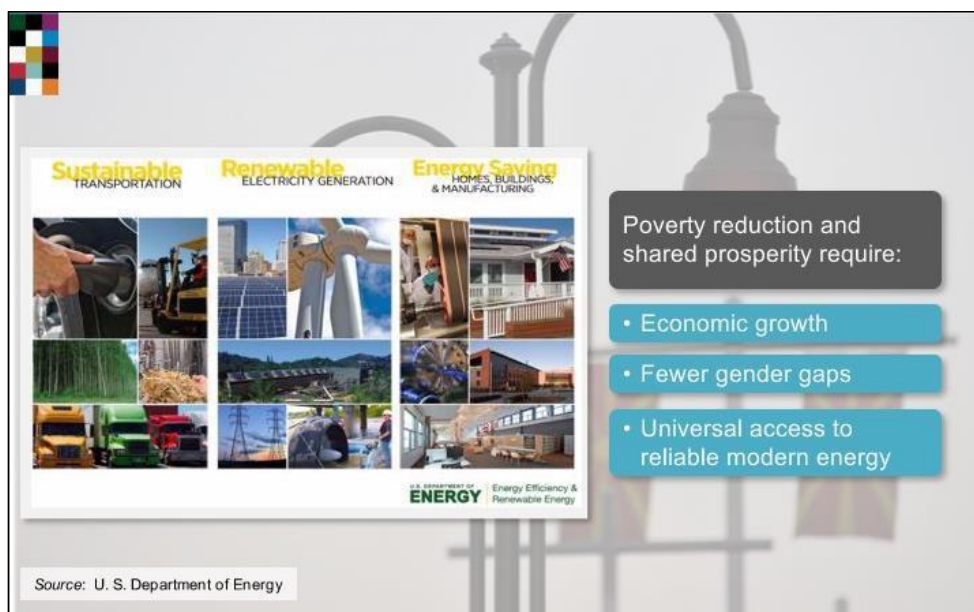
Narrowing gender disparities is critical to reducing poverty and boosting shared prosperity and growth.

Similarly, we cannot reduce poverty and achieve growth and prosperity without universal access to reliable modern energy.

Energy is an important engine of economic growth, and access to energy is increasingly seen as vital for wider social development, including better health and education. However, about 1.2 billion people around the world still lack access to electricity, and about 3 billion lack access to modern cooking and heating solutions.

As the visual shows, there are many aspects of everyday life that rely on the availability of modern energy, such as sustainable transportation, renewable electricity generation, and energy-saving lighting, appliances and equipment in homes, buildings, and manufacturing.

As the visual shows, there are many aspects of everyday life that rely on the availability of modern energy, such as sustainable transportation, renewable electricity generation, and energy-saving lighting, appliances and equipment in homes, buildings, and manufacturing.



### Access to modern energy and the MDGs

Energy services are an essential means to support overall development, rather than an end in themselves. Recent empirical evidence shows cumulative causal impact of electricity on economic development, including increased income, health, education, and reduced poverty. Studies have also found a strong correlation between per capita commercial energy consumption and indicators such as life expectancy, literacy, and school enrolment.

Energy access is increasingly seen as a vital catalyst for wider economic and social development. Its importance and impact on the livelihoods of women and men can be seen throughout the priorities set in the Millennium Development Goals (MDGs). For example, improved cooking fuels and stoves reduce air pollution and associated respiratory illnesses, while electricity and modern energy services support the functioning of health clinics and hospitals.

The MDGs – summarized in the visual - were adopted by the international community in 2000. We have reached the target year of the MDGs, 2015, and, although most countries have achieved many of their goals, many countries still fall short. Consequently, 192 member states agreed in June 2012 to start a process of designing sustainable development goals (SDGs), which will set development priorities and targets for the future. It will be important to include energy access explicitly, given its importance for achieving inclusive development.



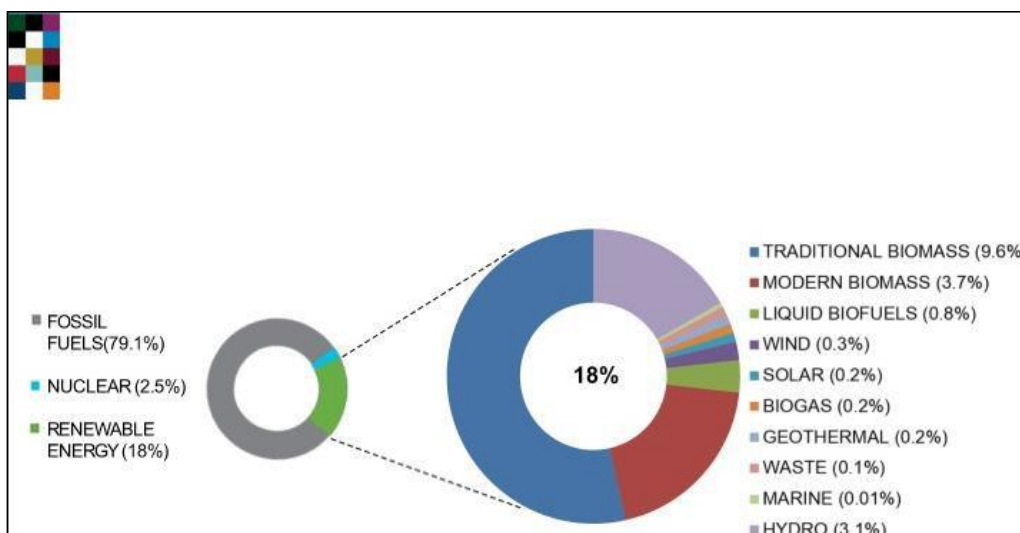
### Sources of energy and total final energy consumption, 2010

The three main sources of energy are:

- Fossil fuels (coal, petroleum and natural gas), which represent about 80 percent of total final energy consumption (TFEC);
- Renewable energy, which represents about 18 percent of total final energy consumption; and
- Nuclear energy, which represents about 2 percent of total final energy consumption.
- One of the energy challenges the world faces in the coming years is increasing the share of renewable energy in total final energy consumption. A global initiative, the Sustainable Energy for All Initiative, launched in September 2011 by the United Nations Secretary General, Ban Ki-moon, endeavors to achieve universal access to reliable modern energy, to accelerate improvements in energy efficiency, and to double the global share of renewable energy by 2030.

There is tremendous variation in energy supply conditions around the world.

- About 97 percent of the new renewables was produced and consumed by a few high-income and emerging economies: USA, Europe, Japan, Brazil, China and India.
- About 80 percent of TFEC is consumed by developing countries, but almost all this consumption is in the form of traditional biomass and hydro.



### Gender is important in the energy sector

Gender matters in the energy sector because energy affects women and men differently, as men and women have different roles and responsibilities in households, markets and their communities. This makes the access, use, and impact of energy services different for women and men.

- The levels of access, use and impact of energy services differ for women and men.
- Gender needs to be considered in planning and implementing energy interventions.

For example,

- Electricity results in time savings in the daily lives of both men and women – but men and women may use these savings differently.

- When it comes to household energy, women and girls in developing countries are responsible for most of the household cooking, and are at greater risk of the negative impacts of cooking with solid fuels in poorly ventilated stoves and kitchens.
- Women business owners often work in the informal sector, so in order to benefit from improved electricity, they may need financing options and/or payment plans for connections.
- While large infrastructure creates jobs and other benefits, these projects may result in resettlement and compensation – an area where women may be at a disadvantage due to weaker rights.

It is therefore critical to increase awareness of these issues. Energy tends to be overlooked when conducting national gender assessments. Likewise, although energy plans and surveys may collect gender data, it is often not analyzed.


### Gender and Energy Issues

Throughout this module we will look at some of the key gender issues in relation to specific energy areas:


1. Household energy: cooking and heating. Issues arise from women's primary role in cooking, fuel wood collection, and from their greater exposure to indoor air pollution associated with cooking. Other issues include women's lack of decision-making power and access to finance for improved cooking technologies.
2. Electricity access – grid and off-grid. Poorer households, especially female-headed ones or small and medium enterprises may have limited ability to connect to the grid, make electricity payments, or access off-grid electricity technology.
3. Renewable energy. Women and men need information on new renewable energy options and their potential for improved livelihoods.
4. Energy efficiency. As managers of the household, women are often in a good position to monitor and manage electricity use within the household.
5. Large energy infrastructure generation, transmission, and distribution. Some of the issues where gender may play an important role include: displacement, resettlement, loss of livelihood, job creation, benefit sharing, land titles, influx of migrant workers (which may carry the risk of sexually transmitted diseases), and (mostly) men's exposure to hazardous work (such as electrical wiring and chemical handling).
6. Electricity pricing. Men and women have different preferences, and are impacted differently by the duration, time and value of electricity access. In many cases, women are overrepresented among the poor; hence, when subsidies are removed, women could be disproportionately affected by the change.



This concludes our brief introduction of basic gender and energy issues and concepts. In the next topic we will cover gender and energy access, focusing on household energy and rural electrification.



1. Household energy
2. Electricity access
3. Renewable energy
4. Energy efficiency
5. Large energy infrastructure
6. Electricity pricing



### Check Your Understanding

- The World Development Report 2012 identified three domains of gender equality. Given below is a list of concepts related to these domains.

Identify the domain to which each concept refers.

Statements	Endowments	Economic Opportunities	Agency
Land			
Consumption			
Health			
Financial resources			
Control over movement			
Income			
Control over resources			
Ability to have a voice in society			
Education			
Freedom from violence			
Decision-making over Family formation			

- Most of the fuels used by low-income households in developing countries consists of traditional biomass – dung, crop waste, and wood. Does this have a gender impact?
  - No, because all household members eat together and are equally affected.
  - Yes, because women and girls are affected by both the time needed to collect fuel, and the negative impact of cooking with solid fuels in poorly ventilated kitchens.

3. The energy sector can take different gender issues into account.

Identify which gender issues relate to the energy themes given here.

Energy Themes	Gender-Related Issues
Household Energy	Arranging daycare during consultations and ensuring women are part of project design and policy dialogue
	Equal access to compensation, benefits or jobs during construction of generation projects
	Indoor Air Pollution and Potential for Gender Based Violence during Fuel Collection
Energy Planning	Arranging daycare during consultations and ensuring women are part of project design and policy dialogue
	Equal access to compensation, benefits or jobs during construction of generation projects
	Indoor Air Pollution and Potential for Gender Based Violence during Fuel Collection
Large infrastructure	Arranging daycare during consultations and ensuring women are part of project design and policy dialogue
	Equal access to compensation, benefits or jobs during construction of generation projects
	Indoor Air Pollution and Potential for Gender Based Violence during Fuel Collection