

Energy

Safe, secure, reliable and clean energy supplies are essential to sustainable development.

While the global economy has grown from \$6 trillion to \$40 trillion in 40 years, a global chasm of inequity still separates the haves from the have-nots. Energy illustrates the gap. In 2000, residents of North America consumed 287 million BTUs of energy per capita, while residents of Africa consumed 15 million BTUs per capita.¹

More than 2 billion people have no access to modern energy sources, relying instead on inefficient biomass like wood, animal dung, and charcoal, which are gathered at great hardship and significant environmental cost.

Women and Energy

Lack of access to modern energy sources disproportionately affects women and girls, especially in rural areas where the traditional fuels are wood, dung and charcoal. As fuel wood becomes scarce from land clearing and environmental degradation, more time and physical energy is required to gather such staples.

Greater access to modern sources of energy can provide social and economic benefits while also improving energy efficiency. A shift from biomass for household use can save women time, reduce their health burdens and allow them to pursue education and productive economic work. Small-scale manufacturing, food processing, trading and marketing all become easier with modern energy sources.²

World population has doubled since 1960, to 6.2 billion people, and continues to grow by about 77 million people a year. Just to stay at current per capita use, worldwide energy consumption will grow by 60 percent over the next 20 years.³ Whether these growing energy needs are met with traditional high-polluting fuels or more efficient sources will have profound implications for individual health and the global environment.

Carbon dioxide, the byproduct of burning fossil fuels that is the primary “greenhouse gas,” is changing the global climate by trapping heat in the atmosphere and raising average surface temperatures. Climate changes will affect everyone on earth, warming the atmosphere by as much as 5.8 degrees Celsius over the coming century. This rate is unmatched in the past 10,000 years.

Supply and Demand

- 2.5 billion people lack access to modern energy sources, relying on wood and other biomass for energy.⁴
- Energy use is growing faster than population—2 percent versus 1.2 percent. If this trend continues, energy use will double from 1998 levels by 2035 and triple by 2055.⁵
- Developed countries consume 10 times as much energy per capita as developing countries.⁶
- Energy use is growing fast in developing countries—up to 2.5 times the rate in developed countries.⁷

- Transportation is among the fastest growing energy sectors. Between 1950 and 2000, the global automobile fleet increased from 70 million to more than 600 million. If current trends continue, 1 billion automobiles will be on the road by 2025.⁸
- The gender dimensions of energy use need to be recognized in policy planning.
- Implementing the International Conference on Population and Development Programme of Action will help achieve population stabilization and reduce future energy demand.

Climate Change

- Emissions of carbon dioxide, the primary greenhouse gas, increased 12-fold during the 20th century. Developed nations, with 20 percent of global population, accounted for 65 percent of greenhouse emissions; the poorest 20 percent for 2 percent.
- Global climate change will cause significant economic, environmental and social impacts, including higher sea levels, altered habitat, changed precipitation patterns and new patterns of disease.

A Sustainable Energy Future

- To meet future needs and improve quality of life, improved efficiency by large users and development of clean energy supplies must be an international priority.
- Clean energy technologies must be shared with developing countries so that they can “leapfrog” older, polluting energy sources.

UNFPA, Energy and Sustainable Development

The UN Population Fund (UNFPA) assists developing countries in achieving sustainable development, working with key agencies and ministries of environment, health, education and labour, as well as with national and local development commissions.

UNFPA is working with Colombia’s Environment Ministry in four geographic areas to develop and apply a model for regional/territorial planning that incorporates population and environmental factors.

In Botswana, UNFPA supports the National Council on Population and Development to build human resources and organizational capacities at national and district levels for actions to further sustainable development.

Since the early 1990s, Tanzania has developed new strategies for sustainable development. With UNFPA support, a National Environmental Policy was adopted to help reverse environmental losses and reduce poverty.

—August 2002

Source: United Nations Population Fund, *The State of World Population 2001—Footprints and Milestones: Population and Environmental Change*, UNFPA, New York, 2001, except as noted below.

¹ Energy Information Agency, Department of Energy, *International Gross Domestic Product, Population, and General Conversion Factors Information*, August, 2002, <http://www.eia.doe.gov/pub/international/iealf/tablee1c.xls>

² Salome Misana, Editor, *Generating Opportunities: Case Studies on Energy and Women*, United Nations Development Programme, New York, 2001, chapter 1.

³ Energy Information Agency, Department of Energy, *International Energy Outlook 2002*, March 2002, <http://www.eia.doe.gov/oiaf/ieo/index.html>.

⁴ United Nations, *Johannesburg Summit 2002 Fact Sheets, World Summit on Sustainable Development*, New York, 2002, p. 9 http://www.johannesburgsummit.org/html/media_info/factsheets.html

⁵ *Ibid*

⁶ *Ibid*

⁷ Energy Information Agency, *International Energy Outlook 2002*, pages 8-9

⁸ World Resources Institute, et al, *World Resources 1998-99: A Guide to the Global Environment*, Oxford University Press, 1998