

Energy is essential to sustain life. Progress and development of human society requires continuous supply of energy in different forms.

At present, 1.1 billion people living in developed countries use 60 percent of the world's total energy. The share of 5 billion people living in developing countries is 40 percent of the world's total energy supply. This means that every person in a developed country uses 25 times more energy than one in a developing country.

Some 1.6 billion people living in Africa, Asia and Latin America do not have access to modern forms of energy such as electricity, gas and liquid fuel. To reduce poverty and inequality in developing countries, different subsidies are introduced. Subsidies if not planned to follow long term goals, may result in high consumption and waste, low efficiency and finally benefit the affluent class.

**Fast Growing**

Primary energy consumption increased in all regions of the world in 2003. The strongest increase was in Asia Pacific, up 6.3 percent, while North America recorded the weakest growth, at 0.2 percent. As in 2002, coal was the fastest-growing fuel, rising by 6.9 percent globally.

Oil consumption was also relatively strong but the growth of natural gas use was held back by a

energy use is expected to grow at a much slower rate of 1.2 percent per year over the same period, and in the transitional economies of Eastern Europe and the former Soviet Union growth in energy demand is projected to average 1.5 percent per year.

**Too High**

The per capita energy consumption in Iran is twice as high as the average world standard. While the annual rate of growth in the consumption of energy in the developing world is something between 2 to 2.5 percent, Iran is consuming energy at a much more rapid pace.

Due to the lack of optimal use of energy in Iran, a great deal is wasted in



Several hydropower plants are currently in operation, and several more are under construction.

much still remains to be done in these areas. In addition, the weakness of supporting institutions, along with problems related to accessing capital, technology, and knowledge, diminishes the ability of local economic actors to survive and thrive in the new environment.

**Economic Edge**

Energy prices go up and down, but those who optimize their use of energy

**Per capita energy consumption in the country is twice as high as the global standard**

increased awareness of the need to evaluate energy consumption habits. With an increased demand for power, Iran should look for alternative sources of energy.

Iran's renewable energy consumption is low. Abundant oil and gas resources have tended to discourage the pursuit of alternative, renewable energy sources. Iran's 1997 renewable energy consumption—including hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, and industrial and municipal wastes—totaled 106 trillion Btu, a 6 percent increase over the previous year.

In an attempt to diversify its energy mix from a primarily oil-based economy, Iran should increase its hydroelectric capacity. Several hydropower plants are currently in operation, and several more are under construction. In addition, Iran should attempt to increase its nuclear power usage in order to eventually meet a major portion of the country's electricity demand.

Policies such as raising the prices and allocation of subsidies have proved futile in alternating energy consumption patterns. Seeking alternative resources and raising awareness on ways of saving energy are the remedies.

# Energy Efficiency

the industry sector and in homes, which also causes air pollution.

Managing Director of Iran's Energy Productivity Organization Abdolreza Karbasi announced recently that energy consumption in Iran has doubled in the past decade. Karbasi noted that in Iran it stands at 705 million barrels of oil annually, thus making optimal consumption of energy unavoidable.

According to the official, natural gas has been incorporated into Iran's energy basket since 1990, leading

to a fall in consumption of other energy resources.

Karbasi also said that Iranian power plants' energy generation capacity rose to about 29,000 megawatts in 2001 from 7,000 megawatts in 1979.

Iran ranks 16 in terms of energy consumption in the world. Previously, Iran's ranking was 18.

Current studies show that average life span of the world's energy resources is about 37 percent.

Due to probable depletion of fossil fuels, the World Energy Council

has proposed more use of gas, coal and new energy resources. The Energy Productivity Organization says it is ready to grant loans to industries that seek better ways for optimal use of energy.

**Multiple Benefits**

Improving energy use efficiency has become a well-recognized means of meeting national objectives such as enhancing productivity and competitiveness, reducing local environment costs associated with energy supply and use, and increasing

the security of energy supply.

Improving energy efficiency in the developing and transitioning countries is particularly important because these countries exhibit considerable potential for such improvement and, in the case of the developing countries, they will contribute increasingly to future greenhouse gas emissions as their populations and economies grow.

At the same time that the importance of improving energy efficiency as a cli-

mate change mitigation strategy is receiving attention, concern about energy on the part of the public and the private sector has diminished as a result of years of low energy prices.

In the past, many energy efficiency programs have been implemented to achieve short-term savings without a long-term objective to transform markets, and in some cases, with too little understanding of the target markets. Subsidizing the cost of investments in energy efficiency has often been seen as the most effective means of achieving a sizable impact in a short time. The question of how policies and programs could support the sustained evolution of markets toward greater energy efficiency has generally received significant attention only in the past several years.

In the economically advanced countries, where markets and the institutions that support them are highly developed, and capital and knowledge flows rapidly within and between countries, a market-oriented approach to improving energy efficiency has considerable merit. What about developing countries and states in transition?

**Energy demand in Asia's developing economies lead by China and India, is projected to more than double over the next quarter century**

While the degree of economic development and the strength of market forces and institutions varies greatly among these countries, in general markets and their supporting institutions are deficient in many important respects. Economic reforms in the direction of freeing markets from government regulation and management have had an enormous impact throughout the world, and subsidies for energy prices have been reduced, but

have an economic edge.

It used to be a simple matter of switching to the lowest cost source, be it oil, gas or electricity. But today the job of staying ahead is becoming more difficult. New technology is providing a myriad of supply options to energy users.

These days, how you use energy is as important as where you get it.

The recent energy crisis

**Subsidies, if not planned for long-term goals, may result in high consumption, waste and low efficiency, and ultimately benefit the rich**

steep, price-induced fall in US consumption. Hydroelectric generation was up by only 0.4 percent and nuclear generation suffered only the second contraction in its history.

The International Energy Outlook 2004 (IEO2004) projects strong growth for worldwide energy demand over the 24-year projection period from 2001 to 2025. Total world consumption of marketed energy is expected to expand by 54 percent, from 404 quadrillion British thermal units (Btu) in 2001 to 623 quadrillion Btu in 2025.

In the IEO2004 mid-term outlook, developing nations of the world are largely expected to account for the increment in world energy consumption. In particular, energy demand in the emerging economies of developing Asia, which include China and India, is projected to more than double over the next quarter century. In the developing world as a whole, primary energy consumption is projected to grow at an average annual rate of 2.7 percent between 2001 and 2025. In contrast, in the industrialized world—with its more mature energy-consuming nations—



Electricity generation capacity in Iran rose to about 29,000 megawatts in 2001 from 7,000 megawatts in 1979.



Natural gas has been incorporated into Iran's energy basket since 1990, leading to a fall in consumption of other energy resources.

## Review New Job Scheme

By Samaneh Ekvan

Article 28 of the Constitution confers on every citizen the right to select a job that does not violate Islamic tenets or public interests. The government is also obliged to create equal job opportunities for all people of working age.

However, many laws of the country and articles of the Constitution have not yet been implemented. The constitutional article, which enjoins the government to create equal job opportunities, has also not been implemented.

The members of the Seventh Majlis have promised to resolve people's everyday problems, particularly unemployment.

The plan put forth by Ardebil MP Hassan Noie Aqdam titled 'temporary employment of the unemployed' aims to address the dilemma. However, achieving this lofty objective requires greater vision and utilization of the services of experts.

The scheme, to be placed before the Majlis soon, will exclude contractual and temporary labor force from being subjected to Labor Laws. It will hence attempt to increase the recruitment for different jobs. However, besides the main concern of the unemployed and the youth, which is finding a job, will the scheme help ameliorate the living conditions of the labor force? It will not improve their situation drastically since a large number of unemployed people will be recruited without going through the legal channels and will thus be deprived of legal support.

The scheme, from the date it is ratified until the end of the fourth development plan (2005-10), exempts from the purview of labor Laws those who are temporarily employed in factories. Their employment would be contingent upon their written agreements with employers.

Furthermore, according to the proposal, employers and employees should agree on the insurance coverage and there are no obligations for employers.

Deputy labor Minister Mohammad Salamati, opposing the draft of the new employment proposal, said that it violates the best interests of the labor force. He stressed that the scheme was reminiscent of the time when employers tried to increase working hours of the labor force and decrease their wages. He also noted that the resolution of the dilemma of unemployment requires efficient planning and schemes of this sort could not tackle the problem.

Meanwhile, labor officials have opined that the employment market was never before challenged so viciously. They emphasize that the plan merely intensifies and essentially legalizes exploitation of the rights of the labor class. They point out that if the Majlis ratified the plan, some people would be deprived of their constitutional rights.

At any rate, the scheme is currently being studied by the Majlis Research Center. Let us hope that our legislators would ultimately pass a bill that would ensure the best interests of the labor community.