



## ENERGY SECURITY IN THE AGE OF CHANGE

By H.E. Mohammad Gul Khulmi,  
Minister of Energy and Water, Afghanistan

According to the accepted definition, energy security is “the uninterrupted availability of energy sources at an affordable price.” Energy security is divided into two sections: long-term energy security and short-term energy security. Long-term energy security mainly deals with timely investments to supply energy in line with economic developments and sustainable environmental requirements. Short-term energy security focuses on the ability of the energy system to react immediately to sudden changes within the supply-demand balance. Lack of energy security is thus linked to the negative economic and social impacts of either physical unavailability of energy, or prices that are not competitive or are overly volatile.

Although about 30 per cent of consumers in Afghanistan have access to electricity supply, this was less than 5 per cent in 2002, showing good progress during this period of time. Today 70 per cent of Afghan people do not have access to the power grid. About 78 per cent of electricity which is consumed in Afghanistan is supplied by imported energy from neighbouring countries such as; Uzbekistan, Tajikistan, Turkmenistan and Iran. The issue of external electricity power supplies is one of the big challenges of the government for securing sustainability and reliability of supply.

Afghanistan has significant renewable energy potential sources such as hydro, wind and solar. But constructing and developing hydro-power plants, wind farms or solar power plants and transmission lines needs investment from the private sector. Fortunately Afghanistan has provided the ground for absorbing the private investments. Given the geographical location of Afghanistan, it is a suitable energy transmission corridor for transmitting power from Central Asia to South Asia. As an example, Afghanistan plays a significant role as an energy transmission corridor in ongoing projects like CASA 1000 and TAP (Transmission Line from Turkmenistan via Afghanistan to Pakistan).

The accelerating reduction in renewable energy costs, improving energy efficiency, far-reaching electrification, increasingly smart technologies, continual technological breakthroughs and well-informed policy making all drive this shift to bring a sustainable energy future within reach.

The global action today will be so important to create a stable energy system in the future. Finally, the path to secure a better future depends on pursuing a positive, inclusive, economically, socially and environmentally beneficial energy transformation.

Renewable energy systems are well placed to decrease the risk of energy supply disruptions and the current reliance of many countries on imported fuels. Renewable energy sources are widely distributed and can be used as alternative choices for generating electricity, producing heat and manufacturing transport fuels. In addition, significant greenhouse gas reductions and other co-benefits can be obtained.

Security of energy supply should be a key objective of governments if they are to meet other objectives relating to economic growth. Following a period of stable and reliable energy supplies since the Second World War (with the exception of the 1970 oil shocks) many countries have invested in roads, buildings and infrastructure with the expectation that cheap and readily available energy supplies would continue. Now that threats to the future of conventional energy supplies have been identified, there is growing concern that other energy sources need to be found.

Renewable sources are the most promising and risk-free energy resource in the world as they will never run out. These sources are the key to a healthy environment and sustainable energy future. In recent years the costs for renewables have trended downwards whilst the costs for fossil fuels (including a carbon charge) have increased. Thus, renewables have become more competitive and world growth in capacity for wind and solar has been around 20 per cent per year for 10 years or longer.

In order for governments to obtain greater security of energy supply, and to help meet their climate change policy targets, greater uptake of more energy efficient technologies, demand reduction, and adding more renewable energy systems to the national portfolio make good sense.

The IEF is the neutral facilitator of informal, open, informed and continuing global energy dialogue. The IEF can foster greater mutual understanding and awareness of common energy interests in order to ensure global energy security by holding global meetings of ministers and thought leaders.

Good coordination and collaboration among IEF member nations and between the public and private sectors is essential if renewable energy technologies are to be successfully developed to help meet the goals of sustainable development and climate change mitigation as well as to reduce the risk of continued disruption to energy supplies. ■