A1-ENERGY & ENVIRONMENT PROJECTS

The inevitable increase in population and the economic development that must necessarily occur in many countries have serious implications for the environment, because energy generation processes (e.g., generation of electricity, heating, cooling, or motive force for transportation vehicles and other uses) are polluting and harmful to the ecosystem. Energy is considered to be a key player in the generation of wealth and also a significant component in economic development. This makes energy resources extremely significant for every country in the world. In bringing energy needs and energy availability into balance, there are two main elements: energy demand and energy supply. In this regard, every country aims to attain such a balance and hence develop policies and strategies. A number of factors are considered to be important in determining world energy consumption and production, including population growth, economic performance, consumer tastes, technological developments, government policies concerning the energy sector, and developments on world energy markets. As stated above, there is an intimate connection between energy and the environment. A society seeking sustainable development ideally must utilize only energy resources that cause no environmental impact (e.g., that release no emissions to the environment). However, since all energy resources lead to some environmental impact, it is reasonable to suggest that some (not all) of the concerns regarding the limitations imposed on sustainable development by environmental emissions and their negative impacts can be in part overcome through increased energy efficiency. Clearly, a strong relation exists between energy efficiency and environmental impact since, for the same services or products, less resource utilization and pollution is normally associated with increased energy efficiency. Energy conservation, that is, the use of energy resources in a rational manner, represents another factor that together with energy efficiency can lead to the stabilization of the rate of growth of energy demand, which is predicted to increase rapidly in the near future due to population growth and excessive use of various commodities (e.g., cars, computers, air conditioners, household electronic I ˙

Any reduction in the energy demand of a society leads to the extension of its available energy resources. We at **Technoites** discuss energy resources and the environmental impact associated with their use, including global warming and acid rain. The notion of sustainable energy engineering is defined. The main kinds of energy resources are listed and characterized in terms of resource amounts, production, and consumption. To be able to project a future sustainable economy, it is important to set the context by correlating various factors, such as the present energy resources, the population growth, and the evolution of energy demand in the next 30 to 50 years. Fossil fuels and nuclear fuel are finite, while other energy resources are renewable. The term renewable energy suggests an energy that can be renewed, or in other words cannot be depleted.

We at Technoites undertake designs, development and Quality assurance audit of sustainable energy projects