

15th India Energy Summit 2021

Preparing for the New Age Energy

Transition

10th – 11th January 2022
On virtual platform

Background:

Energy continues to be a prerequisite for organized human activity. Its use has been a determinant of a level of development in a society, particularly in an industrialized or commercial society. Its availability, affordability and efficient marketing have gained increasing importance over the years. Energy is now increasingly being deployed in the form of electricity. Various fuels to produce energy are converging towards the production of electricity. Traditionally, coal and other fossil fuels like petroleum and natural gas have been the mainstay of the production of electricity.

Over the last two or three decades environmental concerns have begun to dominate global attention. The threatened climate change necessitates the adoption of cleaner energy for the production of electricity. The United Nations Sustainable Development Goals had highlighted the need to provide clean energy to global citizens. Developing countries like India, undertook the massive task of reaching out to every household in the country and provide round the clock connectivity. This has entailed massive investment and production of energy, whether it be electricity or cooking and transportation fuels. India having well endowed with good coal reserves and some hydro power potential has tried to harness these resources for the production of electricity. The nuclear power sector is also well developed, though the capacity

could be increased manifold. Energy for homes, industry, work places, commercial establishments and transport are a topmost priority for India. The production of energy, particularly fossil fuels, building materials metals like steel and various other chemicals and fertilizers require substantial quantities of energy. The entire transport sector is based on the use of energy, whether it is land, sea or air transportation and travel. Climate change concerns in recent years have largely been dominated by the issue of global warming which is largely associated with energy production or its use. The prevention of climate change will require reductions of emissions particularly from fossil fuels. Energy use has been directly proportional to the level of economic development in any country. The per capita emissions of the developed countries are far above those in the developing countries like India. The per capita energy use and the per capita emissions globally provide a stark picture of inequality. Developing countries like India need vast quantities of energy to catch up with the developed world.

The new challenge before the world is energy transition, emission reduction, the efficient delivery of energy services and the efficient end use of energy. The task before India is to ensure adequate supply of fuels to the conventional energy sector, develop new and renewable sources of energy production, increased efficiencies in the production of energy and lay great emphasis on end use efficiency. All this is with the object of reducing GHG and ensuring a sustainable future.

This massive energy transition will involve a paradigm shift in the production of energy, whether for lighting, industrial use or transport. Electric mobility or EVs is the future of mobility. This will entail the development of energy storage technologies for mobility as well as electric supply from intermittent sources. Necessarily, Indian industry technology, academia and employment have to adopt this energy transition. It will require the development of new technologies, chemical processes, new substances for use in solar PV manufacture and energy storage. The existing work force will have to be retrained to handle the new energy sources, digital platforms and remote sensing technologies.

Industry and the education system have to reorient themselves to meet the coming challenge.

Globally there is talk of net zero emissions by 2050 in order to contain the global temperature rise to 1.5 degrees Celsius. The task is not easy; the new wonder fuel is Hydrogen. The world of transportation and other energy use is likely to move towards a Hydrogen Economy. There can be various forms of Hydrogen, like Green, Blue and Grey. The challenge before Indian industry is to develop Green Hydrogen in the shortest possible time. The Prime Minister has already declared a Hydrogen Mission for the country and the industry, academia and technologists, have to realize it speedily.

While all these new technology developments are underway, the business of energy, particularly electricity distribution has to be run efficiently to provide reliable and quality electricity to all categories of consumers, ensure smart metering for better services and management and realize the cost of energy from the end consumers efficiently. Unless this revenue cycle is run efficiently, the business of energy supply will be doomed to fail.

The ICC has always been at the vanguard of adoption of new technologies, better business practices and customer satisfaction. Industry now has a global responsibility to prevent climate change and also provide gainful employment to the workforce of the country. This can only be achieved with the cooperation governments, business establishments, academia and research institutions and the consumers of energy.

The 15th India Energy Summit is being organized by the Indian Chamber of Commerce to deliberate upon the imminent energy transition with the cooperation of governments, industry, technocrats and consumers. We earnestly request your kind participation and active involvement in this summit. The two day energy summit will be held from 10th -11th January 2022 on web platform addressing the following issues.

Summit Focus:

Day 1

- 1. Optimising Coal and Electricity Production**
- 2. Cleaner Fuels and their Optimised Availability – OIL and GAS**
- 3. Hydrogen Economy**

Day 2

- 1. Solar Power**
- 2. IT and Smart Technologies in Power Sector**
- 3. Round Table on Power Distribution- Reform and Efficiency**