

**Statement by Dr. Sekhar Basu**  
**Chairman of the Atomic Energy Commission**  
**And**  
**Leader of the Indian Delegation**  
**At the**  
**60<sup>th</sup> General Conference of International Atomic Energy Agency**  
**In**  
**Vienna**  
**On**  
**28 September 2016**

**Mr. President, Excellencies, Ladies and Gentlemen,**

I would first take this opportunity to convey on behalf of the people and the Government of India, warmest greetings and congratulations to all the Members of IAEA on the historic occasion of this 60<sup>th</sup> year of IAEA's founding. The journey of these 60 years has amply proved the utility of IAEA and its commendable global contributions to peaceful uses of atomic energy for the benefit of humanity. As a founding member of the IAEA, this is of great satisfaction and pride for India.

Mr. President, I also take this opportunity to congratulate you on your election as the President of the 60<sup>th</sup> General Conference. I am confident that under your leadership, the current General Conference will accomplish all the tasks laid before it.

We also welcome Antigua and Barbuda, Barbados and Turkmenistan as the newest Members of the IAEA this year.

**Mr. President,**

The Department of Atomic Energy (DAE) of India and the IAEA have grown together and share a glorious history.

India's abiding interest in nuclear energy grew out of a deep conviction that the power of atom can be harnessed to help the country achieve human and societal development.

That vision, espoused by Dr. Homi Jehangir Bhabha, the founder of India's atomic energy programme, also shaped the evolution of IAEA.

Dr. Bhabha also led the International Conference in Geneva in 1955 where IAEA's inception took roots.

Dr. Bhabha was a great admirer of Vienna's cultural and musical life. Therefore – and it is documented in IAEA's historical archives – when the choice of IAEA's headquarters came to a tie between Geneva and Vienna, it was Dr. Bhabha's decisive vote as the Chair of the body entrusted with selection of headquarters, that finally made Vienna the home of IAEA.

We thank the city of Vienna, and the people and the Government of Austria, for hosting the IAEA since then, with the warmth and commitment of a gracious host.

**Mr. President,**

As per our practice since 1957, it is my proud privilege to deliver this address to the 60<sup>th</sup> General Conference of IAEA as the current Head of India's Atomic Energy Programme.

India has consciously made a strategic choice to pursue a low-carbon growth model in the coming decades. As announced by Prime Minister Modi, our Intended Nationally Determined Contribution announced at COP-21 in Paris late last year will be ratified next week on October 2<sup>nd</sup>, the birth anniversary of Mahatma Gandhi. Accordingly, a comprehensive plan, spanning next 15 to 20 years, is being prepared to augment the investment in the nation's nuclear power generation.

The addition of Kudankulam-2 plant to our national grid last month has increased our installed nuclear power capacity by another 1000 MWe. Our plants continue to work at high capacity factor. Today, nine more reactors, at various stages of implementation, will add additional 6700 MWe capacity in the next 6 to 7 years.

We are also planning the construction of a number of additional PHWRs of 700 MWe capacity.

Our on-going engagement with Russia, U.S. and France will continue with a view to bring large capacity additions of nuclear power in India. Finalisation of these projects is being pursued in earnest, with due attention to cost, technology and safety.

In another notable development for our nuclear power programme, India ratified the IAEA's Convention on Supplementary Compensation (CSC) earlier this year. Along with the ratification of CSC, we have also operationalised the India Nuclear Insurance Pool with the launch of both the Operator's and the Suppliers' Policy. These steps have now addressed all issues related to civil nuclear liability in India.

India's international civil nuclear cooperation in the last one year included conclusion of Inter-Governmental Agreements on the peaceful uses of nuclear energy with the United Kingdom and Australia.

**Mr. President,**

India attaches utmost importance to strengthening all aspects of nuclear safety measures. The safety performance of the Indian Nuclear Power Plants continues to remain satisfactory. Even in the event at Kakrapar following a coolant channel failure earlier this year, the safety systems worked to the utmost perfection as per the design intent and there was no exposure to operators or members of public. Overall, the occupational exposures and the radioactivity releases from the nuclear power plants remained well within the limits specified by our Atomic Energy Regulatory Board.

It is a reflection of our commitment to the highest standards of maintenance that the Tarapur Atomic Power Station Unit-2, which has been

in operation since 1969, has been given regulatory clearance for continued operation.

In conformance with the obligations under the Convention of Nuclear Safety, India has submitted National Report for the Peer Review at the upcoming 7th review meeting of the Convention. India is committed to actively participate in the 7th Review Meeting of the Convention during March / April 2017.

India greatly values its association with the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) and makes regular contributions to it.

**Mr. President,**

The performance of several Indian fuel cycle facilities continues to reach higher levels every year. To augment our domestic Uranium production, we have initiated steps to develop new mining sites. Production at Tumallapalle Mill in Andhra Pradesh has also stabilised after the initial teething problems.

Last year, we set a record by producing 1500 tonnes of PHWR fuel at our Nuclear Fuel Complex in Hyderabad. Our Heavy Water Plants have worked at 115% capacity factor. In addition to meeting our domestic requirements, we are trying our best to meet requests from many partner countries for export of Heavy Water. Our reprocessing, waste management and fuel

fabrication facilities dedicated to our second stage power programme continued performing very well.

Performance of our research reactors has also been most satisfactory. Fast Breeder Test Reactor (FBTR) at Kalpakkam has been operated at its highest ever power. Also, as part of technology development for metallic fuel based fast breeder reactors, irradiation of metallic fuel has commenced. At the 500 MWe Prototype Fast Breeder Reactor at Kalpakkam, preheating activities prior to sodium loading is in progress. Commissioning activities are being pursued under rigorous regulatory oversight. Our DHRUVA reactor at Trombay, producing medical isotopes, continues to operate at full power and recently touched its highest ever capacity factor.

India continues to attach high priority to all aspects of Thorium related reactor technologies and allied fuel cycle. Work on all aspects is being undertaken at various Units of the Department of Atomic Energy.

**Mr. President,**

Our INDUS-I and II synchrotron radiation sources at Raja Ramanna Centre for Advanced Technology at Indore continued to perform well and utilise fully all its beamlines.

Our Tata Institute of Fundamental Research (TIFR) has discovered superconductivity in pure Bismuth at 500 micro Kelvin. TIFR has also developed 3 out of 5 major instruments being used at ASTROSAT, the first Indian Satellite dedicated to astronomy.

India is participating in several national and international Mega Science projects like CERN, International Thermonuclear Experimental Reactor (ITER), Facility for Antiproton and Ion Research (FAIR), Square Kilometre Array (SKA), Thirty Meter Telescope (TMT), Laser Interferometric Gravitational-waves Observatories (LIGO), and Indian Institutions and Fermilab Collaboration (IIFC). The MACE telescope being built at Ladakh in northern India will become operational next year.

**Mr. President,**

Director General Amano spoke of IAEA's focus on global cancer treatment. This is also our focus.

DAE, through its Tata Memorial Centre continues to promote indigenous development of radiotherapy equipment and support IAEA Member States by offering low cost radiotherapy treatment to developing countries. Most recently, in July 2016, India presented its indigenous teletherapy machine Bhabhatron, along with digital simulator, to Bougando Medical Centre in Tanzania. We are also going to soon install Bhabhatron at the Kenyatta National Hospital in Kenya. This follows similar contribution made to the National Cancer Centre of Mongolia in 2015.

After the successful launch of the Cancer Staging App during last year's General Conference, another smart-phone app developed by IAEA in collaboration with the Tata Memorial Centre and the All India Institute of

Medical Sciences for “Cancer Staging for Gynaecological Cancer” was launched yesterday at the Vienna Centre.

In line with this year’s Scientific Forum on Nuclear Technology for Sustainable Development Goals, we have put up a stall to showcase India’s contributions to all the themes of the Forum. I would urge you to visit it.

**Mr. President,**

India has continued active engagement on nuclear security issues through participation in the Nuclear Security Summit process, the Global Initiative to Combating Nuclear Terrorism, and through the activities of India’s own Global Centre for Nuclear Energy Partnership.

India believes that IAEA is the right global platform to discuss nuclear security issues.

As part of India’s continuing contributions to IAEA’s nuclear security work, we are making a contribution of one million dollar to the IAEA’s Nuclear Security Fund this year. This follows a similar contribution made by India in 2013.

India looks forward to participating and contributing to IAEA’s International Ministerial Conference on Nuclear Security in December this year.

We also congratulate the IAEA and the global community on entry into force of the 2005 amendment to the Convention on Physical Protection of

Nuclear Material (CPPNM), the all-important legally binding convention on nuclear security. India was among the countries that ratified the 2005 amendment soon after it came into existence.

As part of its commitment to global efforts to combat nuclear terrorism, India will host a meeting of the Implementation and Assessment Group of the Global Initiative to Combating Nuclear Terrorism in New Delhi in February 2017.

**Mr. President,**

The global energy demands will continue to grow, and in order to ensure sustainable low-carbon energy generation, nuclear power is likely to remain a credible option and an important component of future growth strategy of many countries. In this scenario, India looks forward to IAEA's continued leadership for fostering safe, secure and sustainable use of nuclear energy in the decades to come. We wish the 60<sup>th</sup> General Conference a grand success.

**Thank you.**

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