

Speaking at "Energy Conservation Day" , Delhi

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आप सब बच्चे जो लगभग सवा करोड़ बच्चों ने इस पेंटिंग कम्पटीशन में भाग लेके पूरी दुनिया को दिखा दिया कि इस देश का नागरिक और इस देश का भविष्य दोनों इस संकल्प के साथ जुड़ा हुआ है ।

Panelist: Thank you, we will now move to our next school which is the Jawahar Navodaya Vidyalaya, Haridwar, Uttarakhand. Please ask your question. Can you hear us? If you do, then please ask your question.

Q. Good evening sir, I am Shraddha Kumar from JNV Haridwar, Uttarakhand, and my question is that what are the programs of the Ministry to promote green energy throughout the country?

A. Madam, India has embarked on the world's most ambitious renewable energy program. We are currently planning to go up to 1,75,000 MW of renewable energy and this does not include hydro projects which are more than 25 MW. If we had the larger hydro projects which really are also green energy, they are also renewable form of energy because only water is being used and water is falling from a height and generating electricity. There is no consumption or there is no waste, in this situation if we had that India will be about 2,25,000 MW of green energy by 2022 which, to my mind, is the largest program being embarked by any country in the world. And I must compliment all of you who are in this industry, all the youngsters who are so passionate about green energy that our promotion of solar energy to take it up to 1 lakh MW. When I became Minister 2.5 years ago Prime Minister Shri Narendra Modi told me we must think big, think to scale, have big ambitions and when he said we should plan for 100,000 MW, the whole world laughed at us. They thought it is impossible that a country like India can expand by 40 times from 2400 MW that we had in 2014 to 1 lakh MW by 2022. But I am happy to report to you that we have already gone more than 3 times, we are above 9000 MW in solar power. By December 2017, we hope to be 20,000 MW and we will rapidly keep increasing till we reach 1 lakh MW.

Similarly, we have ambitious plans on Wind energy – 60,000 MW. We have also started reviving a lot of stalled hydro projects which will add new capacity clean energy to the country. We are in dialogue with different countries to encourage nuclear energy. All in all, India has shown to the world that India will take a leadership position when it comes to green energy and clean energy and that is thanks to the blessings of all of you.

Panelist: Thank you honourable Minister. We now move on to the next school which is the Karmel GHSS Holy Angels Convent, Higher Secondary School from Trivandrum Kerala. Please ask your question.

Q. Good evening sir, my name is Parvati. I am a 10th grade student of Holy Angels Convent, Higher Secondary School, Trivandrum. My question is why is the use and generation of solar energy not being popularized among the households in India unlike in the developed world. Has the government got any specific plans in this regard? Thank you.

A. Thank you ma'm, very very valid and pertinent question. First of all, I would like to share with you, again when I became Minister in 2014; we had only 200 MW of rooftop solar of the type that you have suggested. We have now scaled up our ambition to go up from 200 MW to 40,000 MW that means 200 times what it was in 2014. We will expand to 200 times by 2022. We have made ambitious plans; we have a scheme right now where we are promoting all government buildings and buildings owned by public sector undertakings, to begin with to go for rooftop solar. Now the challenge which you have very rightly pointed out in household solar, rooftop solar is that, by and large, in India to help the people of India without burdening them with very high cost of power, by and large, the cost of electricity in our homes is kept at a lower rate compared to industry. And, therefore, rooftop solar has not yet reached a point where on its own, without any subsidy or government support, it can become a viable alternative at the existing price points. In the developed world, in America, in Europe, the household electricity is usually costlier than industrial power tariff. Therefore, there is a natural attraction to use rooftop solar in those countries. In India, it is the reverse, industrial tariffs are more, household is less. But in the first stage I expect a lot of industries to start going for rooftop solar, simultaneously, because of the large economies of scale I expect solar prices to fall and we will very soon reach an inflexion point that

even without government support household rooftop solars will become viable. I am very confident that in the coming months and years we will see a larger roll-out of rooftop solar. And the government of India stands committed to encourage and support these efforts. Thank you.

Panelist: We now move on to our next school which is the Government Senior School from Port Blair, Andaman & Nicobar.

Q. Namaskar sir, myself Maryam Bibi, I am from Government Senior Secondary School Port Blair of class 11. My question is that in our island the electricity department distributed LED bulbs by the replacement of ordinary and CFL bulbs for the consumers. Why the same is not implemented in school and other commercial consumers?

A. Thank you *beta*. The Andaman & Nicobar Islands Lt. Governor, Shri Jagdish Mukhi has been in regular touch with me. And I think it has escaped my attention that LED bulbs are not being implemented in schools and commercial consumer organisations. We will make sure that that is immediately taken. I have my Mr Sourabh Kumar, the MD of EESL and post haste he will make sure that action is taken so that it reaches all the schools there. As regards the construction of school buildings, many of these were designed and constructed much earlier. Nowadays we have brought in more efficient building construction codes because of which the new designs, by and large, factor in that you can get more natural light and we don't have to worry about air conditioning or lighting, we can have natural ventilation and more lights. But while you are on the line I would like to share with you that in my earlier interaction in 2015, December 2015, on the same day, we had discussed about how we can make Andaman & Nicobar free of diesel. And make it a fully green island. I am happy to report to you that the Ministry has prepared a draft plan in that respect and we have started setting up a 20 MW capacity solar plant in Andaman & Nicobar Islands. In the initial stage, we have got 42 hectares land to set up 20 MW, and going forward, our plan is to set up 100 MW of solar energy in Andaman & Nicobar Islands and supplement it with other forms of energy including energy storage so that we can make the Andaman & Nicobar Islands free of the menace and pollution of diesel.

Panelist: We will now take on the next question from the Ramanbaug School which is from Pune, Maharashtra. Please pose your question.

Q. Good evening sir. Respected sir, I am Varun Kulkarni from New English School Ramanbaug Pune and I am studying in standard 8th. Sir, my question to you is, implementation of Make in India will lead to growth of industrial sectors, naturally, this will increase the need of energy resources. Then how will this demand be satisfied?

A. Well, I fully agree with you that as more and more domestic manufacturing capacity increases, both for Indian requirement and to serve the rest of the world. Very clearly, the need of energy resources will increase and, in fact, it is the need of the hour because we need to provide jobs to our young boys and girls who graduate from college, we need to ensure that the economic growth is there in the country and we have a better future for all of you. As regards where this demand will be satisfied from, I am happy to share with you that the government of India is now not waiting for demand first and then planning capacity. In the last two and a half years we have resolved a lot of issues about a number of projects which were stranded at different stages and not getting implemented. In the last two years, we have added nearly 90,000, we have added about 45,000 MW of thermal capacity only in the last two years, apart from the renewable energy that we have expanded by about 15,000 MW. In addition to that, another 40-45,000 MW of thermal capacity is under implementation and we will be adding probably another 80-90,000 MW of renewable energy in the next four or five years. When you combine all of these capacities, India has the ability to double its power generation in the next three to four years. We can double our power generation. So I can assure all of you that days of power shortage are history. Very soon we will add it into your history curriculum that there used to be a time before 2014 when India used to be struggling with power and coal shortages. And just like dinosaurs have gone into the fossil age, the days of shortages will also go into the fossil age.

Panelist: On that positive note, we will move to our next school which is the SS Patel School of Science and Commerce from Gandhi Nagar, Gujarat. Please ask your question.

Q. Good evening sir, *Kem Cho*, here I am Gopi Sharma from Gujarat belonging to SS Patel School of Science and Commerce. And my question to you is, we have so many ways to conserve and use energy-efficient products but for the fast and better implementation of the relevant schemes and projects of the central and state governments what is your opinion on having a separate and an independent body? Thank you.

A. See, we already have this Bureau of Energy Efficiency, it's a very vibrant body which comes up with newer schemes and newer plans for energy conservation and to promote energy efficiency. Along with that, we have a company called Energy Efficiency Services Limited, EESL. To my mind, and I have been in the business world now for more than 35 years, to my mind, this is one of the finest companies that India has ever seen in our corporate history. We have all heard of private sector companies doing very well, very often a lot of people try to run down government companies and public sector companies and criticize everything that government does. But here is a company which in the last two years has not only been able to distribute over 18 crore LED bulbs in the country, in about 20 months 18 crore LED bulbs, 18 crore 30 lakh now, but has been able to bring down the price from Rs 310 at which they used to purchase it 2 years ago to Rs 38 today, 88% reduction. That is the strength of honesty and integrity, that is the strength of the will power to do large scale projects fast with speed, with skill, with scale.

Panelist: We now move to the next school which is the Government Model Higher Secondary School from Bhopal, Madhya Pradesh.

Q. Good evening sir, this is Vanshika Shishant from Model Higher Secondary School, Bhopal, sir as we have seen that when our honourable Prime Minister launched Swacchha Bharat Abhiyaan, at that time all the celebrities came forward to promote it. But when we talk about energy conservation there is no one coming forward. So my question is why government is not approaching celebrities to promote energy conservation as well?

A. Madam, you all are the celebrities for me. I don't need to go to film stars or anybody for being celebrities. These young boys and girls from all over the country from Manipur, from Nagaland, from Tripura, from Goa, from Uttarakhand, these are my celebrities. And only today when I was seeing their

beautiful paintings, I have asked my colleagues we will be forming clubs. There will be a Michael Club, will Michael stand up? Where is that little boy and my favourite? Can you pan the camera on Michael? Where is the camera? Michael, somebody will have to stand up on the sofa. Yeah, there will be a Michael Club, he will be our celebrity.

And each one of the award winners, and beta you just saw that film also. In that film, who were the actors, who were the people who were suggesting – *Button Dabao*. They were all young children. The message that young children can give, we old fogies and particularly all the film stars cannot have as much power as the young children of India can have. And I have full faith and confidence that all these celebrities and all of you children, particularly, the 1 crore 14 lakh children, who participated in this painting competition. They can move mountains. Nobody on earth can beat the power of all of you children. So you take up the... you take up this mission and I have full faith and confidence the whole country will rally behind you. All the best to all of you.

Panelist: Rightly said honourable Minister, we now move to our next school which is the Saint Paul High School from Patna, Bihar.

Q. Good evening sir, I am Veer Pranagam of class 7th from Saint Paul High School Patna. Sir, I would like to ask with your kind permission that sir, huge electricity tariff difference is there in our country. Can it be uniformed?

A. That's a very good question. Now, you will appreciate that our country is still going through the development phase. We have millions of farmers who are not making enough money that they can afford to pay full tariff, full electricity tariff. We have millions of poor people who have remained deprived, who have remained in the marginalised sections of society for decades and centuries. Now those sections of society which need power but cannot afford power I think deserve a little support, a little affirmative action so that all children in this country can enjoy the benefits of power. Therefore, there is the scheme of cross subsidy where the relatively better to do, well to do, people pay slightly more than the others where the industry cross-subsidizes and pays more so that the poor of India, the farmers of India, the deprived and marginalized sections of India can also afford power. Their children can also study in school. Their children can also prepare for their exams with electricity in their home.

And I think that's my philosophy also and I believe that that should continue for some more time so that till such time as all the children in this country, all the poor of this country get equal opportunity out of development, till that time we must continue to support that section of society. And I do hope all those who can afford to pay for their electricity will not mind this little cross-subsidy because it is going to light the home of a poor, of a child whose parents otherwise could not have afforded electricity. And I think it's a duty of all of us to support them.

Panelist: Thank you, we now move to our next school which is the JNK Public School from Itanagar, Arunachal Pradesh.

Q. Good evening sir, myself Rivesori Baimin of 7th standard from JNK Public School, Itanagar, Arunachal Pradesh. Sir, my question to you is what is the position of importance given to energy conservation and energy efficiency in the parliament of government of India?

A. Well, I wish I could address that question while I was in parliament because actually at this time, parliament should have been working. But unfortunately, since parliament is not allowed to function we have to cancel being in parliament and sit here. And when the organizers were preparing the program I asked them that why at 3.30, we should keep it little later. Because parliament may be going on. But they said it looks like the parliament doesn't seem to function so let us keep it at 3.30. And, again today both houses were adjourned. It's very unfortunate that, after all, parliament runs, electricity is consumed, lighting is done, air-conditioning or heating is done. The entire machinery is sitting to work but unfortunately parliament is not functioning so that certainly gives the impression that there is very little concern for energy efficiency because we seem to be wasting our energy over there. But that was on a lighter note, but the fact is that the honorable Speaker of the Lok Sabha and the honorable Chairman of Rajya Sabha, the honorable Vice-President of India; both are very very conscious about energy efficiency, they are working to see how we can improvise the consumption of electricity in the various areas in and around the parliament complex. And, to my mind, at the individual level and at the system level there is a lot of consciousness about energy efficiency. I have seen parliamentarians being very concerned that not enough LED lights are sold in their district or their constituency. So individually

even parliament leaders, parliamentary party and parliamentary members of parliament are all very conscious. So I am happy that there is so much awareness and support from all sections of parliament towards our energy conservation drive.

Panelist: Thank you honorable Minister, we will now move on to the next school which is the Haryana Bhavan Vidyalaya from Panchkula Haryana. Please ask your question.

Q. Good evening sir, we take immense pleasure in interacting with you on this occasion of National Energy Conservation Day. Sir our question to you is, are there any plans of the government to introduce energy conservation programs in curriculum at all levels of education to empower youth and make them future ambassadors of energy conservation? Thank you sir.

A. Thank you very much, it's a good question. In fact, when we met with the students through video conference in December 2014, this issue had been flagged off by some children from the Government Girls Senior Secondary School, Jalandhar. And at that time also I had asked the department to take up training of teachers so that the teachers become ambassadors of energy conservation and efficiency. I am happy to report to all of you that this program for training teachers was held on 12-13 May, 2015 at Jalandhar and Amritsar in Punjab to begin with. And we have started rolling out this program in other parts of the country but I do believe there is scope to further actively engage with schools, teachers and children to expand energy conservation and efficiency programs and training. And, I will also talk to my colleague Shri Prakash Javadekar ji to see if we can bring in some lessons in the school curriculum itself. It's a very good suggestion. Thank you very much.

Panelist: We now move to the next school which is the Sophia School from Bangaluru Karnataka.

Q. Good evening sir, I am Elvia Desouza from Sophia High School. Today, my question to you is, though the government is creating awareness on energy conservation. In most of the rural areas, street lights are not being switched off during the day time then why can't the government introduce a system for streetlight consumption so that penalty can be levied to concerned local authorities and wastage of energy can be avoided?

A. Well, that's excellent, in fact, that was also a subject of discussion in one of our earlier interactions also in December 2014, where the issue came up about switching of streetlights and a central control system. Unfortunately, each city has its own streetlight control mechanism and more often than not it's not connected into a central server. Now, we have started replacing streetlights with LED lights which is also being done by EESL limited. While we replace these lights with new LED lights we also introduce technology so that these street lights can be switched on and off from a central control room and also they can get dimmed, have full intensity in the night and gradually dim down towards closure in the morning. That way we are able to save anywhere between 35-40 to 60% of the energy consumption in different parts of the country. 60 cities have already been done. We are in dialogue with all the municipal corporations and municipalities across the country to do with. I am happy to share with all of you that Gujarat has recently entered into an agreement with EESL to replace the streetlights with LEDs across the state of Gujarat, every municipal corporation and municipality will replace its lights with LED lights in next 6 months. And that will become the country's first 100% LED streetlight state. And all of them can be controlled through computers and a central server. So the savings will be huge. And all of this will be done without a single rupee cost to state of Gujarat. The savings will pay for this investment.

I would urge you to talk to your local government. I think your school should write a letter to the government and suggest that they also participate in this scheme and change the streetlights in the whole state of Karnataka. The central government is willing to support it with zero investment of the state of Karnataka.

Panelist: A brilliant initiative, we now move to the next school which is the Army Public School from Lucknow, Uttar Pradesh.

Q. Good evening sir, this is Mansi from Army Public School, Nehru Road, Lucknow. My question to you is that it is seen in most of the public places like railway coaches, restaurants, that the room temperature maintained by the air conditioning systems is around 18 to 20 degree centigrade. While as the ideal temperature for human body is around 25-28 degree centigrade. It not only poses a adverse impact on the human health but also consumes more energy.

And similar is the case with chilled water system, you will never find purified water at normal temperature. So, is it possible to have regulations to address these problems for good health and in the interest of the nation. Thank you.

A. That's truly a very good question. In fact, if I may share with you, about four years or five years ago, just after the accident, the nuclear accident in Japan. They had a shortage of power in the whole country and instead of having power outages or shortages, the entire country through self-regulation, everybody in the country self-regulated the temperature and kept it at 25 or 26 degree centigrade in every hotel, restaurant, so much so, that while I was travelling in a car where only the driver and I, and the driver was a friend of mine. A friend in Tokyo was driving the car and I was sitting and it was feeling a little warm so I said can you at least now turn on the air conditioner to make it little cooler. But he said no, the national regulation is 25 or 26, whatever it was, degree centigrade and despite the fact that nobody would have ever known. We were just two of us in the car. But he refused to change the temperature from the national specified. That is the spirit of nationalism. That is the spirit of care and concern that each citizen had and because of the collective effort of all the citizens of Japan they were able to tide over the problems after the nuclear accident. Now such a thing is not done by law. It cannot be done by regulation. It has to come from within and I would appeal to all of you children from all across the country, you all start this movement and we will pitch in, we will support you, we will do whatever it takes to help popularize this movement. That we move out of 18-20 degrees on our air conditioners and convince our parents, our teachers, our people whom we know, neighbours, everybody to start keeping the temperature in the air conditioners at 24-25 degree centigrade. And if we use 4-star or 5-star labelled air-conditioners which will switch off as the temperature reaches that level your electricity bills will also fall drastically.

And the only person complaining will be probably Mr Pujari, Secretary Energy, because all his PSUs will see a fall in demand of power. But I think that will be good for the country, all consumers will save electricity, save money in their bills and it will be in national interest. So lovely suggestion, I endorse it fully and I hope all of us can take this message from here today from these young children from the Army Public School.

Panelist: On that positive note, we now move to our next school which is the Buxi Jagabandhu English Medium School, from Bhubaneswar, Odisha.

Q. Good evening sir, sir I am Aradhna Manushvani of Buxi Jagabandhu English Medium School, Bhubaneswar. Sir, the domestic sector in my state accounts for nearly 32% of the total electricity consumption. We have read that the Energy Conservation Building Code, the ECBC, launched by the Ministry aims to reduce the domestic energy consumption by improving the housing designs. So my question is how to ensure that such a massive and unorganised housing sector will adhere to the code?

A. Very good point. It's very difficult to literally monitor each building sitting in Delhi. The process followed in this is that we have prepared Energy Efficient Building Codes which are given out to all the states through the Urban Development Ministry as an advisory. And, several states have started adopting these building codes and then when once a state adopts it the building plans only are not sanctioned unless they adhere to this code. Several states have already adopted it and I have children on the VC today from all the states of India. I think all of us must give a big hand, we have children from 34 centres across the country and see the enthusiasm that they have. Now these new Code, ECBC, has been notified in 10 states – Rajasthan, your state of Odisha, Punjab, Andhra Pradesh, Telangana, Karnataka, Uttarakhand, Union Territory of Puducherry, Haryana and West Bengal. May I urge all of you assembled here to please talk to, and those on video conference, talk to your state if it is not in this list of 10 to quickly adopt these codes and ensure that no buildings plans are passed by the local municipality or panchayat unless they adhere to the ECBC. Thank you.

Panelist: Thank you honourable Minister, we now move to the next school which is the Presbyterian English School, from Aizwal, Mizoram. Please ask your question.

Q. Good evening sir, my name is from Presbyterian English School, Aizwal, Mizoram, sir, for more energy efficient appliances can the government subsidize in energy efficient, because most of the energy efficient appliances are much costlier in the market?

A. Thank you. Young man I just mentioned that I believe that the best way to roll-out and expand a program is to make it economically viable without government subsidy. By giving a subsidy we actually limit the size of a program so if I give a 1000 crore subsidy I can only do the program to the extent of whatever money is available – Rs 1000 crores. But if it stands on its own leg and it's economically viable then the sky is the limit, like we did in the LED program. So rather than subsidy let's look at economies of scale, let's do the procurement through a transparent and honest manner and let's leverage on modern technology and we can make all energy efficiency drives to be by itself an economically viable proposition. However, if there is some project which still requires government support this government led by Prime Minister Modi is fully committed to supporting energy efficiency. Thank you.

And by the way, I must compliment the children from your state Mizoram because all of all the North Eastern States have done wonderfully well in the painting competition. My compliments to all of you.

Panelist: Thank you honourable Minister, may I please request esteemed members in the audience to kindly remain in their seats till we conclude this function. Meanwhile, we move on to our next school which is the Maharani Tulsivati Girls Higher Secondary School, from Agartala.

Q. Namaste sir, I am Navnita Roy and we are from Maharani Tulsivati Girls Higher Secondary School at Agartala Tripura. Sir, we want to know can the government introduce low electricity tariff schemes or rebates for domestic consumers who use energy efficient appliances?

A. Well, I think, by and large, the electricity tariff is set by the regulators in each state and the central government does not interfere or monitor or is not in a position to direct any particular electricity tariff. And it will be very difficult to implement such a scheme, we won't know who has what type of appliance at home. Therefore, my approach is to bring the power tariff down throughout the country and that's what we are trying to do by making the distribution company stronger. We have introduced Ujjwal Discom Assurance Yojana and over the next two or three years I am very confident we will be able to keep prices stable and make those who are using energy efficient appliances benefit by lower consumption of energy and therefore lower electricity bills. Thank

you. And congratulations to the children from Tripura, you all have done outstandingly well in the painting competition.

Panelist: Thank you sir, we now move to the last but not the least school which is the JR Dhaani Government High School from Raipur, Chhattisgarh?

Q. नमस्कार सर, मेरा नाम खुशबू येदु है, मैं जे.आर. धानी हायर सेकेंडरी रायपुर छत्तीसगढ़ की छात्रा हूँ, मेरा प्रश्न यह है कि सरकार की प्रत्येक योजनाओं का व्यापक प्रचार प्रसार तो किया जाता है किन्तु ऊर्जा संरक्षण के विषय में कोई व्यापक प्रचार-प्रसार क्यूँ नहीं किया जाता जिससे आम जनता में भी ऊर्जा संरक्षण के विषय में जागरूकता पैदा हो? धन्यवाद ।

A. बेटा आपने बहुत अच्छा सवाल पूछा, सही बात है मैं समझता हूँ कुछ कमियां रह गई कि हमने जिस बड़ी मात्रा में प्रचार करना चाहिए था उस बड़ी मात्रा में प्रचार नहीं हुआ है । अब हम आज से ही शुरू करेंगे कैंपेन रूप में यह जैसे अभी एक फिल्म दिखाई थी, छोटी सी थी एक मिनट की, इस प्रकार की छोटी छोटी फिल्मों और प्रोत्साहन करने वाले, मेसेज देने वाले हम कैंपेन चलाएंगे और उसमें हम स्कूलों को जोड़ेंगे, स्कूलों के माध्यम से यह मेसेज देशभर में जायें तो मैं समझता हूँ उससे अच्छा कुछ नहीं होगा । जैसे आज की paintings में कई विद्यार्थियों ने piggy bank बनाये और बताया कि यह बिजली बचत से पैसा बचेगा और वह पैसा बचत हम piggy bank में डालेंगे । तो मैं समझता हूँ हम इस concept को लेके देशभर में एक व्यापक कैंपेन चलाएंगे और वह आप लोगों के माध्यम से चलेगा । बहुत बहुत धन्यवाद ।

Panelist: Thank you honourable Minister for answering all these questions.

Honourable Minister: What about the other children?

Panelist: We have only been able to get touch with these many schools.

Honourable Minister: They have been able to listen to all the questions, the other children?

Panelist: Yes.

Thank you honourable Minister for satisfactorily and patiently interacting with all our school children. He is a person who dons many hats with equal ease and aplomb and successfully leading many government initiatives like UDAY and Ujala and carrying out a range of interventions to ensure availability of electricity to all households on a 24/7 basis. With a distinguished academic record and both Chartered Accountancy as well as law, and as a successful investment banker he is equally passionate and serious about changing the

face of energy through new and renewable energy in the country. Ladies and gentlemen, it is indeed a matter of great privilege to have with us the gracious presence of Honourable Minister of State for Power with us today. And with these words, may I please request him to kindly address us.

The speech

Thank you very much ma'm. We have with us several MPs some of whom I think may have had to leave for other engagements but I must acknowledge the presence of the MPs and thank them for being with us here; Shri Oscar Fernandez, Shri Bharat Singh ji, Shri Vinayak Rao ji, Shri Mahesh Poddar ji is still here, thank you very much Mahesh ji for being with us today. We have also had the privilege of having the honourable Ambassador of Bhutan. Thank you your Excellency for sharing the joy of Energy Conservation Day with us. Earlier, we had the honourable Ambassador of Nepal with us also. We are delighted that the officials of the Ministry of Power, the Ministry of New and Renewable Energy, the Bureau of Energy Efficiency, the EESL, all of them have put in so much effort to put together today's wonderful program. Thank you, Secretary Power, Mr Pujari; Special Secretary Power, Mr BP Pandey; Additional Secretary Power, Ms Shalini Prasad; our Economic Advisor Shri Rajpal ji, somebody who takes very passionate interest in this subject. All the officials from several PSUs who have joined us today, we have Chairman of Powergrid Corporation, PGCIL, we have Technical Director of NTPC, we have Chairman Power Finance Corporation. Several several distinguished guests have joined us today and I would like to thank each and everyone of you, ladies and gentlemen, for sparing the time to be with us today. My congratulations to all the young children who have done a fantastic job, winning outstanding prizes, congratulations to each one of you. Actually, will you all stand up, all the children who won prizes today. Please stand up. And your parents, are your parents with you, any of your parents are with you? Can the parents also stand up if anybody has come. Parents, teachers, anybody?

थोडा ज़ोरदार उत्साह से ताली बजाइये उनके उत्साह से कम है आपका |

Thank you, thank you and if any of you hasn't seen the exhibition of paintings, I would urge you and I would strongly recommend कि आप जाके देखिये कितना सुन्दर प्रदर्शन इन्होंने अपने कला से किया है| Each one is a potential budding artist. और मुझे

लगता है अगर यह कुछ painting वैन्टिंग की auction करे तो तुरंत जाके ले लेना नहीं तो बाद में जाके जब इनकी करोड़ों रुपये में paintings बिकेंगी तो आप लोग सब पश्तायेंगे | क्योंकि इन सब में कोई न कोई हुसैन या कोई न कोई अन्जोली इला मेनन छुपी हुई है |

But really wonderful job done by all of you, you were able to depict your passion, your enthusiasm, your care and concern for the environment very very beautifully through those paintings. And we will cherish each one of those paintings in the government of India and we will make sure that they are protected, they are kept very carefully and they are given the necessary prominence that they deserve. Thank you for all your effort and my heartiest congratulations to all the other award winners for the work that you have done, for the effort that you have put in, for the impact your work has had towards energy conservation, toward energy efficiency. I would also like to thank all the officials of Bureau of Energy Efficiency and Energy Efficiency Services Limited for the very good work they have done in the several projects that the government of India has initiated towards efficiency and conservation.

In fact, just after I had become a Minister, I remember Prime Minister Modi in one of his public addresses speaking about the importance of energy conservation, energy efficiency, saving power. And he had articulated it that in a country where nearly 25% of the power that we produce is wasted, goes in AT&C losses, and other ways of waste; power theft, distribution and transmission losses, effectively, every unit of power of energy that you save is equivalent to producing 1.33 units of energy, 1.33 of electricity. So every time you save 1 unit, you are actually saving 1.33 units of electricity being produced and that much pollution, that much fossil fuel is being saved by your efforts to save electricity. And I think the programs that we have initiated have already been able to save quite significant amounts of electricity. The other day I was reading on the Ujala App that we have already reached about Rs 10,000 crore saving out of the LED bulbs that EESL has sold to the consumers of India, annual saving of Rs 10,000 crores. It's a huge amount of saving. And this figure will increase to Rs 40,000 crores in the next three years, annual saving of Rs 40,000 crores. Now, all of these may seem to be small steps, changing an LED bulb may look to be a small action but just like every squirrel contributed to creating the Ram Setu by which Lord Ram went to Lanka and saved Sita Mata from there and brought her back. Every LED bulb that is replaced in the

country and as I said over 18 crore bulbs have been sold only by EESL, private sector has sold another 25 crore bulbs. Each one of these LED bulbs and each one of you who changes to those LED bulbs does the work of a squirrel in the national mission to save energy, to save electricity, bring down waste of electricity and become soldiers in this fight against pollution, in this fight against climate change, the impact of climate change, in this fight to leave behind for the next generation a better world than the one we have inherited.

In fact, many of the paintings of the children were drawing an analogy from this that they want us to save a cleaner planet for the next generation. And I am delighted that all of you are participating wholeheartedly in this mission. In the last two days, I have also been on a mission. I have been negotiating with NTPC to see what we can do to help bring down wasteful pollution, to bring down waste in consumption of coal, to help leave behind a better planet for the next generation. And I would like to take this opportunity where we are recognising through National Energy Conservation Awards all those who have been able to do good work on energy efficiency and conservation. And on this happy occasion of National Energy Conservation Day on 14th of December, 2016, I am delighted to share with all of you that NTPC has taken an in-principle decision that all the 11,000 MW of power plants which are more than 25 years old will immediately be taken up for change, for replacement with modern supercritical energy efficient thermal plants across the country. And that one action alone will not only help us bring in more efficiency in the operation of thermal plants but will help us reduce millions of tonnes of carbon dioxide that is being generated by these age old plants. It will help to once again ignite economic activity in the power sector and I am going to urge all the states taking a lesson from what the young children today said. I would urge all the states to similarly look at phasing out all power plants which are more than 25 years old so that rather than spending money to modernise these old plants, rather than spending money to put in pollution control equipment on these old plants, let us make it a national mission to scrap all plants which are more than 25 years old and phase them out to introduce new modern technology in thermal generation. And I am delighted that NTPC has taken the first step in this mission and having almost 25% of the national capacity. This 11,000 MW will be the first step towards a eventual roll-out or

phase out of nearly 25 to 30,000 MW of old thermal power plants which will have a huge impact to improve the energy sector in the days to come.

I am also very delighted that the few states where the electrification of villages was left out have now picked up speed. States such as Arunachal Pradesh which today has a young Chief Minister Mr khandu, Pema Khandu, have taken it on a mission mode. I see very good progress in several North Eastern states. One or two states are falling behind but I hope that they will also quickly pick up speed and I think all the children's enthusiasm that I am seeing from North East will now translate to enthusiasm of their government also, to engage with the government of India, to take electricity to the remotest corners of the North Eastern states. And to share with you, Arunachal alone had about 1,578 unelectrified villages of which 348 villages have been electrified. We are working to take electricity to all the other remote far off villages, we have about 800 odd villages which are in distant far off locations where the grid cannot reach. There we have planned that every house, and there are 16,000 homes and if one takes maybe 2 children in each home, they are 32,000 children just like these young boys and girls who live in those far off remote areas of Himachal Pradesh from the borders of India who have been deprived of electricity for all these years. We are going to give each one of those homes a 300 KW solar panel along with a 8-hour backup storage, a battery backup which can hold power for 8 hours in the night. It will be a lithium-ion battery and along with this solar unit and battery storage we will also give 5 LED bulbs, an energy efficient ceiling fan, a socket to charge mobile phones, free of charge under the Deen Dayal Upadhyay Gram Jhyoti Yojana to each one of those homes. And I am also very happy to share with you that the companies under the Ministry of Power have further decided that under their CSR they will give each of those 16,000 homes and those 30,000 children a free television set which will run under the solar power. So that all those children who have been deprived for so many years can be connected to the rest of the world through their television screen, through the solar power, through computers and become a part of the Integrated Global Children's Community.

Of course, they just told me that despite the high court order being in our favour the particular party who had some stake in that contract has now filed a petition in the Supreme Court. I am told tomorrow is the hearing and the

Supreme Court will then get into a recess after tomorrow or day after. I would urge you to please engage the best of lawyers and make sure that before the court gets into recess the case can be decided upon. Because I don't want to deprive those young children in those remote far off villages of Arunachal Pradesh of electricity any further. This company has already, for months, delayed our project and I feel very sorry that even now we have business people and we have companies in India who don't care for the children, who don't care for the poor but want to drag everything to court rather than allowing the poor of India to get a benefit of power. It's extremely unfortunate and I do hope we will find a resolution in the Supreme Court in the next day or two so that we can take power to those remote villages, to those remote areas quickly.

In fact, our effort is that in the next four or five years, India will lead the world in our efforts towards energy conservation and efficiency. And I am delighted to share with you that when I go to other parts of the world, leaders from all over the world compliment all of you, compliment your country and my country, India, for the leadership role that it has played in the field of energy efficiency. In fact, the Energy Minister, Secretary of Energy of the United States, I am told on many occasions' shows the specifications and the LED program of India to participants all over the world. And I am told that he has also started showing the mobile app on which we track the progress of the LED program, the Ujala dashboard. I am told even the Ujala dashboard he shows to all participants of energy conservation and energy efficiency seminars all over the world that this is leadership. Oh my God, it was 18,30,00,000 yesterday, today it has become 18,38,40,129 LED bulbs. And you will be happy to know that 1,93,38,560 tonnes of carbon dioxide emissions is saved because of this roll-out of LED bulbs. And, it saves 23,875 million units of electricity annually, just these bulbs so far which has been sold, 23,000 million units of electricity and, of course, saving Rs 9,550 crore for consumers. That is the power of India's leadership to the energy efficiency program. In fact, the Swedish Energy Minister told me in last month that LED prices in Sweden have crashed, have fallen drastically, thanks to India's massive roll-out on LED bulbs. And now we are looking at working with Bhutan, with Nepal, with Bangladesh, all the neighbouring countries, except one, to help them roll-out energy efficiency, energy conservation in a big way so that India's people can contribute to the

world's effort to save electricity, to conserve electricity and live in a better planet. I am sure these young ambassadors, all the school children, present here, present on video conferencing all of those who participated in this contest, 1,14,00,000 children all across India participated. There is not one city in the whole country, not one district or Taluka in the whole country where children did not wholeheartedly participate. My compliments to each one of those 1,14,00,000 children for their enthusiasm, for the lovely paintings that they gave us and I am sure this program will only grow from strength to strength on the back of their support, on the back of their blessings, on the back of their passion to be the change agents for tomorrow, to be the change that they want the world to be. And I am happy that they are becoming the change agents, I hope all of us will also take a lesson from them and instead of being status quoist, instead of living in the past, all of us will start changing with the changing times.

As John Keynes had said, 'when things change or when facts change I change, what would you do?' I similarly appeal to all of you and to the people of India at large that the world is changing, the young people of India want change, they are looking for a better future for the country. And I do hope all of us will participate in the same enthusiasm like the young children of India, I hope all of us will participate in this changing world where we are fighting corruption, where we are fighting black money, where we are fighting every sort of waste; be it in electricity, be it in evasion of taxes, every form of waste, every form of wrongdoing can be fought with the collective efforts of all the people of India. And I am sure that today's National Energy Conservation Day will be the harbinger of massive steps that all of us take towards a cleaner, brighter and better India for all the 125 crore Indians across the country. My best wishes to all of you and I do hope this movement grows rapidly and in this season of Christmas and New Year we will all pledge to begin the next year in a more energy efficient way.

My good wishes to all of you. Merry Christmas, happy New Year.

Thank you.