

## Keynote address in the “Light of Asia: The Future of Energy” session of the Raisina Dialogue 2016

March 3, 2016, New Delhi

Thank you, well I did get late but we had the honourable Prime minister speaking in parliament replying to the debate on the President’s address. And I am sure you will all agree in the Raisina dialogues, it would have been very improper for me to get up in the middle of his intervention and come here. My apologies to you, but I am delighted to be here to be a part of this very important new initiative which since it’s a dialogue should really be more interactive than an address so I will try to be as brief as I can. Not that it’s easy for a politician to come on to the mike and then try to be brief, if you had not given me the mike I can only **kept in the queue** and think possibly. But thank you for this opportunity clearly energy is a focus area of this government. It’s an area which the world is watching what India is doing and we are also watching what the world is doing, after all, while it’s a part of the sustainable development goals that have been finalized last year and I am delighted that they have added energy and affordable energy access to every citizen of the world as a sustainable development goal. The sad part is that they have kept 2030 as the target date, I for one can’t believe that this world cannot get together and make sure that everybody in this world gets energy access much faster than that. In fact, my own father has studied under street lamps to become an engineer and we still have, we had rather 6,000 of those have now got electrified in the last 11 months, but we had 18,452 villages which didn’t have electricity 68 years after independence. And apart from those villages we still have probably 200 million people in other so called so- electrified villages that still don’t have electricity and 68 years after independence, it’s a matter of shame for us. But Prime Minister Modi amongst his first decisions was to see that how we can take electricity to every one of these villages. How we can ensure that by 2022, when this country turns 75, post independence, we provide not only an affordable home but in that home we provide a toilet, in that home we provide electricity, hopefully access to digital world, internet or Wi-fi. Mobile revolution has matured and am sure by that time and well before that almost everybody will be connected with the mobile technology, but we also ensure an access, road which goes up to each one of these homes. We also ensure quality healthcare for the aged and children, quality education for

the next generation. And he articulated this vision of 2022 amongst his opening remarks as Prime Minister also as a part of the manifesto of the BJP. On 15<sup>th</sup> of August, 2015, and further reinforced on 29<sup>th</sup> February by the Finance minister, this government laid out the mission to ensure that each one of these eighteen and half thousand villages also get electricity. I am delighted to share with you and in some sense it's not the achievement of Prime Minister Modi or his government alone, it's the achievement of Team India, of all of us who are part of this mission that in the first eleven months of this year until yesterday we had 6,020 villages already electrified out of these eighteen and a half thousand, so one third of the target has been met. We have a robust per chart which lays down exactly every milestone with the timeline and a responsibility matrix by which we are hoping to ensure that everyone of these 18,452 villages gets electricity by 31<sup>st</sup> of March, 2017 that will be more than a year ahead of schedule. And, similarly, I am very confident given the enthusiasm of that young team which is working on it we have these 500 young Gramin Vidyutikaran Abhiyantas, Rural Electrification Soldiers and all of them selected from villages, from those areas which have not received electricity over so many years. These young boys and girls are going around these villages monitoring the programme and they are the ones who inspire confidence in me that we will succeed. And the target now we have set is that by 1<sup>st</sup> May 2018, which was the original thousand day target, we will not reach electricity to every village but we will reach electricity to every home in these 18 and half thousand villages, something which was never conceptualized for years and years of electrification in this country. And then by 2019-20, I am fairly confident well ahead of target that we will take electricity to every home in this country and that for us is truly a development goal that in 5 years we want to make sure that everybody gets electricity not waiting for 2030 and I would, in fact, urge many people who have come from other parts of the world to take this message to the United Nations that we can't have a goal which will ensure electricity for the rest of the world, large parts of Africa, other parts of Asia who are still deprived of electricity, we can't take 15 years in this current day of modern technology, this current day of our ability to scale up these missions, ability to finance these missions. So I would really urge possibly one of the suggestions out of these dialogues to suggest that the world should get together to ensure access to everybody in the world much earlier than 2030.

Affordability is the other access, sustainability are the two other dimensions of energy access that have been in public debate, in public discourse. For affordability, this government is very very committed because we do realize that it is not going to be good enough to take electricity to large parts of India who can't afford it. And the UDAY programme, the Ujwal Discom Assurance programme, while it talks of Discoms is an overarching reform that the government of India has brought to fore and is currently implementing, which focuses its energy and its efforts to bring down the overall losses and costs and inefficiencies in this system, both financial and operational, and reduce the costs associated with the electricity and power sector by about 27 or 28 billion dollars every year, a 1,80,000 crore Indian rupees saving that we are envisaging for this sector against a business as usual scenario by 2019, and that's an annual saving mind you. Which we believe will help us make the affordability of power truly a successful mission, so far the results have been quite encouraging and that encompasses several initiatives, it's not only about bringing down the cost of financing and interest cost, it's not only about reducing the aggregate technical and commercial losses, power theft and things like that, by which we are not able to collect full revenue of power produce. It also involves ability to swap and exchange coal, so that we bring down the freight cost, use coal more efficiently. It also involves significant thrust to the renewable energy sector because renewable energy while, of course, it's an important part of the environmental concerns of the world and of our government, in fact, Prime Minister is on record to say that we are not doing renewable energy because some other country told us to do. In fact, when the US President was here in the press conference somebody asked this question, said we are not doing renewable energy out of any compulsion, we are doing it because it's an article of faith for the Prime Minister and his government. We are doing it because we believe that we are trustees of this planet and are expected to leave behind a better planet than the one we inherited and because we believe that renewable energy also is closely linked with our energy security. Because, after all, countries may in the future refuse to give us gas, or refuse to give us nuclear raw material Uranium, but certainly they cannot take away the sun and the wind and rain and water from us. And that, ladies and gentlemen, is the mission of this government to expand the scope and initiatives on the renewable energy to a scale never witnessed in human history before. We are planning to increase our renewable energy

sources five-fold from about 34 Giga watts last year to a 175 Giga watts by 2022, and mind you we are on track on that. Every one of the actions required to reach that goal has been planned, has been worked upon, we have 33 solar parks in which work has started, or is going to start shortly. We have bid out about 17,000 megawatts of solar power bids in the last 11 months, by March end we want to cross our target of 18,000. So from a mission which had envisaged solar power to generate 20 Giga watts by 2022 which we upscaled to 100 Giga watts, from a mission of 20 Giga watts till 2022, in 2015-16 alone we have bid out contracts for 18 Giga watts. **And all through** are transparent, equal opportunity for all process which has helped us bring down that cost by 30-35 in some cases 40% and which is the power of scaling up a programme getting economies of scale into play, speeding up a programme compressing the time frames so costs remain under control, don't have over runs of time, over runs of costs, interest during construction piling up on projects and the power of honesty and integrity in the system so that we don't give out freebies and favours to friends and relatives or the members of the political parties, but are able to run the programme in the most honest manner where everybody in the world can participate, of course, I don't know whether it was discussed in the earlier panel, but just after the Prime Minister's address, a **learned** colleague from the lower house, we were both walking out of the house and he asked me what's happening on the WTO dispute I believe we have lost I don't know whether he was trying to be cocky about it but he did ask me about our losing a dispute which, of course, related back to his party's government because the whole programme was started in 2013 to protect domestic manufacturing which by the way I agree with I think they did a good thing only did it slightly wrong, could have been done a little smarter so we wouldn't have had to go the WTO, but yes we have not won that case in WTO we will obviously go and appeal and we hope some wiser sense will prevail but before I conclude and I can keep going on and on because there are about 50 or 100 things I can talk about but why I thought I will talk about it is because there are people from other parts of the world. And I want to send this message across to the whole world particularly to the developing world and the countries which are yet to develop their economies to the level of Europe and America to inform them what is the level of concern for your economies and for countries like ours in the west. I think it's important that the debate should be out in the open about whether all of these talks about renewable

energy, whether all this pontification about clean energy and protecting the environment and climate change is really backed by credible action and when this WTO dispute was going on. We also had a parallel dispute where domestic manufacturers, Indian domestic manufacturers had filed a case against the United States of America, against China and possibly Malaysia which was a surrogate production centre for American companies and another country. And they had won the dispute in the adjudication in the commerce ministry, when Prime Minister Modi's government took charge on 26<sup>th</sup> of May, the adjudication process was over on 22<sup>nd</sup> of May, four days before I was sworn in as the Minister and large amounts of duties were to be imposed on the imports from these four countries. Prime Minister desired that we should scale up our ambition and we should aggressively go for renewable energy as a part of our clean energy initiatives and this is all in public record so I am only repeating what I have said before but in the context of today's world I would each one of you to **dwell** on what I am going to tell you, I had actually in the car thought I will not talk about it but I see a lot of colleagues, I see people from other developing nations, I see former ambassador from Bangladesh and I thought it's necessary that the world should know what has happened particularly since after we lost that WTO case a long three-page statement was put out by the winner in a particular dispute trying to create the impression that this victory is a great victory to promote renewable energy in the world and to create jobs in his country and I will demolish both these theories in a few minutes. So I had this problem, this Hobson choice of wanting to increase renewable energy and solar energy in this country but at the same time faced with the challenge of an anti-dumping duty potentially to be imposed, 22<sup>nd</sup> May was the decision, you have 4 months to finally impose that duty -- June, July, August – 3 Months, you have 3 months to impose that duty. So 22<sup>nd</sup> August was the day that duty would have been in the normal course imposed just like the United States today has imposed anti-dumping duty on several products, am I right? In today's paper, I am sure many of us might have read it and not a small duty by the way, 267% on imports which are damaging their industry.

Similarly, the Indian industry was injured they had won the arguments and before 22<sup>nd</sup> August, import duty would have come into play. Now, if I wanted to increase renewable energy to a 100 GW and at the same time there was an

import duty on these products, and Indian domestic manufacturing capability was 1 to 2 GW per year, I could at best produce 1 or 2 GW in a year in India. So if I had to scale it up to a 100 GW I would obviously have to depend on the imports, there can be no argument on that and by imports would have become costlier to the extent of anti-dumping and made energy access that much more expensive and unaffordable. So what would I have had to do, instead of scaling up my renewable energy mission I would have actually scaled the mission down because of affordability. Can I tell my poor people in India that look guys, you know, Europe and America for the last 150 years have indiscriminately used coal, have indiscriminately used fossil fuel, put in more than 50% of the green house gases that are up there barely supporting 10% of the world's population. But as India which supports 17% of the world's population has hardly put two, two and half percent of those green house gases but sorry guys either you don't get electricity or you pay **amount** three times of what it will otherwise cost you because we want to protect the world which somebody else has messed around with. Or I had the option of supporting the global effort on climate change yet protect my domestic manufacturers, so what do you do, you have a dialogue with them. I called all of them in my office, we had extensive dialogues, I don't know if any of the domestic solar manufacturers are there in this room, but we had extensive dialogues and I convinced them that it's in the interests of India and the people of India and in the interests of the world and the people of the world that India also gives a big thrust to renewable energy, we want to scale it up from 20 to 100 GW by 2022. But we also want to support you, but by bringing in an anti-dumping duty international imports will become so expensive that the mission will fail. Once the mission fails and we can't get benefits of economies of scale your own production will also remain unviable you will also become sick and hardly get any business. The world will not be able to help India and we will not be able to help the world. So kindly withdraw your anti-dumping petition, suo moto, and help us not to impose the anti-dumping duty so that your business also flourishes and India also benefits and by that we contribute as a responsible global citizen to the world's efforts. I must compliment and congratulate each one of those domestic manufacturers of India who didn't take a myopic vision but took the big picture vision and suo moto wrote a letter to the honorable Finance minister of India after having won in the commerce ministry in the adjudication proceeding, won the case for anti-dumping to be imposed on United States,

China and two other countries. They suo moto withdrew their anti-dumping application and said we want to be a part of this mission we want to support Prime Minister Modi bringing renewable energy in a big way to India, we want to be a part of this global effort on climate change. They withdrew their request and I still remember I was in Mumbai and the commerce minister very rightly so, **I think experienced Teacher**, I am also now learning from experience, but she warned that this is a one-way traffic what you are doing. What you are doing is only going to be done by India, there is not going to be any corresponding support from the other side. She warned me and I was in Mumbai so Finance minister actually called me to Delhi. Finance minister sat in his office on 22<sup>nd</sup> August till midnight with the Commerce minister. I flew in from Mumbai only for that meeting and all three of us assembled at about 11.30 or quarter to twelve. I pushed my way that look they are withdrawing their requests, we want to go a 100 GW, we want to be a part of the global effort and that effort has been applauded by the way in Paris. So we don't impose that anti-dumping duty and Finance minister, Commerce minister then agreed and we did not impose that anti-dumping duty. And then we had dialogues, we exchanged various correspondences, informally and unofficially, to try and see if we could get a corresponding support in terms of this WTO dispute. There is one way of looking at it very technically, that no no it's a dispute, whoever is the winner is the winner and gets the upper hand but by that logic they should have imposed the anti-dumping duty also. In these things you have to take a bigger picture and the big picture was if you want to support renewable energy, we need to make it affordable. And I had explained this to the highest levels of government that if this dispute causes angst to the domestic manufacturers, the alternative is they will file another petition and in that other petition we may have to impose anti-dumping duties. So who is the winner – No body, who is the loser – The whole world. Neither does the world get business from India and neither do we get clean energy in India. Everybody suffers, I suffer, the country suffers but the world also suffers. But a prestige issue was made that no the WTO findings have to be made public and therefore obviously we will go and appeal against that and the process will continue but in the process is it a victory of clean energy or is it a defeat of clean energy. I had even proposed that the WTO should actually take a more larger world vision particularly considering we have said terrorism and climate change are the two biggest challenges before the world. Would it not have

been more sensible if we had taken a view that all of us agree that renewable energy will not be a part of WTO disputes. Let's everybody in the world support each other to make renewable energy happen, and happen at affordable prices. Would it not have been a job creating mechanism, that India, when it's doing a 100 GW and its domestic capacity is 1 or 2 GW maybe it will expand to 5 GW but still in the next 6 and a half years can only meet 20% of your domestic needs. You would still be giving business of 80% to the rest of the world and creating jobs. But in the process what you have landed up doing is kill the solar energy initiative around the world and kill the job-creating potential even in your own country which could have otherwise bid and got some business from India but is now neither going to be a part of increasing renewable energy and clean energy and sustainability and nor is it going to help create jobs for any other country, of course, and I have said it openly many times before I can very easily create another mechanism so I will not let this deter my mission because my mission comes out of conviction as I said it's my Prime Ministers article of faith so India will still stand committed to a 100 GW but we will only have to change the mechanism but the message has gone to India that all this talk of supporting green energy, all this concern for climate change leaves a lot of action which we still want to see, leaves a lot to be desired in terms of support from the western world which as I said earlier, in the first place, responsible for this problem and in that sense I hope the message goes to the rest of the world that we need to see far more action in terms of renewable energy, in terms of supporting the developing world to get affordable energy access to everybody. And instead of resting on the laurels of giving, many parts of Africa they are giving these bulbs, you know, solar lamp, but LED is very good, they give a solar lamp, I have heard this very often even in Paris it was discussed quite a bit, that they provide solar lamps to many parts of Africa and they say oh we have done a great thing, we have provided a lamp, one lamp which also has a mobile charger to so many homes in Africa so we have illuminated their lives.

My little son when he was in class 11, he used to do this, he had a small thing called illuminating Indian lives and he used to go to the villages and give these solar lamps out to those in the tribal areas. Now I can understand a 16-17 year old boy doing that, but I think nations have to show more responsibility. Nations should be concerned that those billion people living in Africa cannot



get one lamp they need proper energy access, they need lighting, they need fan, they need maybe some refrigeration to protect their produce. They need a better quality of life and that quality of life, ladies and gentleman, cannot be divorced from what is happening in the rest of the world. This situation of 60 and 70,000 dollar economies per capita income economies, keeping all their office buildings in every part of the developed world with lights switched on for whole night with not a single person working inside those offices to consume their electricity and throw green houses into the space on the one hand and concern for developing world to be one lamp for a household. This disparity certainly cannot be the mission and goal of any right thinking human being I would say and that's my angst with.. I have taken this Raisina dialogue opportunity to express, I hope nobody takes personal offense to what I have said because I have spoken truly from the concern of a nation of a people who want to be a part of this global mission to clean the world. And irrespective of whatever obstacles come in the way we will be a part of that but at the same time the world should recognize that under what adverse circumstances we have been able to do that, I will not labour the point on power and coal and all the other initiatives we are doing. A lot of it is in the record, a lot of it is on the websites but I thought a dialogue is truly good if we can speak our heart and our mind out and I am happy to hear any other alternative view point from the other side, today, or at any time in the future.

Thank you very much!

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### **Question Answer**

**Q. I know we are all hungry but I am gonna just take this opportunity to ask you two specific questions because one was mentioned but not answered in the panel discussion which was around how can India integrate its energy ambitions with the region and the second obviously was on nuclear, in the sense, where does that fit in, in the energy basket because you have spoken both about coal and renewable, these two questions I think will be useful for the audience to listen.**

**A.** Well, as far as the regional grid is concerned we have a frame work that we have developed last year amongst all the SAARC countries, we already are importing a lot of power from Bhutan where we are helping them to set up those hydro based power plants which helps them to serve their local population and also the surplus power we buy from there, in fact, most of the investments in the past were made by India to support the economy and I am delighted we have done that and this government stands committed to continuing the collaboration and efforts with Bhutan in a bigger way. In Nepal we are in dialogue to set up several projects, some are ongoing, some greater initiatives are underway. The idea with Nepal is there are certain months in the year where we can export power to them where there will be a shortage in Nepal because hydro power may not come around the year but in other times of the year we will bring that power into India. India and Nepal are working very closely and ambassador here has been a very integral part of that dialogue. I am delighted to inform all of you the recent visit of the Prime Minister of Nepal was an absolutely fabulous engagement with Nepal, I accompanied him to Tehri, showed him Indian engineering skills at the Tehri hydro project which I believe helped him also to make up his mind that we should engage with India much more. And with other countries in the region we have started a dialogue whether we can add transmission lines to other parts of the region we are already talking to Sri Lanka for setting up a power plant in Sri Lanka by NTPC which is India's national utility, so we are looking at a deeper engagement in the days to come. In terms of nuclear, we are very keen to expand that, there have been certain critical issues which we have been able to resolve in the recent years the agreement on supply of Uranium has been concluded with some countries. The civil liability matter is close to resolution I believe some dialogue in terms of procuring equipment also has made progress particularly with France. So I am quite confident that in the years ahead we will see a greater degree of work happening on the nuclear front, of course there are certain concerns about safety which will have to be addressed in greater measure, there are concerns about the effective cost of nuclear power, the life cycle cost which we are still in dialogue with the developed world or the countries which provide nuclear equipment. But clearly we are wanting to do more nuclear power, it provides us with a clean base load which we are very conscious of but it will also have to ensure safety and affordability are not compromised.

**Q. Sir, last word, how can you do both of them in the same time, get a mine opened every month and be so passionate about renewables.**

**A.** Well, today my base load is coal, I can't tell my people look guys I am going to give you power from 7 in the morning to 5 in the evening, but if you want to switch on a fan it can only be between 12 and 2 because that's the time solar radiation is the most and then you can hope that if the wind gets better you can switch on your Air conditioners if the rain gods are good at that points of time we will give you some hydel power and bye bye, rest of the time stay in darkness. Shall I suggest that to my people? I do need a base load, for India coal is our domestic fuel, we want to be self-sufficient and energy secure, because you may recall there were times in the past certain countries didn't even provide us spares for our equipment as a **lever on** us. So obviously India has to become energy-efficient but energy-secure also. So my security comes first, let's all be very clear about it. But at the same time I am proposing that we have only super-critical and ultra super-critical clean coal technologies which are efficient in the future. I am working with Australia and now I am hopefully going to start working with MIT to see if clean coal can be given a greater thrust. I have been talking to countries around the world mostly Japan and Australia to see how we can get more environment-friendly technologies in our appliances. Take a small example of air conditioning, now most of the western world has already set up whatever air conditioning loads they need they may add 2 or 3% every year. India is a developing nation, we will add 20-30% more air conditioning load every year, so what air conditioning load will be there in 2030 is going to be almost 3 or 4 times what it is today. I have two ways of doing it, do it the inefficient way of doing whatever is available or make HFC air conditioning happen in India. I am happy to do HFC-free air conditioning, without HFC, HFC is probably more damaging than coal, right, you know that as an energy expert. Now I want to do that but when I talk to the countries they say no no don't, technologies are with our private sector, you talk to our private sector, want to charge me 7 times or the 8 times for that technology as compared to what technology is available here today. So you leave me to the wolves, I mean not that I have anything against the private sector, I come from the private sector. I meant wolves in the sense of having to pay huge amounts of money to get that technology and clean the environment

and say no no but you have to also not use coal. So let's make up our mind, let's be clear. Security is first, I have to be energy secure, within that I will try to be more and more and more efficient and conscious of the environment.