

The energy sector in India is changing very fast. I first became a Minister in 2002, and, therefore, have practical experience in the Energy Department since the last 18 years. I am witnessing a lot of changes. I recall those days when we had overdues to the tune of Rs. 2200 crore and losses to the tune of Rs. 2000 crore every year.

I can tell you, with connection that the energy sector can be changed by every State, only and only if there is political will of the government. If there is no political will, irrespective of the policies of the Central or State governments, it just can reduce your T&D (transmission & distribution) losses. And no discom will be viable, if your T&D losses are not reduced. Our State was lucky to have Hon'ble Narendrabhai Modi ji as CM. During his tenure, within a span of three years, starting from 2005, all our 4 discoms started making profits. In the last 15 years, there is not a single year where we have not made a small profit. We may not have an 'ROI' of 12% or 14% since we keep

the minimum rate so that our discoms can manage funds on their own. The Central Govt in all these years have given the top ratings to our four discoms. It is an internal competition where we operate. So, I am glad to see the good times we have today.

I still recall the changes in the energy sector. In 2003 the Electricity Act was enacted; laws for to bidding for coal mines were put in place. Gujarat was the first to take the lead and bid for a 5100 MW unit. A 25 year long-term project was launched. And we were happy that we got the best rates at the time, despite the fact that not a single coal mine is found in the state of Gujarat. All our discoms were based on imported coal.

Comparing those days and today, there is a huge difference. Today, coal mines are not an attraction. The attraction is renewable, because every state is concerned what is the cost of power, Wind, hydro or solar? The first priority is to bring the rates down. We, in Gujarat, have

always taken the lead. I still recall that when the first solar power was offered by the state in 2010, the rates were Rs. 15 per unit, and 500 MW were given at Rs. 15/50. Today, we have the lowest rate of Rs. 1.99 per unit. At that time, I remember going to Shri Narendrabhai Modi ji to inform the rate of Rs. 15 per unit. He said, we have to show the nation the way, and Gujarat has to lead. So don't worry about the rate, offer to all and everyone else will follow. That is how we progressed and have reached here. Today, when you look at the Centre and the way they are working, is the reason how we have brought the rate down to Rs. 1.99 per unit about a month back. It is the lowest rate ever. So Gujarat is going way ahead, to fulfill the dreams of our Prime Minister. Earlier he had targeted for 175GW by 2022 and now we are talking about 450GW by 2030. Gujarat alone has around 19,000MW of conventional energy sources, out of which renewables, are 10,000MW. In

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the next two years, we are going toad another 12,000 MW. From 37%, we will achieve 50% of renewables in the next two years. We are doing this in multiple ways.

We are entering a competitive bidding process in two ways. One, on government land and secondly, for private land. If you look at the existing competitive bidding process, the last Rs. 1.99 per unit was on private land. Selection was done by a private player and given to us on Rs. 1.99 per unit rate on a long-term PPA (Power Purchase Agreement) duly signed. Today, the State has, where ever on government land (in places like Raghanesda, Dholera), we have welcome bids for 4650MW. And I expect this 4650MW to be taken up by private players and government in the next two years. Usually, our PPA, once signed is completed in a span of 15 months. So, even if the PPA takes some time, after signing it, the total process will be completed in a maximum span of two years.

Now, another interesting thing which I thought I should share with you is that we are very aggressive, as far as small solar capacity is concerned, say from 500KW to 4MW, near a substation. The last bid we received was for Rs. 2.63 per unit. So we have come up with a policy, where the Rs. 2.63 + Rs. 0.20 per unit which we give, and it has been approved by the regulator. For Rs. 2.83 per unit, we gave an advertisement in the newspaper, and believe it or not, we received 12,000 applications. A total of 8000MW next to substation, which has to be completed in a span of 12-15 months, after signing of PPA. I expect, that out of the 8000MW, at least 4000-5000MW will materialize at Rs. 2.83 per unit. This rate is applicable until March 31, 2021. The new rates will be Rs. 2.20 per unit. We are comfortable with Rs. 2.83 per unit because we do not have to pay any transmission charges, nor any new substations have to be erected by us. This is something unique and I think we are the first in the country to go on such a massive scale, as far as this sector is concerned.

We announced our new Solar Power Policy (2021) around a month back. It is one of the most aggressive policies anybody may have noticed. We have given complete freedom to anyone who wants to install new solar plants. This captive policy of ours is going to change the whole working style of generation and usage of power. Anyone can generate power, use the power, and sell the extra power which remains. So the result will be, what will happen is, every manufacturing unit, L.T. (Low Tension) or H.T. (High Tension), can generate as much power as they want on their roofs. If there is any extra power remaining, they can sell it to us at a fixed price. The price will be Rs. 0.75 per unit to the last bid. So this means he is making money on the captive generation which he is installing. He is not making money on his excess capacity. Secondly, collective ownership is, like a housing scheme. The way a housing scheme comes up, builds houses, and gives it for residential use. The same way, a group of people or a developer can develop 500 KW or 1MW and give it to a captive party, it sell to them, and they can use it for their own purposes. So there is a complete shift. What we expect is that rooftops and warehouses, practically everywhere, and everyone, will start generating power, using the power and selling the extra power to the State at the cost which is 25% lower than the last bid. So GUVNL will not lose any money on that. The excess units which he is drawing during night or day time also, he will be paying at the existing rate. Banking charges have been introduced by the State. So if he wants to bank, he will have to pay the banking charges. No cross subsidy surcharge or any extra surcharge will be paid by the captive consumer. So we expect our indices to grow. A saving of Rs. 2 - Rs. 4 (minimum) for captive users can be foreseen. This will bring in additional

generation of power and additional GST collection, employment, production. We are doing this on a very big scale.

We are also on our way to establishing the largest solar renewable park in the world. The Prime Minister has just laid the foundation stone for it. 72, 000 hectares of unused land, lying in Kutch, next to our border with Pakistan is going to be utilized for this project. Our target is to generate 30, 000 MW from this project, the largest anywhere in the world. The transmission network we are going to set up will carry atleast 50-60% of the power out of the state, the remaining 30-40% power will be used within the State. This is also win-win policy. And I think we can accomplish this within the next ten years. Massive infrastructure is being created by the Government, and roads and transmission networks are being planned in a big way. Our objective is that in the next 10 years, we fully utilize the 72,000 hectares of land.

My State will always take the lead. What I can assume you is, time is moving very fast. No one visualized back in 2002 what the roadmap is going to be. I personally think that whatever discussions we are having today, in 10 years technology will be moving even faster than our thoughts. I think the days are not far off when complete generation would be at the user level. We will not then require much of transmission networks, many storage capacities options will come in also, and the huge problem of surplus net power will be resolved. Today, the wind capacities are using a lot of the transmission networks, as is solar generation. One unique thing which we have come up with is, we are using 83 million units of energy to farmers during the day time. Only we are spending Rs, 3,500 crores on infrastructure, building up the transmission networks to be able to provide energy to all farmers during the day time. So we expect that in the next 5-7 years, a lot of solar generation

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will come up, due to which the cost of solar power will be much lower, even in the exchange, which will help supply cheaper power to farmers. Today, my State is spending Rs. 8000 crore as subsidy every year only for agricultural purposes to 18 lakh farmers, as water tables are very low.

We will be following the Centre's policies too. According to the dreams of our Prime Minister, we have decided that we will remain number one in every way. In rooftops, we are number 1 right now; we are going to convert 10 lakh households with 860MW in the next three years. Most of the basic work is complete. Just another 40,000-50,000 are left,

whereas we started this scheme just around one and a half years back. We are very aggressive on rooftop solar projects. For Wind Power, we are second right now, and I foresee SECI (Solar Energy Corporation of India), out of the 10,000 MW of wind, 7000 MW is in the state of Gujarat, some which has not been calculated. So by the time all the count of SECI comes in, we will be Number 1 in wind also. So I am confident that in the next 2-3 years, Gujarat will not only be number one in renewable energy in the country, but will also be way ahead of other states. As our Prime Minister is showing the world the way forward, Gujarat will show the nation the way forward, as far as

renewables are concerned.

Thank you all, my friends assembled today from all over India & abroad.

*Excerpts from the Chief Guest 'Keynote Address' delivered by, *Mr. Saurabhbhai Patel*, Hon'ble Cabinet Minister for Energy, Govt. of Gujarat State, India at IOD's 'Directors' Dialogue Series' Global Edition #2 with a special focus on Power, New & Renewable Energy sector, held virtually on January 21, 2021.

