## MARY CLUBWALA JADHAV 20<sup>TH</sup> ENDOWMENT LECTURE:

### RENEWABLE ENERGY PROSPERITY OF THE NATION AND THE ROLE OF PROFESSIONAL SOCIAL WORKERS

by

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#### INTRODUCTION

Good evening one and all, I am glad to be a part of such a great occasion amongst such esteemed dignitaries in the field of social welfare. It is an honor to be present at an institution which is known to have shaped up many great personalities constantly contributing towards a better social living.; starting with the founder Mrs. Mary Clubwala Jadhav, a woman with an inborn instinct and an insatiable thirst for service to humanity; and amongst the various faculties, alumni and students .Thank you for giving me this opportunity to share my views on today's energy set up and how we look at it. I will keep it short and simple.

## Let me start this session stating a few realities about the India we live in

- The 2014 WHO report suggested that Delhi is amongst the most polluted cities in the world--the level of air pollution affecting its younger generation is the most.
- Just last month, a study conducted by the World Resource Institute suggests that over 100 million Indians live in areas with poor water quality.
- In Nov 2014, the Guardian Environmental Magazine signified that India's air pollution was "cutting crop yields by almost half."

In a nutshell, increasing urbanization has created so many imbalances in our eco-system that we are over shadowed by a thick layer of pollution affecting basic necessities like food, water and air. Our generation and the future generations are prone to face all the adversities that are created as a result- in terms of reduced life expectancy, reduced birth rates, increased rate of cancer, lack of basic immunity, to name a few.

#### **CLIMATE CHANGE ADDING TO THE WORRIES**

The adversities of climate change are felt across the globe today. The increased temperature levels, unpredictability of rainfall, increasing water levels due to melting arctic glaciers, submerging coastal regions are all the resultant outcomes of climate change.

# ALL THESE PROBLEMS CAN BE LARGELY ATTRIBUTED TO OUR LIFE STYLE PREFERENCES

- The high energy consuming buildings that we occupy.
- Total disregard to wastage of energy- be it water, electricity or fuel.
- Compromising on energy sustainability for a luxurious lifestyle.

The startling fact to be realized is that producing and transporting energy (electricity) is one of the biggest causes of pollution in the world today.

#### **HOW IS ENERGY GENERATED?**

The word "energy" has gained so much importance these days. Energy, as a word, is much familiar to us. It appears in different forms. For a student, it is something that makes him put an extra hour of work during exams. For an athlete, it could be that spurt he needs to make the dash to the finish line. For a wrestler it could be that extra something needed to knock out the opponent. In layman's terms Energy is the ability to do Work. It is the same energy that drives the world's economy forward. We as engineers try to extract these different forms of energy available in nature to create a better life style for society.

#### **FORMS OF ENERGY**

We work with both conventional forms of energy like coal, gas and oil and non-conventional forms like wind, solar and hydro electric power to name a few. As we all know the conventional sources of energy are depleting. They are also corrosive to the environment. It is not just the usage of these fuels that is corrosive but also the extraction of these fuels from beneath the earth's surface that is causing permanent impairment to the eco system. Enormous amount of deforestation occurs because of mining activities and construction of new power plants.

#### WHAT IS THE ALTERNATIVE SOLUTION?

Every nation is trying its best to find an alternative to meet its power demands. The only viable option is through renewable sources of energy. As a renewable power company, our ultimate aim is to extract these abundant natural resources of power from its source and deliver it to its point of consumption in the most benign way possible. Out of the total 255GW of installed capacity of power in India, renewable energy contributes to about 12% of the total energy mix. Out of the renewable share, wind contributes to over 70%. India is amongst the top 5 countries in the world in terms of wind power capacities with over 22000MW installed till date.

#### IMPORTANCE AND BENEFITS OF ALTERNATIVE POWER

The most fundamental reason for opting for renewable energy is that we have a huge potential of renewable source available in the rural parts of the country. If we can capture and disseminate this limitless power in the right channel, we should be able to resolve two of the biggest problems faced by India today, "Migration and Food grain production" Reports suggest that there are over 11akh unelectrified villages in India. Some of the electrified villages are experiencing poor quality of power and as well as constant power cuts. It is clear that Power is the backbone for any economy to grow. What has been a hindrance to India's growth is its inability to tap its huge rural work force. Imagine an India with limitless power to all the cities, towns and villages. We shall be able to utilize the manpower and natural resources available in the rural areas of our country and trigger an economic revolution in a decentralized manner contributing individually to the GDP of our Economy. Multiple (small/micro scale) industries can come to life. We shall have much healthier, socially informed and safer citizens across the country living an improved lifestyle. This could be the next big thing that could happen to India after the IT revolution. Decentralized solar power plants and off-grid wind power plants shall play a crucial role in scaling up this idea.

It is very essential that when we say India is growing, it should not be restricted only to the bigger cities. It should include each and every village in its journey to the top of the world. Expanding the industrialization to rural India will prove most effective in terms of cheaper manpower and reduced infrastructure cost that could prove a catalyst for our Prime Minister's most anticipated campaign- the Make in India Campaign.

#### **SUSTAINABILITY**

Though much advancements have been made at the consumption points, it is very difficult to optimize its usage without human intervention. I strongly believe it is our responsibility to use energy in the best possible way so that we can preserve and offer a better future for our children. Just as the common man secures and saves money and wealth for his progeny, similarly, it is high time, we start preserving our energy for our future generations. We take so much pain and effort to ensure better living standards for our children. We give them all the comforts in the world and strive to make a better life for tomorrow. If we do not give due importance to preserving our environment and its various forms of energy, it will be like offering one a cruise to sail in the ocean but with very little fuel in it. It is important, not just as a parent to preserve energy , but as a society, as a nation, we should strive for higher levels of energy efficiency and sustainability.

Small things could make a huge difference in life; Let me suggest some small initiatives that you can adopt as part of your life style that can make a world of change in the use of your energy system.

- When you get up to an early alarm, rather than reaching out to the light, open your windows and shades. Use natural source of lighting throughout the day as much as possible.
- Use water filled in a bucket for bathing. It prevents a lot of water from going waste as it gets pumped from your overhead tank, which in turn consumes a lot of electricity.

- Switch off the heater on your way out.
- Use the staircase and avoid using lifts/escalators unless you are on 5th floor or above.
- For shorter commute use bi-cycles or walk the distance. It could prove to be a lifesaving action from a lot of fatal diseases.
- Switch off your car/bike engine at traffic signals.
- Stop using serial lights for your commercial shops and business hoardings.

The three R's of sustainability help us preserve energy at a larger level Reduce, Reuse and Recycle. These three terms are relevant for all forms of energy. It is very pertinent to the food we waste; Reducing the quantum of food according to need is the first step. Instead of throwing away excess food, giving it to the hungry is the next step to prevent food wastage. Reusing the waste water for gardening, and waste recycling, are all practices that are gaining much prominence in recent times. Recently I came across a video which showed how to construct a house using plastic bottles and earth.

#### CSR & ROLE OF PROFESSIONAL SOCIAL WORKERS

Having said all this, there is a definitive difference in the mindset of people in the rural and urban community. It is very difficult for a corporate like Gamesa to break the entry barrier in these remote villages. To educate them that we are not there to exploit their resources. To assure them that we will not leave them stranded without anything like many of their past experiences with other industries. Rather, we jointly want to assist them towards growth and sustenance. I see a great opportunity for social workers to create a positive mindset towards a mutually beneficial idea and act as a bridge between the corporates and the villagers so that large scale deployment of renewable is possible.

I believe that for a stable economy to be built, it is most important to have a strong rural population. Progressive growth, as desired by all, will have to be inclusive. After all, if 2/3rds of India's population is left

underdeveloped, socially and economically, we will never be able to gain a developed nation status. Whether the farmer in Chittoor is actually contributing towards global warming or not, he will anyhow suffer the repercussions of climate change. We are all in this together. While philanthropy is needed and much appreciated, corporate need to sit up and engage in initiatives that will help us realize a progressive society is the need of the hour. CSR is more than philanthropy. It is more than a mere cheque signed towards a particular cause. We aim to contribute through active participation. Involvement is key to ensuring that the good we intend to do is actually being done. Social upliftment in its true sense will take wings only then. Having said that, as a socially responsible corporate we strive to improve the standard of living of the people in cities by making a difference in the village at first where the energy is generated. For example Gamesa, as an organization, tries to touch the lives of people close to our wind farms, mostly in rural settlements. Our CSR initiatives include meeting basic requirements of social development and empowerment such as education, health and sports. The Gamesa slum soccer which we kick-started from this very college ground is helping many young boys and girls understand the meaning of social inclusiveness in its own way.

Thank You.