

A SEMINAR ON

“ENERGY SWARAJ YATRA”

BY

Dr. CHETAN SINGH SOLANKI

PROFESSOR, IIT BOMBAY

FOUNDER, ENERGY SWARAJ FOUNDATION

DATE: 18th JANUARY, 2021

TIME: 11:00 AM

VENUE: ROOM NO. 211

ELECTRICAL ENGINEERING DEPARTMENT

L. D. COLLEGE OF ENGINEERING, AHMEDABAD



Electrical Engineering Department, L D College of Engineering, Ahmedabad organized an expert talk cum awareness seminar on “Energy Swaraj Yatra - A Big Leap Towards Greener World” by Prof. Chetan Singh Solanki, Professor, IIT, Bombay and Founder of Energy Swaraj Foundation. The seminar was held amidst

all SoP due to the pandemic. PG students and faculty members were participating offline whereas for the benefit of other participants which included UG students, industry personnel, students and faculty from other institutes etc. it was broadcast on YouTube as well as Facebook.

Prof. Chetan Singh Solanki has been referred to as “Solar Man of India” by Times of India, The Hindu and India Today. Some people also know him as “Solar Gandhi” due to his remarkable work in the field of solar energy. He is an educator, innovator, researcher, entrepreneur and author. He is widely felicitated nationally as well as internationally.

The seminar was inaugurated and addressed by the Head of the Electrical Department - Dr. M. C. Chudasama. Dr. Chudasama introduced the speaker and also gave a brief of the tremendous contribution Dr. Solanki has made and is still making to the field of solar energy.

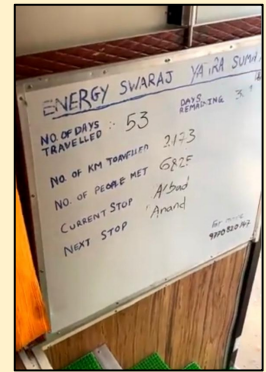
Prof. Solanki received his Ph.D. from IMEC (Ketholik University) Leuven, Belgium. He had led major solar projects at IIT Bombay including the National Centre for Photovoltaic Research and Education (NCPRE), which is one of the leading research centres in India and the Solar Urja



through Localization for Sustainability (SoULS) Initiative which through its clean light initiative has reached 8.5 million families. Prof. Solanki has authored 7 books, published over 100 research papers in international journals, and has 4 US patents to his credit.

He has authored his thoughts in the book “Energy Swaraj: My Experiments with Solar Truth”. His desire to take concerted action in climate change mitigation prompted him to undertake Gandhi

Global Solar Yatra across the world. Following Gandhian ideals, Prof. Solanki has envisaged the idea of Energy Swaraj wherein locals generate and consume their own energy. He has undertaken an 11 years long Energy Swaraj Yatra from 2020 to 2030 to create a public movement for establishing Energy Swaraj. Efforts will also be made to spread the same in other countries as well.



Dr. Solanki started his talk by giving a brief idea of the energy scenario prevailing today. Nearly 80% of our energy needs are being fulfilled through fossil fuels, which is also causing global warming. *The Guardian Headline of 8th October 2018, read, "We have 12 years to limit climate change catastrophe, warns UN", of this 2 years have gone.* Climate crisis has become more prominent in recent years. Snowfall in the deserts of Dubai, wild bush fires in Australia, heatwaves in Europe, large scale melting of glaciers, droughts, and floods in many parts of the world are examples of climate crisis of recent times. *As per the Intergovernmental Panel on Climate Change (IPCC) special report, the world is already hotter by 1°C. It is imperative to limit global warming to ideally 1.5 °C or at max to 2°C to avoid irrevocable change in the climate.* This requires rapid and far-reaching transitions in energy.



Dr. Solanki emphasized that climate change is a crisis that requires urgent large scale efforts involving public at large. Taking a cue from the Gandhian Philosophy of Gram Swaraj, Energy Swaraj is generation and consumption of Energy by Locals and for Locals, using local resources. The idea of Energy Swaraj has been implemented through IIT Bombay's

SoULS, which also won the prestigious Global grand award of IEEE amongst 459 teams.

He informed that the Energy Swaraj Yatra is planned across the country starting from October 2020 until December 2030, nearly 11 years long yatra, to create Energy Swaraj as public movement. The Yatra sets to bring a philosophical understanding and practical acceptance in society, at large, for the adoption of the solar solutions in a disciplined manner for fulfilling 100% energy needs.

It is understood that the Energy Swaraj can become public movement only when public starts to adopts solar energy solutions irrespective of any governmental policy or subsidy framework. Dr. Solanki has a bus which is customized to demonstrate the concept of Energy Swaraj. He is travelling

and living in a solar-powered electric bus or solar bus. It will not be a ‘vanvas’ but a ‘solarvas’, he says.



The bus has solar panels on its roof which charge and store up to 6 units of energy. The bus can run on diesel or solar energy (it can run upto 35 - 45 km on solar). The bus also functions as a small house consisting of a sitting area, a washroom, a pantry, work area, storage space and a folding bed. It has CCTV for security.

The bus is fitted with all possible gadgets and household appliances like induction plate for cooking, lights, fans, inverter based AC, charging points for mobiles, laptops, two TV sets, etc. All the power supply required for these gadgets and appliances are drawn from the solar panels fitted on top of the bus.

He also gave the mantra - *“AMG - Avoid, Minimize, Generate”*. He feels this principle will prove to be very helpful in the efficient utilization and management of energy requirements. Dr. Solanki expects this yatra will be the seed for creating a public movement for the adoption of solar energy solutions on a very large scale, sufficient to mitigate climate change.

It was a pleasure for all faculty, students, NGOs and industry persons to interact live with Prof. Chetan Singh Solanki. There were around 40 participants offline including faculty and PG students. The online participation crossed 400 with more than 250 views on YouTube at that time. Now it has increased far more.



Dr. Chudasama concluded the seminar by expressing his gratitude to the Principal Dr. Rajul Gajjar for her constant support and motivation for all activities the entire team for their efforts especially Prof. Jiten Chavda, Prof. Fedrik Macwan and faculty members. Of course, he profusely thanked Dr. Solanki for visiting our campus and delivering such an excellent talk and demonstrating his philosophy of “ENERGY SWARAJ”.



LINKS FOR VIEWING THE EVENT -

YOUTUBE: <https://www.youtube.com/watch?v=4wO0A8CWFu0&feature=youtu.be>

FACEBOOK: <https://m.facebook.com/groups/1791937127709697/permalink/2922796777957054/>