## COVER STORY

## SOLAR ODYSSEY: JOURNEYING TOWARDS ENERGY SWARAJ AND A SUSTAINABLE TOMORROW



## Dr. Chetan Singh Solanki

As I reflect on the global challenges we face, it's clear that the climate stands as the most formidable adversary of our time. Its impacts have transformed the abstract notions of rising seas and disappearing species into tangible disruptions that affect our daily lives and economies on a global scale.



This existential crisis now holds a prominent place on scientific, political, and policy agendas. So, I always quote these simple yet powerful lines whenever I meet people, which gives the complete picture of today's scenario. 'Climate is not changing. It has changed, and the change is accelerating.' The culprit behind this crisis is the reliance on fossil fuels—coal, gas, and oil—which currently satisfy 80% to 85% of the world's needs. The urgency of the situation cannot be overstated. The Inter-Governmental Panel on Climate Change (IPCC) has sounded the alarm for 'drastic" and "immediate" changes in our energy consumption patterns. The clock is ticking, and we merely have 6 to 7 years to prevent global temperatures from breaching that critical mark of 1.5 °C.

The purpose of my Energy Swaraj Yatra transcends mere rhetoric. It is a call for immediate action, irrespective of governmental policies or subsidies. Energy Swaraj can only become a solution when individuals themselves embrace change. The Energy Swaraj Yatra was launched to propagate the wholesome idea of energy swaraj among the masses so that it could be converted into a mass movement.





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This solar-powered journey, conducted aboard the Energy Swaraj Yatra bus, lies at the heart of our movement. Stretching over nearly 11 years, from November 2020 to December 2030, this epic voyage merges the synergies of climate change mitigation efforts. It seeks to raise awareness about energy use, combat misuse, and catalyze measurable changes in energy consumption patterns. It has been more than 1,000 days since the Yatra started. The Yatra has covered more than 43000 km, visiting 22 states across India, including Jammu and Northeastern states, meeting more than 2,00,000 people, motivating them to initiate corrective actions, climate and bringing behavioural changes in the current energy use attitude, which is also in line with the Mission LiFE launch by our hon. Prime Minister, who advocates the conscious use of energy. Our goal is to inspire global societies to shift 100% solar-powered towards living by locally generating their own energy and becoming energy-independent.

The antidote is "right energy", clean and sustainable, and its pursuit hinges on two fundamental principles: "limiting consumption" and "localized production". These principles, which I have termed the 'laws of human existence', form the bedrock of Energy Swaraj, offering a sustainable path forward. It is very important to have discipline in anything that we do, so there must be discipline in energy consumption, which everyone should follow for a sustainable future.



In the words of Mahatma Gandhi, "The world has enough for everyone's needs, but not enough for anyone's greed." Our Earth's resources are finite, and it is incumbent on every organization, every individual, and every government worldwide to embrace essential energy consumption. Even as we transition to renewable sources like solar and wind, we must acknowledge their environmental impacts and the looming challenge of recycling.



Inspired by the timeless principles of Mahatma Gandhi's 'Gram Swaraj', which advocates for self-sufficiency and dignified living, Energy Swaraj emerges as our beacon of hope. It champions energy autonomy, encouraging us to consume energy locally. The root of our energy crisis lies in the carbon emissions associated with fossil fuels, driving environmental degradation, global warming, and climate change.





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The Energy Swaraj Yatra bus serves as testament to our commitment. I, Professor Chetan Singh Solanki, have taken a leave without pay from my position at the Prestigious Indian Institute of Technology Bombay to lead this transformational journey. The bus itself is a showcasing solar training marvel, and demonstration facilities equipped for daily tasks including showers, cooking, work, meetings, and training. With 3.2 kW of solar panels and 6 kWh of battery storage, it powers lights, coolers, cookstoves, water pumps, TVs, ACs, and laptop charging, all while running its engine on diesel. This bus embodies the possibility of 100% solar energy adoption, exemplifying Energy Swaraj's mission.

As the bus embarks on its epic voyage, it becomes a vessel of enlightenment, traversing the bustling streets of urban India, winding through the tranquil countryside, and venturing into the remote corners of the nation. Every mile is a mile towards a brighter, cleaner tomorrow. It is a declaration that energy autonomy, sustainability, and climate resilience are not lofty ideals but achievable dreams.



It is an invitation to all, an urging to join hands, to ride alongside me, to be part of this symphony of change. Along its path, it leaves a trail of inspiration, sparking conversations and imaginations. Every individual's igniting contribution to fossil fuel-driven energy consumption impacts our planet. Our mission is to bridge the gap between governments and individuals, offering solutions for climate correction. Through energy literacy training and the Energy Swaraj Yatra, we aim to raise awareness about solar energy adoption and promote self-reliance in energy needs.



As we navigate the intricate web of global energy production and consumption, one truth emerges: our actions today will shape our tomorrow. The Energy Swaraj Movement, in its relentless pursuit of clean and sustainable energy, calls upon every citizen to become part of the solution. It beckons us to embrace energy consciousness, limit consumption, and transition to distributed renewable energy. Only by uniting in this endeavour can we hope to secure a sustainable future, mitigate climate change, and limit global warming.

Together, we are authoring a story of change, where the sun is our guide and Energy Swaraj is our destination.

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