

AUTO DRIVER'S WILLINGNESS TO SHIFT TO ELECTRIC VEHICLES

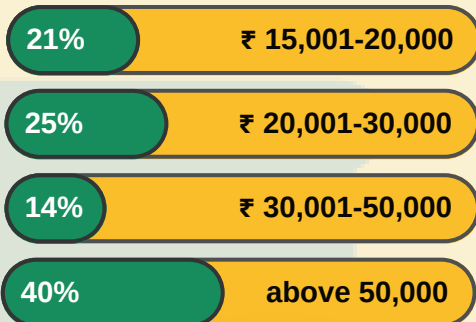


Air pollution due to the use of petrol, diesel and LPG is among the most important problems to be resolved in the near future. Electric vehicles (EVs) will play a key role by making a positive contribution to these problems. One of the most intriguing participants in the long-term renewable energy marketplace is the automotive industry. The consequent shift of the global market towards electric vehicles is monumental.

SwitchON Foundation conducted a quantitative survey of 164 auto drivers from selected routes of urban Kolkata to gauge their willingness to shift to cleaner energy sources.



COST OF SWITCHING TO LPG



In 2008, the Calcutta High court ordered the conversion of all autos from petrol and diesel to LPG.

Only 11% of the respondents admitted to receiving government subsidies during the switch to LPG.

40% of respondents had to pay above ₹50,000 for their switch to LPG from conventional fuel sources.

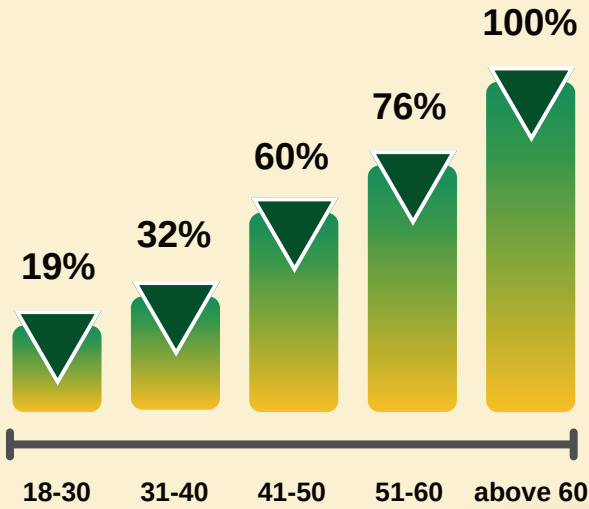
STORIES FROM THE GROUND

Satisfaction and liabilities in the profession

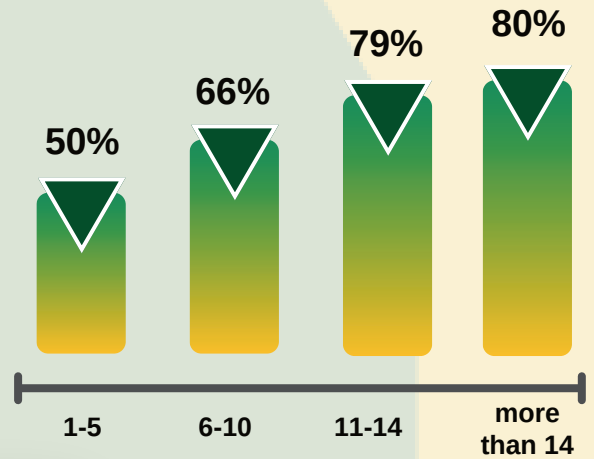
The respondents are satisfied with their daily income (₹1000-₹2000) and the increase in income in the last decade. However, 100% of auto drivers above 60 years old and 19% of young (within 30-40 years old) auto drivers failed to renew their Pollution Under Control Certificates (PUC).



Age Group wise proportion of Auto Drivers who paid fine (for non-renewal of PUC certificate)



Association of Satisfaction regarding Decadal Income Change with hours of Auto Driving

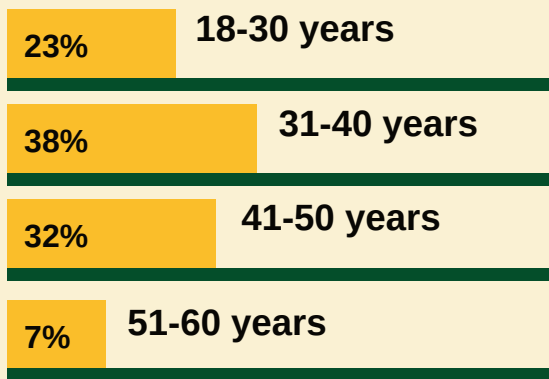


WILLINGNESS TO SHIFT TO CLEAN ENERGY

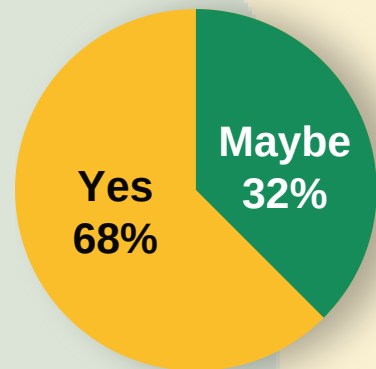
59% of respondents are willing to shift to cleaner energy sources, most of them belonging to the younger age group (31-40 years)

68% of willing respondents were primarily aware of what an EV is and 32% either didn't know or had feeble knowledge of the same

However, there still remains some confusion regarding the boons of the transition among the auto drivers that demands clarity which will motivate the change.



Willingness for Energy Transition among different age groups

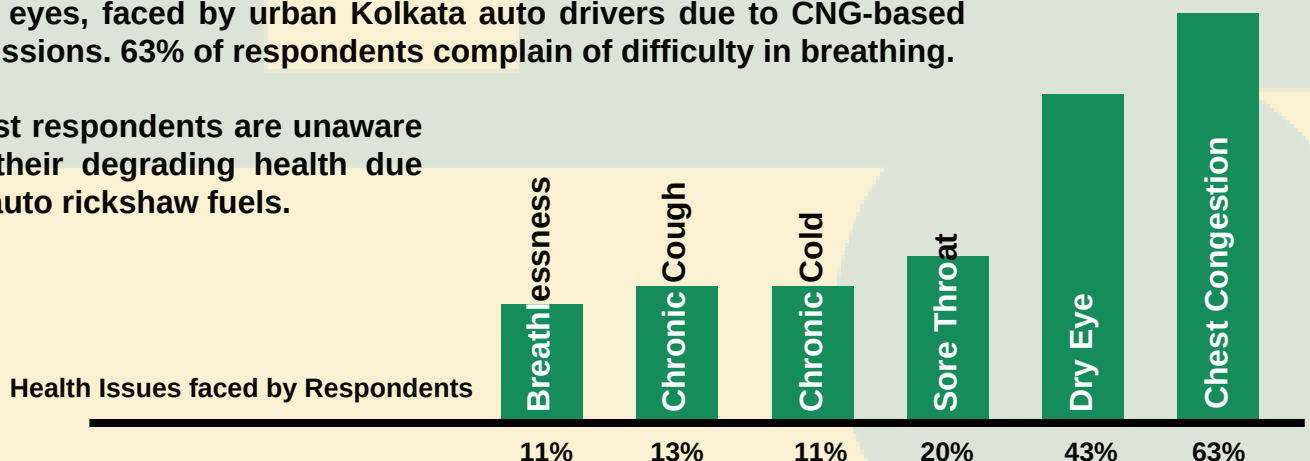


Willingness for Energy Transition as per previously existing knowledge on e-Vehicles

DEGENERATING HEALTH OF AUTO DRIVERS

Chest congestion is the highest reported health issue followed by dry eyes, faced by urban Kolkata auto drivers due to CNG-based emissions. 63% of respondents complain of difficulty in breathing.

Most respondents are unaware of their degrading health due to auto rickshaw fuels.



Health Issues faced by Respondents

RECOMMENDATIONS



Auto drivers need to be made aware of the properties and functions of electric vehicles

EVs can be subsidized by the government to promote the sales of EVs in a competitive automobile market

The availability of subsidies for auto drivers who are inclined to the transition will also motivate other drivers toward the change

There should be an exemption from taxes to support the sale of EVs in the country

Setting up proper charging stations that are convenient to access or available on auto-prone routes

Acknowledgment of environmental damage imposed by vehicular emissions

WAY FORWARD

Proper analysis and study of vehicular emissions contributed by autorickshaws

Involvement of stakeholders and researchers to aid in the reduction of air pollution due to autorickshaws

Awareness of the rising air pollution scenario and the measures that can be adopted to combat the problem

Awareness of the health hazards imposed by auto rickshaw emissions amongst auto drivers

Motivation towards shifting to clean energy and a proper understanding of the transition



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SwitchON Foundation is a leading, award-winning not-for-profit, established in 2008 with a focus on Environment Sustainability and Equal Opportunities. Presently working in 10 states across India, the organisation spearheads and supports interventions on Clean Energy Access, Sustainable Agriculture, Skilling - Education, and Wellbeing. SwitchON's core competencies lie in testing innovative technologies and business models, communication for advocacy and awareness, capacity building through skilling and training, and implementing / supporting field operations.

