



## Bhushan Sawhney

**Executive President and Chief Business Officer (Cables)  
Polycab India Ltd.**

# Sustainable Solutions to Build Energy Efficient Homes

*Efficient and secure building design involves implementing the best of everything, and that includes choosing the best building materials. India's rapidly evolving infrastructure needs to integrate sustainability and safety into its fold.*

India is witnessing an interesting phase in the history of sustainable and economic development. The ongoing meetings in the lead-up to the G20 Summit which India is presiding over have put the spotlight back on the country's commitment towards achieving net-zero targets by 2070 and low-carbon pathways. India has set it a priority to preside over discussions on energy with a focus on low-cost finance for the energy transition to decarbonise the economy and provide universal access to clean energy. The transition aims for a shift from a carbon-based development model to a more sustainable development model. India has been laying stress on the idea of sustainable living and highlighted the issue of climate change at global forums.

India's presidency of the G20 Summit will be a slingshot towards assuming leadership roles among the emerging economies in the bloc, especially in areas of accelerating sustainable development goals, inclusive growth and seeking affordable clean energy partnerships.

India has the opportunity to showcase its efforts in realising numerous international pledges, including promises made to tackle climate change.

### Shared Responsibility

The government's commitment alone, is insufficient to propel India into the orbit of its climate mission. We need our people, institutions and businesses to come forward in the mission to achieve carbon neutrality and prevent irreversible damage to the planet from green energy transition to developing sustainable, safe and resilient infrastructure, the various stakeholders in India's development have crucial roles to play.

But will building eco-friendly and sustainable infrastructure alone work as a panacea, unless the sources from where these infrastructures draw their energy aren't efficient and 'green', too?

Electrical wire and cables that are the veins of any domestic, commercial and industrial infrastructure and growth machine do not find the deserved atten-

tion in our focus on the 'look and feel' of what lies in front of us. Lack of knowledge about the intricacies involved in wiring often leads to fire hazards and loss of lives and properties. A May 2022 report pointed out that fire-related accidents have killed an average of 35 people every day in five years surveyed between 2016 and 2020. Not only that but in our rush to catch up with the latest trend of purchasing energy-efficient and smart appliances we seldom take notice of efficient wiring and cables that bear the load of our appliances, gadgets and pieces of machinery.

### Winds of Conscious Change

Until a few years ago, the personal preferences of electricians entrusted to carry out the installation or servicing of wirings at homes largely influenced a consumer's purchasing decision. Fortunately, the approach of consumers while purchasing wires and cables for homes and buildings has been gradually changing. Consumers nowadays are

increasingly making informed decisions while choosing the quality of wiring for their homes. People search for the safety, quality and durability of wirings, as they are the backbone of the entire electrical system of our homes.

Moreover, environmentally conscious consumers have increasingly been researching on such wires and cables that are environment-friendly and energy-efficient. A series of global catastrophic events and increases awareness about social impact issues are prompting consumers and businesses to make responsible choices that are beneficial not only for them but for the planet, too.

### Pioneering Energy-Efficient and Eco-Friendly Solutions

Manufacturers across the board are nurturing innovative technologies that mitigate risks to life, property and the planet, by developing electrical wires and cables that are sustainable, safe and resilient to disasters and accidents. Polycab green wire is one such solution that combines breakthrough engineering with meticulously selected materials that conform to stringent European Norms of Environmental Sustainability and Cable Safety.

The green wire comes with 5-in-1 green shield technology that delivers fire safety and energy efficiency. Green Wires are manufactured in a way that limits the environmental impact of their production by ensuring sustainable practices such as limiting energy consumption or diverting waste from landfills.

India is taking giant strides towards fulfilling its energy goals through its progressive international initiatives and policy changes. One among them is the passage of the Energy Conservation (Amendment) Act in both houses of Parliament last year. The noteworthy features of the bill include mandating



the use of non-fossil sources, including green hydrogen; establishing carbon markets; bringing large residential buildings under the ambit of the energy conservation regime; and enhancing the scope of the energy conservation building code.

India has a well-established provision for manufacturers of electrical appliances to get their products rated on energy efficiency and help make consumers an informed choice of purchasing them. But until recently the norms applied only to large appliances such as air-conditioners, refrigerators and washing machines. The government has now extended the applicability of star rating norms on smaller appliances — such as ceiling fans — thereby bringing more accountability on part of manufacturers to produce efficient products. Polycab has been playing an active part in India's smart and sustainable energy efficiency goals with several offerings. Polycab's five-star rated BLDC energy-saving ceiling fans and smart LED lights are solutions that cater to informed consumers of this age while reducing stress on power consumption and resultant pollution.

A BLDC (brushless direct current) fan

consumes less electricity as compared to a normal induction fan and has a longer lifespan. It operates on direct current electricity, and its motor contains permanent magnets instead of electromagnets used in induction motors, thus limiting heat loss and energy like in electromagnets. The BLDC technology completely revolutionised the fan industry. With the new Bureau of Energy Efficiency Star Ratings being introduced from January 2023, Polycab has launched a range of new revised and improved star rated fans. The company's Scintillate 3-in-1 LED panel light is truly scintillating.

### Sustainable Energy Consumption: The Way Forward

Efficient and secure building design involves implementing the best of everything, and that includes choosing the best building materials. India's rapidly evolving infrastructure needs to integrate sustainability and safety into its fold. Homes are more than just four walls — they need to be safe and sustainable. Choosing the right cables, wires and electrical solutions is a natural step in that direction.