

Reports on Use of Energy Efficient Equipments, Waste Management and Water Conservation (Guru Nanak College Budhlada)

Report on Energy Efficient Equipments

USE OF SOLAR ENERGY LIGHTS

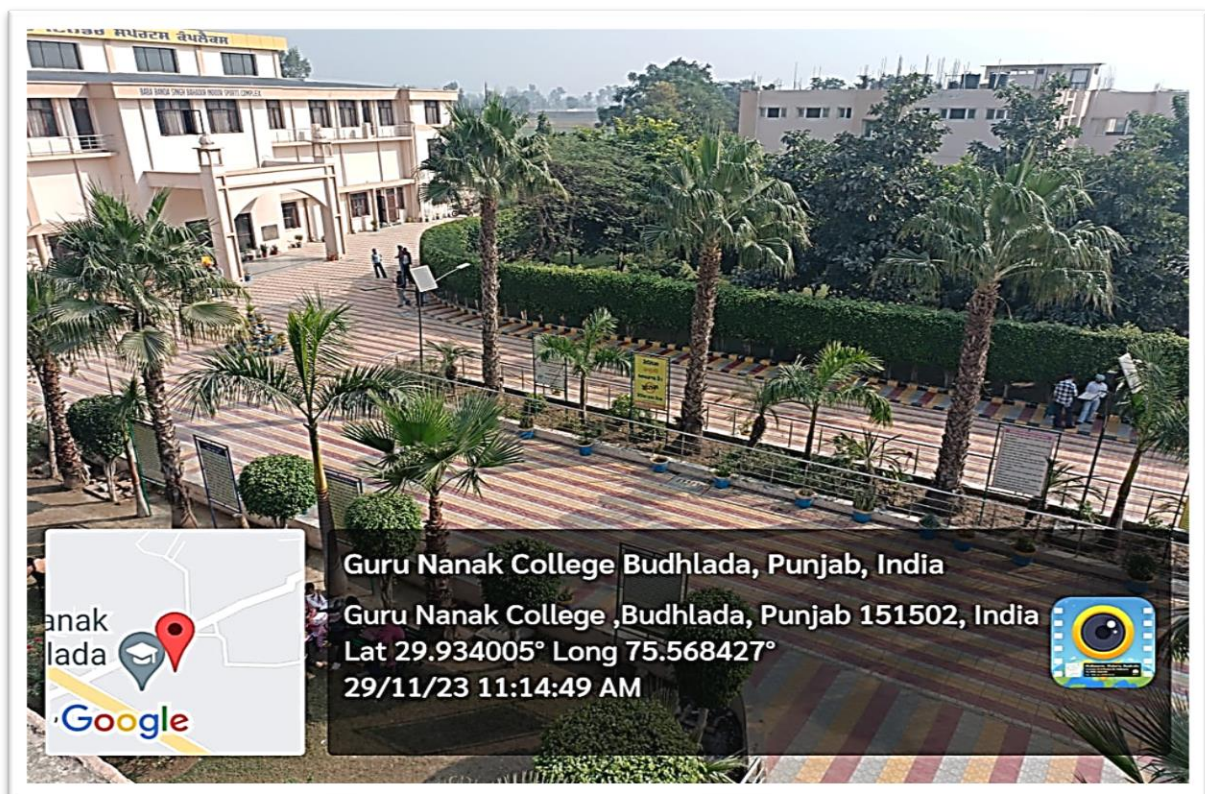
Introduction:

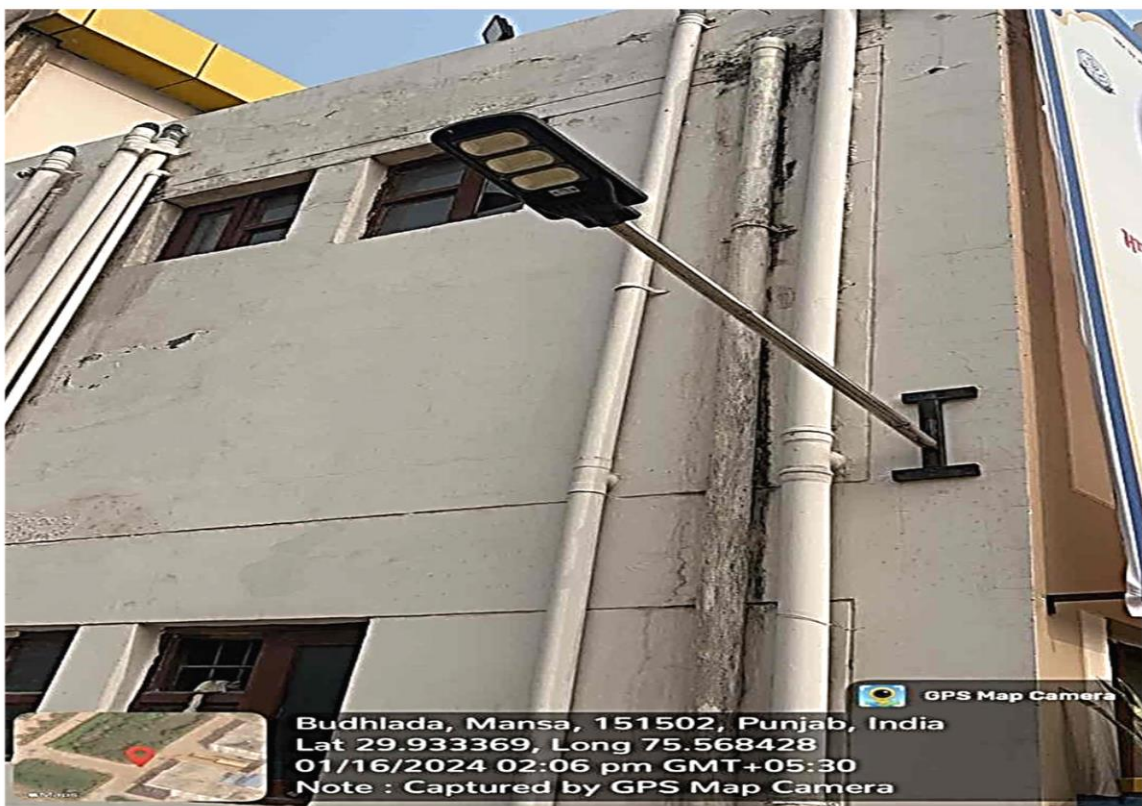
World's energy demand is grow in fast because of population explosion and technological advancements. It is therefore important to go for reliable, cost effective and everlasting renewable energy source for energy demand arising in future. Solar energy, among other renewable sources of energy, is a promising and freely available energy source for managing long term issues in energy crisis. Solar industry is developing steadily all over the world because of the high demand for energy while major energy source, fossil fuel, is limited and other sources are expensive. In today's climate of growing energy needs and increasing environmental concern, alternatives to the use of non-renewable and polluting fossil fuels have to be investigated. One such alternative is solar energy. Solar energy is quite simply the energy produced directly by the sun and collected elsewhere, normally the Earth. The sun creates its energy through a thermonuclear process that converts about 650,000,000 tons of hydrogen to helium every second. The process create she at and electromagnetic radiation. The heat remains in the sun and is instrumental in maintaining the thermonuclear reaction. The electromagnetic radiation (including visible light, infra-red light, and ultra-violet radiation) streams out into space in all directions. Only a very small fraction of the total radiation produced reaches the Earth.

Report on Solar Lights

Guru Nanak College Budhlada is one of the prime institutions contributing in the Environmental and Social prosperity by inculcating the practical knowledge to aware the individuals regarding the importance of renewable sources of energy. A great effort has been made to tackle the energy crisis issues through the installation and functioning of ultimate source of energy i.e. solar lights. As a prime institute Guru Nanak College Budhlada initiated

activity to adopt eco-friendly lifestyle by the consumption of energy through solar and sensor based source for which solar and sensor appliances have been installed in college campus.





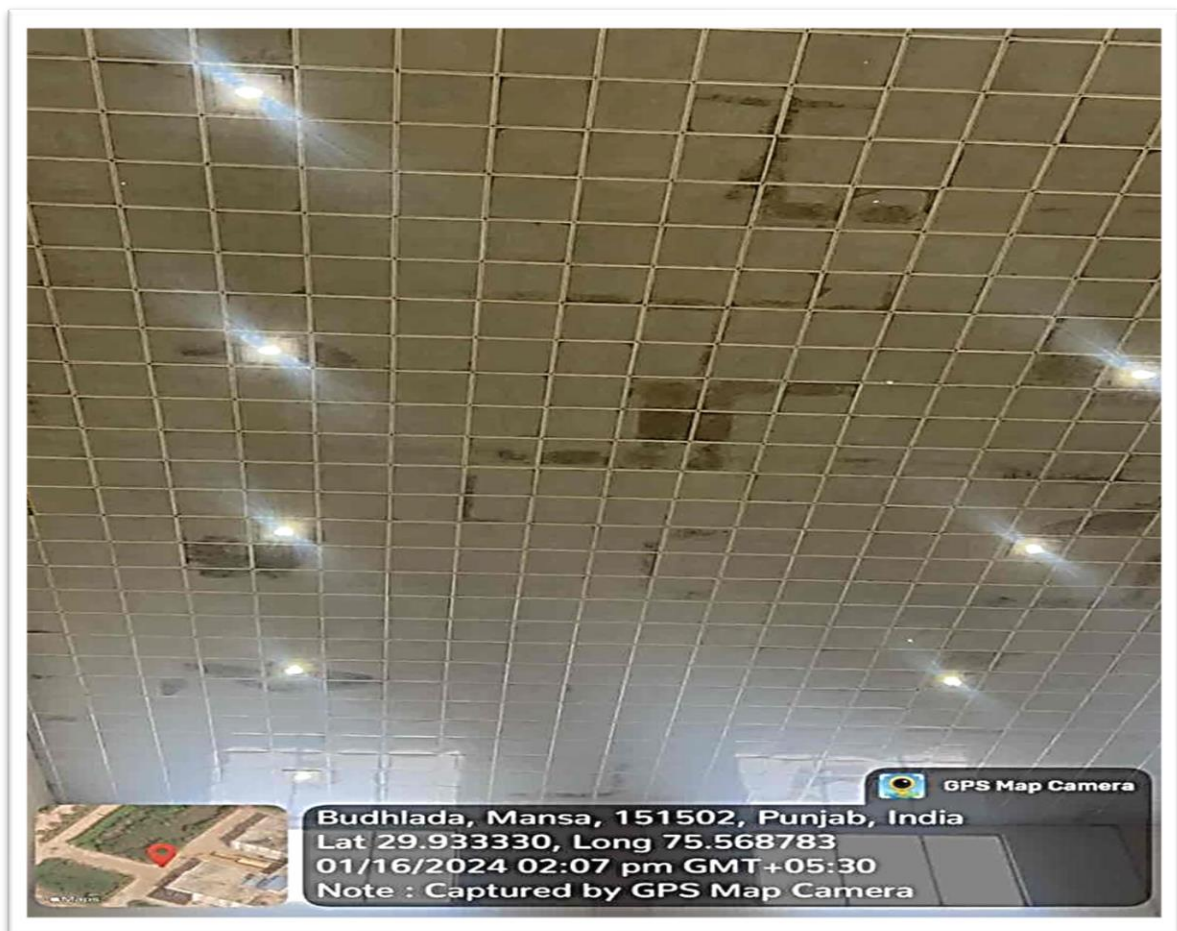


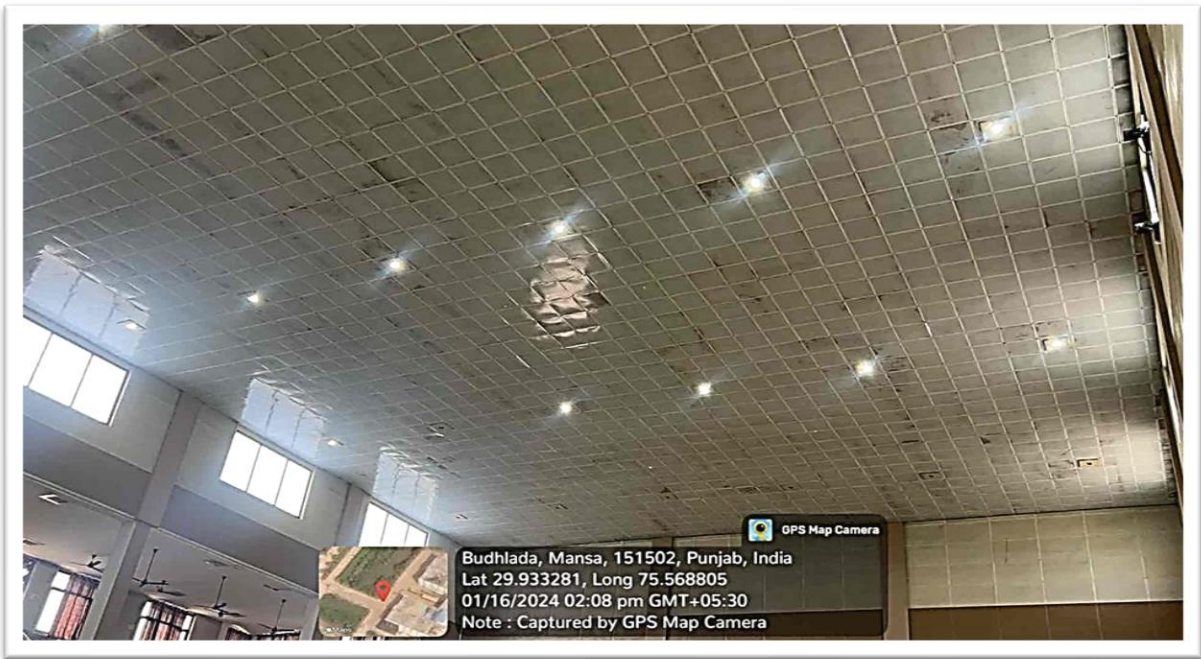
Use of LED bulbs/ power efficient equipment

Use of LED Bulbs in the College

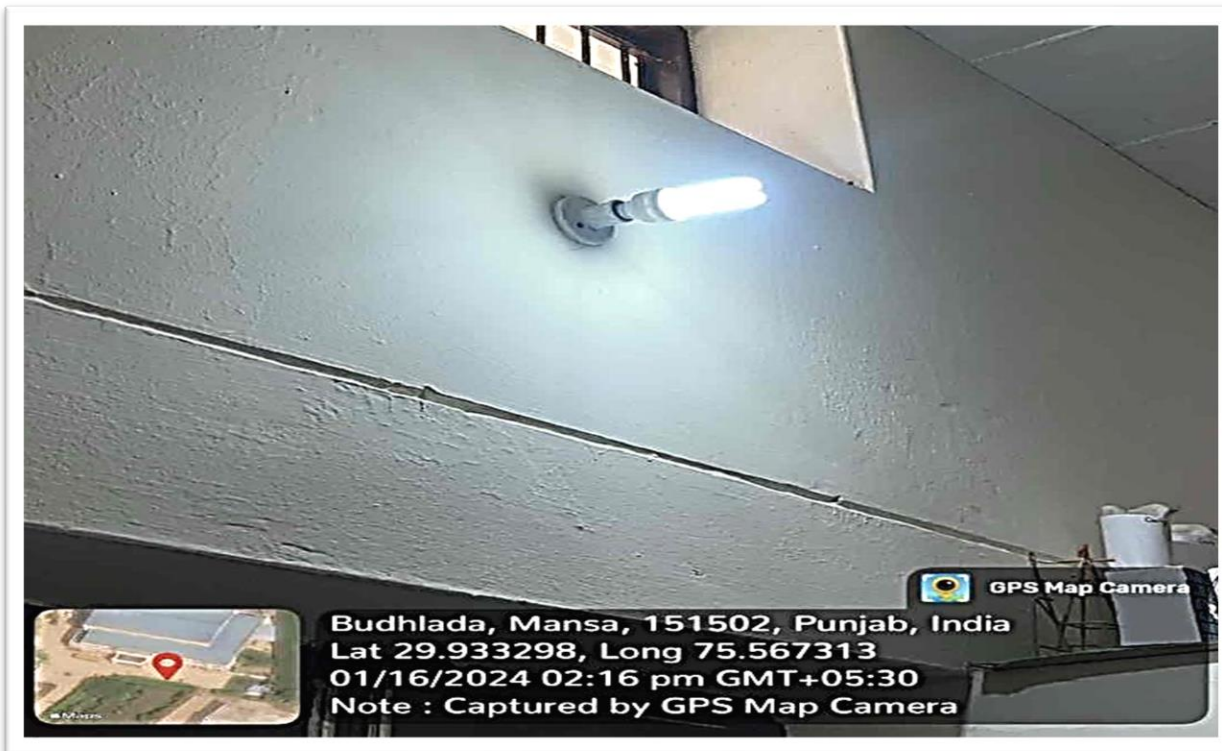
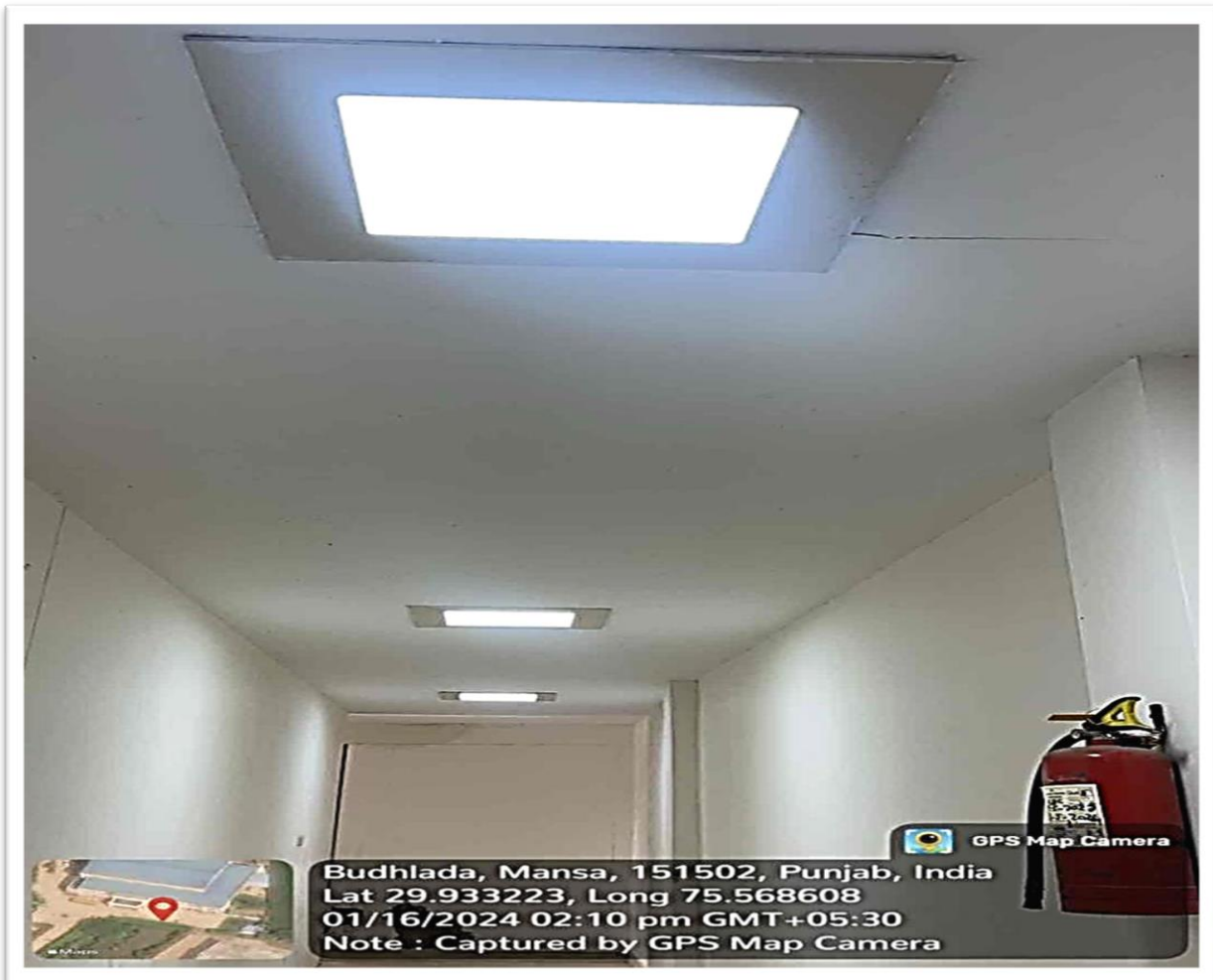
A LED lamp is an item for consumption that uses a Light-emitting diode and that is assembled in to a street lamp or a light bulb .LED lamps last much longer, and are more efficient than luminous lamps. Unlike luminous lamps, most LED lamps do not need to "warm up" before they emit the full quantity of light in our everyday life. By replacing 40 watt florescent tube by 9 watt LED tube or 14 watt T-Bulb we can save approximately Rs.1116 per year. LED lighting fixtures are more beneficial for saving energy and to conserving the environment. These lighting solutions help a lot in maintaining campus security, providing better quality light, improving student safety, and giving facility managers a sense of peace that comes with purchasing long-lasting products. LED light bulbs last much longer and consume far less energy. The high efficiency and directional nature of LEDs makes them ideal for many uses. LEDs are increasingly common in street lights, parking garage lighting, walkway and other outdoor area lighting, refrigerated case lighting, modular lighting, and task lighting. Natural light is the best and most important light to incorporate in the classroom. Natural sunlight provides physical and physiological benefits to both students' and teachers alike. The truth is that LED lights are directional, which means that they are excellent for use as reading lights.

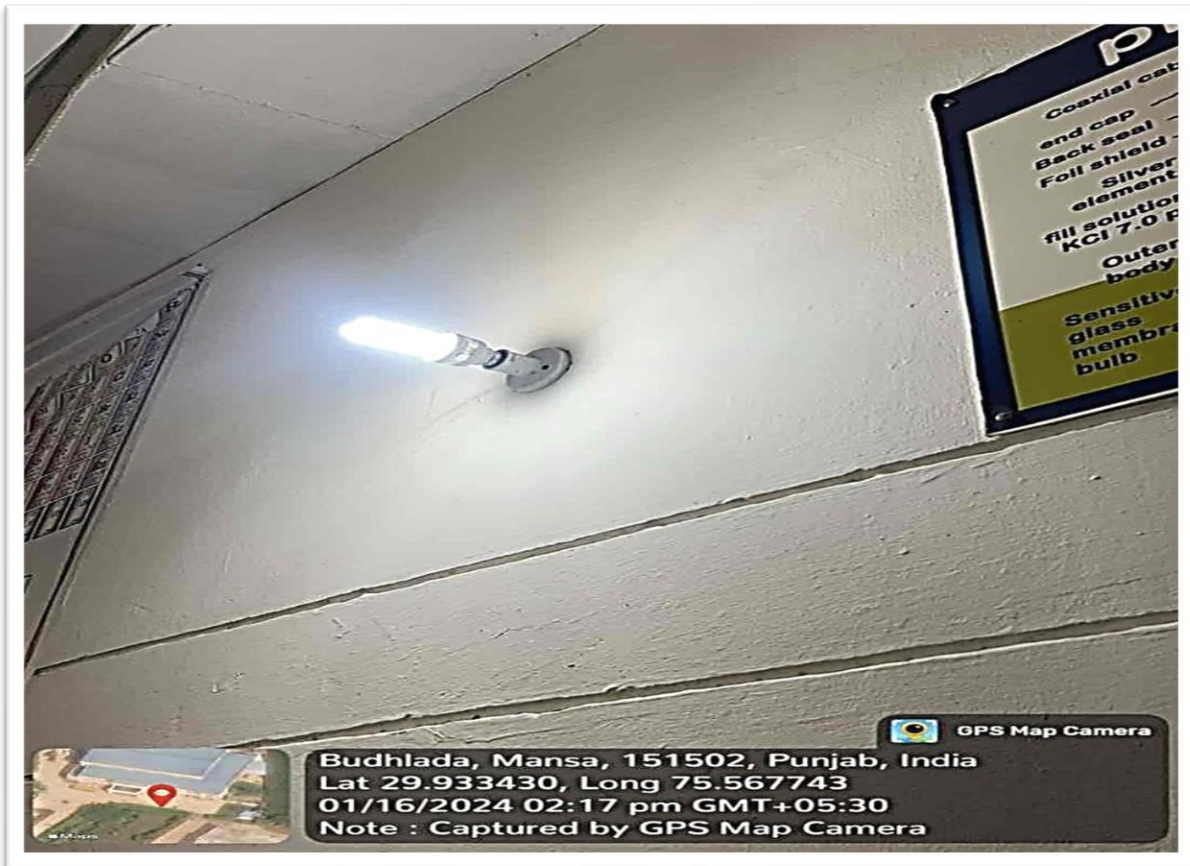
The electric light bulb has been called the most important invention since man-made fire. The light bulb helped to establish social order after sundown, extended the workday well into the night, and allowed us to navigate and travel safely in the dark. Without the light bulb, there would be no nightlife. As solid-state light sources, LEDs have very long lifetimes and are generally very vigorous. The main reason that LEDs use so much less electricity than incandescent lighting is that they don't produce light in the same way. This process doesn't use a filament and creates little heat, instead relying on a property of semiconductors to generate light. LED lights are up to 80% more efficient than traditional lighting such as fluorescent and incandescent lights. 95% of the energy in LEDs is converted into light and only 5% is wasted as heat. Less energy use reduces the demand from power plants and decreases greenhouse gas emissions. LED tubes are much more efficient on your energy costs as well as your carbon footprint on the environment. There's nothing more sustainable than Energy.

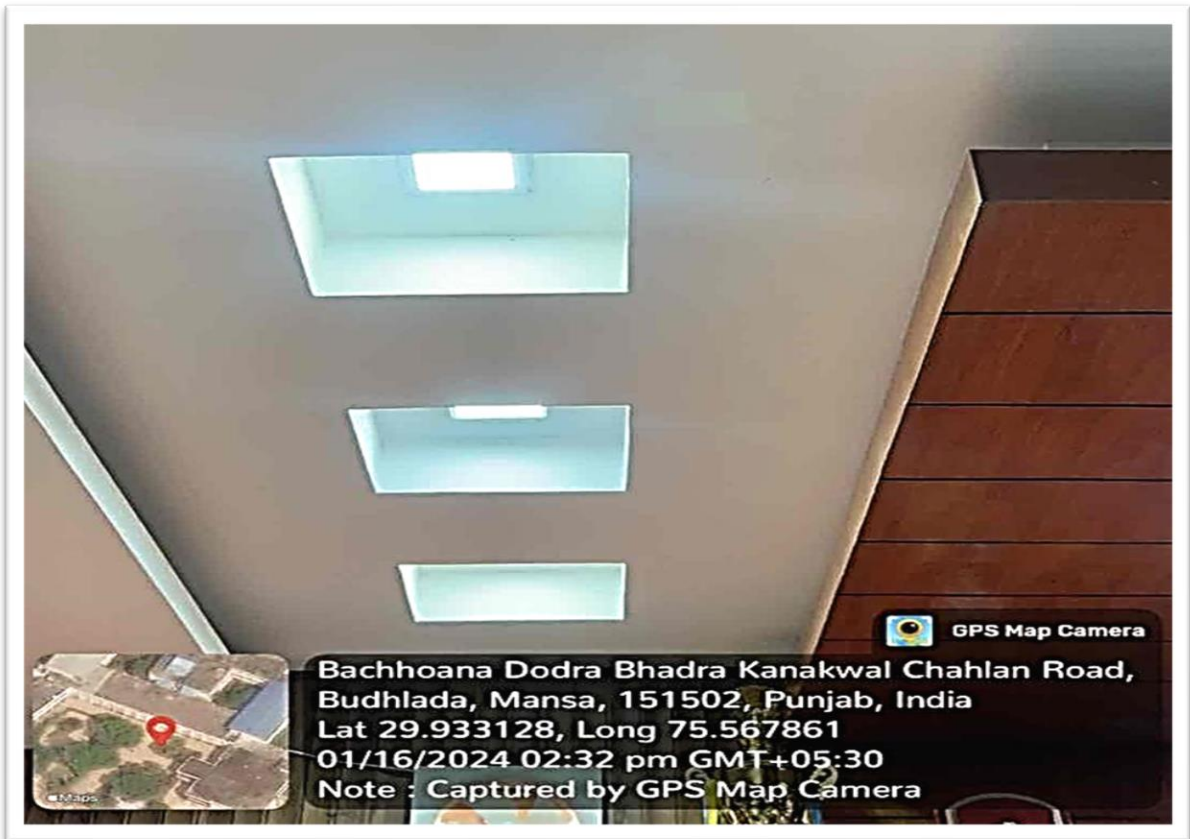




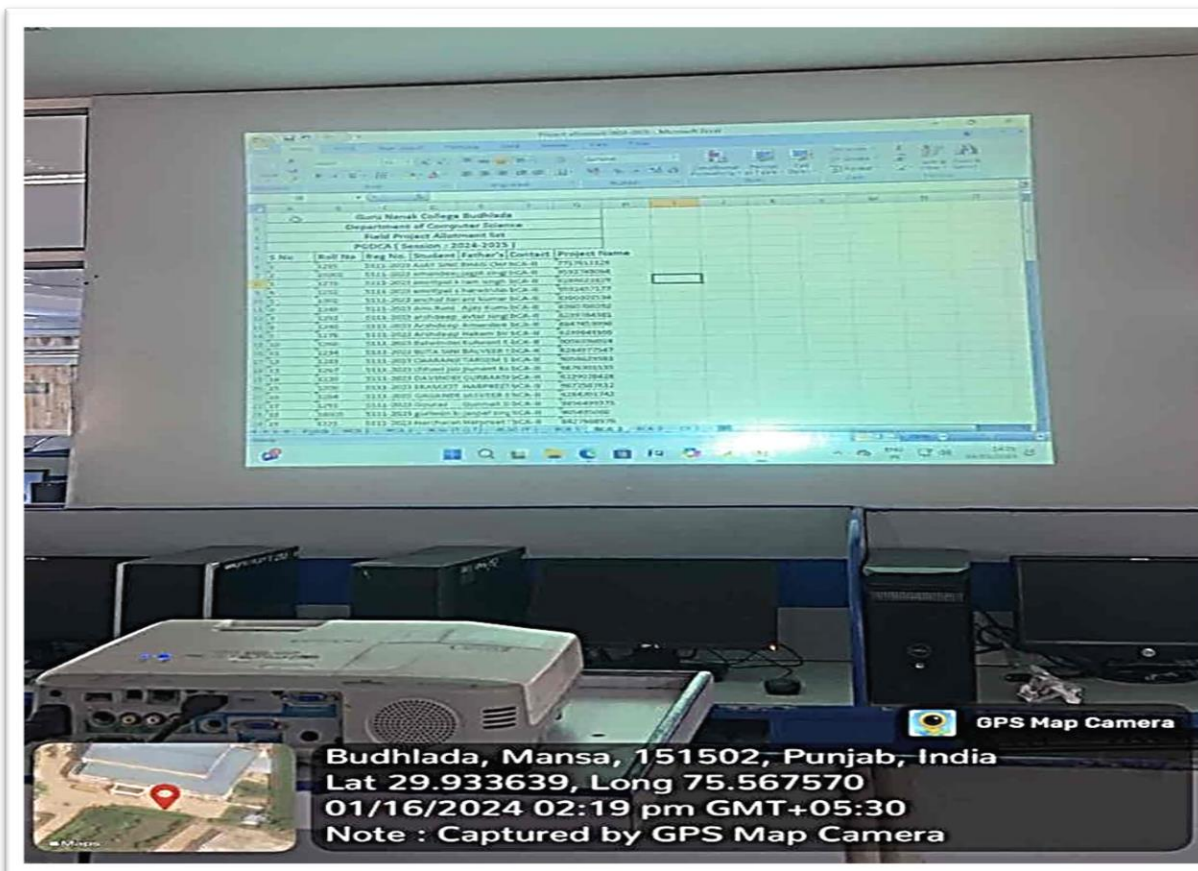
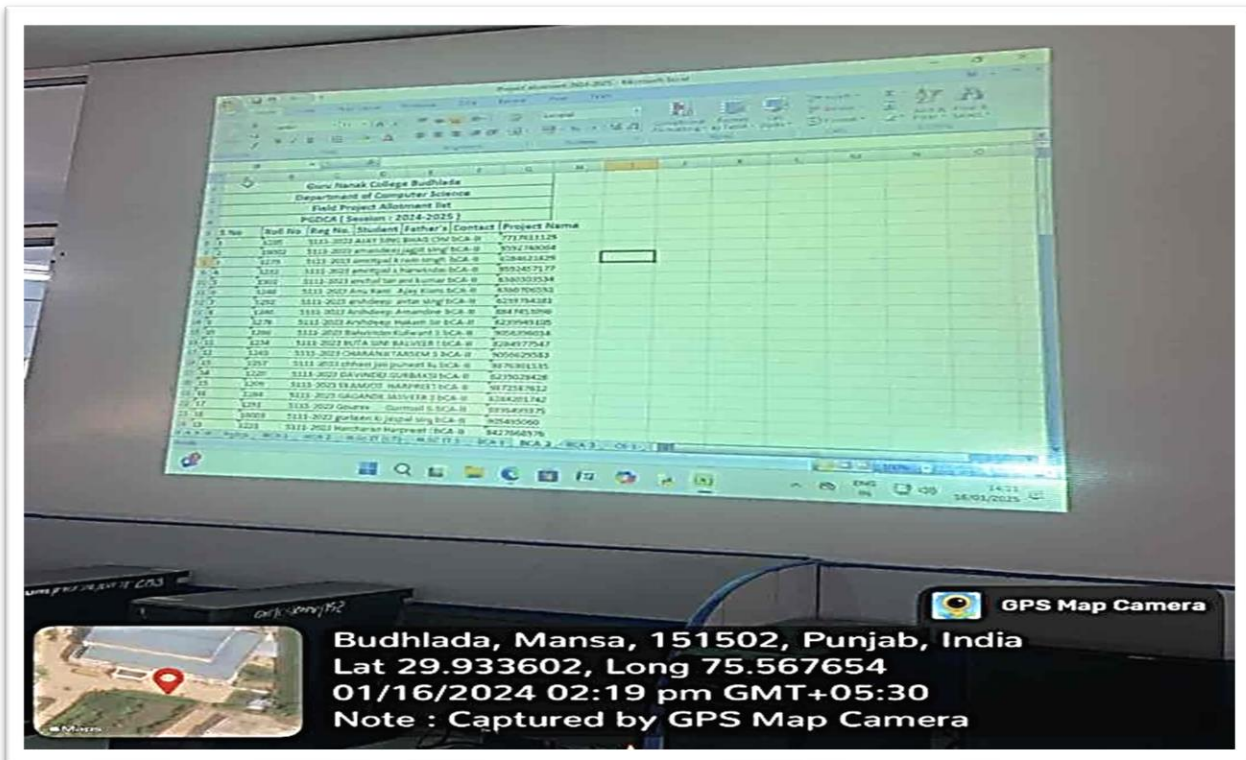








Power Efficient LED Screens



Power Efficient Ac



