**PROFILE OF THE COLLEGE**

This college was established in 1980 with B.A(E.H.P) and B.Com.(TM) in the Govt. Junior College and Govt. High School building. Later it was shifted to its own building on Bellary Road in 2006.The B.Sc., MPC course was introduced in the interest and demand of the public in 1991 while B.Com Computer Applications in 1999 , MPCs in 2002 & MSCs in 2006 . B.Sc., BZC is introduced in 2016. The College is accredited with “B” grade by NAAC in 2016 .The College offers 7 programs including conventional and restructured courses at UG level. More than 800 students are now pursuing higher education in this institution. Out of which 80% belong to SC, ST and BC communities

**THEME OF THE SEMINAR**

The World currently relies heavily on coal, oil, and natural gas for its energy. Fossil fuels are non-renewable, that is, they draw on finite resources that will eventually dwindle, becoming too expensive or too environmentally damaging to retrieve. In contrast, the many types of Green energy resources-such as wind and solar energy-are constantly replenished and will never run out. Green energy comes from natural sources such as sunlight, wind, rain, tides, plants, algae and geothermal heat. These energy resources are renewable, meaning they're naturally replenished. In contrast, [fossil fuels](https://www.mnn.com/eco-glossary/fossil-fuels) are a finite resource that take millions of years to develop and will continue to diminish with use. Green energy sources also have a much smaller impact on the environment than fossil fuels, which produce pollutants such as greenhouse gases as a by-product, contributing to climate change. Gaining access to fossil fuels typically requires either mining or drilling deep into the earth, often in ecologically sensitive locations.

**Green energy** is energy that is collected from [renewable resources](https://en.wikipedia.org/wiki/Renewable_resource), which are naturally replenished on a [human timescale](https://en.wikipedia.org/wiki/Orders_of_magnitude_(time)), such as [sunlight](https://en.wikipedia.org/wiki/Sunlight), [wind](https://en.wikipedia.org/wiki/Wind), [rain](https://en.wikipedia.org/wiki/Rain), [tides](https://en.wikipedia.org/wiki/Tidal_power), [waves](https://en.wikipedia.org/wiki/Wave_power) and [geothermal heat](https://en.wikipedia.org/wiki/Geothermal_energy). Renewable energy often provides energy in

Four important areas electricity generation, air and water heating / cooling, transportation and rural (off-grid) energy services.

Green energy, however, utilizes energy sources that are readily available all over the world, including in rural and remote areas that don't otherwise have access to electricity. Advances in technologies have lowered the cost of solar panels, wind turbines and other sources of green energy, placing the ability to produce electricity in the hands of the people rather than those of oil, gas, coal and utility companies. Green energy can replace fossil fuels in all major areas of use including electricity, water and space heating and fuel for motor vehicles.

Green energy resources exist over wide geographical areas, in contrast to [other energy sources](https://en.wikipedia.org/wiki/Non-renewable_energy), which are concentrated in a limited number of countries. Rapid deployment of green energy and [energy efficiency](https://en.wikipedia.org/wiki/Efficient_energy_use) is resulting in significant [energy security](https://en.wikipedia.org/wiki/Energy_security_and_renewable_technology), [climate change mitigation](https://en.wikipedia.org/wiki/Climate_change_mitigation), and economic benefits. The results of a recent review of the literature concluded that as [greenhouse gas](https://en.wikipedia.org/wiki/Greenhouse_gas) (GHG) emitters begin to be held liable for damages resulting from GHG emissions resulting in climate change, a high value for liability mitigation would provide powerful incentives for deployment of green energy technologies. In international [public opinion surveys](https://en.wikipedia.org/wiki/Public_opinion_surveys) there is strong support for promoting renewable sources such as solar power and wind power. At the national level, at least 30 nations around the world already have green energy contributing more than 20 percent of energy supply. National green energy markets are projected to continue to grow strongly in the coming decade and beyond. Some places and at least two countries, Iceland and Norway generate all their electricity using green energy already, and many other countries have the set a goal to reach [100% green energy](https://en.wikipedia.org/wiki/100%25_renewable_energy) in the future. For example, in [Denmark](https://en.wikipedia.org/wiki/Denmark) the government decided to [switch the total energy supply](https://en.wikipedia.org/wiki/Energy_transition) (electricity, mobility and heating/cooling) to 100% green energy by 2050.

In the past three decades, research and development in **green energy** has exploded, yielding hundreds of promising new technologies that can reduce our dependence on coal, oil, and natural gas.

Based on [REN21](https://en.wikipedia.org/wiki/REN21)'s 2016 report, renewables contributed 19.2% to humans' [global energy consumption](https://en.wikipedia.org/wiki/World_energy_consumption) and 23.7% to their generation of electricity in 2014 and 2015, respectively. This energy consumption is divided as 8.9% coming from [traditional biomass](https://en.wikipedia.org/wiki/Biofuel#traditional), 4.2% as heat energy (modern biomass, geothermal and solar heat), 3.9% hydro electricity and 2.2% is electricity from wind, solar, geothermal, and [biomass](https://en.wikipedia.org/wiki/Biofuel). Worldwide investments in renewable technologies amounted to more than US$286 billion in 2015, with countries like [China](https://en.wikipedia.org/wiki/Renewable_energy_in_China)  and the [United States](https://en.wikipedia.org/wiki/Renewable_energy_in_the_United_States) heavily investing in wind, hydro, solar and biofuels. Globally, there are an estimated 7.7 million jobs associated with the green energy industries, with [solar photovoltaic](https://en.wikipedia.org/wiki/Solar_photovoltaics) batteries being the largest renewable employer.  As of 2015 worldwide more than half of all new electricity capacity installed was renewable. Other renewable energy technologies are still under development, and include [cellulosic ethanol](https://en.wikipedia.org/wiki/Cellulosic_ethanol), [hot-dry-rock](https://en.wikipedia.org/wiki/Hot-dry-rock) geothermal power, and [marine energy](https://en.wikipedia.org/wiki/Marine_energy). These technologies are not yet widely demonstrated or have limited commercialization. Many are on the horizon and may have potential comparable to other renewable energy technologies, but still depend on attracting sufficient attention and research, development and demonstration (RD&D) funding.

The most significant barriers to the widespread implementation of large-scale renewable energy and low carbon energy strategies are primarily political and not technological. According to the 2013 *Post Carbon Pathways* report, which reviewed many international studies, **the key roadblocks are:**[**climate change denial**](https://en.wikipedia.org/wiki/Climate_change_denial)**, the**[**fossil fuels lobby**](https://en.wikipedia.org/wiki/Fossil_fuels_lobby)**, political inaction, unsustainable energy consumption, outdated energy infrastructure, and financial constraints.**

The market for renewable energy technologies has continued to grow. [Climate change](https://en.wikipedia.org/wiki/Climate_change) concerns and increasing in [green jobs](https://en.wikipedia.org/wiki/Green_job), coupled with [high oil prices](https://en.wikipedia.org/wiki/Oil_price_increases_since_2003), [peak oil](https://en.wikipedia.org/wiki/Peak_oil), oil wars, [oil spills](https://en.wikipedia.org/wiki/Oil_spill), promotion of [electric vehicles](https://en.wikipedia.org/wiki/Electric_vehicle) and renewable electricity, nuclear disasters and increasing government support, are driving increasing renewable energy legislation, incentives and [commercialization](https://en.wikipedia.org/wiki/Renewable_energy_commercialization)

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**THEMES/TOPICS OF THE SEMINAR**

1. **Solar Energy**
2. **Wind Energy**
3. **Geothermal Energy**
4. **Bio Energy**
5. **Ocean Energy**
6. **Fuel Cells**
7. **Economics of Green Energy**
8. **Green Energy Production & Marketing**
9. **New Technologies for Green Energy**
10. **Environmental aspects of Green Energy**
11. **Green Energy Entreprenuership**
12. **Ethics of Green Energy**
13. **Roadblocks to Green Energy Production**

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**EMERGING TRENDS IN HARNESSING GREEN ENERGY**

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