

# ENERGY POLICY OF GC KULLU HIMACHAL PRADESH 175101

### **PREAMBLE:**

Energy plays important role in development of Nation as well as organization. Around 70% of global countries energy requirement is met through electricity generation using thermal power plants. Use of fossil fuels leads to environmental pollution. Energy Conservation 2001 was enacted to improve energy efficiency and reduce energy intensity. For sustainable development it is necessary to provide focus on Energy, Environment and Ecology. Energy Management is judicious and effective use of Energy without curtailing requirement to maximize profit and minimize Environmental degradation. There is substantial potential to conserve Energy Management programme in all sectors of Economy. Energy Conservation of awareness at all level is important to play significant role in creating awareness about Energy Management programme among all category of students in colleges, schools also in society and surrounding areas ofbig industries. Energy Audit is one of the important tools to identify Energy Conservation potential and give positive orientation about Energy Cost Reduction by considering in all techno commercial aspects.

## **OBJECTIVES OF ENERGY MANAGEMENTS:**

- Improvement in energy efficiency to reduce energy consumption and cost.
- Eliminate wastages by use of good housekeeping practices.
- Minimize environmental degradation.
- Use of renewable energy.
- Reduce, Reuse, Recycle.

## **ENERGY MANAGEMENT STRUCTURE:**

There is energy management cell at institute level headed by Assistant Professor Sapna Verma and five other representatives for effective implementation of Energy Management Programme at college level. M/s ECI Consulting Engineers, New Delhi has conducted Energy Audit of GC Kullu during session 2023/2024 and give recommendations on Energy Conservation.Following are the certified Energy Audit Managers of Institution.

- Prof Sapna Verma(Department of Physics)
- Prof Jai Prakash(Department of Physics)
- Dr. Sunil(Department of Physics)
- Dr. Sohan (Department of Physics)
- Dr. Ravi (Department of Physics)
- Dr. Ashwani(Department of Chemistry)
- Dr. Nandini Thakur (Department of Environment Science)

Sr. No.	Type of Energy	Energy usage
1	Electrical and solar energy	Indoor and outdoor
		illumination
		Water pumping
		Fan and A.C
		Computers and smart classes
		Function of laboratory
		equipment
		Conference hallEquipment
2	LPG	Hostel Mess and Canteen for
		food preparations
3	Solar Heat energy	Water solar heating geysers in
		Girls hostel.

## TYPES AND USE OF ENERGY

#### ELECTRICAL SUPPLY SYSTEM AND ROOFTOP SOLAR POWER SYSTEM.

GC Kullu has installed rooftop solar power system of total 44 KWP capacity on four buildings of institution. The total solar energy generation for FY 2022-2023 was 54737 KWh. Total electricity energy consumption in GC Kullu is 128387 KWh/Units (As mentioned in Energy Audit Report). This solar power generation reduce dependency and burden on requirement for supply of electricity from grid. GC Kullu has also installed solar water heating Geysers in Girls hostel of 36 rooms accommodating 90 girls.

#### BACKUP POWER SUPPLY:

The Backup power supply is given to college campus by DG Set 415 Volt(AC), 13.8V(DC), 30 Amp, 51.2 HzGenerator Model No 5125 DSP, installed on 16/10/2018.

#### **OUR MISSION IS:**

- Minimize Energy Consumption by use of Energy Efficient Equipment and maximum use of day light, natural ventilation and energy substitution.
- Maximize use of renewable Energy.
- Create awareness about Energy Conservation through Lectures, Rallies, Debates, Poster makings and workshops.

#### THIS WE PLAN TO ACHIEVE:

- Manage efficiently utilization of energy resources by use of cleaner and more efficient technologies.
- Train faculties, students, industry professionals to make institute the pace setter in the area of Energy Conservation.
- Promote awareness related with Energy Conservation among various sections of society.
- Enrich our experience on Energy Conservation by exchange of ideas with other organization.
- Encourage faculty members to obtain certification as a certified Energy Auditor as managers.
- Carry out regular Energy Audit to identify Energy Conservation opportunities.
- Provide expertise to industry and other organizations in the area of Energy Management by offering Energy Audit services.

# OUR SHORT TERM (WITHIN 6 MONTHS) GOALS ARE

- Use the 'OFF' switch, rather than the "Stand BY" mode of equipments.
- Switch off lights, heater and other equipments when not in use.
- Utilize team of Energy Club to spread awareness on Energy Conservation and organize inter and intra college activities to boost innovative thoughts through process of Energy Conservation in young minds.
- Co-ordinate with government departments of all concerned level and with other colleges, share practices among them.
- Use electricity efficiently and effectively.

# OUR LONG TERM (WITHIN 1 YEAR OR MORE) GOALS ARE

• Use of Motion sensors/Times for lighting systems.

- Use of more solar plants on Rooftop of Girls hostel. The process is in the pipeline.
- Purchase of BLDC Fan whenever replacement of ceiling is required which consumes 50% less energy as compared to conventional fans.
- Do maintenance of solar water heater systems at the earliest.
- Check for BEE star level before purchasing all kind of equipments.



Prof (Dr.) Roshan Lal Principal