



# **ENERGY MANAGEMENT ASSESSMENT (2022-2023)**



**ADARSH SHIKSHAN SANSTHA BEED'S,  
KALIKADEVI ARTS, COMMERCE AND SCIENCE COLLEGE,  
SHIRUR KASAR. TQ- SHIRUR (KA), DIST- BEED,  
MAHARASHTRA.**

**(Affiliated to Dr. Babasaheb Ambedkar Marathwada University,  
Aurangabad)**

## **1. Introduction**

### **COLLEGE INTRODUCTION:**

#### **Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar.**

Adarsh Shikshan Sanstha is a rural voluntary service organization. It was established by the contribution of authentic members with the motive of "Social Development" in Taluka Shirur Kasar Dist. Beed state Maharashtra. Kalikadevi Arts, Commerce and Science College Shirur Kasar, run by Adarsh Shikshan Sanstha Beed was established in January 2002 by Honourable late Kesharbai Sonajirao Kshirsagar Alias Kaku (Ex. Member of Parliament), with noble and foresighted vision to provide higher education to youth of rural areas. The College is affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad. The college provides three programs; at UG level i.e. Arts, Commerce and Science and two programs of PG level M.A. English and M.Com. The college has also introduced, Tourism and Service Industries course from academic year 2019-2020. UGC has recognized the institution with 2(f) and 12(B).

The cardinal objective of the institution is to create good citizens with social, economic and political responsibilities to meet the global challenges. The vision and mission of the college is to empower and elevate the rural community and to promote a unique learning experience. The Principal deeply involves various day-to-day and academic activities for building social responsibilities among the students.

Surrounded by extensive green cover of nature, the college has an aesthetic landscape which is architecturally striking. The institution has a well maintained, user friendly and resilient infrastructure conducive for teaching, learning and comprehensive development of students, faculty and stakeholders. The college provides various facilities like sports, library, canteen; consumer store (Grahak Bhandar), pure drinking water cooler, ICT hall, well-furnished teaching halls, well equipped laboratories indoor game facilities, health care centre and competitive examination coaching classes' centre for students of college and other stakeholders. College arranges study tours to places of historical and geographical importance, visits to various study centres, and industries. College always tries to arrange various Co-curricular and extracurricular activities like elocution competition, essay writing speech events science exhibition etc. Our NSS and Life Long Learning and Extension

department conducts society oriented programmes like blood donation camps, eco-friendly awareness, rallies, cleanliness camp, national integration camp, tree plantation, literacy programme etc. Student mentoring system is also available in the college to solve the student's personal and social problems.

With a proper Vision and Mission we, as an Institute are striving to give quality Education, Ethics and Morals to our students and looking forward to give as much as we can.

## **1. COLLEGE VISION & MISSION:**

### **VISION**

**The institution has a right aim, which leaves no room for covetousness or indulgence but encourages everybody for development of self and society..**

### **MISSION**

- To mentor and inculcate social moral values in students and empower them towards nation building activity.
- To cultivate feeling of social bonding and development among students through different intervention and entrepreneurship program of college.
- To promote an environment of academic excellence through development of human potentials.
- To inspire and ignite young minds creative thinking and innovative ideas with proper livelihood earned by pure and honest means that would help them to succeed in their career.
- To create a platform student to feel free to point out their problems general drawbacks and limitations.

### **1.1 OBJECTIVE OF THE COLLEGE:**

Following are the objectives of the college:

- To Improve Satisfaction And Engagement Level Of Students
- To Promote Use Of ICT For Formal And Informal Education.
- To Equip Students With Participatory And Partnership Role In Higher Education.

- To Inculcate Team Spirit And Provide Environment To Work As A Team With Right Efforts Avoiding Evil Thoughts.
- To Bring About Improvement In Teaching Learning Process And Promote Research Environment Among Faculty And Students.

## **1.2 Perspective Plan**

- To Establish MOUs and Linkages with National and International Institutes.
- To Submit Minor/Major Projects to UGC and Other Funding Agencies.
- To Develop Smart Class Rooms.
- To Introduce Vocational And Skill Based Add On Courses.
- To Develop Green Campus.
- To Increase Student Placement Rate.
- To Organize National / International Seminar / Conference.
- To Introduce PG Courses In Science Faculty.

Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar. demonstrates its commitment to implement sustainable solutions in different ways. It has taken a number of positive steps to reduce possible environmental impact. The management is keen on accepting new ideas of resource management.

This report can be a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects." In view of making green and eco-friendly campus the organization has taken an important step to understand the environmental parameters within the campus. This report serves to highlight, the efforts towards

greener campus. The first step taken in this direction is establishing a baseline of existing condition.

An energy audit is an inspection and analysis of energy flows in a building with the objective of understanding the energy efficiency of building being audited. Typically, an energy audit is conducted to seek opportunities to reduce the amount of energy used by the facility without negatively affecting the comfort of the facility or the production/output in case of a business. This includes identifying the systems and areas of opportunity that will have the greatest impact in improving comfort, indoor air quality, durability & reliability.

## 2.1 Campus planning and construction

### Energy Conservation

The college campus has planned in 10119.19 Sq. meters quite significantly that, there is enough open space, greenery, playground and 14 ventilated spacious classrooms and 1 seminar hall to accommodate students. The build-up area is 3259.76 Sq. Meters. The energy utilization pattern of college on any working day is as follows:-

### Instructional Area:

SN	Room Type (Mention Class Room/ Lab/Toilet, etc.)	Completion of Flooring	Completion of Walls and Painting	Completion of Electrification and Lighting
1	Classrooms	Yes	Yes	Yes
2	Seminar Hall	Yes	Yes	Yes
3	Laboratory Physics	Yes	Yes	Yes
4	Laboratory Chemistry	Yes	Yes	Yes
5	Laboratory Botany	Yes	Yes	Yes
6	Laboratory Math's	Yes	Yes	Yes
7	Laboratory Computer	Yes	Yes	Yes
8	Laboratory Zoology	Yes	Yes	Yes
9	Laboratory Home science	Yes	Yes	Yes
10	Sport Department	Yes	Yes	Yes
11	Examination department	Yes	Yes	Yes

**Administrative area:**

SN	Room Type (Mention Class Room/ Lab/Toilet, etc.)	Completion of Flooring	Completion of Walls and Painting	Completion of Electrification & Lighting
1	Central Store	Yes	Yes	Yes
2	Faculty Room	Yes	Yes	Yes
3	Security	Yes	Yes	Yes
4	Cabin for Head of Dept	Yes	Yes	Yes
5	Office All Inclusive	Yes	Yes	Yes

**Amenities area:**

SN	Room Type (Mention Class Room/Lab/Toilet, etc.)	Completion of Flooring	Completion of Walls and Painting	Completion of Electrification & Lighting
1	Canteen	Yes	Yes	Yes
2	Girls Common Room	Yes	Yes	Yes
3	Boys Common Room	Yes	Yes	Yes
4	Toilet	Yes	Yes	Yes
5	Internal complaint committee & Health care centre	Yes	Yes	Yes
6	Sport Auditorium	Yes	Yes	Yes
7	Seminar hall	Yes	Yes	Yes

**Circulation Area:**

SN	Room Type (Mention Class Room/Lab/Toilet, etc.)	Completion of Flooring	Completion of Walls and Painting	Completion of Electrification & Lighting
1	Corridors	Yes	Yes	Yes
2	Staircases	Yes	Yes	Yes

## Electricity utilization pattern

Energy Utilization Places	Appliances with approximate Quantity	Approximate Total Consumption
Classroom, Laboratories, Computer laboratories & all Departments, Conference Hall, Administrative Office, Principal Office, Auditorium, Board Room, Examination Department, Boys & Girls Common Room, Library etc.	AC - , Fan-62, Tube light – 45, LED Bulb – 38, Corridors & Common area lights -10, Computers -43, Printers - 8, Server – 1, Xerox machine - 1, Scanner - 4, Projector - 1, Refrigerator- 01, Auto clave- , Microwave Oven-, water Purifier - 01, Water Cooler- 01, Water Pumps -01, CCTV – 8,	Monthly avg. power Req. = 800-1100 Kwh Avg.

### Action:

- 1) Height and size of the windows in classrooms provide adequate ventilation. There is no heat trapping mechanism and glare due to excessive use of glass in the campus.
- 2) There is less construction cost due to well-designed structure. Interaction space for the students is maintained, thus utilizing the optimum space.
- 3) There is consideration for disaster management.
- 4) Strictly turning of monitors, fan, tube lights, and laboratory instruments after the work.
- 5) Organizing lectures on energy conservation in order to give awareness to the students.
- 6) Perhaps the most significant improvement has been the general switch from CRT (cathode ray tube) monitors to LED (Light Emitting Diode display)/flat panel display monitors. This change occurred in response as an initiative for meeting Kyoto Protocol standards. Although over twice as expensive up front, LCD monitors are estimated to use 40-60% less energy overall than CRTs.

- 1) All computers purchased by the college have an Energy Star rating, which is beginning to be a standard requirement for computers.
- 2) Solar unit installation is in plan, step towards use of renewable energy.
- 3) All tubes and bulbs being used of LED types
- 4) Due to ample cross ventilation and windows there is very less electricity consumption during day time.

**Conclusion:**

The findings of this report show that the college performs fairly well on sustainability issues. The college does consider the environmental impacts of most of its actions and makes a concerted effort to act in an environmentally responsible manner. In conversations with faculty, staff, and administration at the college, A policy to minimum possible use of energy to sustain environment has been decided.

**Energy efficiency is the need of future.** ... The organization shows a potential to become energy efficient institution, which can be collective step toward the direction of renewable energy, environmental protection, and sustainable living. Having such an organization helps management reduce their bills and provides an excellent investment.

**Suggestion:**

Routine energy auditing will help organization to

- (i) Map energy usage within the organization
- (ii) Conserve energy,
- (iii) Improve energy efficiency and thereby
- (iv) Maximize their institutional energy and cost savings.



## **Energy Policy**

Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar is dedicated to the responsible and sustainable consumption of energy.

We dedicated ourselves for

- Reduction of energy use in the premises.
- Reduction of dependability on exterior energy sources.
- Reduction of environmental damage and pollution.
- Reduction of damage to the environment associated with the exploitation of resources
- Reduction of energy bills.
- Increase the life span of the equipment in college premises.
- Increase in cost-effectiveness through optimization of energy expenditure