



BASELINE ENVIRONMENTAL ASSESSMENT (2020-21) OF NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING AND TECHNOLOGY, PUNE, SAMARTH VIDYA SANKUL, VISHNUPURI, TALEGAON DABHADE, TAL. MAVAL, DIS. PUNE, MAHARASHTRA -410507

NAAC Accredited (Approved by AICTE, New Delhi, Recognized by Govt. of Maharashtra & Affiliated to Savitribai Phule Pune University)

#### 1. Introduction

#### **COLLEGE INTRODUCTION:**

**Nutan Maharashtra Institute of Engineering and Technology** NAAC Accredited (Approved by AICTE, New Delhi, recognized by Govt. of Maharashtra & Affiliated to Savitribai Phule, Pune University)

Nutan Maharashtra Vidya Prasarak Mandal is a highly respected education society in Maharashtra and is credited with starting national education schools in the Maval Region of Pune district over 100 years ago. The great freedom fighter Lokmanya Bal Gangadhar Tilak was the founder member of the Mandal and was the Chairman of its Governing Body for almost 12 years.

NMIET (Nutan Maharashtra Institute of Engineering and Technology) was founded in 2008. The All-India Council for Technical Education (AICTE) in New Delhi and the Maharashtra Government's Directorate of Technical Education (DTE) have both recognized the institute. It is a part of Pune's Savitribai Phule Pune University (SPPU). There are four undergraduate courses offered by the institute. Computer Engineering, Information Technology, Mechanical Engineering, Electronics, and Telecommunication Engineering are some of the undergraduate courses available. Furthermore, the Nutan Maharashtra Institute of Engineering and Technology (NMIET) began offering Bachelor of Vocational (B.VOC) Courses in 2019. Automotive Manufacturing Technology, Refrigeration and Air Conditioning, Graphics and Multimedia, and Software Development are all B.VoC courses.

#### Vision:

To be a recognizable institution for providing quality technical education & ensuring holistic development of students.

#### Mission:

To nurture engineering graduates with highest technical competence, professionalism and problem-solving skills to serve needs of industry & society.

#### Perspective plan:

- 1. NBA Accreditation
- 2. NAAC 'A' Grade Accreditation
- 3. NIRF Ranking within 200
- 4. Increase in Intake from 300 to 420
- 5. Development of Incubation Center
- 6. Development of Center of Excellence in all departments
- 7. Development of Smart Class Rooms
- 8. More interaction with industries (AICTE-CII Survey)
- 9. More placements in Product based company
- 10. Establishment of Community Radio Station
- 11. Development in IT & other infrastructure

12. Motivating faculty for Completing and Registration for Ph.D As soon as possible.

- 13. Increase the number of students for Higher Education.
- 14. Increase the number of Publications in International or Reputed journals.
- 15. More IPR and Copyrights.
- 16. Development of IIIC cell.
- 17. Development of Consultancy Projects from industry.
- 18. More Number of Alumni engagements.
- 19. More number of Social activities and responsibilities.
- 20. More number of Research Proposals.

21. International conference.

22. More number of Industry Visits for students.

23. Increase the number of internships for students.

24. Increase the number of Students certification.(Professional certification, NPTEL etc...)

25. More number of FDP/Workshops/Seminars/Guest Lectures for students and faculty.

26. More number of R&D activities.

The College believes that its primary stakeholders are the students. All aspects of education focus on the core values of contributing to national development while fostering global competencies among students. The College admits students from all social milieus and empowers them through intensive mentoring and counselling to face the challenges of life and become responsible and sensitized citizens of the country.



**Nutan Maharashtra Institute of Engineering and Technology** NAAC Accredited (Approved by AICTE, New Delhi, recognized by Govt. of Maharashtra & Affiliated to Savitribai Phule, Pune University) Talegaon *PUNE 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.* 

The environmental assessment of an educational institute being carried out in different phases.

- To establish a baseline of existing environmental scenario
- To provide basis for improved sustainability
- To promote environmental awareness through the assessment process
- To create an educational document for future use

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.

The different environmental criteria's with their current status, action being taken by an institution and effective ways to improve the actionable points being highlighted in this report. Sensitization of all the stakeholders of an institution towards eco-friendly campus is very crucial at this juncture.

#### 2. Environmental criteria's

2.1. Know green and think green is promoted on the campus Governance and Leadership

The college has Clear policies, principles or goals that provide direction for staff, administrators, and other members of the campus community. Clear decision-making power and reporting mechanisms with responsibilities to monitor, report, give advice about, and promote action and awareness around environmental sustainability.

#### Action:

The College currently has an Environmental Advisory Committee (EAC), which is composed of members each from different stake holders of the college. It is co-chaired by a student and by the Director of Facilities. The EAC has been very active in discussing and advising the College on campus sustainability issues.

SN	Name of the Committee Member	Designation
1	Dr. Lalitkumar wadhwa Advisor	
2	Prof. Nitin Dhawas Chairman	
3	Prof. Shekhar Rahane	Coordinator
4	Prof. Sagar Joshi	Member
5	Prof. Vikas Nandgaonkar	Member
6	Prof. Shraddha Kirwe	Member
7	Prof. Manojkumar kate	Member
8	Mr. Mandar Pigle Non Teaching Member	
9	Miss. Nidhi Hegade Student Membe	
10	Mr. Shubham Patil Student Membe	

Environmental Advisory Committee-EAC (AY 2019-20)

Since commencement, the committee has discussed such topics as campus energy use, recycling, reduce use of plastic, composting of dining hall waste, saving water and sustainable use of resources.

#### 2.2 Dining

The college campus accommodates more than 1000 members including students and staff. The college authorities have appointed a food supply vender within the campus area. Due to Covid-19 pandemic the entire function of the college through online platform, so there was physical utilization of the campus.

#### Action:

The waste dumping site has been created and then it being collected by Municipal council system of garbage collection system. Only few staff members were present in the campus due to Covid-19 pandemic.

#### 2.3 Water conservation and prevention of water wastage

The source of drinking water for the college is Municipal council supplied water and Bore water for other uses. The college has water filters with 1,500lit/hour capacity and filter water supplied through 5 water coolers within the premises for drinking purposes. The water quality monitoring is being done regularly. The water consumption within the campus is controlled by campus authority. The storage tanks are as follows Storage Water Tank Under Ground – 02 Nos. 10000lit/each Overhead tank 1: Capacity 07 Nos.- 10000 lit/each So total water storage capacity 90,000 liters The approximate water uses on any working day during work hours can be

summarized as follows.

Due to Covid-19 pandemic the entire function of the college through online platform,

so there was no physical utilization of the campus.

S.No	Activity	Utilization(Student + staff)	Total lits
1	Drinking	x approximately 2lit	20
2	Toilet	x approximately 4lit	40
3	Laboratories	5 labs x 20 students x approximately 5lits x 2 batches	
4	Watering plants		1000
5	Spraying on play ground		
6	Canteen area		
			1,060

#### Action:

1) Maintenance activities being carried out in this period.

## 2.4 Solid waste management

Due to Covid-19 pandemic the entire function of the college through online platform,

so there was physical utilization of the campus.

S.No	Activity	Utilization(Student + staff)	Total kg.
1	Classroom 25 + Tutorial room 15 Seminar Hall 4 + Staffroom 4 + Girls & Boys common room 2 + Sport room 1 + Training Placement cell 1 + Exam section 1 + Reception area 1	Dustbin x gms	kg approximately
2	Laboratories 57 + Chemical store 2	Labs x gms	kg approximately
3	Canteen	Students & staff used for snacks or meal	kg approximately
4	Sweeping and cleaning	Campus	4 kg approximately
5	Admin block	All offices	500gm kg approximately
			3 kg approximately

#### Action:

1) Maintenance activities were carried out in this period.

#### Hazardous waste management

Due to Covid-19 pandemic the entire function of the college through online platform, so there was no physical utilization of the campus.

#### Action:

8) Maintenance and cleaning carried out during this period.

#### E-waste management

Due to Covid-19 pandemic the entire function of the college through online platform, so there was physical utilization of the campus.

#### 2.5 Carbon dioxide neutrality

Carbon dioxide neutrality has been maintained on the campus by developing greenery with available plants. The 10 to 30 % area is occupied by greenery of all type of plants. This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programme.

Campus is located in the vicinity of various tree species approximately 200.

#### Action:

1) The campus is situated in such an area that there is no any other type of disturbance.

2) An indoor atmosphere is designed to be well ventilated that airflow mixing of fresh/outdoor air is continuous.

3) Specific strategies and plans in place in order to reduce transportation impacts.

A) Parking slot for students (800 bikes) maintained at the main entrance to restrict the traffic movement in the campus.

B) Awareness among the students was increased to use public transport.

d) The college has a canopy of trees and plants that make the environment healthy. **(See annexure 4).** 

e) Plants were selected with low maintenance requirements and that otherwise fit the local ecosystem (i.e. provide habitat for native species of insects and birds).

f) At present the big ornamental trees are dominant all over the campus. The medicinal plants planted and maintained in the campus . The college is planning of botanical garden which will be utilized for educational purpose.

#### 2.6 Campus Culture and Environmental Awareness

The college has aim to educate all students in the area of environmental studies in an interdisciplinary framework, and provide adequate training for those students who wish to pursue environmental research in accordance with engineering or environmentally-related career choices.

#### Action:

- 1) College has developed a clear assessment of the environmental studies curriculum for faculty, students, and administration.
- Due to Covid-19 pandemic the entire function of the college through online platform, so there was physical activity in the campus.
- College has developed its own environmental policy for the campus and displayed it everywhere.

# \*Environment Policy\*

We are committed to protect Environment, Occupational Health and Safety of all through our work and activities. We Endeavour to...

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**Nutan Maharashtra Institute of Engineering and Technology**, Talegaon Pune is committed to reduce its impact on the environment. We will strive to improve our environmental performance over time and to initiate additional projects and activities that will further reduce our impacts on the environment.

Our commitment to the environment extends to our students, our staff, and the community in which we operate. We are committed to:

- 1) Comply with all applicable environmental regulations.
- 2) Prevent pollution whenever possible.
- Minimizing waste by reviewing purchasing practices and segregating wastes for reuse and recycling.
- Purchase and use environmentally responsible (recyclable, refurbished, etc.) products from environmentally responsible suppliers (i.e. suppliers who emphasize the need for renewable energy supplies).
- 5) Train all of our staff on our environmental program and empower them to contribute and participate.
- 6) Continually improve over time by striving to measure our environmental impacts and by setting goals to reduce these impacts each year.

### As per the policy guidelines the institution is implementing

- College is implementing Environmental Module as prescribed by the Savitribai Phule Pune University and Engineering Council.
- 2) Organization of various seminars & workshops on regular basis
- College has taken efforts by putting Environment awareness slogans to inculcate values on students mind. Slogans on walls

#### 3. General Recommendations:

- To reach the goal of a 30% recycling rate, which some institutions have achieved, college should compost food waste and be more vigorous about recycling education.
- Any future increases in servers should be consolidated in one "machine room," rather than building another on campus with the same high maintenance requirements. Additionally, when the College's phone system is replaced, the central system could also be consolidated in this space.
- The EAC should make decisions with respect to continuous input, interests and commitments of the students, participating faculty, and administration. The college should continue to support the work of the EAC and should ensure that its recommendations are considered carefully and in a timely manner through the appropriate chain of command.
- Environment Awareness programmes and Environmental field visits should be arranged on more frequent basis for Hands on Experience.

#### 4. Conclusions

Due to Covid-19 pandemic the entire function of the college through online platform, so there was physical activity in the campus.

College effectively utilized online platform for spreading environmental awareness and action project at household level. Carried out virtual field visit.

The college does consider the environmental impacts of most of its actions and makes a concerted effort to act in an environmentally responsible manner.

College authorities showed their commitment towards environmental protection.

#### 4.1 The high priority recommendations are:

- Adopt the proposed Environmentally Responsible Purchasing Policy, and work towards creating and implementing a strategy to reduce the environmental impact.
- With regards to the concerns mentioned in this report, the College should consider adopting specific goals and targets in its pursuit of sustainability.

### 4.2 The medium priority recommendations are:

- > Look towards meeting different environmental standards.
- Continue to support the work of the EAC and should ensure that its recommendations are considered carefully and in a timely manner through the appropriate chain of command.

#### 4.3 The minor and future concerns are:

- > Encourage student project on environmental footprint for College.
- Continue expanding interpretive program to better educate students about natural history and college role in preserving biodiversity and optimum utilization of natural resources.

## Annexure No1.

## Solid Waste Dumping Facility

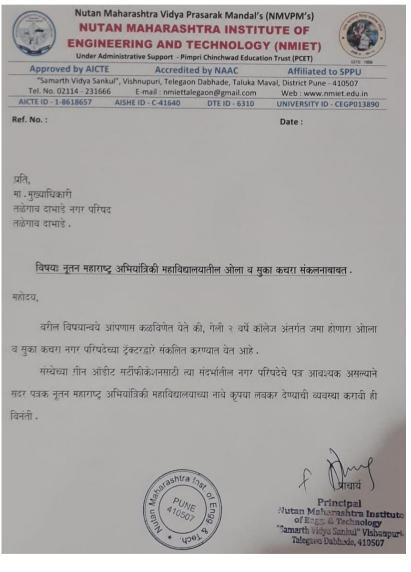


Dry garbage collection Dust Bin





**Garbage Collection system** 



Letter to Talegaon Municipal Council

## Annexure 2



Canteen Waste Biogas Plant



Well maintained storage tanks



Rain water Storage Tank

## Annexure 3

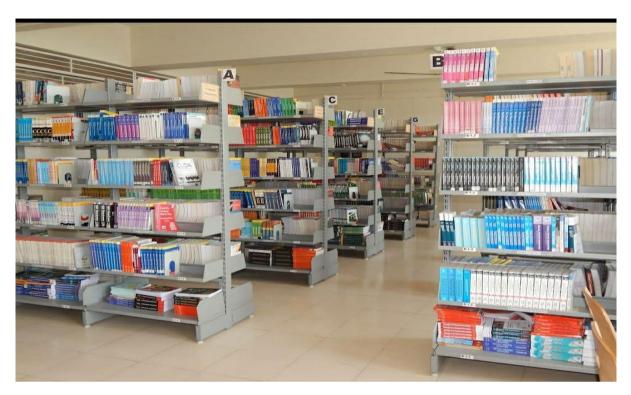


## E- Waste management Facility



**Plantation Drive** 

## Annexure 4



**Resourceful library** 





Greenery and Parking area of the campus.



Solar System Installed in campus area

## Audit Participants

#### **On behalf of Institute:**

Name	Position/Department	
Dr. Lalitkumar wadhwa	Principal, NMIET College	
Prof. Nitin Dhawas	Professor	
Prof. Shekhar Rahane	Professor	
Prof. Manojkumar kate	Professor	

#### On behalf of Aditya Envirotech:

Name	Position	Qualification
Dr. Swapnil Sheth	Lead Auditor	M.Sc. (Environment Science), P.hd.
		Lead Auditor ISO 14001:2015,
Ram Shinde	Co- Auditor	M.Sc. (Environment),



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