

# Aditi Mahavidyalaya University of Delhi

Delhi Auchandi Road, Bawana, New Delhi -110039

"Building a Sustainable Future: An Action Plan from Aditi Mahavidyalaya, for a Cleaner, Greener, and Pollution-Free Delhi"

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#### **Introduction:**

A Breath of Fresh Air: Towards a Clean, Green, and Pollution-Free Delhi: A Policy Proposal for a Healthier and More Sustainable Future

Delhi, the bustling capital of India, is home to millions of people and a hub of industry and commerce. However, the rapid pace of development and urbanization has come at a cost - the city is grappling with severe air and water pollution, which is taking a toll on the health and well-being of its residents. The air quality index in Delhi has often been recorded as "severe" or "hazardous," leading to a range of respiratory and other health problems. Similarly, the water quality in many parts of the city is poor, leading to waterborne illnesses and other health issues.

It is clear that urgent action is needed to address the pollution crisis in Delhi. This policy proposal aims to do just that - by outlining a comprehensive and actionable plan for a clean, green, and pollution-free Delhi. Our goal is to create a healthier and more sustainable future for all residents of Delhi, by reducing pollution levels and improving the quality of the air, water, and surroundings.

In the pages that follow, we will outline the current situation regarding pollution in Delhi, and propose a range of strategies and actions that can be taken to address this crisis. We believe that by working together - government, industry, civil society, and the general public - we can create a city that is cleaner, greener, and healthier for all.

#### Goals and Objectives:

As an undergraduate college, our goals and objectives for a clean, green, and pollution-free Delhi would be aligned with the larger vision for a healthier and more sustainable city.

- 1. To reduce air pollution levels in Delhi by 50% in the next 5 years, through a combination of measures such as promoting the use of electric vehicles, implementing stricter emissions standards for industries, and increasing green cover.
- 2. To ensure that all water sources in Delhi are safe and clean for consumption, by increasing the number of water treatment plants and improving waste segregation and recycling practices.
- 3. To promote the use of clean energy sources such as solar and wind power, with a target of generating at least 30% of the city's energy needs from renewable sources by 2030.
- 4. To improve waste management practices in Delhi, by increasing public awareness about the importance of waste reduction and segregation, and by implementing effective systems for waste collection and disposal.
- 5. To promote sustainable practices and behavior change among the college community, by encouraging the use of public transportation, promoting cycling and walking, and reducing paper usage through digitization.

By achieving these goals and objectives, we hope to create a healthier and more sustainable future for all residents of Delhi, including our college community. We believe that by working towards a common vision for a clean, green, and pollution-free city, we can make a real difference in the lives of people and the environment.

#### **Strategies and Action Plan:**

At Aditi Mahavidyalaya, we are committed to contributing to a cleaner, greener, and pollution-free Delhi through the implementation of specific strategies and action plans. Our policy recommendations aim to address

the major sources of pollution in the city, including transportation, industry, and waste management.

- 1. Increasing Public Transportation Options: We recognize that transportation is a major contributor to air pollution in Delhi. To address this issue, we propose the expansion of public transportation options, such as buses and metro services. We will also advocate for the implementation of dedicated bicycle lanes and pedestrian- friendly infrastructure to promote sustainable modes of transportation. We also plan to have designated cycle stands in the campus and tie up with corporates to fund electric two wheelers which can be rented out at nominal rates to students residing near the campus.
- 2. Promoting the Use of Electric Vehicles: To reduce vehicular emissions, we propose promoting the use of electric vehicles (EVs) in Delhi. This can be achieved through the implementation of incentives such as tax breaks and subsidies for the purchase of EVs. We will also advocate for the installation of more charging stations across the city. At the college level we will recognize and reward stakeholders using e vehicles to commute o college and also appoint them as green ambassadors of AMV.
- 3. Implementing Stricter Emissions Standards for Industries: Industries are a major source of air pollution in Delhi. To address this issue, we propose the implementation of stricter emissions standards for industries. This can be achieved through the establishment of a regulatory body tasked with enforcing and monitoring emissions standards for industries. At the college level we will sensitize nearby industrial community through workshops and seminars.
- **4. Improving Waste Segregation and Recycling Practices**: Effective waste management practices are essential for a cleaner and greener Delhi. To achieve this, we propose the implementation of waste segregation and recycling practices across the city. We

will work with local authorities and communities to promote the separation of waste at the source and the establishment of recycling centers. Charity begins at home...we at AMV would put this to practice and spread awareness in the nearby community.

5. Increasing Green Spaces: Green spaces provide numerous environmental and health benefits, including reducing air pollution and enhancing mental well-being. To achieve this, we propose the creation of more parks and green spaces across the city. We will work with local authorities and communities to identify and develop suitable locations for new green spaces. Aditi is proactively engaged in identifying green spaces and around the campus. The initiative will be given further acceleration.

By implementing these specific strategies and action plans, we believe that we can contribute to a cleaner, greener, and pollution-free Delhi. We will work with various stakeholders, including government agencies, civil society organizations, and the general public, to ensure the successful implementation of our proposed measures.

# **Stakeholder Engagement:**

As an undergraduate college, we recognize the importance of engaging with various stakeholders to ensure the successful implementation of a policy for a clean, green, and pollution-free Delhi. We believe that it is important to involve government agencies, industry, civil society organizations, and the general public in the decision-making process, and seek their input and feedback.

Government Agencies: We recognize the role of government agencies in implementing policies and regulations to control pollution levels in the city. We will engage with relevant agencies such as the Delhi Pollution Control Committee (DPCC) and the Municipal Corporation of Delhi (MCD), to ensure that our policy recommendations are in line with their efforts and to seek their support in implementing our proposed measures.

**Industry:** We recognize that industry is a major contributor to pollution levels in Delhi. We will engage with industry stakeholders such as the

Federation of Indian Chambers of Commerce and Industry (FICCI) and the Confederation of Indian Industry (CII), to encourage them to adopt cleaner technologies and reduce their environmental impact.

**Civil Society Organizations:** We recognize the role of civil society organizations in advocating for a cleaner and greener Delhi. We will engage with organizations such as Greenpeace India and the Centre for Science and Environment (CSE), to seek their input and feedback on our policy proposals, and to collaborate on initiatives to raise awareness and promote behavior change.

General Public: We recognize that the general public has a crucial role to play in reducing pollution levels in Delhi. We will engage with the college community and the wider public, through campaigns and awareness-raising initiatives, to promote sustainable practices and behavior change. We will also seek feedback and input from the public through surveys and

public consultations, to ensure that our policy recommendations reflect the needs and concerns of the people of Delhi.

By engaging with these stakeholders, we hope to create a policy that is comprehensive, effective, and widely supported, and that contributes towards a cleaner, greener, and pollution-free Delhi.

# **Budget and Financing:**

At Aditi, we understand the importance of budgeting and financing for the successful implementation of a policy for a clean, green, and pollution-free Delhi. We recognize that significant financial resources will be required to implement our proposed measures, and we are committed to exploring different funding sources and mechanisms to ensure that our policy is adequately financed.

**Funding Sources**: We will explore different funding sources to support our policy recommendations, including government grants, corporate social responsibility (CSR) funds, international donor agencies, and crowdfunding. We will also explore opportunities for public-private partnerships (PPPs) to leverage private sector investment in sustainable infrastructure projects.

Mechanisms for Financing: We will explore different mechanisms for financing our proposed measures, including green bonds, carbon credits, and tax incentives for environmentally sustainable practices. We will also seek to promote financial literacy and entrepreneurship among our college community, by providing training and resources to enable students to start businesses that promote sustainable development.

Monitoring and Evaluation: We recognize the importance of monitoring and evaluating the impact of our policy measures, to ensure that they are effective and efficient in achieving our goals. We will establish a monitoring and evaluation framework that includes performance indicators, targets, and regular reporting, to ensure that progress is tracked and adjustments can be made as needed.

By prioritizing budgeting and financing, we believe that our policy recommendations will be more effective and sustainable in the long term. We are committed to exploring all available funding sources and mechanisms, to ensure that our policy is adequately financed and that it can make a real difference in creating a cleaner, greener, and pollution-free Delhi.

#### **Monitoring and Evaluation:**

We recognize the importance of monitoring and evaluating our progress towards achieving a cleaner, greener, and pollution-free Delhi. To this end, we propose the following provisions for monitoring and evaluation:

- 1. Tracking Adoption of Clean Energy Sources: To promote the adoption of clean energy sources, we propose tracking the installation and usage of renewable energy systems across the city. This can be achieved through the establishment of a database of renewable energy installations, including solar panels and wind turbines. Solar panels are already in place in college: other initiatives will be implemented.
- 2. Measuring Air and Water Quality: To ensure that our policy is effective in reducing air and water pollution, we propose setting up a system for monitoring and measuring air and water quality across the city. This can be achieved through the establishment of air and water quality monitoring stations at various locations

across the city. Efforts will be made to initiate establishment of the same at college.

- **3. Monitoring Waste Management Practices**: Effective waste management practices are essential for a cleaner and greener Delhi. To monitor progress in this area, we propose setting up a system for tracking waste management practices across the city. This can be achieved through the establishment of a database of waste management practices, including waste segregation and recycling rates.
- 4. Conducting Regular Reviews: To ensure that our policy remains relevant and effective, we propose conducting regular reviews of our progress towards achieving our goals and objectives. This can be achieved through the establishment of a review committee consisting of representatives from various stakeholders, including government agencies, civil society organizations, and the general public.

By implementing these provisions for monitoring and evaluation, we can ensure that our policy is effective in achieving its goals and objectives. We will work with various stakeholders to establish a robust monitoring and evaluation system that can track our progress towards a cleaner, greener, and pollution-free Delhi.

### **Budget and Financing:**

As an undergraduate college, we understand the importance of having a clear budget and financing plan for implementing a policy for a cleaner, greener, and pollution-free Delhi. To this end, we propose the following measures for budgeting and financing:

1. Defining the Budget: We propose defining a clear and comprehensive budget for implementing the policy. This budget would include the cost of infrastructure development, the cost of implementing various measures to reduce pollution levels, and the cost of monitoring and evaluation. We will work with government agencies, civil society organizations, and private sector

stakeholders to arrive at a realistic budget that can be funded through multiple sources.

- 2. Identifying Funding Sources: To finance the policy, we propose identifying multiple sources of funding, including government grants, corporate social responsibility funds, and private sector investments. We will also explore the possibility of securing funding from international organizations that support sustainable development initiatives.
- 3. Establishing a Financing Mechanism: We propose establishing a financing mechanism that can attract private sector investments. This can be achieved through the establishment of a green bond market or a green investment fund. Such mechanisms would enable private sector stakeholders to invest in sustainable development initiatives and earn returns while contributing to the larger goal of a cleaner, greener, and pollution-free Delhi.
- 4. Ensuring Transparency and Accountability: To ensure transparency and accountability in the budgeting and financing process, we propose establishing a monitoring and evaluation system that can track the utilization of funds and measure the impact of the policy. We will work with government agencies and civil society organizations to establish a mechanism for regular audits and reviews of the financing and budgeting process.

By implementing these measures for budgeting and financing, we can ensure that our policy for a cleaner, greener, and pollution-free Delhi is adequately funded and can achieve its objectives. We will work with various stakeholders to ensure that the financing and budgeting process is transparent, accountable, and sustainable.

Questionnaire with options to conduct a survey among undergraduate students on the need for a clean green Delhi and possible action that can be taken:

- 1. How concerned are you about the pollution levels in Delhi? a. Very concerned b. Somewhat concerned c. Not very concerned d. Not at all concerned
- 2. Do you think that individuals have a role to play in reducing pollution in Delhi? a. Yes, individuals can make a significant difference b. Somewhat, but the government needs to take the lead c. No, individuals can't do much to reduce pollution
- 3. What steps have you taken to reduce your environmental impact? a. Using public transportation or biking/walking instead of driving b. Reducing water usage c. Recycling and composting d. Using energy-efficient appliances and light bulbs e. Other (please specify)
- 4. Which of the following measures do you think would be most effective in reducing pollution in Delhi? (Select all that apply) a. Increasing public transportation options b. Promoting the use of electric vehicles c. Implementing stricter emissions standards for industries d. Improving waste segregation and recycling practices e. Increasing green spaces f. Other (please specify)
- 5. Do you think that the college should take steps to reduce its environmental impact? a. Yes, definitely b. Somewhat, but it's not a high priority c. No, it's not necessary
- 6. Which of the following steps do you think the college should take to reduce its environmental impact? (Select all that apply) a. Encouraging the use of reusable water bottles and coffee cups b. Reducing paper usage c. Promoting sustainable transportation options for students and staff d. Installing energy-efficient appliances and light bulbs e. Implementing a recycling program f. Other (please specify)

- 7. Do you think that the government should take more steps to reduce pollution in Delhi? a. Yes, definitely b. Somewhat, but it's not a high priority c. No, it's not necessary
- 8. Which of the following steps do you think the government should take to reduce pollution in Delhi? (Select all that apply) a. Enforcing stricter emissions standards for industries b. Increasing investment in public transportation c. Encouraging the use of electric vehicles d. Promoting renewable energy sources e. Implementing stricter regulations on waste management If. Other (please specify).
- 9. Would you be willing to take part in environmental initiatives or campaigns aimed at reducing pollution in Delhi? a. Yes, definitely b. Maybe, depending on the nature of the initiative/campaign c. No, I'm not interested

Thank you for participating in this survey!

# Examples of successful environmental initiatives taken by Indian colleges and universities:

- 1. Indian Institute of Technology (IIT) Madras: IIT Madras has implemented several sustainable initiatives on its campus, such as using solar power to meet a significant portion of its energy needs, and implementing a solid waste management system that includes segregation, composting, and recycling.
- 2. Ashoka University: Ashoka University has implemented a green energy project, which involves installing solar panels on campus buildings and reducing energy consumption through energy-efficient lighting and cooling systems.
- 3. The Energy and Resources Institute (TERI) University: TERI University has implemented several initiatives to reduce its carbon footprint, such as using biogas for cooking and heating, and

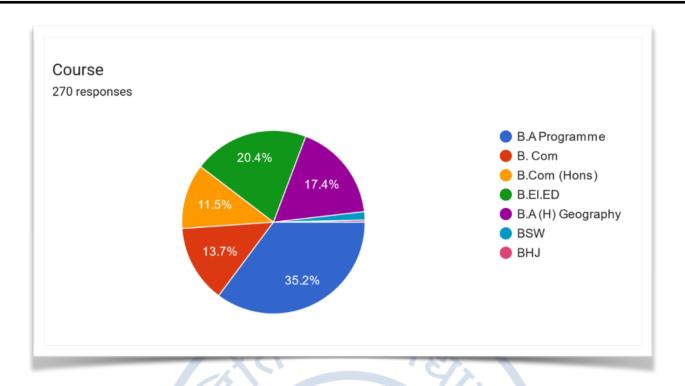
implementing a waste management system that includes composting and recycling.

- 4. St. Xavier's College, Mumbai: St. Xavier's College has implemented a 'green campus' initiative, which includes rainwater harvesting, solar lighting, and promoting sustainable transportation options like cycling.
- 5. Amity University: Amity University has implemented several initiatives to reduce its energy consumption and carbon footprint, such as using energy-efficient lighting and cooling systems, promoting green transportation options, and using renewable energy sources like solar power.

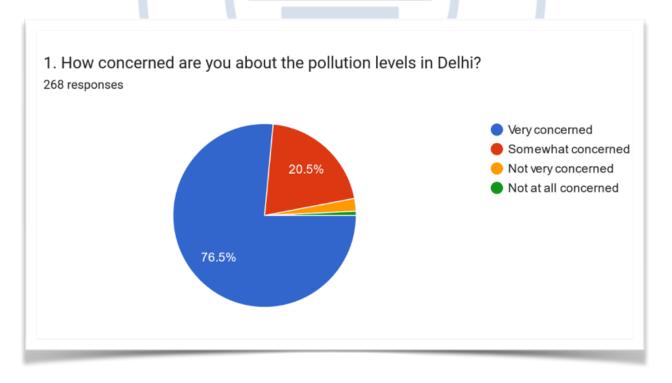
These examples show that Indian colleges and universities are taking significant steps towards sustainability and environmental protection. By implementing these initiatives, these institutions are not only reducing their environmental impact, but also setting an example for students and the wider community.

Under "Building a Sustainable Future: An Action Plan from AMV, University of Delhi, for a Cleaner, Greener, and Pollution-Free Delhi", an online survey with first-year students was conducted in Aditi Mahavidyalaya from April 27 to 7 May 2023. The link is attached herewith.

https://docs.google.com/forms/d/e/ 1FAIpQLSc5epEuW4jS6QZjP5lhafvOW9zadiWgC1FMQBk5JHNw1O vqqQ/viewform?usp=sf\_link

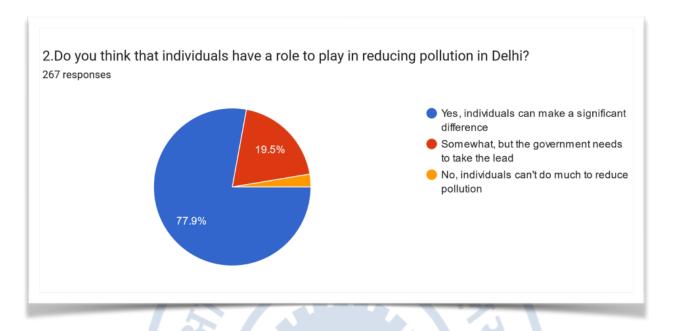


Students from seven major streams have actively participated in the survey. Maximum participation was from B.A. Programme with 35.2% followed by B.EL.ED (20.4%), B.A. (H) Geography (17.4%), whereas B.Com (Hons.) has a 13.7% share.

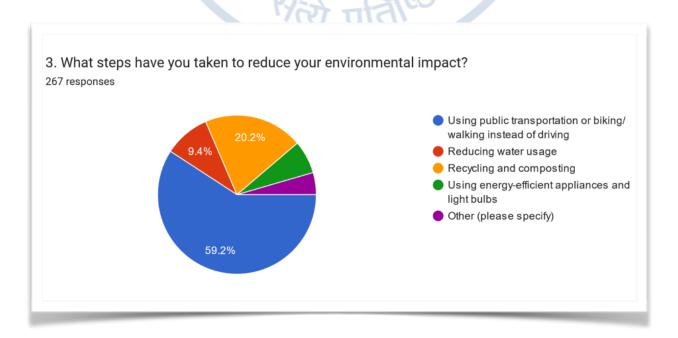


Students of Aditi Mahavidyalaya are very much concerned about the pollution levels in Delhi. As the college is situated near the Bawana Industrial area so it's quite natural for the students to get more aware of the pollution level. 76.5 % are very concerned followed by 20.5%

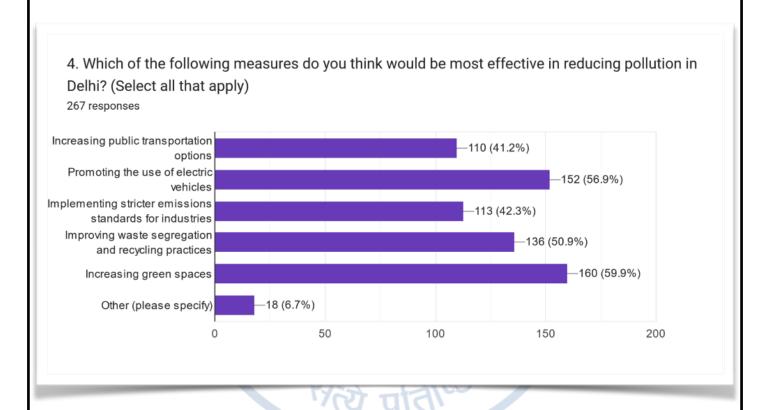
somewhat concerned. The combined figure of both accounts for 97% of the concern level.



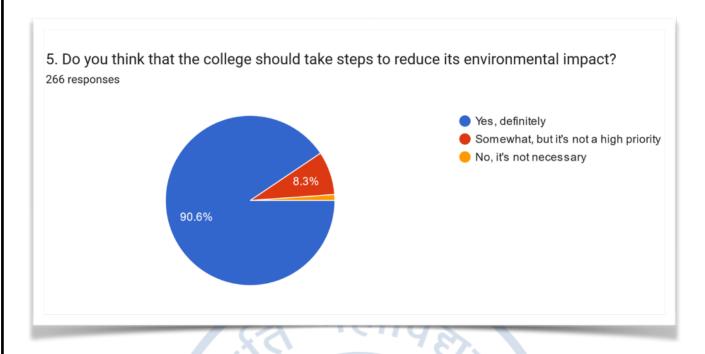
77.9% think that individuals can play a significant role in reducing pollution in Delhi, while 19.5% had the view that the government needs to take the lead to reduce pollution levels in Delhi. Very few had the view that individuals can't do much to reduce pollution. Since the college has an Eco-club where students are involved in environment-related activities throughout the year, that's why students are placing more emphasis on the role of individuals.



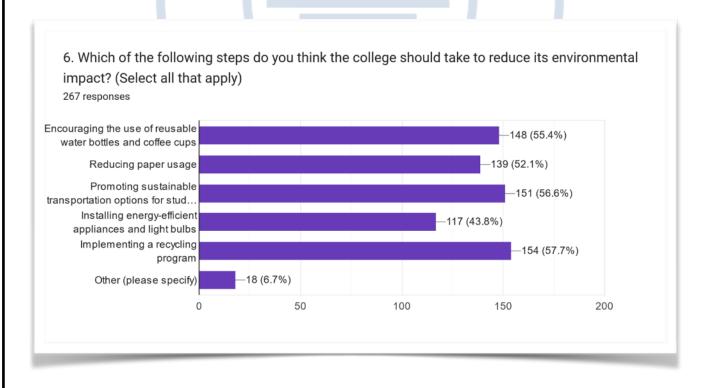
To reduce environmental impact 59.2% use public transport by biking/walking instead of driving. 20.2% have taken steps for recycling and composting. The college has a composting plant which makes them aware of composting and recycling. 9.4% think that reducing water storage is also another step to reduce environmental impact.



As far as effective measures to reduce pollution in Delhi are concerned, 59.9% gave more emphasis to increasing green spaces followed by promoting the use of electric vehicles (56.9%). 50.9% agreed that improving waste segregation and recycling practices is another tool. More than 40% have an interest in increasing public transport options and implementing stricter emissions standards for industries. 18% believed in other measures.

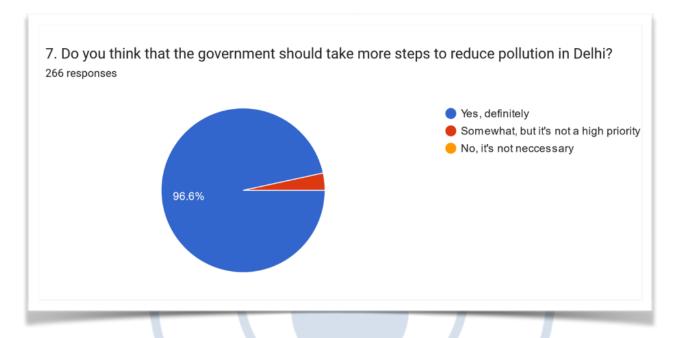


The kind of response to initiatives taken by the college to reduce its environmental impact is 90.6%. College has its fifty percent area under green covers that's why students had a view on larger interests taken by the college. 8.3% think that somewhat, but it's not a high priority.

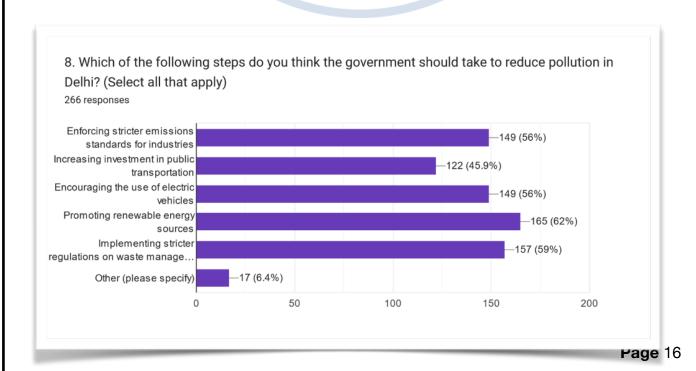


The students are involved in different activities through college committees/societies in recycling programs and that is the reason 57.7%

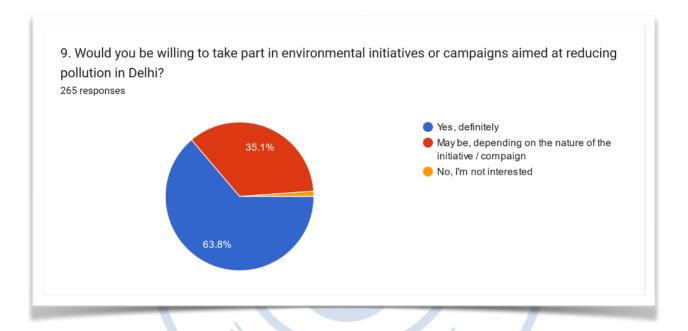
had a view on this. 56.6% had selected the option of promoting sustainable transportation options for students. Encouraging the use of reusable water bottles and coffee cups was supported by 55.4% of respondents. Less than fifty percent i.e. 43.8% think that installing energy-efficient appliances and bulbs can make an impact on the environment.



In this particular question, 96.6% think that the government should take more steps to reduce pollution in Delhi. None of the respondents had a view on, not necessary for the government. 3.4% think somewhat, but it's not a high priority.



Out of five major steps taken by the government, the first priority was given to promoting renewable energy sources with 62%, followed by 59% to implementing stricter regulations on waste management. While 56% had same view on both categories of enforcing stricter emissions standards for industries and encouraging the use of electric vehicles. 45.9% think that increasing investment in public transportation is another step to reduce pollution in Delhi.



Aditians are willing to take part in environmental-related activities, not only on the campus but in the vicinity of Bawana also. 63.8% said "yes" to taking part in initiatives or campaigns aimed at reducing pollution in Delhi. 35.1% expressed it depending on the nature of the initiatives/campaigns. Around 1% have given preference to "No, I,m not interested' category.