Every Speed Breaker is now a source of power: Safer traffic and safer power for the community

SALEM, India

aswathaman vijayan

Year Founded:
2010
Organization type:
hybrid
Project Stage:
Established
Budget:
$1,000 - $10,000
Website:
http://www.sonatech.ac.in

- Energy conservation
- Green business
- Renewable energy
- Sustainability

Project Summary

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

India, unlike the top developed countries has very poor roads. This idea is about introducing speed breakers to control traffic and in turn generate electricity from speed breakers when the vehicle passes over it.

WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"

Every Speed breaker is now a source of power

About Project

Problem: What problem is this project trying to address?

India, unlike the top developed countries has very poor roads. And the amount of vehicle is increasing day by day; the only solution to control this traffic is by setting up of speed breakers. The project is concerned with generation of electricity from speed breakers-like set up. There is possibility of tapping the energy and generating power by making the speed breaker as a power generation unit.

Solution: What is the proposed solution? Please be specific!

The extensive usage of energy has resulted in an energy crisis, and there is a need to develop methods of optimal utilization, which will not only ease the crisis but also preserve the environment. This project attempts to show how energy can be tapped and used at a commonly used system, the road-speed breakers. The generated power can be used for the lamps near the speed breakers. And this will be a great boon for the rural villages too. The load acted upon the speed breaker - setup is there by transmitted to rack pinion arrangements. Here the reciprocating motion of the speed-breaker is converted into rotary motion using the sprocket and chain arrangement from where the motion is sent into a generator to produce electricity.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

A recent survey on the energy consumption in India had published a pathetic report that 85,000 villages in India do not still have electricity. Supply of power in most part of the country is poor. Hence more research and development and commercialization of technologies are needed in this field.
India, unlike the top developed countries has very poor roads. Talking about a particular road itself includes a number of speed breakers. By just placing a unit like the “Power Generation Unit from Speed Breakers”, so much of energy can be tapped. This energy can be used for the lights on the either sides of the roads and thus much power that is consumed by these lights can be utilized to send power to these villages.

**Impact:** What is the impact of the work to date? Also describe the projected future impact for the coming years.

The project till date has been awarded with many prizes in various international and national forums. The research work is also published in the 2010 International Conference on Biology, Environment and Chemistry IPCBEE vol.1 (2011) © (2011) IACSIT Press, Singapore.

**Spread Strategies:** Moving forward, what are the main strategies for scaling impact?

The world has already had its share of its energy resources. Fossil fuels pollute the environment. Nuclear energy requires careful handling of both raw as well as waste material. The focus now is shifting more and more towards the renewable sources of energy, which are essentially, nonpolluting. Energy conservation is the cheapest new source of energy. It is an attractive technology for optimal use of available sources and this idea can solve the traffic problem in India across the country and as well provide electricity for the entire country.

**Sustainability**

**Financial Sustainability Plan:** What is this solution’s plan to ensure financial sustainability?

Currently experimenting the project in live road is a challenge and funding for the project is not available

**Marketplace:** Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

Not Applicable

**Team**

 Priya - co founder

**About You**

**Organization:**

 sona college of technology

**About Your Project**

**Organization Name**

 sona college of technology

**How long has your organization been operating?**

**Project**

**Organization Country**

 , TN, SALEM

**Country where this project is creating social impact**

 , TN, SALEM

**What awards or honors has the project received?**

**Funding:** How is your project financial supported?

Friends and family, Individuals.

**Supplemental**

**Partnerships**

How does your idea encourage citizens to participate in making roads safer?

**Barriers:** What barriers might hinder the success of your project and how do you plan to overcome them?

**Additional Information**
Is your project targeted at solving any of the following challenges?

Would you like your project to be considered for the Bangalore People’s Choice Prize?

If yes, how is your project applicable to the Bangalore context?

Source URL: https://www.changemakers.com/saferoads/entries/every-speed-breaker-now-source-power