Electric Three Wheeler Project

Presented by Dhatusena Senanayake

Of

Lanka Electric Vehicle Association

Sri Lanka



Sri Lanka – a paradise island



Multiethnic island nation of a population of 22 million

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Multiethnic island nation of a population of 22 million



Approximately 4 million school children

But for how long?



Many schools by the roadside....

Paradise - polluted



- 60% of the air pollution in Sri Lanka is caused by motor vehicles
- 4 million vehicles
- 400,000 Two-stroke three wheelers

Comparison of Colombo air quality with new WHO Guidelines

Air Quality Colombo

• **PM** 10 24hour Mean 98 μg/m3

• SO₂ 24hour Mean 50 μg/m3

WHO Guidelines

• PM 10 24-hour Mean

50 μg/m3

• **SO**₂ 24-hour Mean

 $20 \mu g/m3$

(Source: World Health Organization, 2012)

The silent killer...

- Increase in respiratory diseases
- Lung cancer
- Premature death

(Source: Dr.Wijayamuni, 2012)





Increased hospital admissions

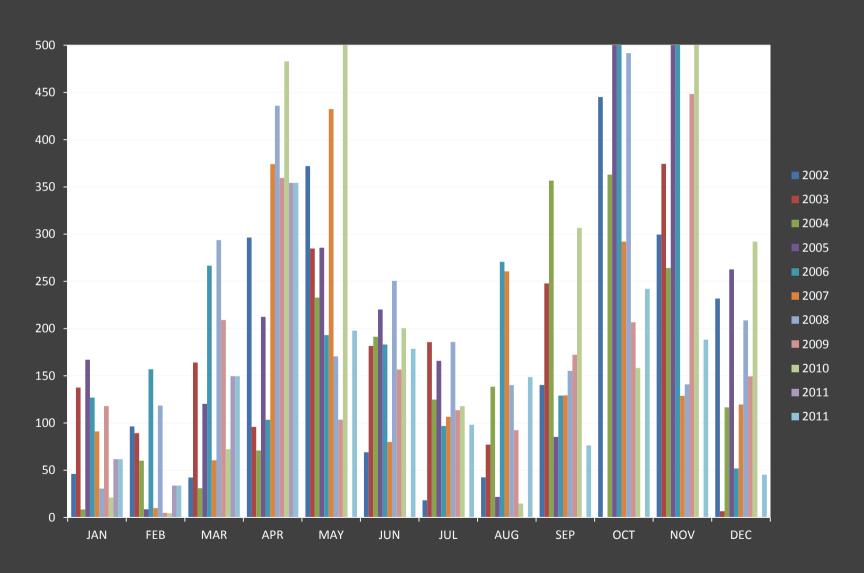
Loss of productivity

Our future - ENDANGERERD!



Asthma is on the increase...

Rainfall in Colombo



(Source: Metrological Department of Sri Lanka, 2012)

The Global Warming Crisis



The Global Warming Crisis



Electric Vehicles – To The Rescue!



How it all began...

- My six year old daughter started to suffer from asthma a very common condition in our country
- Watching my daughter gasping for breath I told myself I had to do something for less privileged people suffering from the same respiratory disease

Lanka Electric Vehicle Association

Pioneer in introducing Electric Vehicles to Sri Lanka



Who are we?



- A non-profit making organization established in 2003
- Vision: To positively impact the environment and the economy
- Mission: Raising awareness amongst the public of an alternate mode of transport

Who made this possible?







The Journey...

Stage 1: Chassis



Obstacles...

 Policy barriers whilst clearing the chassis as there was no HS code in the customs ordinance for Electric Vehicles

Overcome by: Approaching the Director of Physical Policy

 Motor traffic act had no provision for registering Electric Vehicle's, thus barring the vehicle from being driven on the roads legally

Overcome by: Approaching the Ministry of Transport



The first electrical vehicle to be registered in Sri Lanka



Range

75km per charge

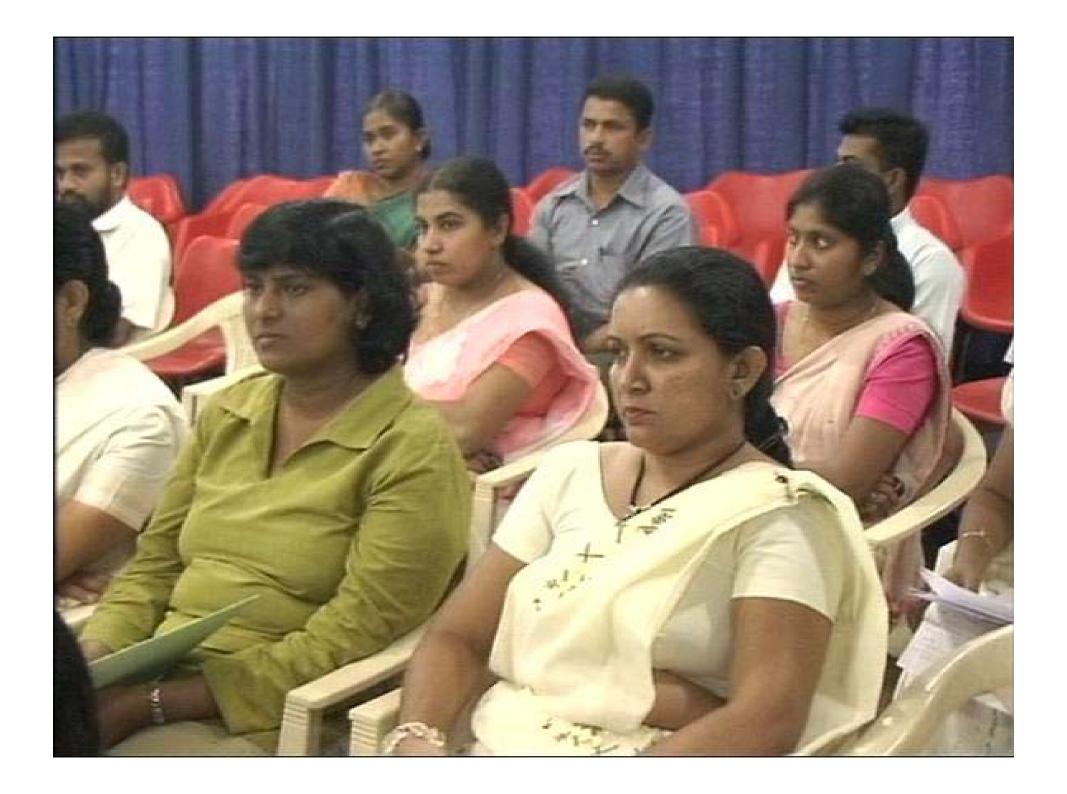
- Max speed
- 45 km/hr
- Carrying capacity 8 passengers
- Motor

- 5.46 kw series wound DC
- 7-8 hours to re-charge battery

Seminar organized by Lanka Electric Vehicle Association and The Ministry of Urban Development







Stage2:Demonstration Project



Obstacle: Marketing to public Overcome by: provision for recharging the batteries

Stage 3: Electric Vehicle with a Soft Top



Paving a way to a cleaner-greener Sri Lanka!

Tourism – Going Green...



Ulagalla Resort - Anuradhapura, Sri Lanka

The Green Way Forward!



Vil Uyana Resort - Sigiriya, Sri Lanka

Stafford Motor Co (Pvt) Ltd introduces it's Honda Insight (Hybrid)



Viny Trading (Pvt) Ltd's **Electric Hybrid Motorcycles**





The Next Milestone

Bus Rapid Transit Pre-feasibility Study, Colombo - Sri Lanka



* Janmarn, Rus Ranid Transport in Ahmedabad, India (Photo Credit: Madhav Pai, EMBARQ)

Pre-feasibility Study for Bus Rapid Transit

Sri Lanka, Colombo

Prepared by EMBARQ, the WRI Center for Sustainable Transport

Lets Save Our Planet!



Thank you for listening.