

# 2017

## PROCEEDINGS

### 6<sup>th</sup> Kathmandu Sustainable Urban Mobility Forum

“Need of Vehicle Fuel Policy”

15<sup>th</sup> August 2017

Trade Tower, Thapathali, Kathmandu



Cities for People



Clean Energy Nepal

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## 1. Background

Nepal is one of the fastest urbanizing countries in Asia with the average growth rate of 5% (World Bank, 2012). With the increasing economic growth and urbanization, the country has seen exponential growth of motor vehicles which are creating complexity of traffic congestion, poor public transport system, pedestrian and vehicular conflict, and poor air quality. The annual average growth rate of the total registered vehicle in the country for last 12 years is 14%, but in 10 years the number of registered vehicle has increased by 3.75 times and it is estimated that there will be 14 million vehicles by 2030. From 2010 to 2050, tripling of the number of cars is estimated on the planet. Improved fuel economy is essential if we are to address some of the negative implications of this growth, such as pollution, congestion, energy and resource depletion, and environmental damage.

Some countries, which have fuel economy policies, show a trend towards improving fuel economy over time, whereas others do not. For example, there is a visible improvement in fuel economy in South Africa after the introduction of scale incentives for more efficient vehicles in 2010. Ambitious policy frameworks can make a significant improvement in improving vehicle fuel economy, particularly vehicle taxation schemes.

Thus, development of cleaner and efficient vehicle fuel policy is prior need for country like Nepal to lowering dependency on expensive imports, reducing high fuel expenditures/subsidies. Hence, 6<sup>th</sup> Kathmandu Sustainable Urban Transport Forum was focused on discussion on the need of the vehicle fuel policy for Nepal.

Clean Energy Nepal (CEN), Clean Air Network Nepal (CANN) and United Nation Environment Program (UNEP) jointly organized the program.

## 2. Objective

The main objective of the Kathmandu Sustainable Urban Mobility Forum is to initiate policy dialogues, partnership stakeholder collaboration for better air quality and sustainable urban transport with focus on people centric transportation.

- Discuss the existing need of vehicle fuel policy of Nepal
- Sensitize stakeholders on necessity of vehicle fuel policy for ensuring cleaner and efficient fuel
- Bring together stakeholder for sustainable urban mobility and way forward

## 3. Program Participants

Around 60 participants from governmental agencies, non- governmental agencies, academia, transport entrepreneurs, media and from other concerned stakeholders urban/transport planners participated in the program.

## 4. Proceedings

The program commenced with opening and keynote remarks followed by five presentations and panel discussion. The presenters focused on the status on transport and fuel consumption scenario of Nepal, opportunities and challenges for electric vehicles and the global scenario of the vehicle fuel policy. The panel discussion was focused on the different possible fuel source; fossil fuel, biofuel and electricity for the transport sector. They explained the current situation of the fuel type and its possible usage and expansion in future.

### 4.1 Opening Remarks

The program commenced with the opening remarks from Mr. Rajan Thapa, Program Manager, CEN. He stated, “We need to adopt cleaner fuels and vehicle emission standard by improving vehicle fuel economy and develop cleaner and efficient vehicle fuel policy for Nepal”.

### 4.2 Keynote Remarks

Honorable Ms. Geeta Chhetri, Member of Parliament, Chairperson, Environment Protection Committee chaired the program. She remarked that beside several efforts from the Committee to control air pollution, still technical solutions are required. Chief Guest Mr. Ram Prasad Lamsal, Joint Secretary, Ministry of Population and Environment remarked that all stakeholders should actively involve in the promotion of the Sustainable Transport system in the country.



**Figure 1: Keynote Speakers of KSUMF-VI; from left: Mr. Ram Prasad Lamsal, Hon. Ms. Geeta Chhetri and Mr. Bhusan Tuladhar**

### 4.3 Technical Session I

#### **Presentation 1: Overview of Transport Policies of Nepal**

During the presentation, Ms. Rassa Manandhar, Program Coordinator, Clean Energy Nepal presented on the overview of Transport Policies in Nepal. She highlighted the major transport policies, strategies and targets for sustainable urban transport in Nepal. The presentation highlights the fact that there are feasible policies on the transport sector for Nepal but the lack of implementation hinders the effectiveness of the policies.

#### **Presentation 2: Electric Vehicles in Nepal; Overview, Opportunities and Action**

Presenting the overview of benefits, cost, chances and challenges of electric vehicles in Nepal, Mr. Rowan Frase, Global Green Growth Initiative (GGGI) presented the possibility of Electric Vehicles in Nepal. The presenter mentioned that as battery cost consume large portion of the production cost; gradual decrease in the cost of battery can reduce cost of electric vehicles. The market of electric vehicle is growing hence, improvement in the financing needs is required for it promotion along with investment in charging infrastructures.



**Figure 2: Participants at KSUMF-VI**

#### **Presentation 3: Fuel Consumption Scenario of Nepal**

The fuel consumption scenario of Nepal was reflected on the presentation of Mr. Ram Ji Prasad Gyawali, Officer, Nepal Oil Corporation Limited. The consumption of diesel and

petrol is increasing by 15 to 25% on average annually. He stated that the NOC is currently importing EURO IV standard fossil fuel. Regarding further plans, NOC is planning to build a pipeline for the supply of fuel.

#### **Presentation 4: Plan for Sustainable Urban Transport in Kathmandu Valley**

Dr. Toka Raj Pandey, Director, Department of Transport Management (DoTM) delivered his presentation on the current status of vehicles, along with the past, existing and upcoming plans and policies for Nepal. The presentation highlighted on the current scenario where; 27,44,000 vehicles are registered in Nepal with 80% of the total vehicles are occupied by two wheelers. Discussing on the policies; dealers are allowed to import only new vehicles with Euro III emission standard. The emission standards for the vehicles are maintained through the Nepal Vehicle Mass Emission Standard, 2012. Among several issues; Phasing out of the old vehicles and open border condition with India are some factors that hinder sustainable urban mobility. Hence, for the sustainable urban mobility; more stringent criteria for importing used vehicles are needed along with strict cross border movement. He highlighted, “Import of electric vehicles is encouraged by the reduction in customs duty.”

#### **Presentation 5: Doubling Vehicle Fuel Economy Globally**

An online presentation on “Doubling Vehicle Fuel Economy Globally” was presented by Mr. Bert Fabian from UNEP. He presented the policy intervention on clean fuel, strategies and initiatives adopted by various nations around the globe along with the way ahead for Nepal. He concluded that there is need of CO<sub>2</sub> abatement polices in Nepal which can influence the new vehicles manufacture and import to reduce air pollution and GHG emission.

### **4.4 Panel Discussion/ Group Discussion**



**Figure 3: Panelist of KSUMF VI**

The presentation was followed by panel discussion and open discussion, which was facilitated by Mr. Bhushan Tuladhar, Senior Advisor, CEN. The panelists were Honorable Ms. Geeta Chhetri, Member of Parliament, Chairman, Environment Protection Committee, Mr. Hitendra Dev Shakya, Managing Director, Nepal Electricity Authority Engineering Company (NEAEC), Dr. Toka Raj Pandey, Director, DoTM, Mr. Umesh R. Shrestha, President, Electric Vehicle Association Nepal (EVAN) and Ms. Shubha Laxmi Shrestha, Senior Officer, Alternative Energy Promotion Center (AEPCC). Mr. Umesh R. Shrestha briefed about the sustainability of electric vehicles and energy security in Nepal. There is a chance of plying 100% Electric Vehicles in Kathmandu in case of sufficient technical and financial support from concerned institution, he added. Ms. Shubha Laxmi Shrestha informed that the renewable energy like biofuel could be an alternative to fossil fuel. She also shared about various initiatives and program for the production and promotion of biofuel by AEPCC. Mr. Hitendra Dev Shakya, stated that the surplus electricity can be used for the promotion of electric vehicles in Nepal but there should be sufficient charging station and maintenance option for its effective implementation.

The floor was opened for discussion where the participants put forward various queries, suggestions and recommendations. The comments and inputs provided were;

- Fuel economy policy of some South Asian countries has kept more tax to diesel/petrol vehicles. In case of Nepal 80% of motorcycle is inefficient. Hence, taxation on such vehicles is necessary.
- Transportation tax should be categorized on the basis of its efficiency and emission level.
- For the promotion of the electric vehicle, investment on its infrastructures like charging station is necessary.
- Though road development is necessary, better and wider road is not the only solution for sustainable urban mobility
- Widening of road and other developmental activities on road degrades the air quality and increase traffic congestion. Hence, coordination between development authorities is necessary.
- Conflicting policies among the institutions still exist; hence proper coordination among such institution can minimize the conflict.

As a closing remarks and feedback, Ms. Geeta Chhetri remarked that electric and bio fuel can be a good alternative for renewable energy for Nepal. She concluded that the forum was very informative and all the stakeholders should come together for the integrated and sustainable development of the country. Mr. Bhushan Tuladhar concluded the program with few remarks;

- There are decent transport policies in Nepal, but the major problem is in implementation phase.

- Proper utilization of the fund and its smooth flow is necessary.
- Promotion of electric vehicles should be done for the sustainable transport.

## 5. Conclusion and Way forward

The 6<sup>th</sup> Kathmandu Sustainable Urban Mobility Forum showed the mutual consent on the need of the vehicle fuel policy for Nepal. These policies must be able to separate polluting and cleaner vehicle fuel. It should incorporate the quality assurance of the imported fossil fuel. Additionally, the Environment protection committee of Parliament noted the transport management as the major issue and showed assurance for proceeding further on it.

### 5.1 Way forward

For achieving the cleaner and efficient transport; switching to the alternative fuel source: electricity and improving the efficiency of fossil fuel through increasing standard could be the way forward for Nepal.

## Annex 1: Program Agenda

S.No.	Program	Time	Remarks
1	Registration/Breakfast	9:00-10:00	
2	Opening Remarks	10:00-10:10	Clean Energy Nepal
3	Overview of policy on vehicle fuel of Nepal	10:10- 10:20	Rassu Manandhar, Clean Energy Nepal
4	Possibility of Electric Vehicle In Nepal.	10:20-10:40	Rowan Fraser, Global Green Growth Institute
5	Fuel Consumption Scenario of Nepal	10:40-10:55	Ramji Prasad Gyawali, Officer, Nepal Oil Corporation Limited
6	Plan for sustainable urban transport in Kathmandu Valley	10:55-11:10	Dr. Toka Raj Pandey, Director, Department of Transport Management
6	Doubling Vehicle Fuel Economy Globally	11:10-11:30	Mr. Bert Fabian, United Nations Environment Program (Skype ppt.)
8	Panel Discussion	11:30-12:15	
9	Discussion	12:15-13:00	
	Lunch	13:00 onwards	

## Annex 2: Presentations

Please find the presentations in the link below:

[https://drive.google.com/drive/folders/0B\\_cz0SGPTRLbWl8wcUVqQnh3TW8](https://drive.google.com/drive/folders/0B_cz0SGPTRLbWl8wcUVqQnh3TW8)

## Annex 3: List of Participants

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