

Clean Air News

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Nepal's Transition to Euro VI and Air Pollution

With India transitioning to cleaner Euro VI compliant fuels, Nepal, which imports all of its petroleum products from the southern neighbour, will be following suit. But the new European standard fuels, which are supposed to be cleaner and more eco-friendly, are unlikely to have any major impact on rising pollution levels in the country, say environmentalists.

According to the Nepal Oil Corporation, Euro VI-compliant petrol and diesel will contain less sulphur and consequently, there will be less pollution.

"Cleaner fuels will increase the performance of the engines and may even lead to better fuel efficiency of vehicles," said Birendra Goit, marketing director of the Nepal Oil Corporation. "India is making the switch to cleaner fuels due to its own statutory requirements but Nepal will also benefit as we will be importing cleaner fuels at no extra cost."

But environmentalists are only with Goit half-way. "Most motor vehicles in Nepal only comply with Euro II or Euro III norms," said environmentalist Bhushan Tuladhar, who is also on the board of Sajha Yatayat. "The emerging scenario is that Euro VI fuels will now be powering engines that are technologically older."

According to Tuladhar, there will be some positive impact because engines will burn less

fuel and release fewer emissions. However, the full environmental impact of having cleaner fuels will only come when Euro VI-compliant vehicles get to use Euro VI-compliant fuels. "Unfortunately, that's not the situation at the moment," he said.

While Euro IV fuels contain 50 parts per million (ppm) sulphur, Euro VI grade fuel only has 10 ppm sulphur content. Harmful nitrogen oxide emissions from diesel cars can be brought down by nearly 70 percent and in petrol cars by 25 percent with the use of Euro VI fuel. The new standard is also believed to reduce cancer-causing particulate matter in diesel emissions by up to 80 percent. The Euro standard of fuel is based on the European Union's fuel and emission standards that were first introduced in 1993. Since then, standards have consistently improved to make fuels cleaner and more environment-friendly.

Manjeet Dhakal, another environmentalist, who is a team leader at the climate policy institute Climate Analytics, said that while the introduction of cleaner petrol and diesel may help in reducing air pollution levels in Nepal, it still won't address the root of the problem.

Source: kathmandupost.com, 21 January 2020

Comprehensive & Multisectoral Approach to Air Quality Needed

Air pollution is one of the world's major slow killers. A study published by the Nepal Health Research Council in early 2019 confirmed that about 12 percent of the country's population aged 20 years and above—have been found to be suffering from chronic obstructive pulmonary disease. Statistics from the Ministry of Health and Population show that in the 1990s, air pollution was the 10th leading cause of disability. By 2019, it was the second leading cause of disability.

And, while rural areas suffer due to inefficient cooking fuels and industrial pollution, the urban parts of the country face the brunt of the problem. This and open burning, urban centres also have the added challenge of vehicular emissions—something that has been on the rise with a ballooning number of private automobiles. This trend has been especially prevalent in the Kathmandu Valley, home to the largest concentration of people and vehicles in the country.

The Air Quality Index for PM2.5 particulate matter registers at 200-250 micrograms per cubic metre on the most polluted days. What's worse, even in the midst of the monsoon, when the rains typically wash down particles in the air, the Air Quality Index for PM2.5 was registering as high as 165 micrograms per cubic metre in some parts of the Valley. At a time like this, and when nearby New Delhi has been

suffering from a public health emergency—the Air Quality Index monitors there being unable to measure the 'off the charts' toxicity last November—the itself a failure in protecting human authorities concerned redrafting Kathmandu Valley's Air Pollution Management Action Plan is welcome.

However, with past action plans having failed to bring tangible changes, the environment department, along with the others concerned, need to hold substantial multisectoral discussions with all stakeholders to ensure implementation. Moreover, the plan's emergency measures—a new addition not found in previous versions—seem to be considered as a complete metric. short-term implements that are only is because, besides the industrial output triggered at misguided levels of toxicity. The levels need to be revised, and policies need to be implemented so that the Valley never faces those toxic levels tion plan needs to lead to tangible, mulof air quality, to begin with.

> For example, as per the new action plan, emergency measures kick in when the level of PM2.5 reaches 300 micrograms per cubic metre and above. However, according to the World Health Organisation, the safe level of PM2.5 is at or below 25 micrograms per cubic metre. Our own government describes the safe level at 40 micrograms per cubic metre or below, which is a bit laxer. So, setting the emergency measures to kick in at 300—defined as hazardous by the US government's Environmental Protection Source: thekathmandupost.com, 10 Agency—doesn't make sense. Any state January, 2020

that allows its citizens to breathe air with an Air Quality Index of above 150, defined as unhealthy, should consider health.

Moreover, the concerned here seem obsessed with the Air Quality Index for PM2.5 alone. While particulate matter measuring 2.5 microns or smaller are deemed to be a significant cause of respiratory illnesses, only a comprehensive measure of air quality, which includes measuring for PM10, nitrous oxides, sulphur oxides and low atmospheric ozone levels, among others, can be

The government must invest in monitors that provide a comprehensive study of air quality. Moreover, the actisectoral changes. For instance, the promotion of electric vehicles for reduced emissions should, therefore, be combined with the promotion of clean energy generation and the simultaneous upgradation of residential power to sustain electric vehicle charging. Air quality, while particularly problematic in the Valley, affects all Nepalis. As such, action plans for the entire country need to be drawn up and implemented. All Nepalis deserve clean air, and simply running odd-even vehicle schemes will not lead to that.

Government Preparing to Slash Power Tariff

Minister for Energy Barsha Man Pun increases announced that the government is said. Slashing the electricity tariff for domestic use meant to encourage people for more domestic consumption of energy.

At a seminar on promotion of electric oven organized here Friday, review in existing power tariff is proposed with the tariff determination commission and new tariff would be fixed to increase the consumption of power as the power generation in the country was increasing for the coming fiscal year.

"In order to reduce the dependency on traditional fuel and LP gas for cooking, the grant will be given for 10,000 electric ovens this year and 100 thousand ovens next year to promote the electric ovens for increasing internal consumption and it would be

increased gradually," Minister Punsaid.

On the occasion, Minister Pun argued that the electricity can be exported to India and other neighboring countries if it is surplus in the domestic market.

But, he added that domestic consumption was the main priority. The use of electric ovens would not only increase the internal consumption of power but also support in health, environment, women empowerment and gender equality, according to him.

Also speaking at the program, Secretary at the Ministry Dinesh Kumar Ghimire said the time has come to pay attention to increase the power consumption in agriculture, transport and other sectors because Nepal will have power surplus from the coming

rainy season.

Executive Director of Alternative Energy Promotion Centre Madhusudan Adhikari, expert Prof Dr. Jagannath Shrestha and other speakers stressed for promoting electricity consumption in the domestic market in different areas. Shrestha claimed that the use of electricity is cheaper by 42 percent in cooking compared to LP gas.

There was no option but to reduce the consumption of LP gas since it was not environmentally friendly but was economically costly and the country paid almost Rs 42 billion for the import of LP gas.

Source: english.khabarhub.com, 24 January 2020

Banks Deny Loan to Electric Vehicles

Banks and financial institutes have denied issuing loan to poweroperated vehicles breaching the provision laid down in the government's existing policies and programs.

Banks have hesitated to issue loan despite Nepal Rastra Bank (NRB)'s direction that they should provide loan to electric vehicles through the Ministry of Finance, said Sundar Yatayat P. Ltd.

Sundar Yatayat P. Ltd. in a statement said banks denied it loans for electric vehicles despite frequent requests.

"Banks seem reluctant on issuing loan to electric vehicles despite assurance of collateral in line with the Nepal government's regulations," reads the statement.

Source: english.khabarhub.com, 13 January 2020

Fuel Economy Labeling for LDVs in Nepal for the First Time

On 28 January 2020, Clean Energy Nepal and Clean Air Network Nepal with the support of United Nations Environment Programme organized a discussion program on "Vehicle Fuel Economy Labeling of LDVs in Nepal". The main objective of this program was to bring together the stakeholders to discuss on vehicle labeling schemes and to recognize possible formulating agencies/bodies in Nepal for its implementation in order to acquire better air quality and sustainable urban transportation system keeping people in center.

Mr. Bhusan Tuladhar, Chairperson of Clean Energy Nepal begun the program with program overview and objectives sharing. Mr. Bert Fabian, Programme Officer of United Nations Environment Programme shared the vehicle fuel economy labeling of light duty vehicles (LDVs) on global context. He introduced about the vehicle fuel economy labeling (VFEL) and its importance. Mr. Fabian said that vehicle fuel economy labeling scheme is information that is displayed about the car in showroom, online or through other media. It is informative, easily accessible and transparent therefore it plays an important role to raise awareness amongst the consumers so as to allow them to make a more informed choice on fuel efficiency when purchasing a vehicle. He said that the processes of vehicle labeling is very important as the vehicles are tested in a laboratory using a standardized procedure established by the EPA. He

further informed about the labeling schemes of different countries.

Dr. Thusita Sugathapala, Senior Lecturer from University of Moratuwas shared experiences on vehicle fuel economy labeling of light duty vehicles (LDVs) in South Asia region. From his presentation he shared the Nationally Determined Contribution (NDC) commitment of Nepal to reduce dependency on fossil fuels by increasing the share of electric vehicles by up to 20 percent by 2020 and to decrease the country's dependency on fossil fuels in the transport sector by up to 50 percent by 2050.

Professor Dr. Amrit Man Nakarmi, Centre for Energy Studies, Institute of Engineering, Pulchowk shared the findings of fuel economy study conducted in Nepal. According to Dr. Nakarmi, compared to goods export from Nepal, the country spends two hundred percentage more in petroleum import therefore it is high time we shift towards the renewable clean energy.

Mr. Mani Ram Bhusal, Senior Divisional Engineer from Ministry of Physical Infrastructure and Transport said that although we import most of the vehicles from India, it is necessary to form our own standards and rating systems, considering that the road structure and actual condition can vary in Nepal from that of India. He suggested that a way forward to achieve vehicle fuel economy labeling could be making the initial process voluntary and then mandatory un-

der strict guidance of government or automobile associations. He stressed on the need of CO2 emission in the case of Nepal to alert the consumers to make proper selection while buying vehicles. Mr. Indu Bikram Joshi, Deputy Director General from the Department of Environment advised that VFEL in Nepal can only be done to recommend the consumers on fuel efficiency without any false claims and misleading information. He said that rather than government, automobile associations could be the mandate to carry out VFEL in Nepal.

Mr. Kapil Shivakoti, Central Committee member of NADA Automobile Association of Nepal said that VFEL isn't easily implementable in context of Nepal. According to Mr. Shivakoti, since more than 95% of the vehicles are imported from India, the dealers could also use the same vehicle fuel economy labeling stickers of the respective car manufactures of India but it could be a problem for the vehicle importers of Nepal as the fuel economy in Nepal may vary due to road conditions and other constraints. If the shown mileage or fuel efficiency isn't met in the Nepali land then the consumers will accuse the dealers of false claims. Other vehicle dealers and importers shared that VFEL is not just important to aware the consumers to buy the most fuel efficient cars but also to make them realize how their choice could impact the environment.

Source: Clean Energy Nepal

Motorcycle Posing Big Challenges In Urban Transport of Nepal

President of Clean Energy Nepal Bhushan Tuladhar emphasized the need for a well-maintained, and well-run public electric bus services which would help reduce air pollution, greenhouse gas emissions as well as congestion within the Valley.

Addressing the concluding forum of 54 participants representing the governmental agencies, non-governmental agencies, academia, transport entrepreneurs, urban/transport planners, research institutions and media, Tuladhar stressed the need to change current mode of urban transport based on fossil fuel.

Mangleswori Dhonju, Program Coordinator at CEN presented the findings of the baseline fuel economy study in Nepal. According to this study conducted by CEN, fuel efficiency and emission in the transport sector of Nepal is improving but LDVs account for only 8% of total vehicles and 78% of them are motorcycles which is a big challenge.

Prof. Dr. Amrit Man Nakarmi, technical expert and Center for Energy Studies at Institute of Engineering presented on Fiscal Policy Options Using Fuel Economy Policy Implementation Tool (FEPIT) in Nepal. He shared about emission rate from the transport sector in Nepal, the objectives of FEPIT, and the impact of new registration tax on fuel Economy and fiscal policy options. Bert Fabian, Program Officer of UNEP gave a global context of vehicle fuel economy and fiscal measures of LDV. He



stressed on improving fuel economy to reduce CO2 emission, decarbonizing road transport to tackle climate change, fuel economy policy options and ecolabeling schemes adopted by different countries around the globe.

Dr. Thusitha Sugathapala, Senior Lecturer from the University of Moratowa, presented on regional experiences of fuel economy and fiscal policy measures in South Asia. According to Dr. Sugathapala, "Transport is a complex matter and the growth of transport sector has translated into constant pressure for sustainability of development". He stressed on NDC commitments of South Asian Countries to reduce GHG target from transport sector.

The technical session was followed by a panel discussion among the audience and five panelists: Maniram Bhusal, Sen-

ior Divisional Engineer at the Ministry of Physical Infrastructure & Transport (MoPIT); Umesh Raj Shrestha, Chairman of Electric Vehicle Association of Nepal (EVAN); Indu Bikram Joshi, Deputy Director General at the Department of Environment; Sonika Manandhar, Founder of Aeloi and UN Environment's 2019 Young Champion of the Earth; and Pradeep Amatya, Environmental Engineer at Lalitpur Metropolitan City.

It was moderated by Bhushan Tuladhar, Chairperson of CEN. Here these experts discussed the feasibility of various policy and plans to increase clean mobility options in the Valley.

Source: spotlightnepal.com, 28 January, 2020

Toxic Air Pollution 'Linked to One in 19 Urban Deaths'

More than one in 19 deaths in UK towns and cities is linked to air pollution — with the proportion even higher for parts of the south, a charity warns.

People living in urban areas are 25 times more likely to die of long-term exposure to pollution than a car crash, according to the Centre for Cities.

They are at risk from Particulate Matter (PM2.5), a toxic mix of dust, ash and soot that the Department for Environment admits is likely to have 'adverse effects' even in small doses.

The threat is worst in London and south-eastern towns including Luton and Slough, with PM2.5 linked to about Fund should be tripled to £660million, one in 16 deaths in these areas.

Cities in Scotland and northern England coal being banned in polluted areas. have the lowest rates, with Aberdeen recording just one in 33.

Zak Bond, of the British Lung Foundation, said breathing toxic air can lead to a range of health conditions including lung disease, stroke and cancer. He said its clean air strategy had been praised it was 'particularly dangerous' for 12million people in the UK with lung conditions. 'In children, it can cause irreversible damage to their developing lungs,' he warned. Centre for Cities, which advises the government on urban policies, wants stricter rules to curb fumes.

It says the government's Clean Air with more low-emission zones in city centers and stoves burning wood or The charity's chief executive Andrew Carter said: 'Politicians often talk tough on addressing air pollution but we need to see more action.'

The Department for Environment said by the WHO and it was 'investing £3.5billion to tackle air pollution from transport'. It added the Environment Bill 'will include a commitment to a legally binding target on fine particulate matter which will improve the health of millions of people'.

Source: metro.news, 27 January, 2020

Good Reads

- I. New action plan against Valley air pollution proposes drastic measures, Shree Ram Subedi, www.myrepublica.nagariknetwork.com, 10 January, 2020
- 2. Cleaner air at home: A personal responsibility, Diana Zulkifli, www.english.khabarhub.com, 13 January, 2020
- 3. Too many vehicles, too short road, Thaneshwor Chalise, www.myrepublica.nagariknetwork.com, 19 January, 2020
- 4. Air Quality Monitoring: Collaboration between Stakeholders can help mitigate the crisis-experts, www. tribune.com.pk, 20 January 2020

Prepared by: Elina Shrestha | Edited by: Mangleswori Dhonju

Clean Air Network Nepal (CANN) is a network of organizations and professionals involved in air quality management in Nepal. The goal of CANN is to increase the ability of professionals and other interested stakeholders to effectively address the problems of air pollution in Nepal. We encourage you to join hands with us to expand our campaign for clean and better Air. CANN is a country network of Clean Air Asia and hosted by Clean Energy Nepal. For more information: www.cen.org.np; www.cleanairinitiative.org

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