

BTVM Air Pollution Interview

1) What is UNDP's upcoming air pollution report about and what are its key highlights?

- UNDP's soon-to-be-launched **report examines the costs of air pollution in Mongolia** – which regularly exceeds the World Health Organization's **safe limit. At times it exceeds the safe limit by a factor of 30**, surpassing **levels in Beijing and New Delhi**.
- Our report –“Air Pollution in Mongolia and Costs of Inaction or Ineffective Measures: Public Expenditure Analysis” – tackles different aspects of the problem, including economic and social factors.
- It analyses the causes, attributing it mainly to coal-burning household stoves and coal-fired power plants.
- It also examines the spending attributed to air pollution in the past, including the **clean stove initiative**. The key message here is that while those actions saw a marginal positive impact in reducing air pollution, most of the time, they were stopped too soon, which didn't allow enough time for the positive effects to kick-in. This is due to various factors, including the **lack of required fuel, insufficient awareness rising and poor monitoring**, but also, a **decline in funding and action** during the economic crisis of 2015-2016.
- But cutting corners on social and environmental spending during tough times is **a false economy, creating higher costs later**. It is therefore **key to continue investing in fighting air pollution**. Air pollution levels have been decreasing from 2012 – 2015 but are on the rise again probably linked to the lower level of relevant expenditure to fight air pollution.
- While the **National Program for Reducing Air and Environmental Pollution** - (adopted in March 2017) is a welcome step forward from the GoM providing a comprehensive and long-term program against pollution, it is however very ambitious. Indeed, it is set to cost **MNT 1.1 trillion a year** which represents about **4.1% of the GDP** (2017 nominal). The program's measures must be **prioritized and sharpened** to succeed in the current climate of austerity.
- The budget allocated specifically to reducing air pollution in 2017 was **lower than the average over the last six years**, despite the importance of this issue politically.
- While the Government tried to address this in the **2019 budget** with the allocation of almost MNT 200 billion to fight air pollution, including current and capital expenditure, the fact that this amount ended up being reduced by almost half in the approved budget, to 121 billion, is a missed opportunity. .
- **Governance reforms** are also needed, to ensure the accountability of funds, which will be given new momentum next year in the civil service reform, which we are proud to have assisted in, with Canadian support.
- Our report also assesses the costs of inaction, such as welfare costs, direct health costs, damage costs and productivity losses which amounts to annual costs of about **20% of the country's GDP**.

2) What measures should be taken to fight air pollution?

Long-term policies and investments are needed to solve Ulaanbaatar's air-crisis, **spanning several election cycles**. Going forward, the mix of responses will need:

1. **Ger district redevelopment**, including eco-districts with sustainable electricity, heating, & sanitation.
 - ADB is piloting this, but 10x more investment is needed to reach all households.
2. **On-and off-grid renewable heating & electricity investments**, to cut dependence on coal.
 - This includes **solar & wind**. Mongolia shows tremendous potential in **renewables** with 270 sunny days a year, and an area the size of Greece suited for generating wind. These offer promising investment opportunities, if the right investment environment is created.
 - The **private sector** is vital. We estimate **two thirds of the funds & tech** needed to end poverty and protect the planet must come from companies. Making sustainability a core part of business models can **protect** supply lines, **improve their image and open new markets**.
3. **Investments to reduce emissions** from burning of coal. This includes **phasing-out of inefficient stoves** and replacing raw coal with cleaner burning bricks.
 - We welcome the **ban of raw coal** beginning May 2019. It is vital to ensure enough **production** of the improved fuel, before the ban begins. Strict **monitoring and enforcement** is also needed.
 - Boosting **energy efficiency** in buildings can also cut energy consumption and emissions. Through our **NAMA construction sector project**, UNDP is also trying to reduce the energy used for heating and power in buildings.
4. **Pricing strategies** for coal-based energy generation that fully reflect the market price, across the whole coal value chain.
 - Currently, the **market price of coal** is only paid by those who can afford it least – ger district residents, without subsidized heating. This deepens inequality, as ger-dwellers are paying **7 times more for coal** than the rest.
 - It is essential to move to full price recovery, based on actual costs of energy and heating, as well as health and environmental costs, to compel more responsible choices.
5. **We must also address the root causes** of air pollution, namely, **urban migration**.
 - Half the population now lives in UB, because rural life is becoming increasingly hard. We must protect the ecosystems that rural livelihoods depend on.
 - This is especially important in the face of **climate change**, which has seen Mongolia's temperatures rise by three times the world average.
6. **Finally, every one of us has a role to play**.
 - For example, by taking a bus or making short journeys on foot, to avoid adding to the cars pumping more fumes into the sky.
 - The number of vehicles on the city's roads grew from around 340,000 in 2016, to over 365,000 in 2017, including **20,000 more passenger cars**.

3) What are the protection measures advised by the UN?

We need to protect against both outdoor and indoor air pollution:

Outdoor

- The government must make sure **real-time advisories** are available, with alerts to stay indoors when levels are too high.
- Two **free mobile apps** provide hourly pollution updates in Ulaanbaatar (Air Visual (Eng) and Agaar (Mgl)). When the pollution is high, especially if “Hazardous”, remain indoors.
- **Air quality monitoring** however can also be improved. We realize it has invested but only 8 out of 15 stations in UB can measure PM 2.5
- If one has to go outside, do so with a **well-fitted mask with a filter** that removes fine particulate matter like PM 2.5, such as N95 or N99. Paper or surgeon masks are not effective enough to filter the most dangerous particles. Scarves or bandanas are not helpful.

Indoor

- Air pollution also affects indoor air quality, so it is important that we improve this through better **insulation and ventilation** of buildings, which UNDP are working on with the gov't. This is key because air purifiers are not effective unless buildings are well ventilated and well insulated, so you do not get any drifts from outside
- If possible, use an **air purifier with a HEPA filter** at home and at office, school, kindergarten for 24/7, as well as **filters on your windows**. All filters must also be **regularly changed**.
- Children who are the most vulnerable must be protected, so it is essential to ensure well-insulated and ventilated **schools, kindergartens and hospitals**, with air purifiers.
- Keep temperatures at **18-21c in gers**, rather than 27c, to indoor pollution by burning less coal.
- And do not make it worse by **smoking inside**. According to a WHO' survey, 30 percent of families in UB are affected by second-hand or passive smoke.
- However, **those most affected are those who can afford to protect themselves least**. Quality masks, well-insulated homes, window filters and air purifiers are all **relatively costly**.
- At the end of the day, the only way to fully protect everyone, including the poorest, is if the **root causes** are addressed and emissions are drastically reduced via **long-term investments**.

Health Services

- In the meantime, **health services** must be boosted cope with more patients during winter.
- This includes in **Aimag centers**. Indeed, PM2.5 levels above above 999 were measured during UNICEF's field trip in Bayankhongor aimag in early December.
- Keep your children warm, breastfed and **fully immunized** in line with regular vaccine schedules and against seasonal flu, as well as pneumonia.
- To **boost your immune system**, stick to a healthy diet with food and drinks high in vitamin C, E and Omega 3 antioxidants, which are abundant in seabuckthorn and wild berries.
- Public buildings including kindergartens, schools and hospitals should be **fully equipped with air purifiers** to protect the most vulnerable (children, pregnant women, elderly)
- Public funds towards fighting air pollution must be used wisely to have the maximum effect. We have no evidence that temporary **oxygen treatment** is effective.

4) ***If it continues at this rate, what are the related costs of air pollution?***

- The health costs are staggering, especially for the elderly, children, and pregnant women, with **3.5 times more miscarriages** in winter, as well as recurring lung infections and **reduced lung function** for children here (UNICEF).
- According to UNICEF and the National Center for Public Health, failure to reduce air pollution would lead to a rise in treatment costs for air pollution-induced diseases in children by 33% in the next 8 yrs. This will cost health providers an extra **4.8 billion Tugriks a year at least**, by 2025.
- The World Bank estimates that across Mongolia, over **2,400 people** (children and adults) **died due to air pollution** in 2013. That's a loss equal to 6.9% of the country's GDP

5) ***Bonus question on UN's statement responding to the recent petition on air pollution (TBD).***

- The UN in Mongolia shares the public's concerns about the high levels of air pollution in Ulaanbaatar and we welcome this petition to make their voices heard..
- We will continue to support the Mongolian government and society with **advice** on reducing exposure, strengthening health services, promoting energy efficiency and clean heating, as well as in developing **long-term plans** for renewable energy.
- While the UN is a source of **policy and technical guidance**, with global experience to share, local actions and financing need to be driven by domestic partners. , including the government, the business community, civil society and the public.
 - The government must lead by **setting priorities** and a supportive budget. Meanwhile, the private sector is crucial in changing business models to be less carbon intensive and **investing into energy transformation**, which given Mongolia's renewables potential, provides an excellent business opportunity (see Q2).
 - The public can also contribute to reduce their carbon footprints by switching to public transport and insulating homes We must all play our part for **the right of Mongolian's to safe and clean air** can be safeguarded.
- The petition specifically draws attention to clean air being a **basic, human right**, and that air pollution **prevents fulfillment of our human right to health**.
- We will also share the public's air pollution concerns with the UN's **Special Rapporteur**, who can **raise the profile of this issue at the international level**.
- This was also picked up by **Special Rapporteur** when he visited Mongolia at the end of last year and highlighted in his report, which was passed on to the HR council this year.
- The **Convention of the Rights of the Child** has also highlighted air pollution as a key concern in their 2017 review of children's rights in Mongolia
- We will **continue to highlight** the seriousness of Mongolia's air pollution, and ways to solve it. The fight against air pollution is **one of our highest priorities** in Mongolia and key to meeting the **Sustainable Development Goals** or SDGs, to end poverty, reduce inequality and protect our shared planet. We look forward to working with all parties on solutions towards clean air for all, so Mongolia can meet this ambitious agenda and leave no one behind.