

N BUSINESS NEWSLETTER

ART PLUS
Aerosol Research &
Technology Plus

Air Visual and Greenpeace publish 2019 World Air Quality Report (YONHAPNEWS, February.25th, 2020)

- Half of the 50 most severe air pollution cities in India · · · Seoul is 27th

- Beijing, for the first time not in the list of top 200 cities with extreme pollution

(Seoul = Yonhap News) Reporter Park Eui-rae Hye-ran Park = A survey result showed that Korea has the most serious ultra-fine dust pollution among Organization for Economic Cooperation and Development (OECD) members. Environmental group Greenpeace announced on the 25th that it analyzed the '2019 World Air Quality Report' published by Air Visual, an air pollution research institute, and found that Korea's average annual ultra-fine dust concentration last year was $24.8\mu\text{g}/\text{m}^3$, up $0.8\mu\text{g}/\text{m}^3$ from the previous year.

This is the 26th place among 98 countries surveyed by Air Visual, the highest among OECD member countries.

The average ultra-fine dust concentration per hour corresponds to the level of 'bad ($55.4\sim 150.4\mu\text{g}/\text{m}^3$)' was 6.5% of the year.

Last year, no city in Korea met the ultra-fine dust concentration ($10\mu\text{g}/\text{m}^3$) recommended by the World Health Organization (WHO).

In addition, 61 of the top 100 cities with the highest levels of ultra-fine dust pollution among cities in OECD countries were Korean cities. In 2018, only 44 Korean cities were on the list.

In China, 98% of all cities exceeded the WHO ultra-fine dust recommendation level, but last year it succeeded in dropping the ultra-fine dust concentration by an average of 9%.

In particular, Beijing, which has reduced the level of ultra-fine dust by 50% in the past 10 years, has been removed from the list of the top 200 cities with severe air pollution for the first time in 2019.

Ultra-fine dust standards introduced in public transportation... Indoor air quality measurement becomes mandatory (YONHAPNEWS, March 11th,2020)

Regional preparations set for fine dust control... Sets the national annual average fine dust target to $20\mu\text{g}/\text{m}^3$ this year

Starting next month, ultra-fine dust (PM-2.5) recommended standards will be applied to public transportation such as intercity buses and subways, and indoor air quality measurement will be mandatory.

A plan to develop a fine dust diagnosis method based on regional-based basic data, and establish customized measures for each region will be implemented.

On the 11th, the Ministry of Environment released a "detailed work plan for the 2020 Office of Living Environment Policy," which contains detailed plans with the goal of creating a positive change in air quality, gathering capacity to respond to climate change, and realizing a healthy and safe environment.

According to the plan, the Ministry of Environment will newly apply air quality recommendation standards for public transportation vehicles from existing PM-10 standard of $150\sim 200\mu\text{g}/\text{m}^3$ to ultra-fine dust of $50\mu\text{g}/\text{m}^3$.

Considering that there are usually $50\sim 60\mu\text{g}/\text{m}^3$ of ultra-fine dust in a space with $100\mu\text{g}/\text{m}^3$ of fine dust, the stricter air quality standards are being enforced.

Air quality measurement in public transportation vehicles which used to be recommended once very two years has now changed to mandatory once every year.

However, the target public transportation was limited to intercity buses, subways, and trains. Town buses and city buses are excluded.

Air Purifier Consumption Efficiency Rating System Expanded

(THE NEWS, February 21st, 2020)



The Korea Energy Agency (Chairman Chang-seop Kim) announced that the energy consumption efficiency rating system revision for clothes dryers and air cleaners will be implemented starting March 1st.

According to this amendment, manufacturers and importers of air cleaners with a standard use area of 200m² or less must label with an energy consumption efficiency rating.

The current air cleaner standard is a mechanical and compound product among the scope of application of KS C 9314, which is a product with a standard use area of about 100m² or less with a rated input voltage of 220V, a frequency of 60Hz, and a power consumption of 200W or less. These standards did not include a large-capacity air cleaner, but in the future, products with a standard use area of 200m² or less will be included to the energy consumption efficiency rating label subject.

This reflects the recent trend of increase in sales of large-capacity air cleaners, and consumers can check the efficiency ratings according to the energy consumption of related products and easily distinguish high-efficiency energy-saving products.

Manufacturers and importers of the product must report energy consumption from the authorized test institute in accordance with the 'Efficient Management Equipment Operation Regulations' and report the measurement results for each model to the Korea Energy Agency before shipping or custom clearance of the product.

Details of this revision can be found through the Korea Energy Agency's efficiency management system (<http://eep.energy.or.kr>).

Mask Raw Materials 'DeChina'... Government inspects MB filter samples from Turkey and India. (ChosunBiz, March 9th, 2020.)

- Samples received from 7 filter manufacturers from 5 countries including Turkey, Israel, and India
- Industrial filters being considered to be used for mask filters

The government has started to produce samples by receiving a melt blown (MB) filter, a core raw material for masks, from outside China. MB filter is an essential raw material for the mask blocking effect. Most domestic mask manufacturers rely on domestic filters, and China (about 16% of total percentage) is the only country of import. Recently, as demand for masks has skyrocketed, MB filters are also experiencing short supply.

Accordingly, the government has taken samples of MB filters from five countries including the United States, India, and Turkey, and is confirming whether the MB filters can be used in domestic mask

production with mask manufacturers. The intention is to diversify the supply line of MB filters that depended on Chinese products to secure the quantity.

Discussion is being made on how to convert the industrial filters into an MB filter for masks. Steps are being taken to find out if it is possible to use vehicle filters for exhaust gases or filters used in factories as mask filters. An official from the government said, "We are trying to expand the supply of MB filters as soon as possible." "It seems that it will take considerable time to secure MB filters (other than Chinese or domestic ones)."