

Think the Green []

KC GreenHoldings
The 136th KC Newsletter

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Here are the updates and activities of KC Green Holdings and its affiliates for the second quarter of 2025.

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KC Cottrell Completes Dangjin Units 1–4 Upgrade

KC Cottrell has successfully completed the environmental facility improvement project for Units 1 through 4 at the Dangjin Thermal Power Plant, operated by Korea East-West Power. The project, which aimed to reduce pollutant emissions from coal-fired power generation, was initiated in line with the Korean government's Special Measures for Fine Dust Management and air pollution reduction policies. Following the contract signing on May 13, 2021, the project was completed over a four-year period, culminating on May 24, 2025.



Initially, a consortium consisting of KC Cottrell, Doosan Enerbility, and Hyundai Heavy Industries Power Systems undertook the project. However, with the mid-project withdrawal of Hyundai, KC Cottrell and Doosan Enerbility assumed full responsibility for the remaining work and brought the project to a successful conclusion. The upgrade delivered a substantial reduction in air pollutant emissions from Units 1–4, as shown below:

- Sulfur Oxides (SOx): Reduced from 150 ppm to 15 ppm (desulfurization efficiency: 98.5%)
- Nitrogen Oxides (NOx): Reduced from 50 ppm to 10 ppm (denitrification efficiency: 95.7%)
- Dust (Particulate Matter): Reduced from 40 mg/m³ to 3 mg/m³ (dust collection efficiency: 99.96%)

All performance outcomes met or exceeded contractual guarantees, with advanced technologies applied across key systems. The flue gas desulfurization (FGD) units incorporated a zero-leakage GGH (gas-gas heater) system to enhance energy efficiency and durability. The selective catalytic reduction (SCR) systems were upgraded with an additional catalyst layer to improve NOx removal efficiency. Furthermore, the electrostatic precipitators (ESPs) were expanded from five to six fields, significantly boosting fine dust capture performance.

This project represents a milestone in KC Cottrell's commitment to environmental innovation and large-scale power plant expertise. It sets a new benchmark for emissions control in coal-fired power generation in Korea and is expected to serve as a key reference for future projects—both in new installations and performance upgrades of existing systems. (End)

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Taesung Plant Inspection Celebrates Office Relocation

Taesung Plant Inspection recently relocated to a new office, marking a significant step toward enhancing its work environment. The move was driven by the need to improve employee comfort and efficiency, moving away from the limitations of the previous office, which lacked even basic facilities such as meeting rooms and a break area.



CEO Park Yong remarked, “Providing a suitable working environment for our team is of utmost importance. I hope that this relocation will lead to greater satisfaction and improved efficiency as we work in a cleaner and more functional space.”

The relocation ceremony was attended by Chairman Lee Taeyoung and CEO Kim Jeongwan, who visited in person to offer their congratulations and words of encouragement. The occasion was made even more meaningful by the simultaneous opening of the KC Safety&Technology Ulsan Office, which will share the new location—laying the groundwork for stronger synergy between the two organizations in the Ulsan region.

Building on this move, Taesung Plant Inspection plans to strengthen its collaboration with KC Safety Technology and further enhance its expertise and competitiveness in technical service areas. The company shared its commitment to “responding proactively to market changes through innovation and technical excellence, while continuing to earn customer trust.”

This relocation represents more than just a change in physical space—it reflects a renewed direction for the people and the organization. As a trusted specialist in industrial inspection, Taesung Plant Inspection will continue to take responsible steps forward for both its clients and the future. (End)

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KC Network's 7th Environmental Campaign



KC Network recently conducted its 7th annual environmental improvement initiative. Continuing from last year's focus, this year's theme centered on "stream purification," with participants engaging in the creation and deployment of EM mud balls.

During the summer season, water pollution in streams tends to intensify. Increased rainfall from monsoon weather leads to the inflow of urban pollutants into waterways. In parallel, agricultural activity peaks during this period, introducing pesticides and fertilizers into the water system via runoff. Rising temperatures also slow the decomposition of contaminants in aquatic ecosystems, and increased recreational use of streams during holidays leads to additional waste and wastewater contamination.

Stream purification activities include not only direct actions such as waste collection but also methods that restore the stream's self-purification capacity. EM mud balls fall into the latter category. EM stands for Effective Micro-organisms, a mixture of beneficial natural microbes that, when combined with loess, form ball-shaped purifying agents. These balls are thrown into the water, where they slowly dissolve upon contact with sludge, gradually aiding in long-term purification.

On June 11, employees from KC GreenHoldings, Clestra Hauserman, and KCVCS took part in the event, producing approximately 750 EM mud balls. These were distributed across the Hongjecheon and Bulgwangcheon streams in Mapo-gu, Seoul. The activity concluded with a group viewing of the environmental documentary The Han River Ecology Report, which highlights the ecological transformation of the Han River.

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Around the same time, KC Safety&Technology also conducted a parallel stream improvement activity. In Dongcheon, Gwangyang-si, employees created and threw approximately 500 EM mud balls into the stream. The event was organized by the SEQ Team, which commented: "We remain committed to preserving and managing local ecosystems through diverse activities and campaigns, not only in Gwangyang but throughout the surrounding communities."

Through this initiative, KC Network reinforced its commitment to environmental sustainability and created a meaningful opportunity for employees to participate together in ecological conservation. (End)

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[HR] Expected HR Policy Changes Under the New Administration



Following the inauguration of President Lee Jae-myung and his “People-Sovereign Government,” attention is turning to HR-related policies that are likely to gain momentum—particularly those highlighted during his candidacy and outlined in his presidential campaign pledges.

1. Ban on the Comprehensive Wage System

- The comprehensive wage system refers to a compensation structure where fixed wages are paid in advance, including allowances for overtime, night shifts, and holiday work—without separate calculations for each. Although not stipulated in Korea’s Labor Standards Act, this system has been widely used in practical labor management, especially for roles such as R&D, sales, or monitoring-related positions where working hours are difficult to quantify. It has been sustained largely through legal precedents and custom.
- While this system can offer advantages in labor cost predictability and flexible working hour management—especially when mutually agreed upon by employer and employee—it may also lead to unintended consequences in sectors where workers have weaker bargaining power, such as small-scale manufacturing. In such cases, it may suppress wage growth and encourage excessive working hours.
- Given these pros and cons, especially in application depending on job type and employment context, there is substantial opposition to an outright legal ban. Therefore, it is possible the new administration may opt for a more moderate approach, such as issuing usage guidelines or restricting the system's application to specific industries.

2. Introduction of the 4.5-Day Workweek and Reduced Working Hours

- One of President Lee's most prominent labor pledges was the introduction of a 4.5-day workweek. The goal is to reduce actual working hours, improve work-life balance, and prevent deaths from overwork. The administration has declared its aim to lower Korea’s annual working hours to below the OECD average of 1,742 hours by 2030.
- A key element of the policy is ensuring that reduced working hours do not result in decreased wages, as this would undermine the very intent of the reform. The success of this initiative will, however, hinge on improvements in workplace productivity. For this reason, stakeholders are watching closely to see whether sufficient support measures will be provided—particularly for small and medium-sized enterprises that may face labor shortages or productivity constraints.

3. Legal Retirement Age Extension

- Due to population aging and growing concerns over national pension sustainability, extending the legal retirement age is becoming an unavoidable policy discussion. This is not unique to Korea—many OECD countries are revising retirement-related regulations in response to similar challenges.

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- For example, in Japan, while the legal retirement age is 60, companies are required to guarantee employment until 65 if the employee desires. France is currently implementing pension reforms to raise the retirement age from 62 to 64 by 2030. Germany is moving to increase its retirement age from 66 to 67 by 2029. Meanwhile, countries such as the United States, the United Kingdom, Australia, Canada, and New Zealand have abolished mandatory retirement age altogether.
- The shared policy direction across OECD countries is to delay workers' exit from the labor market in order to maintain the size of the economically active population and extend the contribution period to public pensions. However, concerns persist regarding the potential negative impact on youth employment and the varying necessity of senior workers across industries. As such, reaching social consensus across generations and sectors will be crucial, and reform in this area is expected to require significant time and negotiation.'

4. The "Yellow Envelope Law"

- One of President Lee's core campaign pledges, the so-called "Yellow Envelope Law," refers to amendments to Articles 2 and 3 of the Trade Union and Labor Relations Adjustment Act. The proposed amendments aim to expand the scope of recognized employers and labor disputes in collective labor relations, while also limiting the liability of labor unions and individual workers for damages incurred during lawful strikes.
- A key provision is to recognize entities that substantially determine workers' employment conditions as "employers," even if they are not direct signatories to employment contracts. The law also seeks to validate strikes that arise due to unfair labor practices or violations of collective bargaining agreements.

5. Other Anticipated HR Policies

The new administration is also expected to pursue a range of additional HR-related reforms:

- Fair Hiring Law: Aims to prevent hiring corruption and expand regulations to ensure fairness not only in hiring procedures but also in hiring outcomes.
- Gender-Based Employment Disclosure System: Will require companies to publish data on gender disparities throughout the entire employee life cycle—from recruitment to retirement—to promote fair labor practices.
- Youth Labor Protection: Amendments to the Fixed-Term Employment Act are expected to include stronger protections for part-time youth workers, such as enhanced legal remedies and access to free, fast-track legal support in case of labor rights violations.
- Flexible Work Models: The government is proposing innovative work arrangements such as an annual overtime savings account system that would allow workers to convert accumulated overtime into extended leave. Other proposals include granting employees the right to voluntarily shift from full-time to part-time without losing permanent status, expanding telework options during parental leave, and promoting time-selective regular employment models to improve work-life balance.

These diverse policies reflect a broader governmental push toward a more inclusive, fair, and flexible labor market that can adapt to Korea's evolving socioeconomic landscape. (End)

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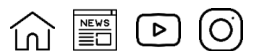
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[Safety] Adapting Your Workout Routine for Summer

Exercise is a great habit for maintaining health, but in hot and humid summer conditions, it can actually pose serious health risks. When temperatures exceed 30°C and UV levels reach “very high” during midday hours, the body’s ability to regulate heat and maintain cardiovascular balance is strained—significantly increasing the risk of heat-related illnesses such as heatstroke and dehydration. To ensure your workout helps rather than harms your health, it’s not about stopping—it’s about smartly adjusting.

1. Change the Timing of Your Workouts; According to the Korea Disease Control and Prevention Agency, outdoor activity should be minimized between 11 a.m. and 4 p.m., when heat and UV exposure peak. Ideal times for summer workouts are in the early morning (6–9 a.m.) or after sunset (6–8 p.m.), when body temperature is more stable and dehydration risk is lower.

2. Choose the Right Environment; Indoor facilities such as gyms, pools, and sports centers are optimal in the summer. If you must exercise outdoors, choose shaded areas like parks with tree cover or urban forest paths. Home workouts or light stretching routines indoors can also be great alternatives.

3. Adjust Your Workout Intensity; Hot weather naturally elevates your heart rate, so it’s best to start at 20–30% lower intensity than usual. Avoid high-intensity interval training or extended cardio sessions. Instead, focus on activities that don’t excessively raise your body temperature—such as walking, yoga, or light strength training. In summer, consistency matters more than intensity.

4. Prioritize Hydration; Hydration is critical—not just for performance, but for safety. Make it a habit to drink water before you feel thirsty. Aim for: Δ One cup of water before exercise, Δ Half a cup every 15–20 minutes during exercise, Δ One to two cups after finishing, Δ Avoid caffeine and alcohol, as they accelerate fluid loss.

Hot weather doesn’t mean giving up on your workout—it means adapting to your environment and listening to your body. Transitioning your summer routine isn’t a sign of weakness, but a smart and effective way to stay healthy. The hotter the season, the more important it becomes to tune into your body’s rhythm. (End)

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[Env] A Sunburned Earth: The Hidden Impact of UV Radiation

Applying sunscreen has become a standard summer routine for protecting our skin—but ultraviolet (UV) radiation affects far more than just human health. Intensified by ozone depletion and climate change, UV—especially UVB—poses a wide range of risks to our urban environments, biodiversity, and natural resources. According to the World Meteorological Organization (WMO), UVB intensity in parts of the Northern Hemisphere has increased by 10–15% compared to levels in 1980. This rise in UV radiation has led to the following environmental consequences:

Urban Environmental Degradation

- Urban Heat Island Effect: High UV radiation causes concrete and asphalt surfaces to retain more heat, creating “urban heat islands” where temperatures can be 3–5°C higher than surrounding areas. This leads to increased demand for cooling energy and accelerates carbon emissions.
- Material Degradation: UV rays break down the molecular structure of plastics and building materials, shortening their lifespan and increasing the release of microplastics into the environment.

Impact on Biodiversity

- Stunted Plant Growth: UVB interferes with photosynthesis and can damage leaf structures, slowing the growth of certain crops and vegetation.
- DNA Damage in Aquatic Life: In clear freshwater environments, UV radiation can harm microalgae, plankton, and fish larvae—organisms at the base of the aquatic food chain—destabilizing entire ecosystems.
- Behavioral Changes in Insects and Birds: Some insects shift their reproductive sites or activity hours to avoid strong UV exposure, causing ripple effects on bird species that rely on them as prey—and on the predators that feed on those birds.
- Negative Feedback in Marine Ecosystems: In oceans, UV weakens plankton’s photosynthetic ability, reducing their capacity to absorb carbon. This contributes to the collapse of marine food webs and diminishes the ocean’s ability to act as a carbon sink, further accelerating climate change.

UV radiation is not merely a summer inconvenience—it is a multifaceted environmental risk that affects urban infrastructure, biodiversity, and climate cycles. Addressing climate change goes hand in hand with protecting the ozone layer. In turn, ozone recovery supports UV regulation, urban resilience, and habitat preservation. In a very real sense, the planet is getting sunburned—together, we must respond with awareness and action. (End)

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