How PlanetWEST'S Direct Air Capture System Will Cool European Megacities Next Summer

Los Angeles, California Jun 24, 2026 (Issuewire.com) - Already Europe's largest cities are breaking the record hot temperatures set last summer. PlanetWEST introduces its new MIDAC Direct Air Capture system to cool them down next year.

PlanetWEST's new MIDAC (Mobile Intelligent Direct Air Capture) network platform approaches the problem with a dual strategy. It targets solid particulate carbon directly at the street level. If deployed across European megacities like Paris, London, Frankfurt, or Milan during a scorching summer, the MIDAC platform acts as an immediate local cooling mechanism through three interconnected engineering pathways:

- Eradicating the "Black Carbon" Heat Trap

Standard DAC systems ignore particulate matter, but PlanetWEST's MIDAC technology specifically intercepts Black Carbon (BC) and emissions in the megacities.

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- The Problem: Black Carbon is a short-lived climate pollutant that absorbs solar radiation with immense efficiency—possessing a warming impact estimated to be up to 1,500 times stronger than by mass. In dense European megacities, summer heatwaves trap these particles near the hot asphalt, creating an atmospheric "blanket" that absorbs sunlight and radiates severe heat back down to the streets.
- The MIDAC Solution: By utilizing a distributed network of capture units (including vehicular radiator integrations), the technology rapidly absorbs the BC out of the urban canopy. Removing these dark, heat-absorbent particles lowers the immediate radiative forcing, allowing ambient solar heat to escape back into space rather than getting trapped at ground level.

An average EU passenger car takes in roughly (cubic meters) of air per year through its radiator. An average EU freight truck takes in roughly (cubic meters) of air per year through its radiator. Across the 27 EU member states, there are almost 300 million vehicles currently in circulation. That is a huge amount of air that can be processed using MIDAC.

- Breaking the Micro-Urban Heat Island (UHI) Effect

European megacities are notorious for the Urban Heat Island effect, where dense concrete, brick architecture, and heavy traffic make urban centers up to 10°C hotter than surrounding rural areas.

[Vehicle Traffic / Industry] → Emits Black Carbon → Absorbs Solar Radiation → Intensifies Urban Heat Island

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[MIDAC Filters Particles Out] → Breaks Cycle → Lowers Local Temp

MIDAC tackles this micro-climate issue by deploying as a localized, decentralized network platform:

- Vehicle Radiator Integration: PlanetWEST's technology can be fitted directly onto commercial fleets, public transit, and delivery vehicles. As these vehicles navigate the city, their moving radiators act as mobile vacuums, scrubbing the air clean.

- Localized Micro-Climates: By aggressively purifying the air in dense transit corridors and industrial sectors, the platform creates cleaner, lower-density atmospheric "micro-environments." This allows building materials and pavement to cool down more efficiently during the night, breaking the compounding day-to-day heat loop of summer heatwaves.

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- High-Efficiency, Low-Thermal-Output AI Optimization

Traditional Direct Air Capture facilities are massive, energy-intensive chemical plants that generate

significant localized waste heat—which would only worsen a city's summer temperature.

PlanetWEST's platform bypasses this limitation using its AI-driven network architecture:

- Minimal Thermal Footprint: The modular MIDAC units are designed to capture carbon and particulates with drastically less energy consumption than standard legacy DAC systems.
- Smart Grid Management: The platform uses spatiotemporal modeling and AI to actively track real-time pollution and heat mapping. Instead of running continuously and expending energy blindly, the network dynamically throttles units up or down. It can target specific high-emissions clusters precisely with special purpose high BC capture units when thermal and pollution risks are peaking, ensuring the technology itself does not add compounding heat to the city grid.

Rather than waiting decades for global atmospheric carbon levels to drop, the MIDAC platform provides near-term, localized cooling. It does this by physically extracting the microscopic, heat-trapping soot blanket out of the city air, allowing European megacities to literally "breathe" and shed thermal energy during peak summer heat.

About PlanetWEST. PlanetWEST is a leader in climate-tech innovation, specializing in decentralized carbon particulate filtration. By turning existing infrastructure into environmental assets, PlanetWEST aims to democratize the path to a cooler, cleaner world.

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