

A woman with blonde hair, wearing a white lab coat over a black top, is smiling and looking towards the camera. She is standing in a modern medical facility, with a large Philips MRI machine visible in the background. The machine has a glowing blue light around its opening and the Philips logo on the wall. The overall lighting is a cool blue, creating a clean and professional atmosphere.

PHILIPS

The key to integrating advanced healthcare into Europe's sustainable city centers

Philips BlueSeal helium-free operations

A new chapter in urban living is being written across Europe. City centers are transforming, prioritizing green spaces, pedestrian pathways, and the concept of having all daily necessities within a short walk or bike ride. But this evolution towards sustainability has presented a complex challenge: how to ensure that advanced healthcare remains a central part

of community life when the physical demands of modern medical technology seem at odds with historic, low-emission urban cores. This is the story of how Montpellier, a city with a millennium of medical history, found a way to bridge this gap, integrating advanced diagnostic imaging into its heart and offering a glimpse into the future of urban wellness.



The green city trend: A welcome shift with practical hurdles

The push for greener cities is a defining feature of contemporary European policy. From the “ville du quart d’heure” in Paris to low-emission zones in Barcelona, municipalities are actively redesigning urban life. This movement is well-documented, with the European Commission noting that over 70% of major European cities have implemented permanent low-emission zones and pedestrianization projects since 2020.¹

This shift, however, introduces practical hurdles for healthcare delivery. The infrastructure required for equipment like traditional MRI scanners—their substantial weight, spatial footprint, and need for specialized venting systems known as quench pipes—often cannot be accommodated in the very buildings that define the character of these historic centers. This dynamic can inadvertently create a distance between residents and essential diagnostic services, as hospitals and imaging centers relocate to more accommodating, but less accessible, suburban areas.

Where a history of healing confronts a modern planning reality

Montpellier provides a poignant example of this challenge. As the home of the world's oldest medical school, the city's identity is deeply interwoven with healthcare. Today, it is also a committed advocate for the 15-minute city model. This dual identity, however, led to a practical dilemma: how to place a state-of-the-art MRI within a historic building in the city

core without compromising the structure or the city's ecological goals.

The architectural constraints were significant. The weight of a conventional MRI was a concern for older structures, and the installation of a quench pipe—a critical safety component for helium venting—was often impossible in protected facades.

"We had architectural constraints that prevented us from having a quench pipe and above all, we wanted this project to have an ecological dimension."

Dr. Marie-Caroline Mas, IMANEO Group, Montpellier, France





A practical solution for urban integration

The turning point came with a technological evolution: the Philips BlueSeal MRI. This system differs from conventional MRIs by operating without the need for thousands of liters of liquid helium, instead containing the coolant in a permanently sealed system. This fundamental difference addressed the core constraints of the historic urban environment.

By eliminating the need for a quench pipe, the project overcame its most significant architectural hurdle. The system's reduced weight and sealed magnet also alleviated concerns about installing advanced diagnostic equipment in a sensitive building.

The technology proved to be a fit not just for buildings, but for the city's broader vision, allowing a modern imaging center to be seamlessly incorporated into the urban fabric.

"Only a helium-free operating system, with no need for a quench pipe and a lighter weight to protect the old structure, could meet our goal."

Dr. Marie-Caroline Mas, IMANEO Group, Montpellier, France

Redefining the patient experience in the urban core

The impact of this integration extends beyond technical specifications. Placing an advanced imaging center in the heart of the city changes the relationship between residents and their healthcare.

This model promotes a shift towards preventive care by making essential exams more convenient and less daunting. The patient experience within the facility is also enhanced. The system's 70 cm bore was noted as a significant feature, with the team stating, "Only BlueSeal allowed us to have a 70 cm bore. And of course, the in-bore experience was really the icing on the cake." This focus on comfort and accessibility helps to normalize essential health screenings.

"This is a new vision for urban healthcare, having a medical center in the heart of the city, accessible by greener mobility. Patients can now walk, cycle, or take a short tram ride from their homes or workplaces, eliminating long commutes and making health a natural part of city life."

**Dr. Marie-Caroline Mas, IMANEO Group,
Montpellier, France**



A legacy of care, looking to the future

The initiative in Montpellier demonstrates that the goals of urban sustainability and advanced healthcare access are not mutually exclusive. It highlights how technological innovation can provide practical solutions to complex urban planning challenges. The success of this project relied not only on the right technology but also on a partnership with experienced professionals,

For Dr. Marie-Caroline, the project carries a profound personal significance. As a doctor from a family of doctors, whose own daughter has now chosen the same path, her work is part of a larger story. This legacy lends a deeper meaning to her vision of integrated community health.

“Everything we do today will benefit future generations,” she reflects. The project is more than an installation; it is a testament to a enduring commitment to healing, now adapted to secure the well-being of future city dwellers.

“Our hope is to shift the paradigm: from treatment-focused healthcare to preventive care and health preservation screening,” she concludes. By showing that it is possible to bring advanced medicine back into the community, this initiative, born from both personal legacy and technological progress, offers a compelling blueprint for other cities to follow. It ensures that as our cities become greener, they also become nurturing environments where health and community are inextricably linked.

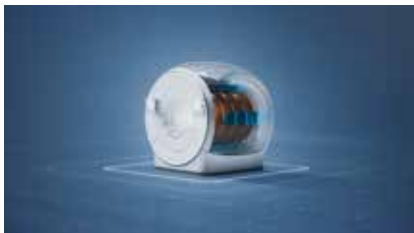


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¹ The Green City Trend: This data is representative of the broader European urban policy shift. While a single source for the exact 70% figure is complex, the trend is well-documented by the European Commission. For reference, the European Green Capital Award network and initiatives like the EU Mission for Climate-Neutral and Smart Cities by 2030 actively promote and track these changes. You can explore the criteria and participating cities here: [European Commission - European Green Capital and EU Missions: Climate-Neutral and Smart Cities. https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en) Helium-free operations. 7 liters of helium is permanently enclosed in the cryogenic circuit

