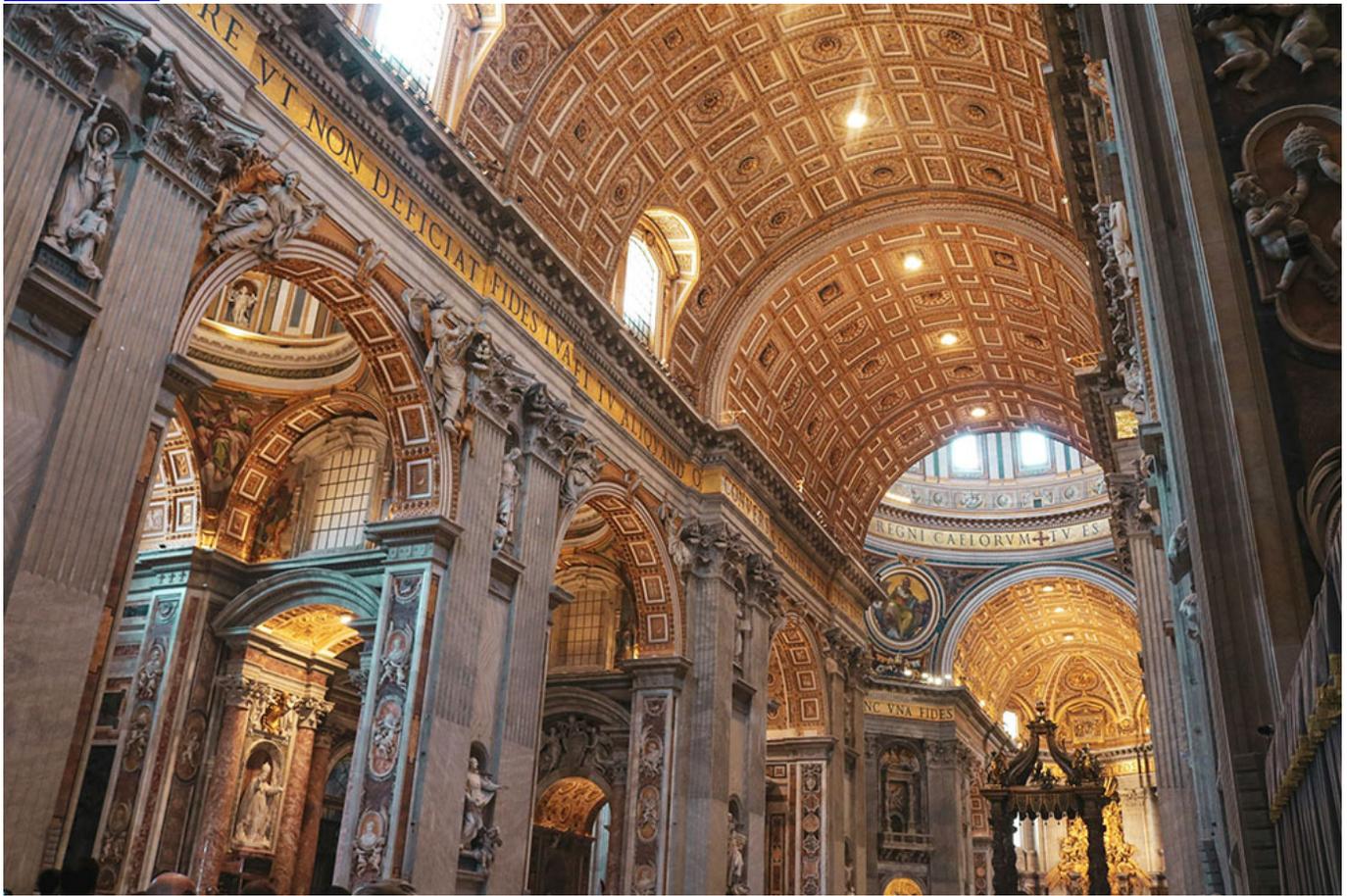


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A view of the interior of St. Peter's Basilica at the Vatican (Unsplash/Anna Church)

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Vatican City — June 16, 2025

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St. Peter's Basilica and some of its surrounding buildings are working to reduce their environmental impact by becoming more energy efficient and promoting sustainability.

The Fabbrica di San Pietro, the office responsible for the basilica's upkeep, launched a project in 2022 to lower the environmental impact of the basilica, which welcomes an average of 45,000 visitors a day.

A scientific committee established by the office to develop a concrete, data-driven plan presented several of its findings and suggestions during a Vatican news conference June 16.

Cardinal Mauro Gambetti, who has a degree in mechanical engineering and is archpriest of the basilica and president of the Fabbrica, said the project is part of a proactive and constructive form of activism with "a concrete and exemplary commitment to ecological and social transition according to the church's social doctrine."

"I think it is time to show the goodness and foresight of official climate plans," he said, given the lingering indifference, opposition and lack of attention to today's climate crisis.

The committee, made up of top engineers and experts in energy, resource management, air quality, and more, did extensive studies of the basilica, its sacristy, the nearby mosaic studio and the Domus Sanctae Marthae residence. It looked at possible ways these buildings could reduce their carbon footprint and become more energy efficient.

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The committee also produced a study on the indoor air quality of the basilica, which is constantly monitored by high-tech sensors recording levels of CO₂, particulates, radon, volatile organic compounds, humidity and pollutants.

It noted that despite the large number of visitors and the use of candles and incense during liturgical events, the air quality remained within acceptable parameters due to the basilica's enormous size and natural air flows that were projected in the original design of the world's largest church 500 years ago.

Immediate changes were planned in the sacristy: replacing old radiators with state-of-the-art "water loop systems and the installation of heat pumps," which should reduce energy consumption between 48% and 57% and emissions between 65% and 72%.

The same is planned for the mosaic studio, including providing LED lighting and giving workers improved ventilation, which will filter out dust and particulates from their work.

Other suggestions included buying supplies in bulk and with non-plastic packaging as well as cooling the basilica, which heats up during the day, by letting in cooler air at night.