

 PHOTIO

POLLUTION IN CHILE

Every year there are 11,300 deaths due to pollution in our country.

According to the latest report by the World Health Organization (WHO), Chile has the same rates as countries such as Austria, Belgium, the United Kingdom and Switzerland, in terms of the number of people who die due to pollution.

11/05/2023 —"Alert in Chile for the terrible air quality. Santiago dawned as the city with the most polluted air in the world." CNN CHILE



Chileans identify pollution as main environmental problem



of Chileans are exposed to pollutant gases with concentrations higher than those required by current regulations

HOW DOES AIR POLLUTION AFFECT US

“Urban air pollution increases the risk of acute respiratory diseases, such as pneumonia, chronic diseases, lung cancer and cardiovascular disease”

World Health Organization (WHO)



RESPIRATORY PROBLEMS,
IRRITATION OF THE EYES,
NOSE AND THROAT



HEADACHES AND
ANXIETY



EFFECTS ON THE LIVER,
SPLEEN AND BLOOD

What is Photio

What is Photio?

Photio is a nanotechnological additive that can be incorporated into different materials.



Paint



Concrete



Asphalt



Synthetic Leather



Fabrics

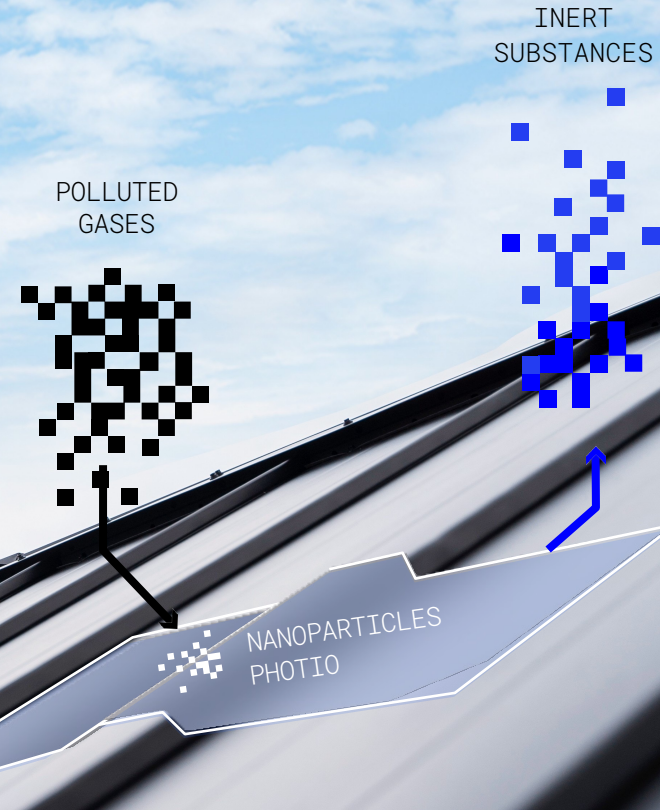


In contact with a radiation source, it promotes the degradation of polluting gases, transforming any material or surface into an air purifier.

Its use generates a measurable and traceable environmental impact, which contributes substantially to the capture of greenhouse gases and toxic gases.

HOW PHOTIO WORKS?

- 1 Polluted air contacts the surface of a building with Photio on its facade
- 2 Photio nanoparticles are activated by radiation and transform the gas that comes into contact with the facade into an element that is no longer harmful to human health



PHOTIO TREATS
POLLUTANT GASES
SUCH AS:

NO_x Nitrogen
oxide

NH₃ Ammonia

SO_x Sulfur
oxides

CO Carbon
monoxide

CH₄ Methane

COV Volatile organic compounds

✓ CERTIFICATIONS

The Center for Environmental Research and Technology (CE-CERT), [the world's leading pollution research center](#), is part of the University of California, Riverside.

The center brings together multiple disciplines across campus to address society's most pressing environmental challenges in air quality, climate change, energy and transportation. CE-CERT's activities encompass three aspects: research, education and public service.



Mode of use

The implementation of Photio product in paints is extremely simple, fast and does not require specific machinery or specialized personnel for its development.



No change in color
or brightness



No change in
physical or
chemical properties
physical and
chemical properties

Mode of Application



STEP 1

Apply the contents of one Photio sachet to one gallon of paint.



STEP 2

Mix paint with Photio for **30 to 50** seconds until a homogeneous mixture is obtained.



STEP 3



Your paint is ready to be applied and start decontaminating!

Benefits

The application of Photio technology within a building brings different health and air quality benefits to your customers.



Environment free
Of Polluting gases



Bacteria and Fungi free
surfaces

Building Seals

Photio is currently a member of the Green Building Council Chile, and has technical data sheets to score points in various certifications associated with sustainability and quality.



Building Seals



Leadership in Energy and Environmental Design

is the world's most widely used green building rating system. LEED certification provides a framework for healthy, highly efficient and cost-saving green buildings that offer environmental, social and governance benefits.



IWBI is a public benefit corporation that mobilizes its community through the administration of the WELL Building Standard (WELL) and WELL qualifications, the pursuit of applicable research, the development of educational resources, and the promotion of policies that advance health and wellness everywhere. IWBI helps companies advance the United Nations Sustainable Development Goals (SDGs) through the use of WELL.

<https://www.usgbc.org/organizations/international-well-building-institute>

Building Seals




The "Sustainable Building Certification" allows to evaluate, qualify and certify the environmental performance of public buildings in Chile, both new and existing, without differentiating between public or private administration or property. To be certified, the mandatory requirements must be met and have a minimum of 30 points. The maximum score is 100.



The Sustainable Housing Certification (CVS) is a voluntary environmental certification system that evaluates the implementation of good design and construction practices. **Certified homes have a higher standard of sustainability than the market average and what is required by regulatory instruments.** They are buildings with high environmental and energy performance.

<https://www.usgbc.org/organizations/international-well-building-institute>

A woman with long brown hair tied in a ponytail with a blue polka-dot bow is seen from behind. She is wearing a white glove and holding a paint roller with an orange handle, applying a forest scene to a white wall. The forest scene consists of dense green pine trees. The text is overlaid on the left side of the image.

**1 m² covered Photio has
the same decontaminant
potential as 2 mature
trees**



SOME OF OUR PROJECTS



Photio & Autopista Central Sustainable Roads

During 2022, the Vías Sustentables project was carried out in conjunction with Autopista Central, where 3,200 square meters of land walls of this highway located in the Metropolitan Region were intervened.

This project counted with the participation of the renowned Chilean muralist, Trinidad Guzmán (@holaléon), who was in charge of intervening along with other artists, one of the busiest roads in the capital of Chile.

Photio & Banco de Chile Sustainable Buildings

During the year 2023 Photio established a strategic alliance with Banco de Chile, one of the main banks nationwide.

Under this alliance, Photio additive has been applied in the painting of 84 branches located throughout the national territory, which leads to a total surface area of 63.213 m²



63.213 m²

Painted with Photio



= 125.000

Mature trees



Photio & Cencosud Sustainable Parking Lots



During the year 2022, the working alliance between Photio and CENCOSUD was formalized, whose starting point consisted of the implementation of the nanotechnological additive in the painting of the three subway levels of the Portal La Reina shopping mall. This project covered a total of 9,661 m².



Subterranean -1



Subterranean -2



Subterranean -3



Social media postings on
intervention and commercial alliance

■ ■ ■ Photio & Construction and Real Estate Companies Sustainable Buildings

During 2022 and 2023, Photio conducted commercial relations with several real estate and construction companies, with the incorporation of the additive in the facades and technical specifications of projects.



 PHOTIO