



GRAPHENSTONE  
GREEN  
AWARDS

#PaintsfortheGreenGeneration



# 1.

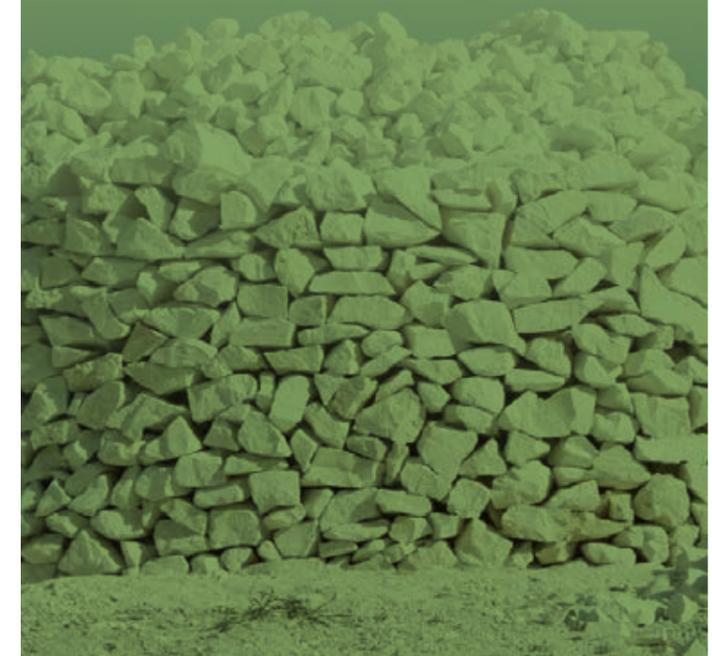
## Why should your submission win an International Green Interior Award?

Graphenstone is committed to the environment which is why we produce natural materials. Among our values are ecology, nature, sustainability and respect for the environment. Our products meet the principles of the circular economy. Our DNA is to be an innovator and creator of ecological and respectful products for the people and the environment. Ultimately, we want the construction sector to serve humans and not the opposite way round. Our philosophy: acting as a benchmark for other companies, complying with the requirements of green building through economic activity.

The concentration of polluting gases has affected the global average temperature which is now 0,8 °C higher than 50 years ago. The WHO says that this air pollution causes respiratory diseases (asthma, cancer, bronchitis, pneumonia,...), viral diseases (yellow fever, dengue...), migraña, stress, depression, etc.

The global business of paints increases 7% each year and the architectural coatings demand is around 800 Mill gal per year so the emissions caused by paints are huge. One of the solution to this problem is using a natural product free of formaldehyde and VOC emissions and that absorbs CO<sub>2</sub> purifying the air.

*Our philosophy: acting as a benchmark for other companies, complying with the requirements of green building through economic activity.*



## 2. What inspired your company to create this green interior product?

Graphenstone is the brainchild of a young chemical engineer committed to develop a natural, ecological and healthy coating. Antonio León Jiménez was that young man and today he is president and CTO (Chief Technical Officer) of Graphenstone. After working as CTO in a successful coatings firm in Spain and Morocco, Antonio León began his new enterprise IEdISA (2009) with the dream of creating ecological products to build the buildings of the future, the sustainable construction. It was the foundation of Graphenstone.

A few years later, the president of Graphenstone developed a new line of natural paints and mortars using artisanal lime from Morón de la Frontera. A unique lime with a 100% natural and environmentally friendly production cycle. Thus a tradition which had been forgotten was back to the market. After generating new ecological, natural and sustainable coatings based in lime, Antonio León takes it a step further and innovates by adding graphene to the formula. The objective behind the utilization of graphene was to enhance the product's properties; improving resistance, flexibility and thermal conductivity while maintaining the natural qualities.

Perseverance was key. After a whole year of research at the University of Seville, and numerous unsuccessful attempts, the CTO achieves his goal: to develop a graphene polymer able to improve the material qualities with outstanding results. The first range

of paints and coatings with graphene technology. Graphenstone is born November 2013. That young man's dream comes true. He achieves a worldwide groundbreaking product that is eco-friendly and beneficial. Since then we have continued to work vigorously in the creation of healthier and more sustainable homes. In just 3 years, Graphenstone is now present in more than 30 countries and has opened production plants in Europe, Asia and LatAm.

*Graphenstone, paints and coatings for the green generation. Our contribution to the building of healthier and sustainable homes.*



## 3. Tell us about the environmental controls put in place for your manufacturing plant or studio.

Graphenstone doesn't use any toxic ingredient. Anyway, all the wastewater is treated by an external company and the water used to clean the vessels is used for the production of the products. Therefore, Graphenstone has Platinum rate in Water management by Cradle To Cradle.



- Graphenstone Biosphere Premium
- Graphenstone Ecosphere Premium
- Graphenstone Filler F10 Premium
- Graphenstone Filler F20 Premium



- GCS Interior Premium paint all colours (except white)
- GCS Exterior Premium all colours (except white).

Cradle to Cradle Certified Product Scorecard	
MATERIAL HEALTH	Gold
MATERIAL REUTILIZATION	Gold
RENEWABLE ENERGY & CARBON MANAGEMENT	Gold
WATER STEWARDSHIP	Platinum
SOCIAL FAIRNESS	Gold
<b>OVERALL CERTIFICATION LEVEL</b>	<b>Gold</b>

Cradle to Cradle Certified Product Scorecard	
MATERIAL HEALTH	Silver
MATERIAL REUTILIZATION	Silver
RENEWABLE ENERGY & CARBON MANAGEMENT	Silver
WATER STEWARDSHIP	Platinum
SOCIAL FAIRNESS	Gold
<b>OVERALL CERTIFICATION LEVEL</b>	<b>Silver</b>



# 4.

## Can your product be recycled or upcycled at the end of its life? If yes, provide details?

Graphenstone has developed a product range with a whole green life cycle. It complies with the reuse, reduce and recycle philosophy, guaranteeing the most efficient use of materials. For that reason, Graphenstone meets the Cradle To Cradle Certification programme requirements, being the only paint in the world with GOLD rate. Graphenstone eliminates any concept of waste and becomes a product with a green life cycle.

### MINIMIZE

GRAPHENSTONE complies with Reuse, Reduce and Recycle philosophy.

### RETHINK

GRAPHENSTONE use materials effectively.

*“Graphenstone eliminates any concept of waste and becomes a product with a green life cycle.”*

In the category of “Material reutilization”, Graphenstone gets the GOLD score according to these requirements:

The product has a material reutilization score that is >65.

The manufacturer has completed a “nutrient management” strategy for the products including scope, timeline and budget.

Graphenstone is not just recyclable. Thanks to the use of lime and its natural cycle, Graphenstone is a reusable coating:

The Graphenstone products, being mineral, can be recycled as an arid together with the substrate where the paint was applied. The procedure to recycle the products is:

Removing the substrate manually, separating from the rest of construction materials. After removing the mortar or panel, it has to be grinded to get the right granulometry for the recycle. Protecting from the environment in a dry place until its use.

The use of Graphenstone products makes possible the recyclability of the mineral substrates as well. Thus the recycle of the complete wall is much easier.

The waste of Graphenstone coatings are the bucket manufactured with recycled polypropylene, generating 6,5 g of waste per square meter of applied product. Anyway, this bucket can also be recycled again.

On the other hand, we have a waste disposal policy. Our factory only waste cardboard with approximate 150 kg/year so the approximate waste of our factory, including other materials like bottles or papers, is around 200 kg/year.

# 5.

## Are the green aspects of your product certified by a third party?

Yes, Graphenstone has been certified by the strictest external institutes in the world.

Graphenstone is in process of certification by Global GreenTag and Sensitive Choice (Asthma Friendly) in Australia.



Please find attached a list of test and certificates.

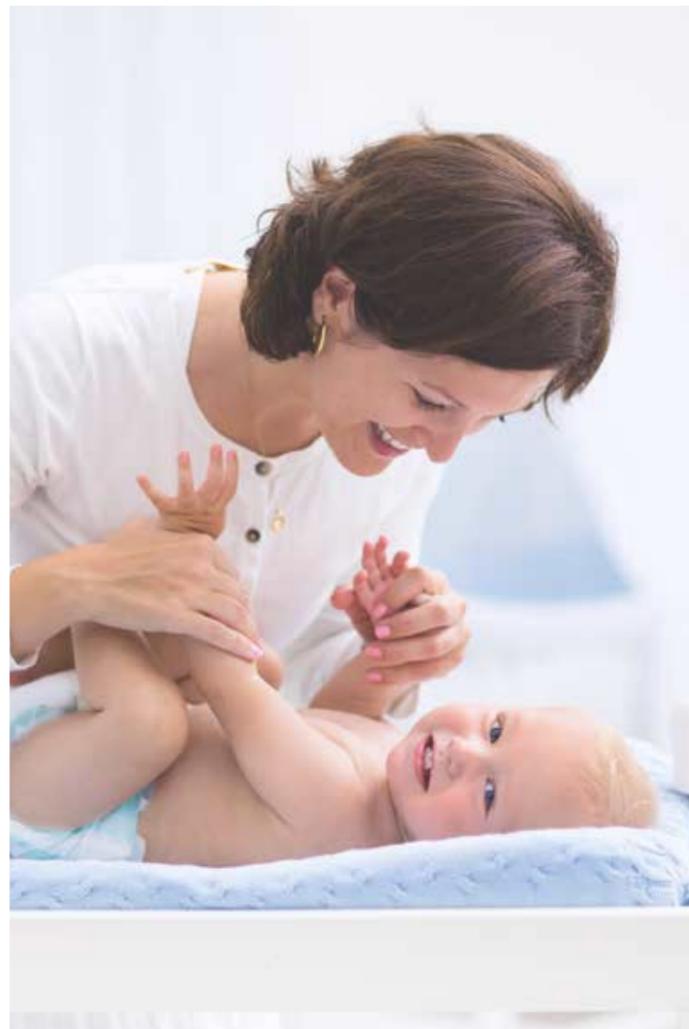
<https://goo.gl/CH3Hvq>

- Graphenstone-Certifications-2017
- Cradle to Cradle Gold Certified™ Products Registry
- Cradle to Cradle GoldCertified™ Products Certification
- Cradle to Cradle Material Health Certificate Page
- Material Health Certificate
- Cradle to Cradle Silver Certified™ Products Registry
- Cradle to Cradle Silver Certified™
- Graphenstone | U.S. Green Building Council
- Graphenstone | Vietnam Green Building Council
- CE\_Biosphere-2017
- CE\_MortarBase\_2017
- CE\_MortarFine\_2017
- CE\_MortarSuper\_2017
- Content\_HeavyMetal\_1606
- Content\_VOCs\_1605
- Emissions\_AgBB\_Germany
- Emissions\_CS01350\_USA
- Emissions\_F4Stars\_Japan
- Emissions\_VOC-Ap\_France
- Emissions\_VOC-Belgium
- Emissions\_VOC-M1\_Finlandia
- Energy-Efficiency\_LRV\_1606
- Energy-Efficiency\_SRI\_1609
- Footprint\_1411-13-01.1
- Fire-Reaction\_1702
- ISO UNE-EN 9001:2000
- ISO UNE-EN 7783
- ISO UNE-EN 14001
- ISO UNE-EN 1062-3
- ISO UNE-EN 50001
- ISO UNE-EN 1542
- ISO UNE-EN 1504-2
- CE 1170/CPR/ER.03117
- Certificado no: 1411-13-01,1
- ISO-9001-2008
- ISO-14001-2004
- Tecnalia-14\_04755-1
- Tecnalia-14\_05458
- Metallic-Components-CRS-LAB
- Microorganism-Action-CIAJ-3879
- Asthma Friendly / Sensitive Choice
- Green Tag Level A
- GreenTag Health GOLD Phd
- Environmental Product Declaration (EPD)

# 6.

## What is the Global GreenTag?

Global GreenTag is one of the world's most robust, trusted and widely recognised ecolabels. We independently assure that every product is fitness tested and certified under one of our two leading certification programs that use world's best scientific methods. That's why we have earned the reputation and trust of thousands of buyers, hundreds of companies and numerous green building councils, certification bodies and governments around the world.



### GreenRate | Level A

Ecosphere Premium  
 Biosphere Premium  
 GCS Interior Premium  
 GCS Exterior Premium  
 Filler F10/F20 Premium  
 Stuki Premium  
 AmbientPro+ Premium  
 Füllmasse Premium  
 Kratzputz Premium



### Gold Health

Ecosphere Premium  
 Biosphere Premium  
 GCS Interior Premium  
 GCS Exterior Premium  
 Filler F10/F20 Premium  
 Stuki Premium  
 AmbientPro+ Premium  
 Füllmasse Premium  
 Kratzputz Premium

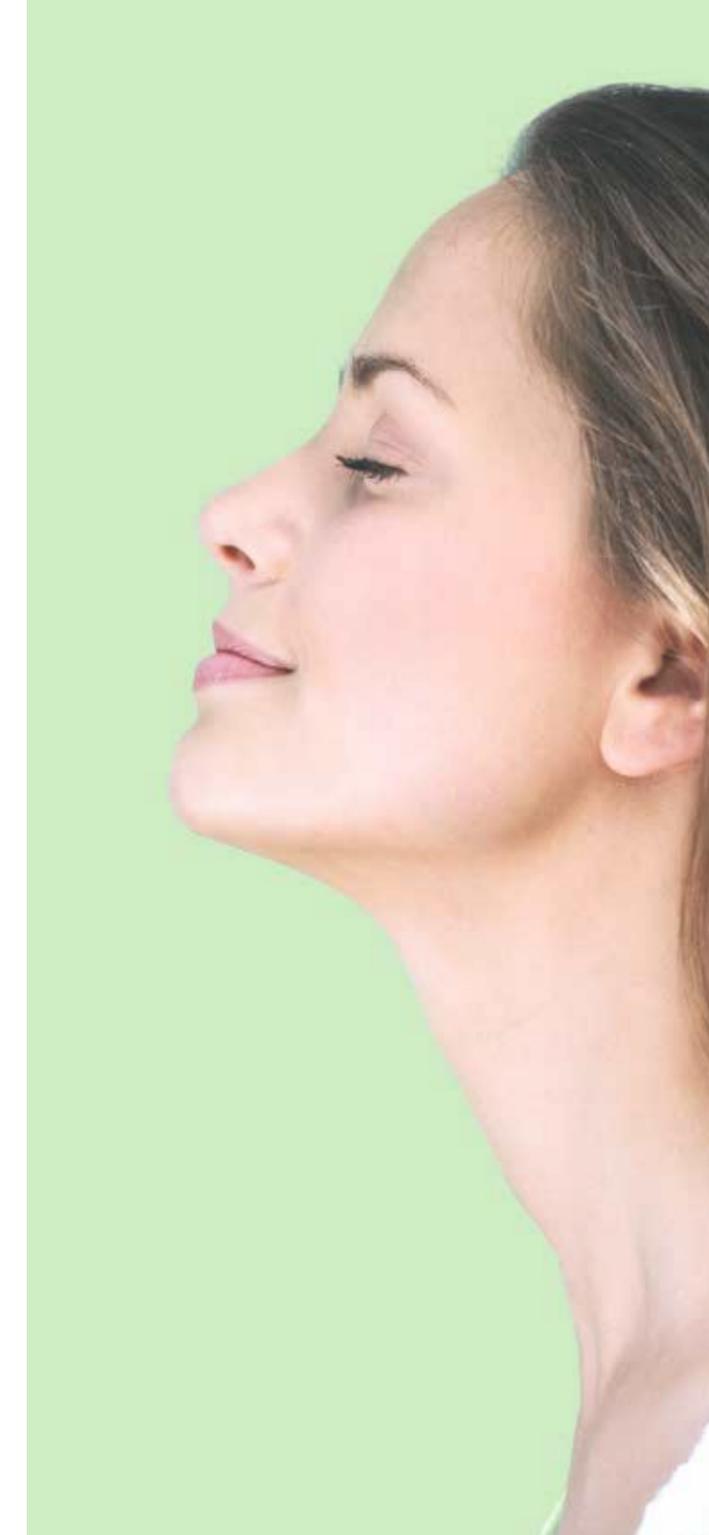
# 7.

## It's about Breathing

Graphenstone is the ultimate ecological range of products, composed of natural elements that purify the air we breathe inside our homes. It is suitable for people suffering from chemical intolerance and respiratory issues like asthma. Graphenstone is recommended for indoor enclosures, hospitals, nurseries, schools, or rooms for infants and children.

Approved products:

Ecosphere Premium  
 Biosphere Premium  
 GCS Interior Premium  
 GCS Exterior Premium  
 Ambient Pro+ Premium  
 Filler Premium  
 Stuki Premium  
 Kratzputz Premium  
 Füllmasse Premium  
 MortarBase Premium  
 MortarFine Premium  
 MortarSuper Premium  
 Naturlglue Premium  
 Thermslab Premium  
 Kalgraphin Premium



The health benefits resulting from the use of Graphenstone materials for individuals living in eco-sustainable homes include:

- Improves air quality of indoor environments;
- Limits pathogens;
- Prevents mould growth, fungi and bacteria;
- Guarantees safe domestic environments; and
- Increases comfort and quality of life.

# 8.

## What materials have you used to make the product?

Graphenstone uses lime, which is made in wood burning kilns, which results in a lime with high whiteness and purity. This lime, from Moron de la Frontera (Spain), has been produced in this way since the mid-nineteenth century.

Furthermore, the lime cycle is 100 % natural, from the wood that's used to feed the oven (olive wood), through the firing, to the collection. This procedure is recognized as intangible Cultural Heritage of the Humanity by UNESCO in 2011.

Graphenstone combines the lime with graphene fibres that provide to the coatings and paints innovative qualities: greater toughness, flexibility, strength, thermal conductivity,...This nanotechnology compound acts a structural support mesh at the molecular level, which translates into a greater durability and therefore lower maintenance and more significant savings. Using this technology permits us to achieve more efficient materials that meet the requirements of a highly demanding market committed to new and more sustainable manufacturing methodology. The graphene inventors were Nobel Prize in physics in 2010.

Lime and graphene combined form the ultimate ecological, natural coating in the world.

Graphenstone design and manufacture with respect for the environment, the circular economy and energy efficiency. This is the reason why our products fit perfectly in

Green or Eco Buildings, Passive Houses and Smart Cities.

The rest of components of the Graphenstone lime-based coatings are commercial additives, fillers (calcium carbonate) and water. Graphenstone doesn't use any petroleum derived product in its composition.

*Lime and graphene combined form the ultimate ecological, natural coating in the world.*



# 9.

## Provide links to marketing information related to this product.

Graphenstone Company Publications:  
<https://goo.gl/sZBPiu>



# 10.

## Provide photos / videos

Graphenstone - Greener cities with the paints for the Green generation:  
[https://youtu.be/vjZsHj\\_zvOQ](https://youtu.be/vjZsHj_zvOQ)

Graphenstone - Paints for the Green Generation Spot:  
<https://youtu.be/JHKdUri-uVM>

Graphenstone Unique Paints – 2017:  
[https://youtu.be/qsYVHgH5\\_qo](https://youtu.be/qsYVHgH5_qo)

References:  
<https://goo.gl/XBvsmM>



# 11.

## Optional Question: Is there any other information that you wish to submit that may assist our Judges?

The high concentrations of CO<sub>2</sub> in the world increases the greenhouse effect that is contributing to a rise of the temperature on Earth. In addition, the air pollution in cities is causing serious concern for the health of those living there. Our products can help improve the quality of the world's air.

THE TARGET:

REMOVING 14,000 TONES OF CO<sub>2</sub>  
To achieve this we need your help. We want to paint 300 million square meters, starting with your house walls, and we are not stopping there...

Imagine if every wall in your building was painted with Graphenstone: the corridors, the stairs... the air you breathe would be healthier and you would have a better home. Your building would be a garden!

Furthermore, we want to tell the city councils, if public facilities were restored with our paint we could transform your city into a forest. It could be achieved simply with paint.

Join the project: My home is a tree, My building is a garden, My town is a forest!

<http://myhomeisatree.com/>



CO<sub>2</sub> ABSORPTION OF 3 BUCKETS OF PAINT





GRAPHENSTONE  
GREEN  
AWARDS



GRAPHENSTONE  
THE ORIGINAL AND AUTHENTIC

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