AGGREGATES

Environmental Product Declaration

Mandra Quarry

Programme The International EPD® System
Programme operator EPD International AB
EPD registration number S-P-09102
Publication date 2023-07-27
Valid until 2028-07-26

Sand for concrete 0/4	Gravel 16/31.5	3A for road construction 0/31.5
Sand for mortar 0/4	Gravel 32/56	Limestone rock 45/180
Fine gravel 4/16 & 8/16	Rice 2/8	3A Backfill 0/8 & 0/22

In accordance with ISO 14025:2006 and 15804:2012+A2:2019
EPD programme website: www.environdec.com
An EPD should provide current information and may be updated if conditions change.
The stated validity is therefore subject to the continued registration and publication at the website.

EPD®
THE INTERNATIONAL EPD® SYSTEM

ECO PLATFORM EPD VERIFIED

LAFARGE

COMPANY INFORMATION

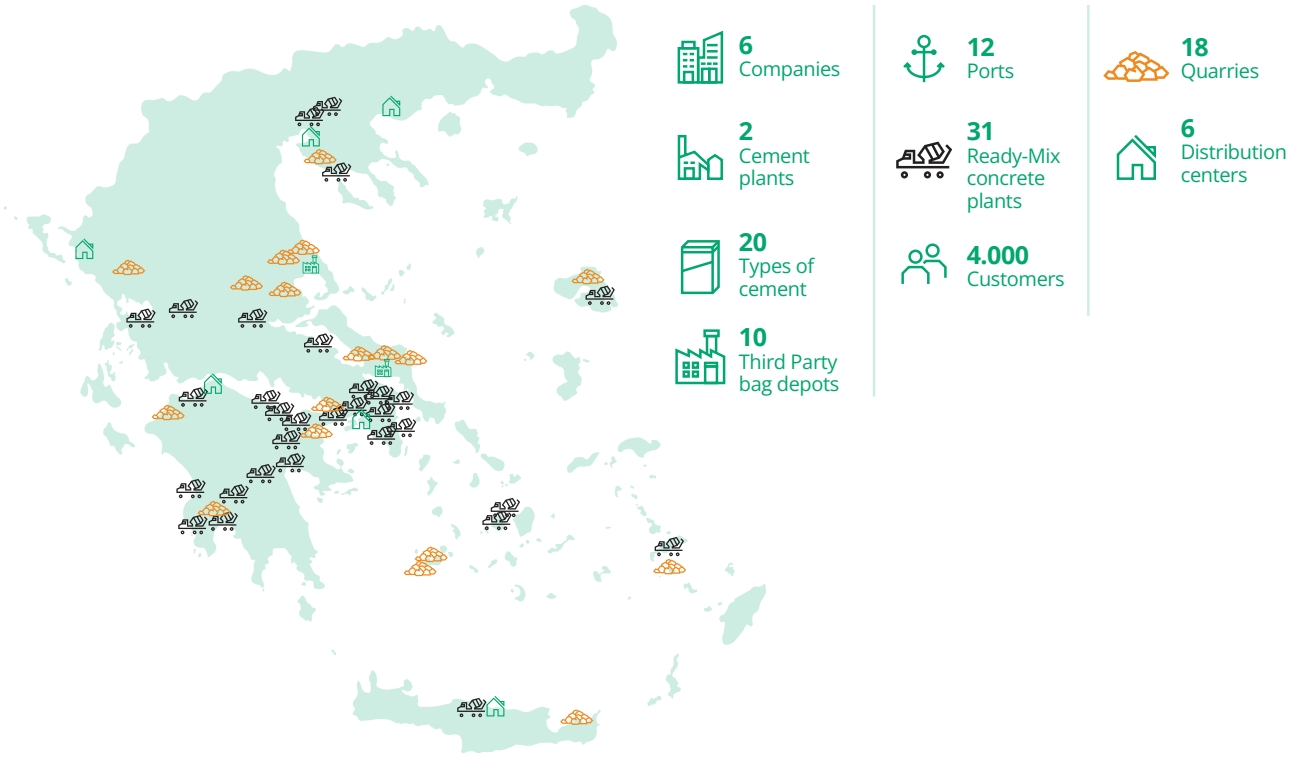
Lafarge Beton SA, member of HERACLES Group, holds a strong presence in the Greek construction sector since 2001. By having 18 quarries, Lafarge covers mainland and insular Greece, with high quality inert materials. Every quarry has well equipped laboratories and specialized staff to ensure the high quality materials.
At Lafarge quarries, all materials produced are appropriate for a variety of purposes, such as:

- Concrete aggregates
- Asphalt components
- Road construction material
- Mortar aggregates
- Boulders for port projects
- Inert materials for lime production

HERACLES Group of Companies

HERACLES Group of Companies, a member of Holcim Group, is the leader in the building materials sector in Greece, having more than 110 years of presence in the market. With a network of 45 production and commercial facilities throughout Greece, the Company is active in the production and marketing of cement, aggregates, concrete and industrial minerals, offering products and solutions that meet the diversified needs of customers and all requirements of modern sustainable construction.

At HERACLES Group, Sustainable Development is a long-term commitment and a non-negotiable priority that guides our daily business activity. We believe in building a greener and more sustainable world for people and the planet, a world that operates with respect for water and nature and upgrades the quality of life for all. We advocate an innovative, climate-neutral construction industry that applies the principles of circular economy regarding the use of resources. To this end, we focus on four strategic pillars for sustainable development - Local Communities, Climate & Energy, Circular Economy, Nature - to create added value for our business, our stakeholders, the local communities and the environment.



SCOPE

The scope of this EPD includes the limestone aggregates produced at Mandra quarry. The analysis includes 2022 full year information regarding the consumption of raw materials, electricity, water, and generated wastes.

This EPD covers multiple aggregate types based on the declared technical standards as described in the Declaration of Performance. The aggregate categories included in this EPD are shown in the table below and they are categorized by size and quality. All of the aggregate types have CE marking complying with the EU's Regulation (EU) 305/2011.

PRODUCT DESCRIPTION

Limestone aggregates are essential materials in the construction industry, valued for their versatility and durability. These aggregates are formed by crushing and grading limestone rocks, resulting in particles of varying sizes. Limestone aggregates offer numerous benefits for construction projects. Their strength and resilience make them ideal for structural applications, such as concrete foundations, roads, and bridges. They provide excellent stability and can withstand heavy loads, ensuring long-lasting performance. Additionally, limestone aggregates contribute to the workability and cohesion of concrete mixtures, enhancing their overall quality. Their natural color and texture also lend aesthetic appeal to various architectural and landscaping designs. With their abundance, cost-effectiveness, and reliability, limestone aggregates continue to be a preferred choice for construction projects of all scales. Aggregates can be classified according to their size, origin, mode of fragmentation and composition.

All materials covered in this EPD are produced by Lafarge Beton S.A. and more specifically at Mandra Quarry in Attica which is a certified plant according to ISO 9001:2015 and ISO 14001:2015 standards. Mandra's crushing site produces aggregates in various particle sizes to cater to the individual needs and preferences of the clients. The production is segregated into the different nine (9) declared materials of this study, as described in the table below:

Characterization	Product Name	Standards				
		EN 12620	EN 13043	EN 13139	EN 13242	EN 13450
All in	3A Backfill 0/8				✓	
	3A Backfill 0/22				✓	
	3A* for Road Construction 0/31.5				✓	
	Sand for mortar 0/4		✓			
	Sand for concrete 0/4		✓			
Fine	Sand for mortar 0/4			✓	✓	
	Sand for concrete 0/4	✓		✓	✓	
Coarse	Fine gravel 8/16	✓	✓		✓	
	Fine gravel 4/16	✓	✓		✓	
	Rice 2/8			✓		
	Rice 4/8	✓	✓		✓	
	Gravel 32/50					✓
	Gravel 32/56				✓	
	Gravel 16/31.5	✓	✓		✓	
	Limestone Rock 45/180				✓	

**3A for Road Construction is a mixed product of 3 main product types after production and does not participate in the crushing stages.*

The products do not contain any substances listed in the "Candidate List of Substances of Very High Concern (SVCH) for authorization" exceeding 0.1% of the weight of the product.

Product Properties

The main properties per product, according to the Declaration of Performance, are presented in the table below:

		PERFORMANCE											
		ALL IN					FINE		COARSE				
Properties	Characteristics	3A BACKFILL	3A BACKFILL	3A FOR ROAD CONSTRUCTION 0/31.5	SAND FOR MORTAR	SAND FOR CONCRETE	SAND FOR MORTAR	SAND FOR CONCRETE	FINE GRAVEL	FINE GRAVEL	RICE	GRAVEL	GRAVEL	LIMESTONE ROCK
		EN 13242			EN 13043		EN 13139 EN 13242	EN 12620 EN 13242 EN 13139	EN 12620 EN 13043 EN 13242	EN 12620 EN 13043 EN 13242	EN 12620 EN 13139 EN 13043 EN 13242	EN 13450 EN 13242	EN 12620 EN 13043 EN 13242	EN 13242
Geometrical & Physical properties	Particle size	0/8	0/22	0/31.5	0/4	0/4	0/4	0/4	8/16	4/16	4/8	32/56	16/31.5	45/180
	Water absorption	WA242	WA242	WA242	WA242	WA241	WA242	WA241	WA241	WA241	WA241	WA241	WA241	WA241
	Fine Quality	SE4≥30	SE4≥40	SE4≥50	MB<2.0 SE4≥50	MB<1.0 SE4≥65	MB<2.0 SE4≥50	MB<1.0 SE4≥65						
	Hummus Content	No hummus												
Chemical properties	Acid-soluble sulfate content	$AS_{0.1}$												
	Total Sulfur	NPD												
	Carbonate content as $C0_2$ (%w/w $C0_2$)	> 43												
	Calcium carbonate content (%w/w $CaCO_3$)	> 98												
	Soluble Chlorides Content	NPD												
	Organic Contaminators by Mortar Method	Does not contain												
	Magnesium Sulfate Soundness	MS18												
	Lightweight Organic Contaminators	$mLPC_{0.2}$												
	Water Solubility	WS10												

LCA INFORMATION

DECLARED UNIT
The declared unit is 1tn of limestone aggregates.

GOAL AND SCOPE
This EPD evaluates the environmental impacts of the production of 1tn of limestone aggregates manufactured in Mandra quarry.

BACKGROUND DATA
The most recent version of Ecoinvent database (v.3.9.1) was used as a source of background data.

SOFTWARE
The software used for the production of the LCA results is OpenLCA 2.0.0.

DATA QUALITY
ISO 14044 was applied in terms of data collection and quality requirements. The data concerning the module A1 (Raw Materials supply) and module A2 (Transportation), were obtained by Lafarge's production files, invoices and technical data of the equipment, while the impacts of the raw materials (e.g. explosives, oils, diesel) were recovered from Ecoinvent database (v.3.9.1). The data concerning A3 stage (direct emissions during manufacturing and waste management) were provided by Lafarge's electronic waste registry and National Inventory Report (regarding the emission factor and net calorific value of diesel for combustion). Regarding electricity mix, the latest (2021) national residual electricity mix as published in DAPEEP SA was utilized.

TIME REPRESENTATIVENESS
Data refers to the whole year 2022.

GEOGRAPHICAL SCOPE
Worldwide

ASSUMPTIONS

- Module A1: Electricity required for the production of each aggregate was calculated based on the nominal power of the machinery used for each product, the efficiency rate of this equipment and the operating hours required for each product.

- Module A2: Since the extraction of limestone rocks takes place in Lafarge's quarry in Mandra, only the impacts from explosives and oils transportation should be taken into account. These quantities are very small compared to the mass of the limestone, thus their transportation is excluded from the study, although their production impacts are taken into account.

- Module A3: Emission factors and net calorific values of diesel used and combusted in loading and crushing were obtained from National Inventory Report (NIR) of 2022 for Greece. More specifically:
  - Diesel Net Calorific Value (NCV): 42.8 TJ/kt
  - Diesel Emission Factor: 73.78 t CO_2/TJ

CUT-OFF RULES
The cut-off rule for insufficient data or data gaps that are less than 1% of the total input mass and less than 5% of energy usage and mass per module was applied to oil filters and unspecified wastes during the manufacturing process.

ALLOCATIONS
Mass allocation took place to the following streams:
- **Diesel used in crushing and processing lines**, based on the total mass of aggregates produced in Mandra quarry.
- **Water used in aggregates wetting**, based on the total mass of aggregates produced in Mandra quarry.
- **Raw materials such as explosives used for rock extraction and oils used for equipment operation**, based on the total mass of aggregates produced in Mandra quarry.
- **Wastes (oils and municipal solid waste)** occurred during the manufacturing process, based on the total mass of aggregates produced in Mandra quarry.

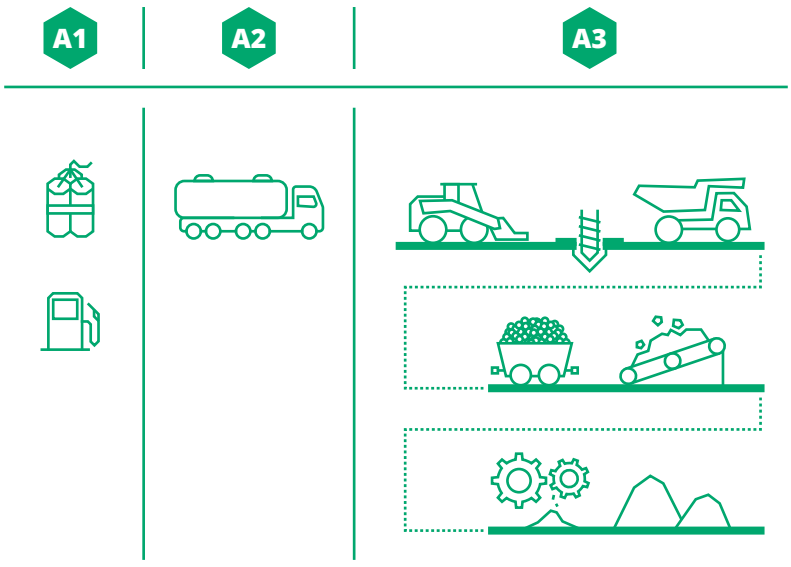
SYSTEM BOUNDARY

The scope of the study is set to be cradle-to-gate. The system's boundaries are shown in more detail in the table below. It should be noted that construction stage (modules A4-A5) and use stage (modules B1-B7) are optional and are not under the scope of this study. End of life stages (modules C1-C4) and module D are obligatory, but can be excluded if the following three conditions are valid:

- The product or material is physically integrated with other products during installation so they cannot be physically separated from them at end of life.
- The product or material is no longer identifiable at end of life as a result of a physical or chemical transformation process
- The product or material does not contain biogenic carbon.

All these three criteria are met, thus the scope of the study is cradle-to gate (modules A1-A3).

X= Included, ND= Module Not Declared																
	Product Stage			**Construction Stage**		**Use Stage**							**End-of-life Stage**				**Resource Recovery Stage**
	Raw Materials Supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction and demolition	Transport	Waste processing for reuse, recovery and/or recycling	Disposal	Reuse-Recovery-Recycling-potential
Modules	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	**X**	**X**	**X**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	**GR**	**GR**	**GR**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation products	**Not relevant**			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation sites	**Not relevant**			-	-	-	-	-	-	-	-	-	-	-	-	-	-



A1-A3: Product Stage

The manufacturing of limestone aggregates commences with stripping, if needed, and then the drilling and blasting of the sedimentary rock mass with the use of explosives to blast and release rocks. The rocks are transported to the processing area by heavy mobile equipment which uses diesel fuel.
The aforementioned materials are fed to an electrical powered crushing plant to break down into smaller particles. The blasted material is driven by the feeder to the primary crusher to decrease the size. The size of the materials is further reduced in secondary crushers and through screening they are obtained to the desired granular size. The materials are transported by conveyor belts to the different crushing stages inside the crushing plant and at last are stored inside silos, which also use electricity for their operation.
The aggregates are available in the form of bulk products and no packaging is used.

A1: Raw Material Supply

Production starts with raw materials supply. The main raw materials used for the production of limestone aggregates are energy carriers (diesel and electricity) and explosives used for the mining of limestone rock. Furthermore, small quantities of oils and lubricants are utilized for equipment operation during the manufacturing process.

A2: Transportation of raw materials to manufacturer

Transportation stage involves the impacts of raw materials' delivery impact from the supplier to the aggregates manufacturing plant. However, since the extraction of limestone rocks takes place in Lafarge's quarry in Mandra, only the impacts from explosives and oils transportation should be taken into account. These quantities are very small compared to the mass of the limestone, thus their transportation is excluded from the study, although their production impacts are taken into account.

A3: Manufacturing

- **Crushing:** The extracted limestone is transported to a primary crusher, where it is broken down into smaller pieces. The crushing process reduces the limestone to a uniform size suitable for further processing.

- **Screening:** The crushed limestone is then screened to separate it into various sizes. Screens with different mesh sizes are used to classify the aggregates according to their particle sizes. This step ensures that the final product meets the desired specifications and allows for the production of different grades of limestone aggregates.

- **Crushing and Secondary Screening:** Depending on the desired size, range and application, the crushed and screened limestone aggregates may undergo secondary or third crushing and screening processes. This helps to further refine the particle sizes and produce aggregates that meet specific requirements.

- **Stockpiling and Storage:** Once the limestone aggregates are processed, they are stockpiled or stored in designated areas to await transportation and distribution. Stockpiles are carefully managed to prevent cross-contamination and ensure proper inventory management.

ENVIRONMENTAL PERFORMANCE INDICATORS

ENVIRONMENTAL INDICATORS - Total A1-A3

Indicator	Unit	Sand for concrete 0/4	Sand for mortar 0/4	Fine gravel 4/16 & 8/16	Gravel 16/31.5	Gravel 32/56	Rice 2/8	3A for road construction 0/31.5	Limestone rock 45/180	3A Backfill 0/8 & 0/22
GWP-total	kg CO_2 eq	4.64E+00	2.68E+00	2.72E+00	2.65E+00	2.68E+00	2.78E+00	2.58E+00	2.08E+00	1.94E+00
GWP-fossil	kg CO_2 eq	4.62E+00	2.67E+00	2.71E+00	2.64E+00	2.67E+00	2.77E+00	2.57E+00	2.07E+00	1.94E+00
GWP-biogenic	kg CO_2 eq	9.01E-03	4.21E-03	5.03E-03	4.76E-03	5.05E-03	5.26E-03	4.69E-03	2.74E-03	2.14E-03
GWP-luluc	kg CO_2 eq	4.39E-03	2.01E-03	2.41E-03	2.28E-03	2.33E-03	2.52E-03	2.15E-03	1.24E-03	9.80E-04
GWP-GHG[1]	kg CO_2 eq	4.61E+00	2.66E+00	2.70E+00	2.63E+00	2.66E+00	2.76E+00	2.56E+00	2.06E+00	1.92E+00
ODP	kg CFC-11 eq	8.57E-08	4.74E-08	4.79E-08	4.65E-08	4.71E-08	4.91E-08	4.51E-08	3.56E-08	3.29E-08
AP	mol H^+ eq	8.16E-02	7.42E-02	7.52E-02	7.48E-02	7.50E-02	7.55E-02	7.44E-02	7.18E-02	7.11E-02
EP-freshwater[2]	kg PO_4^{-3} eq	7.91E-03	2.91E-03	3.77E-03	3.50E-03	3.62E-03	4.02E-03	3.22E-03	1.29E-03	7.67E-04
EP-freshwater	kg P eq	2.58E-03	9.50E-04	1.23E-03	1.14E-03	1.18E-03	1.31E-03	1.05E-03	4.20E-04	2.50E-04
EP-marine	kg N eq	2.35E-02	2.23E-02	2.25E-02	2.24E-02	2.24E-02	2.25E-02	2.23E-02	2.19E-02	2.18E-02
EP-terrestrial	mol N eq	3.69E-01	3.60E-01	3.61E-01	3.60E-01	3.61E-01	3.61E-01	3.60E-01	3.56E-01	3.55E-01
POCP	kg NMVOC eq	7.18E-02	6.74E-02	6.76E-02	6.75E-02	6.75E-02	6.78E-02	6.73E-02	6.61E-02	6.58E-02
ADPe[3]	kg Sb eq	9.43E-06	7.16E-06	7.52E-06	7.39E-06	7.44E-06	7.62E-06	7.27E-06	6.43E-06	6.20E-06
ADPf[3]	MJ	7.02E+01	3.61E+01	3.82E+01	3.67E+01	3.73E+01	3.94E+01	3.53E+01	2.54E+01	2.26E+01
WDP[3]	m^3 eq	1.44E+00	6.98E-01	8.24E-01	7.82E-01	7.99E-01	8.59E-01	7.42E-01	4.59E-01	3.80E-01

RESOURCE USE - Total A1-A3

Indicator	Unit	Sand for concrete 0/4	Sand for mortar 0/4	Fine gravel 4/16 & 8/16	Gravel 16/31.5	Gravel 32/56	Rice 2/8	3A for road construction 0/31.5	Limestone rock 45/180	3A Backfill 0/8 & 0/22
PERE	MJ	7.00E+00	2.67E+00	3.42E+00	3.17E+00	3.27E+00	3.62E+00	2.94E+00	1.27E+00	8.03E-01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	7.00E+00	2.67E+00	3.42E+00	3.17E+00	3.27E+00	3.62E+00	2.94E+00	1.27E+00	8.03E-01
PENRE	MJ	6.89E+01	3.55E+01	3.76E+01	3.61E+01	3.67E+01	3.88E+01	3.48E+01	2.51E+01	2.24E+01
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	6.89E+01	3.55E+01	3.76E+01	3.61E+01	3.67E+01	3.88E+01	3.48E+01	2.51E+01	2.24E+01
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	3.35E-02	1.62E-02	1.92E-02	1.82E-02	1.86E-02	2.00E-02	1.73E-02	1.07E-02	8.84E-03

OUTPUT FLOWS AND WASTE CATEGORIES - Total A1-A3

Indicator	Unit	Sand for concrete 0/4	Sand for mortar 0/4	Fine gravel 4/16 & 8/16	Gravel 16/31.5	Gravel 32/56	Rice 2/8	3A for road construction 0/31.5	Limestone rock 45/180	3A Backfill 0/8 & 0/22
HWD	kg	2.60E-04	1.70E-04	1.60E-04	1.60E-04	1.60E-04	1.60E-04	1.60E-04	1.40E-04	1.40E-04
NHWD	kg	2.02E-01	1.31E-01	1.41E-01	1.37E-01	1.39E-01	1.44E-01	1.34E-01	1.08E-01	1.01E-01
RWD	kg	2.10E-04	7.17E-05	9.58E-05	8.78E-05	9.11E-05	1.00E-04	8.03E-05	2.70E-05	1.20E-05
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ENVIRONMENTAL PERFORMANCE INDICATORS

GWP-total: Global warming potential-total, GWP-fossil: Global warming potential-fossil, GWP-biogenic: Global warming potential-biogenic, GWP-luluc: Global warming potential-luluc, GWP-GHG: Global warming potential-GHG, ODP: Ozone Depletion Potential, AP: Acidification Potential, EP-freshwater: Eutrophication potential-freshwater, EP-marine: Eutrophication potential-marine, EP-terrestrial: Eutrophication potential-terrestrial, POCP: Photochemical oxidant formation potential, ADPe: Abiotic depletion potential-elements, ADPf: Abiotic depletion potential-fossil, WDP: Water scarcity potential

[1] This indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide emissions and uptake biogenic carbon stored in the product with characterization factors (CFs) based on IPCC (2013).

[2] Eutrophication of aquatic freshwater shall be given in both kg PO_4^{-3} eq and kg P eq.

[3] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

PERE: Use of renewable primary energy excluding renewable primary energy resources used as raw materials, PERM: Use of renewable primary energy resources used as raw materials, PERT: Total use of renewable primary energy resources, PENRE: Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials, PENRM: Use of non-renewable primary energy resources used as raw materials, PENRT: Total use of non-renewable primary energy resources, SM: Use of secondary materials, RSF: Use of renewable secondary materials, NRSF: Use of non-renewable secondary fuels, FW: Use of net fresh water

HWD: Hazardous waste disposed, NHWD: Non-hazardous waste disposed, RWD: Radioactive waste disposed, CRU: Components for re-use, MFR: Materials for recycling, MER: Materials for energy recovery, EE: Exported energy

ADDITIONAL INFORMATION

- The EPD owner has the sole ownership, liability and responsibility for the EPD.
- EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

REFERENCES

- **General Programme Instructions of the International EPD® System.** Version 3.01, 2019-09-18
- **General Programme Instructions of the International EPD® System.** Version 4.0, 2021-03-29
- **PCR 2019:14** v.1.11 Construction products. EPD System. Date 2021-02-05. Valid until 2024-12-20
- **EN 15804:2012+A2:2019**, Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products
- **ISO 14020:2000** Environmental labels and declarations - General principles
- **ISO 14025:2006** Environmental labels and declarations - Type III environmental declarations - Principles and procedures
- **ISO 14040:2006** Environmental management - Life cycle assessment - Principles and framework
- **ISO 14044:2006** Environmental management - Life cycle assessment - Requirements and guidelines
- **UEPG** (European Aggregates Association) https://uepg.eu/
- **Ecoinvent** / Ecoinvent Centre, www.Eco-invent.org
- **Residual Energy Mix 2021** from Renewable Energy Sources Operator & Guarantees of Origin (DAPEEP SA)
- **United Nations Statistics Division (2015)**. Central Product Classification, version 2.1, https://unstats.un.org/unsd/classifications/unsdclassifications/cpcv21.pdf
- **a-EN 12620:2022+A1:2008** Aggregates for concrete
- **b-EN 13043:2002+AC:2004** Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas
- **c-EN 13139:2002+AC:2004** Aggregates for Mortar
- **d-EN 13242:2002+A1:2007** Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
- **e-EN 13450:2002+AC:2004** Aggregates for railway ballast

PROGRAMME RELATED INFORMATION

Programme:	The International EPD System
Address:	Box 210 60, SE-100 31, Stockholm, Sweden
Website:	www.environdec.com
Email:	info@environdec.com

Accountabilities for PCR, LCA and third-party verification

Product Category Rules (PCR)

CEN standard EN 15804+A2:2019 serves as the core Product Category Rules (PCR)

PCR 2019:14 v.1.11 Construction products. EPD System. Date 2021-02-05. Valid until 2024-12-20
Product group classification: UN CPC 15320 & UN CPC 15200

PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact

Life Cycle Assessment (LCA)

LCA Accountability: ENVIROMETRICS S.A.

ENVIROMETRICS
Business Consultants & Engineers

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Owner of the EPD

LAFARGE

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www.lafarge.gr

Third party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

EURO CERT

Chlois 89, Athina 144 52, Greece
email: info@eurocert.gr
www.eurocert.gr

EUROCERT is an approved certification body accountable for third-party verification
The certification body is accredited by: Hellenic Accreditation System SA (E.S.Y.D)

Procedure for follow-up during EPD validity involves third party verifier

☒ Yes ☐ No

LAFARGE

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