

# SUSTAINABLE DEVELOPMENT AWARDS 2022



Promoting good practice \* Going beyond what is expected

Providing examples others can follow

### SPONSORS

### **PLATIN SPONSORS**



**ELKAYAM** is a family-owned, privately held company founded by Mr. David Elkayam in the 1970s and still run today by the family, continuing the original traditions of quality and excellence.

All **ELKAYAM** plants and installations are environmentally friendly, and combine many systems that meet the most stringent dust, water and material conservation standards, prevent water table contamination and preserve the

immediate environment, respecting wildlife and any nearby urban conurbations. In addition, we have installed many municipal solid waste and waste recycling plants worldwide, with great success, to the great benefit of local communities.

Whether it be concrete production, wet or dry batch, lime or plaster of Paris, or the conveying of particle material over short or very long distances, or a rock crushing quarry installation for the production, washing and processing of graded aggregates – **ELKAYAM** has been producing these installations, tailor made to their client's needs, for decades. Their attention to every engineering detail and advanced design concepts ensures sturdy, long-lasting and ultra-reliable plant requiring minimum maintenance and giving reliable full specification output.

**ELKAYAM**'s goal for all projects is to produce a facility that meets their clients' objectives for throughput capacity and quality of product with the minimum of downtime and material loss. The detailed engineering and design phase is a key step in any project. **ELKAYAM** develops designs to ensure that the final installation reflects the client requirements at every level, encompassing the layout, resources and logistics as well as the daily running and maintenance of the plant, maximizing up time and with planning for downtimes so that each project can reach its optimum economic targets.

**ELKAYAM** provides solutions for the EU Green Deal policies, including climate change mitigation and adaptation, renovation wave and resource and energy efficiency.

Read further: https://www.elkayam.co/

### **GOLD SPONSORS**



CTC Automotive Ltd, member of the CTC Group, offers a portfolio of exciting brands of vehicles, heavy machinery, photovoltaics, professional tools and lighting. The company works in collaboration with Caterpillar which is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives.

### **MEDIA PARTNER**



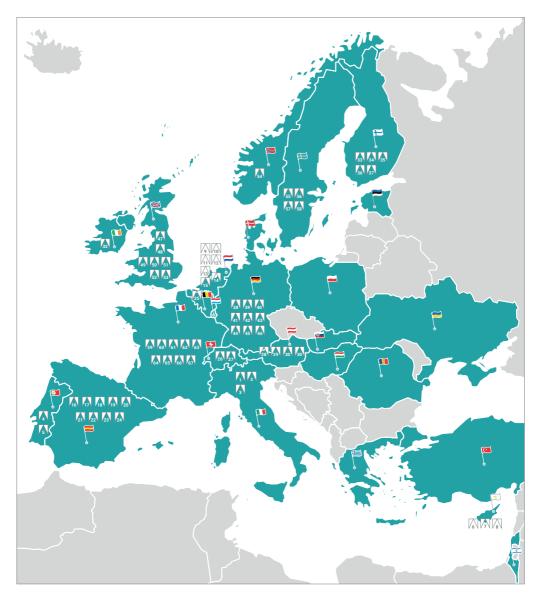
Aggregates Business Europe is the leading title for exclusive and in-depth news and features across the European mineral products industry. The go-to industry magazine is part of Route One Publishing Ltd, proud to be editorially independent since its creation in 1991 and highly regarded throughout its magazines' respective industries for its authority and integrity. Route One Publishing's editors are recognised experts whose writing is widely trusted, with each regularly invited to moderate at leading industry conferences.

Route One Publishing is committed to delivering relevant information across a range of media, including industry-leading international magazines, complemented by <u>digital & online offerings</u>, together with <u>specials & supplements</u>.

UEPG has a longstanding media partnership with Aggregates Business Europe.

To enjoy ABE's latest coverage, please visit: https://www.aggbusiness.com/

### **UEPG Sustainable Development Awards 2022**



1. Allars Spa 2. Bassametti & C.S.r.I. 3. Holdim Aggregati Calcestruzzi s.r.I. 4.8. Domingos da Silva Teixeria S.A. 6. ELMENI (LATOMIA) Ld 7. Latomio Pyrgon Ltd 8. Latomia Latouros Limited 9. Teunesen Zand & Grind Osmals Bouwgrondstoffen B V 1. 10. Netterden Zand & Grind B V 1.3. Van Nieuwport Bouwgrondstoffen B V 1.5. Van Theetherden Zand & Grind B V 1.3. Van Nieuwport Bouwgrondstoffen B V 1.5. Van Theetherden Zand & Grind B V 1.3. Van Nieuwport Bouwgrondstoffen B V 1.5. Van Theetherden Zand & Grind B V 1.4. Van Nieuwport Bouwgrondstoffen B V 1.5. Van Theetherden Zand & Grind Latour Latour





### ► LIST OF ENTRIES

To help you finding entries according to your field of interest, this overview is listing entries by category.



### **Environment**

Ita	ly	Allara Spa	12
Ne	therlands	Smals Bouwgrondstoffen B.V	12
Spa	ain	LafargeHolcim España	13
Ge	rmany	Kieswerk Ottendorf-Okrilla GmbH & Co. KG	13
Un	ited Kingdom	Aggregate Industries - Ven Ottery Quarry	14
Un	ited Kingdom	Hills Quarry Products	14
<b>★</b> Un	ited Kingdom	Aggregate Industries – Ripon	15
Un	ited Kingdom	Tarmac Ltd - Broom Quarry	15
Fra	nce	Eqiom Granulats – Faverney	16
Por	rtugal	Domingos da Silva Teixeira S.A.	16
Cyj	prus	Latomia Latouros Limited	17
Ne	therlands	Dekker Grondstoffen B.V.	17
Ne	therlands	Netterden Zand & Grind B.V.	18
Spa	ain	Sibelco Minerales, S.A.	18
<b>★</b> Au	stria	Lasselsberger GmbH	19
Ire	land	Roadstone Ltd	19
Ge	rmany	Quarzsand GmbH Nudersdorf	20
Fra	nce	Carrières du Boulonnais	20



### **Social Progress**

	Italy	Holcim Aggregati Calcestruzzi s.r.l.	23
*	Netherlands	Nederzand Projectmanagement BV	. 23
	Spain	PRODOMASA	. 24
	Switzerland	Lötscher Kies + Beton AG	. 24
	Germany	Schotter- und Kies-Union GmbH & Co. KG	. 25
	Sweden	Swerock AB	. 25
	France	CMGO Ets Charente Maritime	. 26
	Spain	Prebetong Áridos, S.L.U	. 26
	Austria	Rohrdorfer Sand und Kies GmbH	. 27
	Finland	Peab Industri Oy	. 27
	Germany	Quarzwerke GmbH	. 28
	United Kingdom	Hanson Quarry Products Europe Ltd	. 28
*	United Kingdom	Tarmac Ltd - Nether Langwith Quarry	. 29
	France	Bocahut SAS	. 29



Economic (	'ontribution

*	Netherlands	Teunesen Zand & Grind B.V.	31
	Netherlands	K3 DELTA	31
	Spain	Prebetong Áridos, S.L.U.	
	Austria	Salzburger Sand- und Kieswerke GmbH	32
	Finland	NCC Industry Oy	33
	Finland	Rudus Oy	33
	Germany	Johann Düro GmbH & Co. KG	34
	France	Lafarge Granulats - Agence Rhône Méditerranée	34
	Italy	Bassanetti & C S.r.l.	
$\star$	Portugal	Domingos da Silva Teixeira S.A.	35
	Spain	Candesa Group- Canteras De Santander	36
	Switzerland	Zirkulit AG	36
	Ireland	Kilsaran Concrete Unlimited Company	37
	Germany	Hermann Trollius GmbH	
	Sweden	Skanska Industrial Solutions AB	38
	France	Lafarge Granulats Sandracourt - Agence Seine Aval & Ile de France,	38
	Spain	Reciclajes Camacho, S.L.	39
$\star$	Germany	Wilhelm Stürmlinger & Söhne GmbH & Co. KG	39
	Norway	AF Gruppen ASA	40
	Sweden	Swerock AB	40
	France	Entreprise Jean Lefebvre Mediterannée	



### Communication

	Cyprus	Latomio Pyrgon Ltd	43
*	Spain	LafargeHolcim España, S.A.U.	
	Austria	Wopfinger Transportbeton Ges.m.b.H	
	Germany	1 0	
	France	CEMEX	45



### **Biodiversity**

	Cyprus	ELMENI (LATOMIA) Ltd	47
	Netherlands	Van Nieuwpoort Bouwgrondstoffen B.V	47
	Spain	Arids Garcia Pedrera Gar 1, S.L.U.	48
	Belgium	Carrières les Petons	48
	Finland	Rudus Oy	49
*	Germany	Hermann Trollius GmbH	49
	United Kingdom	Hanson Aggregates-Milton	50
	Sweden	Skanska Industrial Solutions AB	50
	France	Egiom Granulats – Sully	51

### PRESIDENT'S INTRODUCTION



Aggregates ... an essential and strategic product which is responsible for MAKING our lives more comfortable and for providing a sufficient and reliable infrastructure to speed our progress and our lives.

After water, aggregates is the most consumed material on planet earth!

Aggregates just built everything around us and we come in contact with them at almost every single second of our lives. Aggregates build our roads, our railways, our ports, airports, buildings, hospitals, schools etc.! And to put it in its simplest form, without aggregates there

would be literally nothing around us - not even a shelter over our heads!!!

It is widely accepted that aggregates are also needed for the Green Deal Renovation Wave, for the Adaptation to Climate Change and in general in order to have a Green and Secure Europe!

Therefore, the question is not whether we need aggregates, the answer here is obvious. The question is ... where and how to get them in the most sustainable and responsible way.

It is already accepted by the big international Environmental NGOs that the European Aggregates Industry is not a threat to the environment and that, on the contrary, it is part of the solution. In this brochure, all the 67 cases from 15 countries (record number of entries) are another prove of exactly this. The UEPG Sustainable Development Awards Ceremony works as a showcase of excellences and best practices which altogether can be good examples to be followed not only around Europe but also worldwide!

I would like to take this opportunity to convey my warm thanks to the independent Jury which worked incredibly hard to review all entries and to select the ones being awarded for their outstanding contribution to a Sustainable Aggregates Industry.

Finally, I would like also to convey my sincere thanks to the companies who contributed by participating in this edition of the Sustainable Development Awards and our National Member Associations who pre-selected and nominated the entries.

Just to repeat, - without aggregates there would be literally nothing around us – not even a shelter over our heads!!!

Our industry is here to stay. We produce in Europe and for Europe – now and in the future and therefore we need long-term and strategic, thinking and planning not only for the critical raw materials but for all raw materials. Just repeating it again, so that everyone understands and realize it, aggregates are essential and strategic.

So, we need to have coherent land-use planning and streamlined and fast-track permitting procedures taking into account a dynamic changing industry model. Just to make everyone familiar, we are:

- producers of primary and secondary raw materials, recycling is part of our business model.
- ▲ producers of renewable energy on site and we are using increasingly, electrified machinery,
- producers of nature protected areas attracting temporarily and/or permanent endangered plant and animal species, something which is of course proven by scientific studies,
- a sustainable industry essential to the economy and the quality of life in Europe.

Even though, Environment, Health & Safety and other areas relevant for aggregates production do fall under EU competence, when it comes to land-use planning and permitting procedures EU has no or limited competence. On the contrary, the 27 EU member states and often their regions are in charge for this, something which we believe is wrong and needs to be changed. It is obvious that a fitness check regarding land use planning and permitting procedures, is needed, before it is too late!

Resources are everywhere but accessing them is not that easy. Europe needs to be self-sufficient, regarding aggregates and raw materials in general, and in order to achieve this Access to Raw Materials must be simplified! This becomes even more imperative if we take into consideration the latest developments on the energy crisis.

**Antonis Antoniou Latouros** 

President Aggregates Europe – UEPG

### JURY MEMBERS



Yuri Bruinen De Bruin is Project Manager at EU-OSHA. He has 20 years of experience working in academia, research and policy-supporting organisations in the field of public and environmental health, safety and security. He likes the dynamics of science to policy projects and strategies boosting international, regional and national transitions towards green economies enhancing health and safety, sustainability and security of countries and regional economies.

Yuri Bruinen de Bruin,
EU Agency for Safety and Health at Work



Martin Harper has more than 25 years of experience in conservation leadership. He is currently BirdLife International's Regional Director for Europe and Central Asia supporting the work of BirdLife partners in 41 countries. From January he shall assume the role of BirdLife Vice-President for Regions and Partnership. He has served on many not-for-profit boards and is currently an advisor to the recently launched Real Wild Estates Company – the UK's first ecosystem and species restoration business offering sustainable financial returns.

Martin Harper,
CEO BirdLife Europe and Central Asia

Martin Hope



Bernd Lottermoser holds the chair in sustainable resource extraction and is director of the Institute of Mineral Resources Engineering at RWTH Aachen University. He is the author of over 250 publications, conference contributions, scientific reports and 3 books. He has been included in the list of the top 1 % most influential scientists in his scientific area.

Bernd Lottermoser, University of Aachen



Brenda O'Brien has worked with the European Agency for Safety and Health at Work since 2002, where she was heavily involved in funding programmes dedicated to improving workplace health and safety in small and medium-sized enterprises. Since 2005, she is in charge of the Agency's Brussels liaison office, where she is in charge of relations with the European institutions, social partners and other stakeholders.

Falda o'Briel.

Brenda O'Brien, EU OSHA



Guy Woodford is the Editor of Aggregates Business Europe and Aggregates Business International - Asia, Africa & Middle East magazines, two of Route One Publishing's high-quality range of B2B titles covering the global quarrying, road building and traffic management technology sectors. Additionally, he covers the North American quarrying and linked equipment market for the Aggregates Business website.

Guy Woodford,

Aggregates Business Europe



## UEPG Sustainable Development Awards

33

Aggregates ... An essential and strategic product which is responsible for MAKING our lives more comfortable and for providing a sufficient and reliable infrastructure to speed our progress and our lives. Enlightenment regarding the essentiality of our industry and our products is one of my highest priorities.









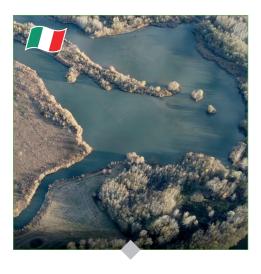


With 19 entries received for best practice in restoration; landscaping; innovative after-use of extraction sites; management of noise, dust or vibration; waste management and efficient use of water and energy, UEPG Members demonstrated their commitment to make aggregates extraction compatible with nature protection and environmental management.



Category:

### Restoration





### Allara Spa

Sustainability along the river Po banks

Allara presents its project in Casale Monferrato which focuses on the ecological land restoration of the area, combining environmental sustainability and action to combat hydrogeological instability. The project began towards the end of the 1990s and it has led to the creation of a "green lung" for the town of Casale Monferrato. The successful redevelopment of the area, which now features a network of interconnected pools as well as a hydroelectric power station, improves territorial safety and reduces the risk of flood damage. The project was carried out through a collaboration between the public and private sectors.

Category:

### Restoration





### Smals Bouwgrondstoffen B.V

Smals on holiday: sand extraction at Center Parcs Huttenheugte

Center Parcs De Huttenheugte is a popular holiday destination for recreational anglers, of which, the water quality, experienced a serious decline in the recent years. Smals, improved the park's lake ecologically by installing an electric sand dredger with floating buoy-lines and a custom-built bridge that ensures the accessibility to the beach at all times. What's more, this project at De Huttenheugte constitutes a unique opportunity to inform the park's guests about the world of sand and explain how this project strengthens the fishing lake at De Huttenheugte.



Category:

### Restoration



Category:

### Restoration





## LafargeHolcim

### LafargeHolcim España, S.A.U.

La Chanta quarry: a key to Sustainability in the Aggregates sector

The La Chanta quarry is located in a territory destined mainly for agriculture and infrastructure, where many species of fauna and flora do not find their necessary habitat requirements. In this context, the habitats created by quarrying activity appeared as precious shelters for the proliferation of valuable species. To protect this biodiversity, multiple restoration techniques were applied, such as GeoFluvNatural Regrade or Talud Royal, revegetation and re-naturalization, but also educative activities to raise awareness that quarries could return a territory rich in ecosystem services to nature and society.



#### Kieswerk Ottendorf-Okrilla GmbH & Co. KG

From the conservation project to the special operating plan "Biological Diversity"

Kieswerk Ottendorf-Okrilla GmbH & Co. KG has worked to restore the Laußnitz I open pit and as a result, in the new complex of different ponds, raw soil areas and slope structures that were created at the beginning of 2020, have become important for protected species, such as the green toad and the blue-winged grasshopper, among others. Since then, numerous species found their way here and reproduced and the total area for species protection is to further increase to around five hectares.



Category:

### Restoration





#### Aggregate Industries - Ven Ottery Quarry

Venn Ottery Quarry Restoration, Devon

The project consists of the ongoing management and restoration of a sand and gravel quarry in East Devon, England. It was the winner of the MPA's 'Quarries & Nature' 2019 award for 'Landscape-scale' biodiversity and it involves the restoration of lowland heathland and acid grassland habitat, along with other features, in a strategically important location, providing connectivity between other areas of heathland and sites designated for their nature conservation importance and landscape.

Category:

### Restoration





**Hills Quarry Products** 

**Shorncote Quarry Restoration** 

The restoration work of the Shorncote sand and gravel quarry, part of which was previously used for sewage disposal by Thames Water, has turned it into a home for wildlife. Shorncote has nine of the Cotswold Water Park's 177 lakes and is a haven for wading, migrating, feeding and nesting birds. The Shorncote site received a Highly Commended award for outstanding achievement in quarry restoration as part of the Mineral Products Association's Quarry & Nature awards in 2019.



Category:

### Restoration





### Restoration







### Aggregate Industries – Ripon

**Ripon City Quarry Restoration** 

The former Ripon City Quarry, operated by Aggregate Industries, has been transformed into a new wetland haven for wildlife through a long-term partnership with Yorkshire Wildlife Trust (YWT) that started in 2011. A modern wetland nature reserve has been created in the footprint of the former sand and gravel quarry thanks to hundreds of thousands of cubic metres of soil being moved and more than 1,800 trees being planted on the site, as well as the installation of canal reedbeds specifically designed for feeding bitterns. The Ripon City site was joint winner of the Cooper Heyman Cup – Britain's top award for outstanding achievement in quarry restoration - as part of the Mineral Products Association's Quarry & Nature awards in 2019.



### **Tarmac Ltd - Broom Quarry**

**Broom Quarry Restoration** 

Broom Quarry is a former sand and gravel quarry, transforming by progressive restoration to a mosaic of lakes, wetlands, islands, lowland meadows, woodland and agriculture. Earlier agricultural reinstatement has resulted in productive crops of cereal and wildflower meadows. Community engagement is key at Broom Quarry and thus, the restored area has been developed as an educational and recreational resource for the benefit of the local community. The standard of restoration achieved recognised at the MPA Restoration & Biodiversity Awards (2019) and the site was named joint winner.



Category:

### Restoration





### **Eqiom Granulats – Faverney**

Global approach at the Breureylès-Faverney gravel pit

The company Granulats De Franche-Comté operates a gravel pit in Lanterne valley, a particularly rich ecological area, resulting from the extraction of aggregates. GDFC has made large-scale actions in partnership with local communities and various environmental associations to protect this biodiversity, reconcile the different uses and enhance this natural heritage. Numerous visits are organized on the site for the general public, scientists and schools. The first results of the restoration were very satisfying with an exceptional mosaic of wetland habitats whose flood ability has been greatly improved.

#### Category:

### **Environmental Best Practice**





### domingos da silva teixeira S.A.

Gouvães: A quarry & aggregates plant designed to provide a green energy infrastructure: Environmental Initiatives

Gouvães quarry was developed to produce high-quality granite aggregates for exclusive use in concrete for the Tâmega hydroelectric complex. It is located on the Tâmega River and Torno River, within the Douro river basin, in Northern Portugal, 90 km from Porto. Domingos da Silva Teixeira was selected to design, explore, and restore the Gouvães Quarry, a project that is being undertaken since 2016. An environmental impact assessment was carried out, including mitigation measures to tackle potential issues. Detailed plans are being completed to restore the plant and all of the surrounding facilities, and to apply the environmental plan approved by the permitting authority.



Category:

### **Environmental Best Practice**





#### Latomia Latouros Limited

Developing a Waste Management Unit, Recycling Point

With the intention to tackle the unaddressed issue of waste dumping from extractions, constructions and demolitions in Cyprus, Latouros Ouarries Ltd decided to develop the first Proper Waste Management and Recycling Unit on the island, with the latest advanced technology and expertise. The Unit that was developed has the capacity of managing a substantial amount of waste (250.000 tonnes/year of C&D waste, bulky waste and green waste). The Waste Management Unit owns a licensed landfill site, with the right to landfill 30% of the total amount of waste received (waste inflow), which corresponds to 75,000 tonnes/year. Thanks to advanced technology, high know-how and innovative management methods, it manages to send only 2% for landfilling (5.000 tonnes/year).

Category:

### **Environmental Best Practice**





#### Dekker Grondstoffen B.V.

Bomhofsplas Zwolle: source of sustainable best practices

The sand extraction quarry Bomhofsplas is trying to become a breeding ground for best practices with respect to innovation, sustainable development and research on sand extraction. Sand extraction quarry de Bomhofsplas in Zwolle is a source of sustainably extracted building materials, based on renewable solar energy. Thanks to local ownership it provides a source of income and a robust provision of energy for local residents and organisations. The Bomhofplas and the solar park also form a source of knowledge, inspiration and development thanks to studies and pilot programmes that take place there.



Category:

### **Environmental Best Practice**





#### Netterden Zand & Grind B.V.

Towards Energy Self-sufficient Sand and Gravel Extraction

On the path of further reducing the environmental footprint of their business operations, Netterden Zand en Grind has decided to exclusively use green electricity from European wind. Besides the implementation of technological measures, the company works on the reduction of the energy demand of their installations. In order to take a significant step on the road to self-sufficiency, a floating solar park on the dredged lake was installed. This solar park of about one hectare has gone into production in July 2020. From that moment onwards, the solar park provides Netterden with more than a third of the energy requirements of the suction dredger and the processing installation - the companies' biggest energy consumers. Monitoring has shown no indications of disturbance on flora and fauna.

#### Category:

### **Environmental Best Practice**





### Sibelco Minerales, S.A.

TECMINE: a sure bet for landscape integration and creation of new habitats in the quarries

Mining activities have key economic importance for mineral raw materials supply. At the same time, extraction implies a certain environmental impact. Rehabilitation is a relatively recent activity. The approach of Sibelco Minerales has been to include the voices of academia and public administration, in order to integrate expertise and local concerns. The objective has been to add value to the land affected by extraction activity by creating suitable habitats, sometimes not existing previously. The project lasted 5 years and led to the publication of technical guides of good practices for their use in reclamation work, showing the range of techniques available to improve their design and planning, as well as their long-term results.



Category:

### **Environmental Best Practice**



Category:

### **Environmental Best Practice**





**↓** LASSELSBERGER

Lasselsberger GmbH

**Greener Construction** 

The basic idea of Lasselsberger GmbH was to combine nature conservation, e-mobility, photovoltaics and recycling in the "Greener construction" project and to implement it in a sensible way. Since the company was founded in 1957, it ensures high-quality raw materials while at the same time protecting the environment through near-natural recultivation of the raw material extraction sites. Regarding the activities on nature protection, the company is supported by the LANUIS nature conservation association. Concerning e-mobility and photovoltaics, the company has already started converting its vehicle fleet to e-mobility and plans to produce the majority of the required electricity itself. Finally, with regard to recycling, Lasselsberger GmbH promotes and supports the production of high-quality recycled building materials under the motto "Greener construction".



#### Roadstone I td

Roadstone takes the sustainable passive approach with their Integrated Constructed Wetland

Roadstone Ltd recognises that the protection of the environment is an integral part of its business with the key objective to provide quality products in a sustainable and environmentally friendly manner. Roadstone Ltd operates certified management systems developed around specific policies. After-Use Plans have been developed for each Location and are underpinned by Biodiversity Action Plans to ensure that development considers not just the current but future requirements of each Location. Belgard Ouarry has integrated a constructed wetland in the development of its boundary on previously disused lands to enhance biodiversity and reduce environmental impacts. Roadstone has operated an ISO 50001 Energy Management System since 2007, and an ISO14001 Environmental Management System since 2003.



Category:

### **Environmental Best Practice**

Nudersdorf



#### **Ouarzsand GmbH Nudersdorf**

How do the bank swallow and natterjack toad get into the forest

Quarzsand GmbH Nudersdorf has integrated the restoration of the extraction sites in its core activities. In the area of the site of "Möllensdorf", the company has created a sequence of different habitats, depending on the stage of the extraction and the geographical levels of the area. The focus has been the optimal preservation of the animal species which are attracted by the physical conditions and landscapes that the extraction creates. In addition, since 2020, the company has tried to monitor and measure the impact of its interventions, providing numbers for certain species.

#### Category:

### **Environmental Best Practice**





#### Carrières du Boulonnais

Optimisation of the freight downstream of Carrières du Boulonnais

Railway transportation of aggregates has been a significantly 'greener' alternative to road trucks. Carrières du Boulonnais has been the main user of the rail haulage system for aggregate loading in France. In 2020, the company proceeded to the construction of a new railway terminal, T2020. The new terminal has an annual capacity of 4 million tonnes, contributing both to the amelioration of the company's environmental footprint and the reduction of the overall rail freight costs, so that this mode of transportation may become more competitive. In addition, T2020 is equipped with 2 electric robots for the manoeuvring of wagons in the terminal. The latter has led to a drastic reduction of both site noise and CO<sub>2</sub> emissions.



Our industry is here to stay. We produce in Europe and for Europe — now and in the future and therefore we need long-term and strategic, thinking and planning not only for the critical raw materials but for all raw materials. Aggregates are essential and strategic.



Aggregates - we are part of the solution!













UEPG had received 13 entries showcasing social progress. Best practice in this category includes local community partnership such as communication and dialogue; promotion of education and cultural events; open-door events; social contribution to the community; addressing local concerns; management of heritage, but also excellence in health and safety during operations; involvement of employees; research and development and innovative solutions to avoid accidents.



Category:

## Local Community Partnership





#### Holcim Aggregati Calcestruzzi s.r.l.

"Centroparco" project

The "Centroparco" project was born out of the collaboration between Holcim and the Municipality of Segrate, in the context of the Binella sand and gravel pit restoration project. As a result, the area has been recovered, repurposed and made available to the local community. The area has been transformed into a park, satisfying all environmental conditions for the nesting of the species of fauna. The park is equipped with a system of network routes. A ring-shaped route that extends along the lake serves as a link between the network of paths inside the park as well as cycling and walking paths in the nearby area.

Category:

## Local Community Partnership







### Nederzand Projectmanagement BV

Over de Maas

The "Over de Maas" project wants to develop a minimum of 140 hectares of new riparian nature and extract a minimum of 15 million tons of industrial sand. It also aims to widen the river to improve safety, open up the area for recreational use, and implement extensive sustainable management. Nederzand, a partnership between industrial sand producers, is responsible for the extraction of industrial sand and the redevelopment of the area. The project will be handed over to the Municipality of West Maas en Waal and Natuurmonumenten (the Dutch Society for Nature Conservation). It also produced 500.000 archaeological finds from prehistoric times to the 20th century. The project became a good example of 'community science': productive public participation showing that heritage has the power to connect.



Category:

## **Local Community Partnership**





PRODOMASA

Committed to society for decades

The firm's social commitment is proven year after year since an important economic item is always reserved for these purposes. This commitment is carried out through three axes: collaborating directly with the municipality of Coín, the municipality where the operation is located; collaborating economically with the associations based in this town; and collaborating by supplying the products they manufacture with any local initiative that may need them. Regarding the environment, Prodomasa has obtained important certifications related to the sustainable management of sites such as UNE 22480: 2019, through SGS. They became the first company in the Malaga region to achieve it and one of only 10 in all of Spain.

Category:

## Local Community Partnership



**LÖTSCHER** 

Lötscher Kies + Beton AG



Erlebnis Eiszeit: Ice Age in a unique setting

During a warm phase of the last ice age, a woolly mammoth died near today's gravel pit in Ballwil, Switzerland. In 2006, its tusk was found and presented to the public. The response of the media and the public led to the idea of the "Experience the Ice Age" project. The concept of "temporary nature" is explained as why gravel pits have great biodiversity and are important stepping stones for animals threatened by extinction. The gravel pit is located in a landscape shaped by the ice-age glaciers and the lifesize mammoth from the 3D printer is the hook of the educational project. The story of the Neanderthal girl Ona and the mammoth calf Jugi is told in the form of a riddle game and a treasure map.



Category:

## Local Community Partnership





#### Schotter- und Kies-Union GmbH & Co. KG

Our gravel plant as a training site for the German Federal Agency for Technical Relief (THW)

For the past three years, SKU's quarry has been the site of regular exercises for the emergency services of the German Federal Agency for Technical Relief and the fire brigade. Due to the large area, the most diverse framework conditions (dredging lake, difficult terrain in the extraction apron, high building parts and technical facilities) can be recreated for an emergency. In this way, the Leipzig regional office was able to carry out a complex large-scale exercise. For the individual exercise areas, the task forces of the individual local units could be pulled together as needed, training their cooperation and the use of the technology. The local population showed great interest in the THW's past exercises and children were delighted to gain an insight into the technology.

Category:

### Local Community Partnership



### **SWEROCK**

#### **Swerock AB**

Homes sweet homes for bats and birds in Vänersborgskrossen quarry thanks to fifth graders and nature studies from a loader

In Vänersborgskrossen quarry and the adjacent artificial Lake Ullasjön, the biodiversity flourishes with birds, newts, frogs, and pollinating insects, so the main purpose of the project was to show how all the species that have found a home in the quarry can benefit from it. In this context, 30 students combined their knowledge in mathematics, natural science, Swedish and woodworking to build homes for different species of birds and bats. Students had a full day in the woods and the quarry. A biodiversity management plan for the quarry was developed. An environment created in quarries is vertical surfaces often with rock shelves with a clear view of open areas. In 2021, ravens nested and given birth to chicks on a rock shelf. Sand environments are also sought after by sand-dwelling hymenopterans.



Category:

## Local Community Partnership







## Health & Safety best practice





#### **CMGO Ets Charente Maritime**

CMGO 17 / GREZAC - The Quarry at the centre of local concentration

When elaborating the Grézac quarry extension project back in 2012-2014, the CMGO company worked together with the municipal authorities on improving the natural landscape. In working together, the municipality and the company discovered that threatened or endangered species such as the redbacked shrike found shelter in quarry hedges. CMGO also worked together with the French Bird Protection League (LPO) and recreated, based on their advice, adapted linear hedges to foster the hosting magpies. Since then, a couple of this type of birds return every year on the site to breed. The acceptability and dialogue efforts made by the company have perdured over time and resulted in a very close collaboration between the local community and the quarry company, with i.a. a yearly neighbours' lunch and the regular hosting of discovery events in the old quarry.



### Prebetong Áridos, S.L.U

Digital Solutions for Health & Safety. Project BEST - Building Excellence in Safety through Technology

At Couso quarry, under the management of Prebetong Áridos SLU, they have developed an innovative package of digital solutions to optimize the implementation of health and safety management tools. This package includes the App Asseguratte, which workers use to conduct Preliminary Risk Assessment for each of the tasks they must perform. Regarding the coordination of business activities, the company has created the platform DocuCAE, which makes it possible to scan QR codes assigned to each worker and allows one to perform any verification in situ. Furthermore, a dedicated platform has been developed for work at the site and mobile equipment, called AsseCAE. Finally, online training platforms have been created to maximize occupational safety both in the extraction sites and the logistics.



Category:

### Health & Safety best practice





#### Rohrdorfer Sand und Kies GmbH

#### VISION ZERO with e-Learning

Rohrdorfer Sand und Kies GmbH operates more than 20 gravel pits and quarries throughout Austria. With the intention to ensure the safety of its employees and the satisfaction of the customers, the company introduced e-learning courses for health and safety. Initially, e-learning has only been made available to office employees. Currently, all gravel sites are properly equipped to serve all stakeholders. This means that not only the company's own employees but also the skilled workers and drivers of freight forwarding partners can enjoy the e-learning offer with little effort.

Category:

## Health & Safety best practice





### **■PEAB** Peab Industri Oy

Swerock is developing occupational safety in its aggregate plants using specialised dogs trained to sniff for explosives

Part of the Peab group, Swerock's goal has been to track and eliminate leftover explosives, which could be left in the rock after blasting. Locating unexploded explosive material under the surface has remained a problem. For that purpose, the company cooperated with the dog training organisation International K9 Institute Ltd, located in Salo, to train specialist dogs to search for explosives and to trial the concept. Explosives detection dogs are currently being trained at Swerock's aggregate plant in Salo. The training takes a few months, after which the dogs are ready to inspect work sites. The first two dogs have already completed training and achieved a 100% success rate at detecting explosives in tests.



Category:

## Health & Safety best practice



Category:

### Health & Safety best practice



Quarzwerke

#### **Ouarzwerke GmbH**

The COVID Year: Closer together despite physical distancing

Responding to the challenge of physical distancing due to COVID-19, Quarzwerke GmbH decided to adjust both its internal and external channels of communication. Internally, the company provided cameras to all employees for online meetings. In addition, it introduced informal online engagements among colleagues 4 times per week, encouraging a more casual and direct communication. Finally, online sports classes were offered to employees. Externally, the company continued its blog on environmental topics for children, which led to the publication of the online kids' book "Quarzwerke Natural Stories".



#### Hanson Quarry Products Europe Ltd

Illuminated Demarcation of Pedestrian Crossing Points

Hanson's Whatley quarry produces over 6m tonnes of aggregates a year and operates 24 hours a day. There are over 100 personnel on-site and a wide variety of large mobile plants. To further protect pedestrians working on this site, particularly, as shift workers will often be working in conditions of poor visibility due to weather or at night, the company reviewed a variety of solutions but recommended a system that synchronized with traffic lights to both tell users when it was safe to cross, but also, to project safe pathways for the user to follow. This system has enhanced the safety of the pedestrian crossing points. This innovation is now being applied in a variety of other areas to improve the safety of Hanson's operation at the site.



Category:

## Health & Safety best practice



Category:

### Health & Safety best practice









#### Tarmac Ltd - Nether Langwith Quarry

Creation of an Occupational Health and Wellbeing (OHWB) Learning Centre at "The Park"

Created to support Tarmac's commitment to investing in its people, the National Skills and Safety Park training facility, "The Park", was opened in 2020 at the company's active Nether Langwith Ouarry near Mansfield in Nottinghamshire. It provides employees with practical, hands-on training for emerging industry talent - including apprentices, graduates and those retraining from other sectors. In 2021, Tarmac opened a new occupational health and wellbeing facility at 'The Park'. The facility focuses on physical, interactive, and visual learning, designed with the sole purpose of educating and protecting all Tarmac employees. This entry was the overall winner of the 'Safer through improvements in health & wellbeing' section of the national MPA Health & Safety Awards 2021.

### **BOCAHUT**





Manage quarry prevention plans with the "EPDP" web and mobile application developed by BOCAHUT

In order to further contribute to the health and safety of its employees and collaborators, BOCA-HUT introduced a web and mobile application, ePDP, to overview their security. Beyond a regulatory obligation, the app responds to the need for the digitalization of security in the sector for the prevention or reduction of risks. To date, more than 200 prevention plans and 450 transport protocols were put into place via the application. The adoption of the app by Eiffage and its gradual deployment nationwide are testimonies of its success.











New and resource efficient production processes and product innovation including new applications are displayed in this category for which Aggregates Europe - UEPG has received 21 entries.



Category:

# Economic contribution / added value to society



Category:

# Economic contribution / added value to society







#### Teunesen Zand & Grint B.V.

### Bakel - Milheeze Integral Area Programme

The Bakel – Milheeze Integral Area Programme consists of a metamorphosis of the space around the lakes of the Bakelse Plassen, including a multifunctional recreational and nature area, by combining a sand gravel extraction site with a golf course, with water features and streams meandering across it. Unique to this project is the successful cooperation with the business community and the (local) governments and interest groups.



#### **K3 DELTA**

Millingerwaard Project

The Millingerwaard is an agricultural area that, because of mineral extraction, has been transformed into an area with riverine forests, plants, lakes and river dunes. The primary objectives for the Millingerwaard were to contribute to flood protection and to develop nature in the area. If water levels are high, the Millingerwaard flows with the river and becomes part of Waal's River basin. When water levels are extremely high, this lowers the river water level by six centimetres and as a result, that has a positive effect on the river and the natural area it flows through.



Category:

# Economic contribution / added value to society



Category:

# Economic contribution / added value to society







### Prebetong Áridos, S.L.U.

ONE GRAVEL, MANY LIVES: from gravel to orange grove (and boutique hotel)

The Cortijo Nuevo gravel pit (Seville – Spain) is an aggregate extraction site in which the process of extraction and the process of restoration is performed simultaneously and where four kinds of activities coexist in the 50 hectares of land that are managed by the company: quarrying, agriculture, food processing and tourism. All of them combined to create an important source of employment and wealth in the region.



#### Salzburger Sand- und Kieswerke GmbH

New construction of the gravel processing and concrete mixing plant in Thalgau

The aim of the new construction of the gravel plant and the concrete plant in Thalgau is to set new standards in terms of economic efficiency and environmental relevance. The investment included emission-free transportation, as well as lower dust and noise emissions, the creation of a state-of-art working environment and the renovation of the premises. Besides,  $300,000~\rm kg$  of CO $_2$  is saved annually thanks to the combination of the gravel and the concrete plant.



Category:

## Economic contribution / added value to society



Category:

# Economic contribution / added value to society





### **NCC Industry Oy**

### One-stop-shop transportation benefit counter

NCC Industry Oy has launched a website calculator to encourage reducing traffic emissions and fuel consumption. The main principle is to promote transparency and networking regarding traffic emissions and to prove the benefits from both outward-and return loads by the NCC One-Stop-Shop model. This concept has been developed especially for corporate customers, such as cities, municipalities and construction companies and for carrier companies who can influence the driving patterns and foster a higher emission reduction potential.



### **Rudus Oy**

Long-term efforts on behalf of migratory fish and watercourses

Rudus supports WWF Finland's work to benefit the good state of inland waters, flowing water ecosystems and migratory fish by donating aggregates to projects that support the goals of the partnership. In 2018, Rudus contributed to WWF's largest-ever watercourse project, on Siuntio's Kirkkojoki River, by donating aggregates needed to build fish passages in the river and bypassing dams. The fish passages built into Kirkkojoki are part of Finland's National Fish Passage Strategy; they are thus considered to be of national importance for the protection of migratory fish.



Category:

# Economic contribution / added value to society





#### Johann Düro GmbH & Co. KG

Integration of a wet processing plant into the existing production process of a natural stone plant

The goal of the project "Integration of a wet processing plant into the existing production process of a natural stone plant" is the processing of these co-products into high-quality construction and aggregate materials combined with a significant increase in resource efficiency, which leads to a significant reduction in the total production volume and consequently to a reduction in energy use and a reduction in emissions, while the sales volume remains the same.

Category:

# Economic contribution / added value to society





#### Lafarge Granulats - Agence Rhône Méditerranée

Agence Rhône Méditerranée France: Basin of Antiquailles at Nîmes

The Antiquailles quarry is subject to a 15-year concession contract with Lafarge and the Nîmes Métropole agglomeration. This collaboration has made it possible to develop actions with a societal scope and to ensure environmental communication by making the general public aware of the economic and social aspects of our industrial activity. In addition, it is possible to develop the deposit within the framework of the conservation of the local heritage, while involving people on the path to reintegration.



Category:

Operational best practice, process or product Innovation



Category:

Operational best practice, process or product Innovation





mmBASSANETTI

Bassanetti & C S.r.l.

Sand Deferisation plant of the Po river

Bassanetti's objective was to produce a type of sand with high silica content (80%) and low iron oxide content (0.30%), using the wet sand extracted from the quarries, to allow the use of sand for special uses and in different sectors. This led to the need for a processing plant, which would facilitate wet micronization. The Electro-Magnetic Separators allow obtaining an important separation between the different types of inert materials. Everything is controlled through an advanced system that represents the heart of the plant.

dst group building culture Domingos da Silva Teixeira S.A.

Gouvães: A quarry & aggregates plant designed to provide a green energy infrastructure: Product and process Innovations

Gouvães quarry was developed to produce granite aggregates, for exclusive use in concrete for the Tâmega hydroelectric complex. Domingos da Silva Teixeira designed the aggregate plant integrating innovative solutions (sand processing solutions, sludge treatment, water management and reengineering of all the support facilities). The company is producing aggregates to supply the construction of the Tamega complex. Detailed plans are being completed to restore the plant and all of the surrounding facilities, and to apply the environmental plan approved by the permitting authority. This means that, in less than 10 years, we will experience the stages of a Quarry lifetime. In that process, the company has managed to enforce its innovation standards.



Category:

# Operational best practice, process or product Innovation



Category:

# Operational best practice, process or product Innovation







### Candesa Group- Canteras De Santander

Mining 4.0: Future technology for a sustainable present

Candesa Group implements a complete programme of good operational practices in Mining 4.0, a project that has the automation of processes and their full digitization as one of the main goals: health and safety, productivity, reducing water consumption and lowering the need for other raw materials, energy efficiency, climate neutrality and circular economy. They used several organizational planning tools Maintenance Management and Quality Management software. The goals are: to monitor the operation via drones and photogrammetry, the analysis of the movement of berms and slopes, use the GPS-Tracker system, study the site/subsoil and the optimization of the blasting process through constant control of the vibrations.



Zirkulit® is a low-carbon circular concrete that is largely composed of secondary (recycled) materials. In order to reduce carbon emissions, the new zirkulit® mix design contains a minimum of cement while at the same time maximizing the secondary fraction. Thereby the CO<sub>2</sub> penetrates the pores of the grains/ granulates, where a chemical process turns it into limestone. In this way, more than 10 kg of CO<sub>2</sub> is stored per cubic meter of zirkulit® concrete. The carbon storage technology of zirkulit AG is scaled up from lab to industrial production and is integrated with the regular concrete production process. The high share of secondary material reduces the need for primary raw material and opens up the opportunity to maximize CO, storage capability. Zirkulit® concrete can further be recycled again in the future.



Category:

# Operational best practice, process or product Innovation



Category:

# Operational best practice, process or product Innovation





# Kilsaran Concrete Unlimited Company

#### **Ballinascorney Quarry**

Ballinascorney Ouarry is located near Dublin City centre (300m above sea level). An Environmental Management System has been adopted to assist in the sustainable management of all aspects of the quarry operations from energy to waste, dust, and noise control. The quarry is located in a difficult upland area, so considerable effort has been made to manage water to minimise impacts on the environment. The exploitation of Recycled Asphalt Payement (RAP) has been incorporated into production at the quarry. There is an environmental gain to replacing primary aggregates in the production of new bituminous materials and reduces the quantity of new bitumen needed reducing energy requirements and emissions. The use of recycled aggregates in RAP will contribute to the circular economy.



#### Hermann Trollius GmhH

# Best Practice / Method of Dust Control

The New Washing Truck, based on the MAN TGS26.510, has a 12,000-litre water tank. The Trollius company uses the clarified process water from the sedimentation basins. The front-mounted frog nozzles can be swivelled and are controlled by a joystick in the driver's cab. What the frog nozzles can't do, is done by a rear-mounted swivellable and high-pressure bar for the final cleaning of the road. For the cleaning of machines and equipment, the washing truck has a 20-metre-long water hose. The tiniest spaces can be cleaned and the working conditions for employees are improved. The enormous power of the water truck has already aroused the interest of fire brigades. With this method of dust control, Trollius takes a step towards the environmentally friendly extraction and processing of limestone and dolomite.



Category:

Operational best practice, process or product Innovation



Category:

Operational best practice, process or product Innovation



SKANSKA

Skanska Industrial Solutions AB

Mobile electric crushing plant in Skelleftea site, East Sweden

Skelleftea Site East in the North of Sweden is a development project for new industrial plots that Skanska runs on behalf of Skelleftea Municipality. Skanska uses a unique electric mobile crushing plant, which is easy to move. Climate, economic and social assessments showed the advantages of the use of the electric-driven crushing plant. The goal is to be Sweden's most sustainable development project and to be climate neutral by the year 2045.



Lafarge Granulats Sandracourt - Agence Seine Aval & Ile de France

Innovate to prevent and preserve

The Sandrancourt system consists of 3 extraction sites for alluvial materials (sand and gravel), a processing facility and river quays for loading/unloading materials. Lafarge has implemented a method of exploitation and redevelopment according to the principle of land rotation. A decanter-clarifier allows the recycling of processed water. Soundproofing barriers are installed around the main sources of noise and dust emissions are controlled. During the development of the impact study, measures were proposed by Lafarge in collaboration with Veolia, the administration services, and the Municipality, to reduce the impact on the water during the operation. Faced with the major challenge of preserving the quality of groundwater, an electric shovel was built by Liebherr and demonstrated many benefits in environmental terms.



Category:

# Best practice in innovation or recycling, marine or manufactured aggregates





### **Reciclajes Camacho**

# Give back to nature what was borrowed

Governed by the maxim, reuse, reduce, recycle, Reciclajes Camacho decided to rehabilitate the space occupied by their waste treatment plant, a degraded and flooded land that had previously been occupied by aggregate exploitation, prior to the company's arrival on the land. For that purpose, the company received and recovered material from engineering and road construction works, obtained a certificate from the Spanish Standardisation Institute AENOR and the CE marking on two of their by-products. The company paid attention to the performance inspection of the materials, considering inert-only construction and demolition waste of concrete and mixed cleans. During the realisation of the project, the company had to deal with significant challenges, such as flooding waters and a special protection area for birds in proximity.

Category:

# Best practice in innovation or recycling, marine or manufactured aggregates







# Wilhelm Stürmlinger & Söhne GmbH & Co. KG

Processing of excavated Tunnel Material to produce Aggregates according to the German Construction Products Directive

When building a 4-km-long tunnel next its Durmersheim site, Wilhelm Stürmlinger & Söhne GmbH & Co. were confronted with the challenge of exploiting the excavated tunnel material while respecting the conditions outlined in the German Construction products Directive. It had to find a way to recycle the water it would use for the processing of the tunnel material. The company decided to expand the existing sand gravel plant drastically to include the process water and sludge treatment equipment. To process the materials, special clarifiers were used and a chamber filter press was built. The company successfully complied with the requirements of the approval authorities, saving landfill and water and reducing  $\mathrm{CO}_2$  emissions.



Category:

Best practice in innovation or recycling, marine or manufactured aggregates





Best practice in innovation or recycling, marine or manufactured aggregates





AF Gruppen ASA

Environmental Centres -Miljopark

AF Gruppen's objective has been to develop a treatment method for contaminated material that promotes economically viable recycling measures while reducing harm to health and environment. After years of research and development, the company developed its own treatment method, exceeding Waste Regulation's objectives. It reduces the volume of waste and contributes to societal benefits by extending the lifetime of landfills. It also makes it easier to manage the material and reduces the risk related to landfill disposal. As a result of a partnership with Kontrollradet, in 2019 Rimol Environmental Centre became the first recycling facility in Norway capable of producing certified aggregates in new eco-friendly asphalt and concrete.



#### Swerock AR

Circural materials for a sustainable future

ECO-Ballast is a collective name for a range of aggregate products manufactured from recycled raw material. Swerock's ambition with the ECO-Ballast concept is to contribute to a more circular construction industry. Today, the Swedish construction industry consumes large resources and accounts for a third of the waste generated in the country. Only a small proportion is reused or recycled. The transition to a circular construction industry requires commitment from several actors, joined in a common effort. From Swerock's perspective, the driving force is to create business opportunities and ensure competitiveness in a market demanding more sustainable solutions. In this context, the ECO-Ballast concept has generated great interest and opened dialogue with customers, trade associations, government agencies, and other industrial sectors.



Category:

# Best practice in innovation or recycling, marine or manufactured aggregates





# Entreprise Jean Lefebvre Mediterannée

**SOLAR** 

Since 1 January 2022, the Granulat+ PACA network has abandoned the commercialisation of aggregates produced by only using primary raw materials. Introducing The SOLAR brand, the company proposes a type of aggregate produced by a mixture of primary and secondary raw materials. The ultimate objective is to contribute to the circular economy while guaranteeing the production of a high-quality product. To that end, the company conducted extensive research and testing. The Granulat+ PACA network foresees the production of more than 5 million tonnes per annum.



Aggregates,
an essential and
strategic product
making our lives
more comfortable
and for providing
a sufficient
and reliable
infrastructure
to speed our
progress and
our lives.











# ► COMMUNICATION

With the industry being much too shy on the many good stories on projects, initiatives and activities it could tell and being less experienced in communicating with the public and policy makers, this category is designed to share the 5 good and innovative examples other producers could follow.

# **▶** COMMUNICATION



Category:

## **Communication**





Latomio Pyrgon Ltd

Can we Live Without Quarries and Aggregates?

In December 2021, Pyrga Quarry created a short film to highlight the necessity of aggregates in human life and promote the strategic goal for 2021-2024 – "Promoting a sustainable industry essential to the economy and the quality of life in Europe". This initiative aims at creating social awareness on the matter. The video shows ordinary daily moments during which people are interacting with aggregates to reveal that people's happiness, development, progress and improvement are related to aggregates. The company shared the video on social media to create a more positive understanding of the key roles played by aggregates in human life. In January 2022, the company ran a marketing campaign to promote the video.

Category:

## Communication





LafargeHolcim

LafargeHolcim España

Communicating the value of biodiversity in extraction sites

It has opted for a comprehensive communication strategy based on transparency and shared knowledge to increase awareness and social commitment. "Production of biodiversity" and "Awareness of geological heritage in mining sites" webinars were organized. Different stakeholders from conservation, geology and extractive industry backgrounds shared success stories in which the company had participated. The adherence to the "Sponsor a rock" initiative organized by the Spanish Geological and Mining Institute stands out. It contributes to the monitoring of Sites of Geological Interest. The "Habitat recreation guidelines for amphibians in quarries" was published. It is directed at people interested in learning about amphibians and their habits.

# **▶** COMMUNICATION



Category:

# **Communication**





#### Wopfinger Transportbeton Ges.m.b.H

From an Environmental Report to a Sustainability Report - Information brochure on sustainable recultivation and renaturation of extraction sites in eastern Austria

Wopfinger Transportbeton GmbH presents its decades of activities relating to raw material extraction and the associated recultivation and renaturation as a sustainability report in the form of a brochure. In cooperation with environmental and nature conservation experts, Wopfinger invested in site-specific nature and environmental protection. Each extraction site requires a special and tailored form of implementation of measures. This was the motivation for each individual location to find and apply the optimal solution and implementation of the renaturation according to the respective local possibilities.



### **Communication**







#### **Zukunft Niederrhein**

Regional public relations work: TOGETHER for sand+gravel and more raw material awareness among the population

The "Initiative Zukunft Niederrhein" (Lower Rhine Future) brings together small and medium-sized enterprises in one area: communication and public relations to create more acceptance for raw materials and their extraction, and to reconcile facts and emotions in this area. The target group has been expanded from interested parties to all people in the Lower Rhine region. The image of the initiative has changed from a "lobby association" to an information provider on sand and gravel extraction in the region. The focus was no longer on the companies, but on "the" system-relevant raw material Sand+Grave4l - as a common market core. A separate Sand+Gravel logo was created and the slogan "creates home" was added.

# **▶** COMMUNICATION



Category:

# **Communication**





#### **CEMEX**

CEMEX, partner of the artistic project "Chirurgies des sables, le fleuvenous regarde"

In September 2021, CEMEX France participated in the L'Odyssée festival, a cultural, environmental, solidarity and sporting event dedicated to the Seine and the canals. CEMEX supplied 300 tonnes of sand and aggregates for the creation of a work of art performed by the artists Julia Borderie & Éloïse Le Gallo ("Surgery of the sands, the river is watching us"). The materials were loaded onto a CEMEX barge chartered for the occasion. Still, as part of L'Odyssée, a team of CEMEX employees took part in a solidarity kayak race in the Bassin de la Villette. The company also hosted the annual meeting of the Deux Rives district about the circular economy at its sites in Bercy and Tolbiac. CEMEX also opened its Bercy and Tolbiac sites to the general public.

33

After water,
aggregates is most
consumed material
on planet earth!











The European Aggregates Industry operates with care in nature. This special category shows the 9 outstanding entries related to the protection or the improvement of existing habitats or the creation of new habitats attracting species.



Category:

# **Biodiversity**





ELMENI (LATOMIA) Ltd

The Creation of New Habitats at the Quarry pit

Elmeni (Latomia) Ltd launched various development activities such as the expansion of its premises, the full automation of the production plant, the investment in highly skilled personnel and the installation of a fully automated water Recycling System from Mud leaching pulp to enhance the protection and the improvement of new habitats/species. As a result, high bird diversity and avifauna were detected in the area, which proves that the anthropogenic habitat alternations enforced within quarries could benefit the local biotic system rather than negatively impacting it.

Category:

# **Biodiversity**





Van Nieuwpoort Bouwgrondstoffen B.V

**Quarry Hoogterras Belfeld** 

Ouarry Hoogterras Belfeld gives space to spontaneous natural development for compensation/ revegetation, some shallow and deeper ponds to reach nature target images such as small sedge vegetation, Fago-Ouercetum and Betulo-Ouercetum roboris, heather and Scotch broom. It can host species like the sand lizard, the natterjack toad, pool frogs, dragonflies and birds. Under the supervision of an ecologist, quarry areas will be unused for one year for nesting or spawning. The Eurasian eagle owl has been nesting for years. To create a permanent habitat, two artificial nesting holes have been created. An additional natural habitat (Brongebied Aalsbeek) has been created as well, which is now home to various species such as sharp-flowered rush, carnation sedge, palmate newt, slow worm and various butterflies.



Category:

# **Biodiversity**





# **Biodiversity**





Arids Garcia Pedrera Gar 1, S.L.U.

# Commitment to biodiversity `If there is a quarry, there is life'

The biodiversity development project: "IF THERE IS A QUARRY, THERE IS LIFE" is focused on the nesting, protection, and conservation of cliff-nesting birds in the extractive areas, which is encouraging the reconciliation between these bird communities and the quarrying activity, both during the active and the restoration phases. The main objective is to achieve a breeding continuity of cliff-nesting birds while obtaining images and studies of great documentary value that might help to explain their reproduction cycle in a visual and didactic way.





#### **Carrières les Petons**

Pilot project to safeguard a Sand martin colony by improving "food", "shalter" and "care" at an active quarry site

The project consists of a collaboration between the quarry site of Yves-Gomezée in Belgium and the nature protection association « Les Bocages », with targeted developments that include the participatory creation of a traditional orchard of old fruit varieties without the use of pesticides, the pilot creation of a swallow wall which aims to guarantee the birds' nesting and finally the production of the documentary film « Swallows and Men » revealing that both extraction activities and natural protection can co-exist.



Category:

# **Biodiversity**











### **Rudus Oy**

Diverse Carbon sinks in gravel extraction sites thanks to aftercare

In gravel extraction sites and rock quarries, carbon sequestration can be increased to promote biodiversity. Information was gathered from publications, interviews and soil samples taken from Rudus's gravel extraction site in Kuopio. The study found that in open areas, xerothermic plants carry organic matter and carbon into the soil via their deep roots. This can help create long-term carbon storage in the soil in gravel extraction sites. The symbiotic relationship between fungi and the roots of plants in hot and dry environments also contributes to the growth of organic matter in the soil. Carbon sequestration can also be enhanced by favouring certain species that are valuable for biodiversity in landscaping.



**Hermann Trollius GmhH** 

Transplantation of the Lady's Slipper Orchid

Following mappings on the approved expansion area at a dolomite quarry at "Hohenfelser Berg" near Hörmannsdorf of the Hermann Trollius GmbH family business, various habitats of the Yellow Lady's Slipper Orchid (strictly protected by European and national law) were identified. As a response, the company reached out to the local authorities and the Higher Nature Conservation Authority to organize the transplantation of the orchids. After a careful process of many years, which included among others, trial plantings, manual digging and selection of the target site, 340 Lady's Slipper Orchids could be moved to new sites. Based on the latest figures, since then, the population of the orchids has grown significantly, underlining the success of the operation.



Category:

# **Biodiversity**





# **Biodiversity**







#### **Hanson Aggregates-Milton**

#### Floodplain Forest Nature Reserve, Milton Keynes

The project involved the restoration of a sand and gravel extraction site in the Milton Keynes in Buckinghamshire. It involved the creation of a dynamic and ambitious river floodplain system - a network of lakes, ponds, wet woodland, wet grassland and reed beds which link with the main river, the Great Ouse. Channels have been engineered so that floodwater flows at different times and at different levels providing periodic inundation. This network is oxygenating the water, trapping silt and helping to reduce pollution. The natural life of the river is working with this restored landscape - water seeps away slowly - recharging the water table and controlling erosion and flooding. Konik ponies and cattle are used to graze and manage vegetation and maintain the habitats in line with "re-wilding" principles.

## SKANSKA

# Skanska Industrial

# Biodiversity flourishing in quarrying in Teras, south-west Sweden

The Skelleftea site East in the North of Sweden is a development project for new industrial plots that Skanska runs on behalf of Skelleftea Municipality. The goal is to be Sweden's most sustainable development project and to be climate neutral by 2045. Skanska uses a unique electric mobile crushing plant that is easy to move. The development of this electric mobile crushing plant started in 2016. Climate, economic and social assessments showed the advantages of the electric-driven crushing plant: the reduction of CO<sub>2</sub>e emissions: less maintenance and service costs; shorter start-up times during the cold months since the heat in all oils/ components can be maintained. Also, the working environment has improved. Through this project and its outcome. Skanska wants to be sustainable and inspire other organizations.



Category:

# **Biodiversity**





### **Eqiom Granulats - Sully**

Redevelopment of the Sullysur-Loire gravel pit: enhancing the heritage and bringing an ecological added value

The quarry of Sully-sur-Loire is an alluvial quarry, between two spaces with different ecological aspects. Taking into account the diversity present on and around the site, the objective of the project is to create a variety of natural environments in the area. Ecological redevelopment, combined with monitoring of plant and animal species present on the site, has increased the diversity of species and has led to the re-appearance of endangered ones. The results prove the interest and contribution of quarry redevelopment to the maintenance of biodiversity.

The European [EU27+UK+EFTA, 2019] aggregates production is



representing an annual turnover of an estimated €15-€20 billion.

The European [EU27+UK+EFTA, 2019] average demand for aggregates is almost

per capita per year.



The aggregates sector is by far amongst the non-energy

numbers employed and tonnages produced.

The aggregates industry comprises



producing aggregates at





## KEY FACTS ABOUT THE AGGREGATES INDUSTRY

- ▲ Aggregates are granular material used in construction comprising sand, gravel, crushed rock, marine aggregates, manufactured and recycled aggregates.
- Agaregates are used to build and maintain your houses, roads, railways, bridges, hospitals, schools and other essential infrastructures you use in your everyday life.
- ▲ Every different application requires a different technical specification of aggregates, some with extremely demanding requirements in respect of shape, durability, abrasion, frost resistance and other factors.

www.uepg.eu

## Get in touch with us



Aggregates Europe -UEPG



**UEPG** Aggregates



Aggregates Europe -



uepg agg

Aggregates Europe - UEPG aisbl

Square de Meeûs 38/40 | 1000 Brussels | Belgium | secretariat@uepg.eu

EU Transparency Register: 15340821653-49