



Deliverable D9.3.

DISSEMINATION AND COMMUNICATION MATERIALS



Deliverable report

Deliverable No.	D9.3	Work Package No.	WP9	Task/s No.	Tasks 9.3
Work Package Title		DISSEMINATION, COMMUNICATION AND EXPLOITATION			
Linked Task/s Title		Implementation of the Dissemination strategy, implementation of the Communication strategy, implementation of the Exploitation and IP strategy.			
Status		Final	Final		
Dissemination level		PU	PU-Public		
Due date deliverable		2023-03-22	Submission date		2023-03-23
Deliverable version		1.3			

Document Contributors

Deliverable responsible	ANEFA				
Contributors	Organisation				
CÉSAR LUACES FRADES	ANEFA				
LORENA VILADÉS SANTOS	ANEFA				
PAULO ROMERO MARTÍNEZ	ANEFA				
Reviewers	Organisation				
PIERRE PLAZA	SIGMA				
DIEGO LAZA	ABAUT				

Document History

Version	Date	Comment
1.1	2021-11-24	
1.2	2021-11-27	Reviewed
1.3	2023-03-23	First Project Review. Requested changes: Annex XI: Track record of the activities carried out by each beneficiary. Page 28: Scientific publications reviewed policy.

Disclaimer

This document reflects only the author's view. Responsibility for the information and views expressed therein lies entirely with the authors. The European Commission is not responsible for any use that may be made of the information it contains.

Table of contents

Deliverable report	3
Document Contributors	3
Document History	3
Disclaimer	4
Table of contents	5
List of Abbreviations	8
1 Executive Summary	9
2 Introduction	11
2.1 Scope of the deliverable	11
2.2 Relation to other activities and deliverables	11
2.3 Structure of the deliverable	12
2.4 Partners' role in the dissemination strategy	12
3 Dissemination Assets	13
4 Target groups	14
5 Dissemination and Communication materials and tools	16
5.1 Promotional materials	16
5.1.1 Roll up	16
5.1.2 Infographics	17
5.1.3 Leaflets	19
5.1.4 Posters	23
5.1.5 Flyers	24
5.2 Publications	24
5.2.1 Press releases	24
5.2.2 Online newsletter	25
5.2.3 Dissemination and communication articles in journals and magazines	25
5.2.4 Scientific publications	28
5.2.5 Public deliverables	28
5.2.6 Joint public-private publications coming from the project, from partners or from organisations outside the consortium	29
5.3 Events	29
5.3.1 Participation in scientific conferences	29

5.3.2	Participation in events, trade fairs and workshops	29
5.3.3	DIGIECOQUARRY's workshops, seminars & panel presentations.....	31
5.4	On-line presence.....	31
5.4.1	Project's website to foster the IQS platform, dissemination and act as a central point to reach the network of partners sites.....	31
5.4.2	Project's social media accounts & network with partner's social media profiles	34
5.4.3	Blog and on-line Fora	38
5.4.4	Videos	39
5.4.5	Capacity Building Programme (CBP) oriented to potential users and adopters.....	39
5.5	Other channels & tools	39
5.5.1	Partners' communication channels.....	39
5.5.2	EU dissemination channels	39
5.5.3	Links and interactions with the exploitation plan	40
5.5.4	IP and knowledge management plan.....	40
5.5.5	Synergies with relevant projects and initiatives.....	40
5.5.6	Meetings with neighbourhood or community reference groups.....	40
5.5.7	Enquiries and surveys for citizens	41
5.5.8	Meetings with policy makers (at EU and national levels).....	41
5.5.9	Meetings with relevant related organisations (at EU and national levels).....	41
5.5.10	Ensuring the development of the Gender Management Plan (under WP10)	41
6	KPIs	42
7	Timetable	43
8	Conclusions	44
9	References	45
10	Annex I. DIGIECOQUARRY's branding report	46
11	Annex II. List of brochures, leaflets, flyers, posters and roll-up	55
12	Annex III. Press releases	56
12.1	DigiEcoQuarry a key project for the digitalisation of the aggregates industry, has been launched .	56
12.2	ANEFA visits Holcim	57
12.3	ANEFA visits Hanson Heidelberg	58
12.4	ANEFA's team visited Agrepor Agregados – Extracção de Inertes	59
12.5	Granulats Vicat – the French pilot site of the project DigiEcoQuarry	60

12.6	ANEFA visited Cronenberger Steinindustrie.....	61
13	Annex IV. List of websites of the partners.....	62
14	Annex V. List of social media of the partners.....	63
15	Annex VI. Press clips released by the partners.....	65
15.1	ANEFA I:	65
15.2	ANEFA II:	68
15.3	ANEFA III	70
15.4	ARCO ELECTRÓNICA.....	72
15.5	FAEN	74
15.6	HOLCIM.....	76
15.7	MAXAM.....	78
15.8	MONTANUNIVERSITÄT LEOBEN.....	80
16	Annex VII. List of partner's communication channels	81
17	Annex VIII. Timetable	82
18	Annex IX. List of Figures	83
19	Annex X. List of Tables.....	84
20	Annex XI. Partners' dissemination track record	86

List of Abbreviations

ABBREVIATION	DESCRIPTION
CA	Consortium Agreement
DoA	Description of Action
DCEP	Dissemination, Communication and Exploitation Plan
EB	Exploitation Board
EC	European Commission
GA	Grant Agreement
IQS	Intelligent Quarrying System
KPI	Key Performance Indicator
MoM	Minutes of Meetings
PCo	Project Coordinator
RP	Reporting Period
WP	Work Package

1 Executive Summary

This document constitutes the first version of the Dissemination and Communication Materials of the DIGIECOQUARRY project.

This deliverable will be updated in months 24 and 36 to keep the strategies set in D9.1 Dissemination, Communication and Exploitation Plan up to date.

DIGIECOQUARRY is a Horizon 2020 project aiming to design, develop and validate in 5 pilot environments an Innovative Quarrying System (IQS) comprising sensors, processes, tools and methods for data capture, processing and sharing to provide integrated, digitalised, automatic and real-time process control for aggregates quarries.

The DIGIECOQUARRY consortium will combine the latest researched and advanced technologies applied to quarry operation together with the integration of selected innovative digital solutions to boost the capacity of the aggregates industry, to enhance Health & Safety conditions for workers, to improve the Process and Efficiency of the aggregates extractive sites, to maximise Sustainability and Resource Efficiency in the quarry operations and to foster Social Acceptance.

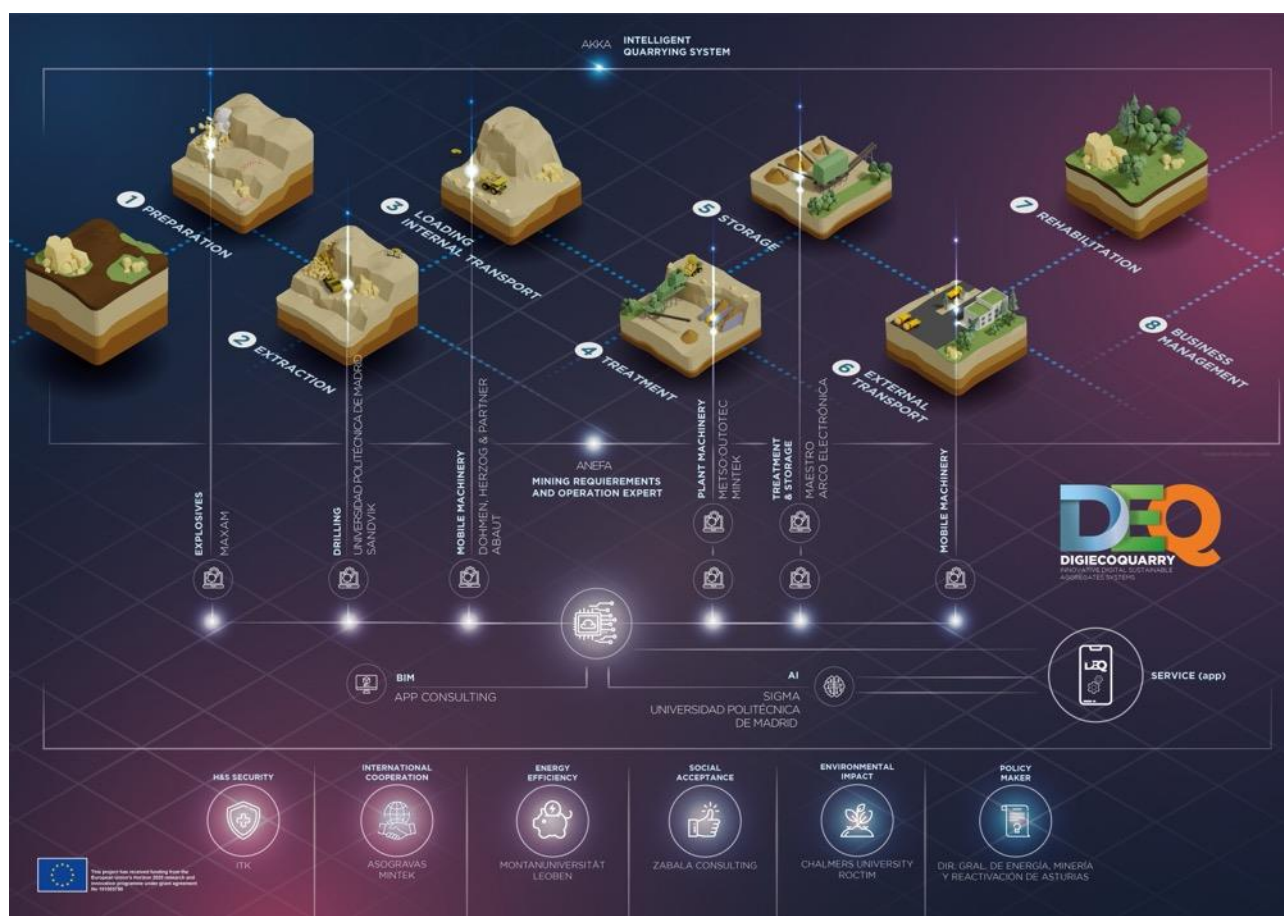


Figure 1. DIGIECOQUARRY's concept.

This document describes the current status of the overall awareness raising process, the management and monitoring of the dissemination activities and partners' responsibilities. It includes specific actions and activities that have been carried out by the DIGIECOQUARRY consortium members to ensure success and maximum publicity for the project and its results.

With that said, this deliverable outlines (see Figure 2):

- **What** has been disseminated. Devoting to the basic project-related information that will be conveyed throughout the project.
- To **whom** the project has been disseminated to. Consisting of the key stakeholder groups that will serve as the main audiences for the project's dissemination, awareness raising and communication campaign.
- **How** the project has been disseminated. Including all the channels and tools that will be used by project partners to successfully implement the dissemination activities.
- **When** the project has been disseminated. Providing the time frame to ensure that the timing of the dissemination activities is appropriate, during the lifespan of the project and beyond.
- **Monitoring** of the process. Indicating the indicators to gauge success on the dissemination, awareness raising and communication actions, enabling partners to refine efforts over the course of the project.

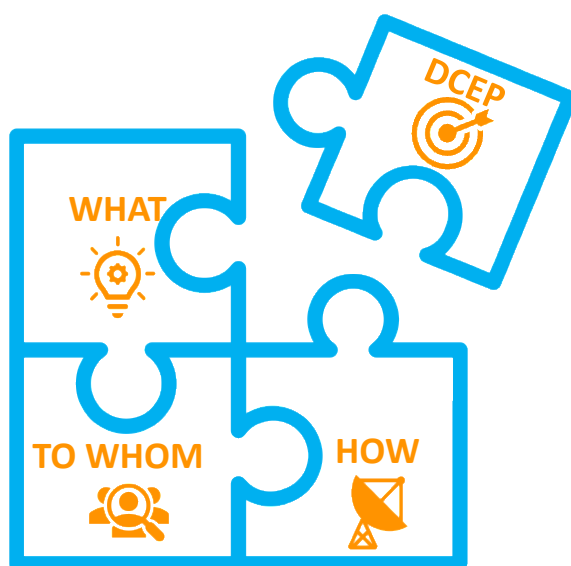


Figure 2. DCEP strategy.

2 Introduction

2.1 Scope of the deliverable

This report, titled ‘**D9.3: Dissemination and Communication Materials**’, aims to follow up on the designed strategy, plan and activities implemented under the DIGIECOQUARRY project, whose goal is to maximise the project’s visibility and impact.

With the plans and actions described, the DIGIECOQUARRY Consortium aims to meet the following dissemination objectives:

- To effectively promote the project and its results to all possible target groups and audiences at national and a European level.
- To establish links and liaisons with international organisations and other interested stakeholders to provide wider dissemination.
- To establish synergies with other relevant projects and initiatives.
- To validate the project outcomes, to obtain feedback from expert groups, scientists and interested user communities.

Dissemination, Communication and Exploitation strategies and actions are the cornerstone for generating a deep impact of the DIGIECOQUARRY results in terms of attracting the interest of the main stakeholders and social acceptance.

To maximise the impact beyond the project lifetime, these actions will be undertaken within three WPs: WP7. Mechanisms for social acceptance and interaction with policy makers; WP8. Clustering activities for a solid EU knowledge base on RM; and WP9. Dissemination, Communication and Exploitation.

These activities will be articulated with 4 master plans: [1] Dissemination strategy, [2] Clustering plan, [3] Exploitation strategy and [4] Communication strategy (all of them based on this D9.1).

2.2 Relation to other activities and deliverables

The Dissemination, Communication and Exploitation Plan will serve as the basis for the dissemination, communication, exploitation activities together with the monitoring of related intellectual property rights facts foreseen in Tasks 9.1, 9.2 and WP7 and WP8. This deliverable will also provide the guidelines for the organization of the project events and workshops as well as for the participation to external events and other relevant initiatives.

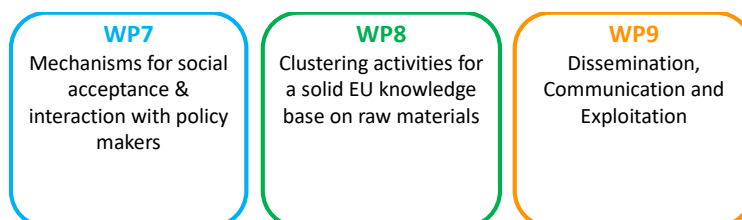


Figure 3. Relationship between WPs.

2.3 Structure of the deliverable

With the above in mind, the “Dissemination and Communication Materials” is structured as follows:

Section 1 – Executive summary. Contains a brief fact sheet about the project.

Section 2 – Introduction. Provides meaningful information regarding the DCEP and its structure as well as its scope and its relation to other tasks, activities and deliverables.

Section 3 – Dissemination assets.

Section 4 – Target groups.

Section 5 – Dissemination and communication materials & tools.

Section 6 – Performance indicators and monitoring.

Section 7 – Timetable.

Section 8 - Conclusions: Summarises the conclusions of this report as well as the way forward.

Annexes

2.4 Partners’ role in the dissemination strategy

DIGIECOQUARRY partners and their strategic positioning in Europe (and also ASOGRAVAS and MINTEK in Colombia and South Africa, respectively) count with vast capacities to influence the target communities and will act as multipliers. Table 1 summarises the main dissemination strategies to be implemented:

Table 1. Dissemination Strategy per partner profile.

PARTNERS	DISSEMINATION STRATEGY
Large companies: SANDVIK, METSO, MAXAM, AKKA	They have an important influence and impact in the aggregates industry, quarry technology providers, construction and complementary sectors (such as OEMs and 1 st tier providers) including their client networks and commercialisation channels. Dissemination will focus on engaging potential customers interested in exploiting product/services generated.
SMEs: ITK, ARCO, MAESTRO, DH&P, ABAUT, APP, SIGMA, ZABALA	They are mainly interested in attracting new clients and reinforcing the loyalty of customer portfolio thanks to the new competitive advantages acquired related to the KTAs and the IQS. SMEs will make available to DIGIECOQUARRY their existing client/supplier networks as well as the involvement of their Marketing and Communication departments.
Quarries: VICAT, HANSON, HOLCIM, CSI, CIMPOR	They are eager to extend their client portfolio and strengthen links with the already existing ones. Their Dissemination actions will be based on the presentation of improved products (in quality, economic, environmental and social terms) to engage specific stakeholders and end users, mainly in the construction sector (e.g., cement, RMC, road base and subbase, mortar, asphalt, etc). Also, they would like to influence positively the perception of quarrying in the society (see section 2.3).
R&D and Academia: MUL, CHALMERS, UPM, MINTEK, ROCTIM	They aim at engaging with the EU (and also international) scientific and industrial communities to raise awareness about the project and contribute to knowledge generation and sharing. They pursue the generation of new research lines and training programmes aligned with the key pillars established in H2020. They are seeking to Involve their research groups and communication departments in dissemination activities. Reinforcement of the EU RM’ sector.
International cooperation, Promoters & Public bodies: ANEFA, DGASTUR, ASOGRAVAS	They will engage with their network of contacts to maximise their dissemination impact by using their wide partners network, benefiting from their experience/expertise in meetings, workshops and conferences to establish contact and bound relations with target groups of the wide range of themes of DIGIECOQUARRY. They would like to bridge the gap between science, practice and society by organising targeted stakeholder workshops to bring together stakeholders, industry, policy makers and citizens to facilitate public acceptance.

3 Dissemination Assets

The Project's assets and outcomes that are here described, have been disseminated by all partners with a view to maximise the project's impact and visibility. This information is being conveyed in a meaningful way and tailored to each stakeholder group, in order to promote not only the DIGIECOQUARRY's results, but also its vision and aim.

- The **conceptual aspects** of the project, meaning the whole project concept, its innovative characteristics, its impact both on business and at social level, etc.
- The **technical achievements of the project** like the DIGIECOQUARRY IQS platform and the respective ICT infrastructure and needed toolkits. The assets of this category will be highly disseminated on appropriate channel once these tools are developed and thus a more detailed communication strategy will be contained in the next version of the DCEP.
- The **scientific knowledge** that derives from the project in the form of reports, scientific articles, etc.
- All the spectrum of the **project's activities**, like the four workshops that will be organized in the framework of DIGIECOQUARRY, the closing event, the participation in external events and every other action that could be of interest to the project's target groups.

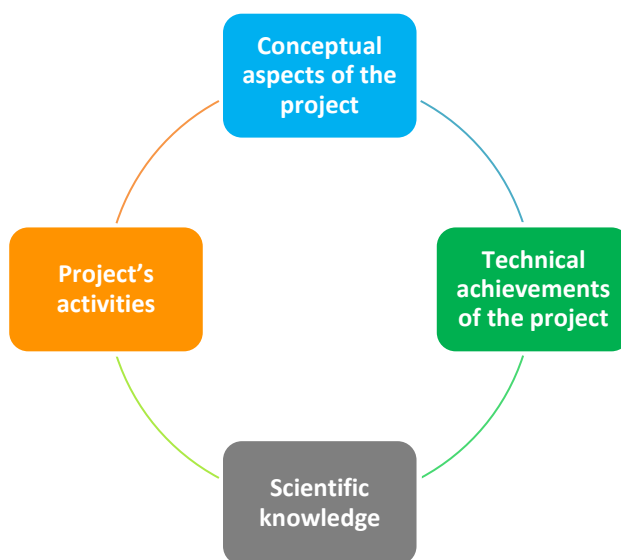


Figure 4. DIGIECOQUARRY's dissemination assets

4 Target groups

The key stakeholders of DIGIECOQUARRY can be segmented into the four target groups outlined below. The actual stakeholders have been identified and registered in a stakeholders Excel worksheet.

- **Business stakeholders:** with potential interest in the project's successful execution and results that will expand the project's scope towards new market opportunities to maximise its impact.
- **Academic and research stakeholders:** Academics, researchers and experts focused on advancing the scientific fields cross-cutting DIGIECOQUARRY.
- **Governmental and policy stakeholders:** policy makers are of primary interest for the consortium given that they are responsible for setting the guidelines of the current and future mining policies that will affect the commercial feasibility of DIGIECOQUARRY.
- **General public stakeholders:** non-governmental organizations, civil society groups or simply citizens, interested in the potential of DIGIECOQUARRY to address needs relevant to them.

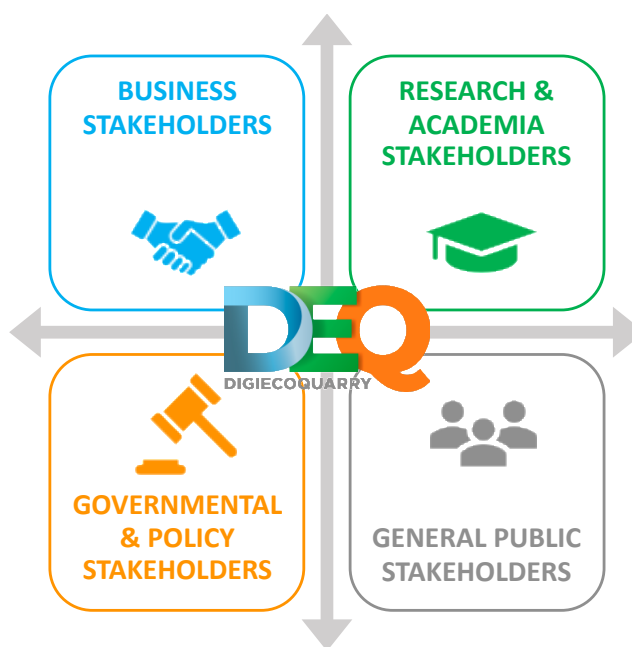


Figure 5. DIGIECOQUARRY's stakeholders.

Table 2. Target audiences, aims and key messages.

TARGET AUDIENCE	AIM	KEY MESSAGES
1. Aggregates industries & Quarries / RM Stakeholders and end users Material providers Industry associations and representatives	Final users of DIGIECOQUARRY's result Commercial exploitation Project involvement Clustering via WP8	Main results and experience from pilots Improved performance, H&S, social and environmental indicators Economic, investment & cost analysis Prospects of prolonging the productive life cycles of quarries
2. ICT industry Technology providers Associations and representatives	New range of services in Quarrying Commercial exploitation Open and flexible methodologies for interoperability of ICT tools	Main results and experience reports from the pilots Available materials/services and knowledge generated
3. Researchers at universities, R&D centres or and Scientific societies in RM	Enhanced scientific knowledge R&D cooperation and promotion Clustering via WP8	Increase data available for research Main results shared in EURMKB and RMIS
4. Construction sector and other clients	Promote the development of new or improved products and services based on DIGIECOQUARRY results	Improved cost-efficient products, H&S, social & environmental KPIs Raise awareness
5. Citizens and civil society	General awareness Social acceptance (SLO) Project involvement via WP7	Community Engagement Strategies Social Awareness plan Local engagement plan
6. Policy makers and funding bodies (Government, Regulatory agencies) at local, national and EU level	Provide strong evidence to establish new policies, initiatives and roadmaps for RM Interaction in WP7	Reinforcement of the Quarrying sector Improved performance, H&S, social and environmental indicators Raise awareness
7. Media, journalists and other groups at European level (e.g., environment, energy, safety, NGOs, Consumer's organisations...)	General awareness Improved perception of the extractive industry Trend setters	Improved performance, H&S, social and environmental indicators Available materials/services for communication purposes

A preliminary list of identified stakeholders is included in Annex I of the Dissemination, Communication and Exploitation Plan (D9.1).

5 Dissemination and Communication materials and tools

5.1 Promotional materials

Based on the project's identity, as seen in Annex I, the following items have been created.

5.1.1 Roll up

A roll up has been designed for partners attending events where DIGIECOQUARRY is being disseminated.

In the top left corner DIGIECOQUARRY's logo can be found. In the middle is placed the project's motto 'the future of quarries', a brief text, and the four main pillars it leans on. Between the motto and the pillars, it has been decided to big print the logo of the partner who is attending the event. In this example, this would be CSI's roll up.

Finally, at the bottom the logos of all the partners of the consortium are inserted, as well as the disclaimer for EU H2020 projects.



Figure 6. DEQ Roll up.

Other Roll up will be produced during the project.

5.1.2 Infographics

An overall conceptual diagram of the project (as a one pager) has been designed where all the stages of the quarrying process are shown highlighting the participating partner name active on each of the stages.

Other infographics will be produced during the project.

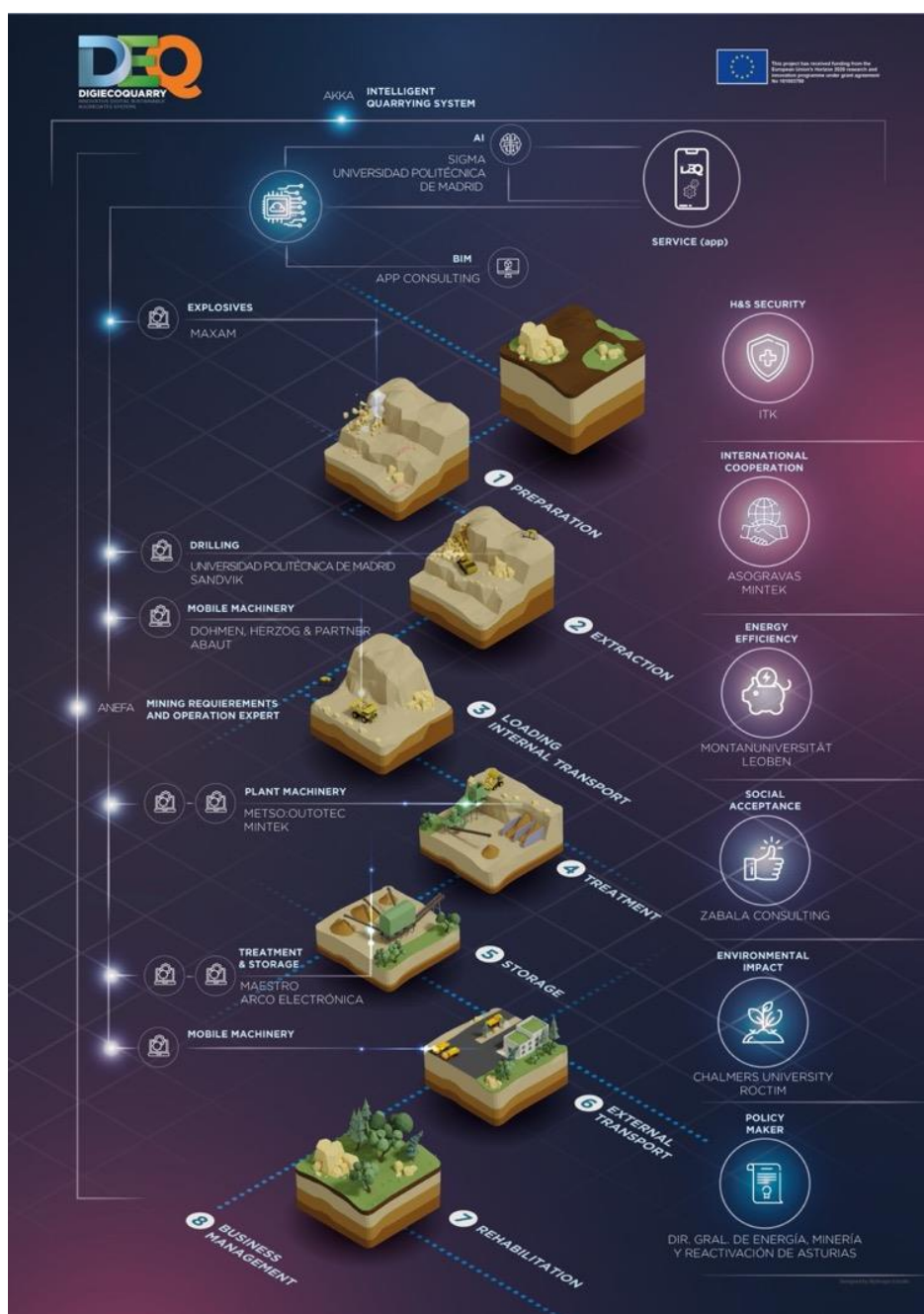


Figure 7. DEQ vertical infographic.

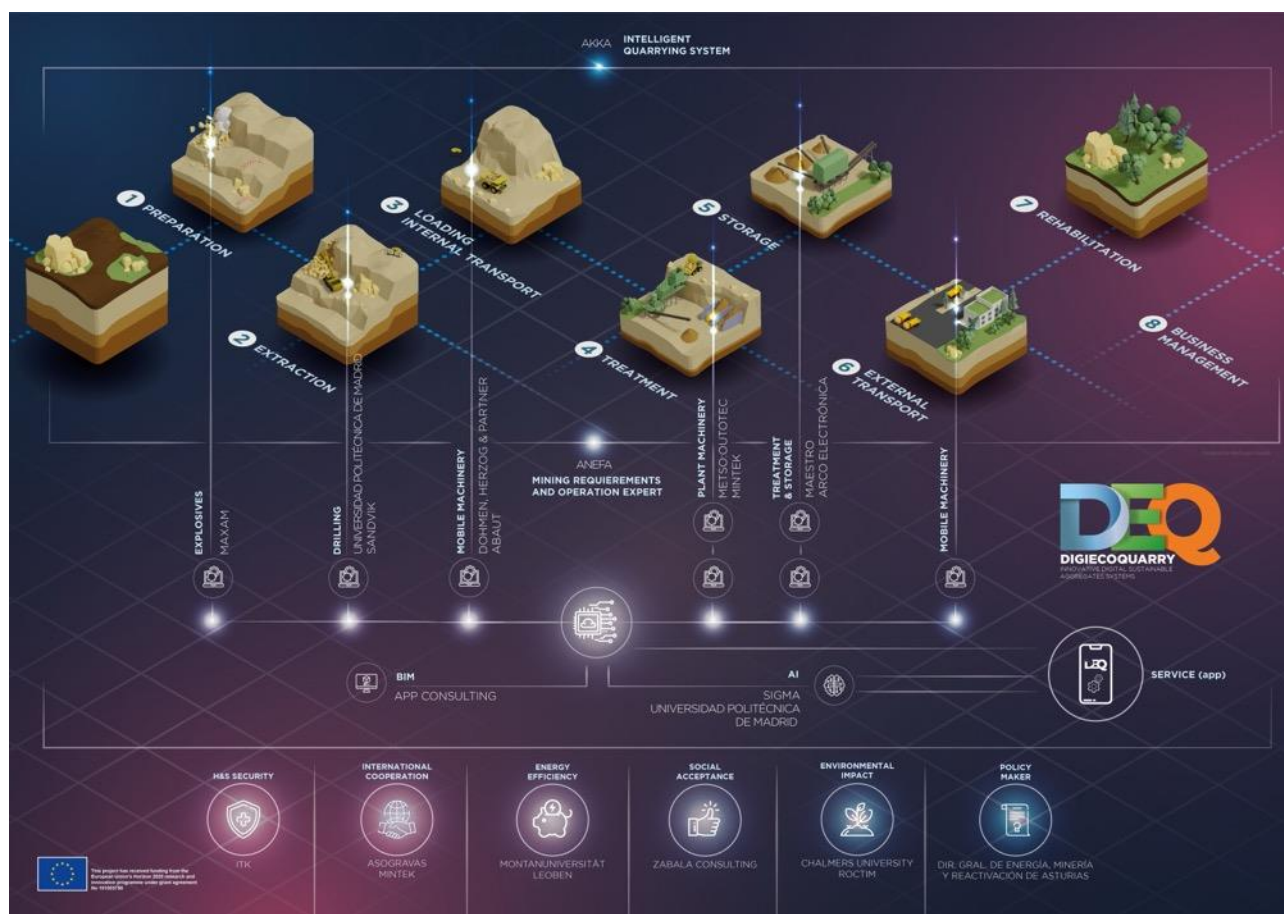


Figure 8. DEQ horizontal infographic.

5.1.3 Leaflets

A leaflet containing general information of the project has been designed. Both in print and online versions.



Figure 9. DEQ leaflet print version



The future of quarries



DIGIECOQUARRY aims to design, develop, and validate in 5 pilot environments an Innovative Quarrying System (IQS) comprising sensors, processes, tools and methods for data capture, processing and sharing to provide integrated digitalised, automatic, and real-time process control for aggregates quarries. This will be translated into:



Health & Safety and Security

Upgraded H&S and Security conditions for workers, avoiding their exposure to dangerous operations through automated and controlled processes.



Efficiency, Selectivity and Profitability

Enhanced Selectivity and Efficiency of the aggregates sites, thus increasing the profitability of the processes, ensuring long-term operational sustainability and viability.



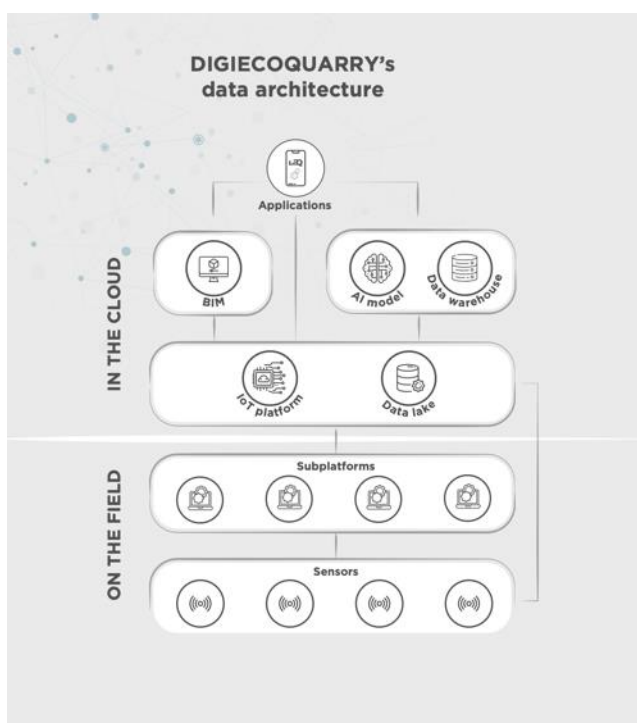
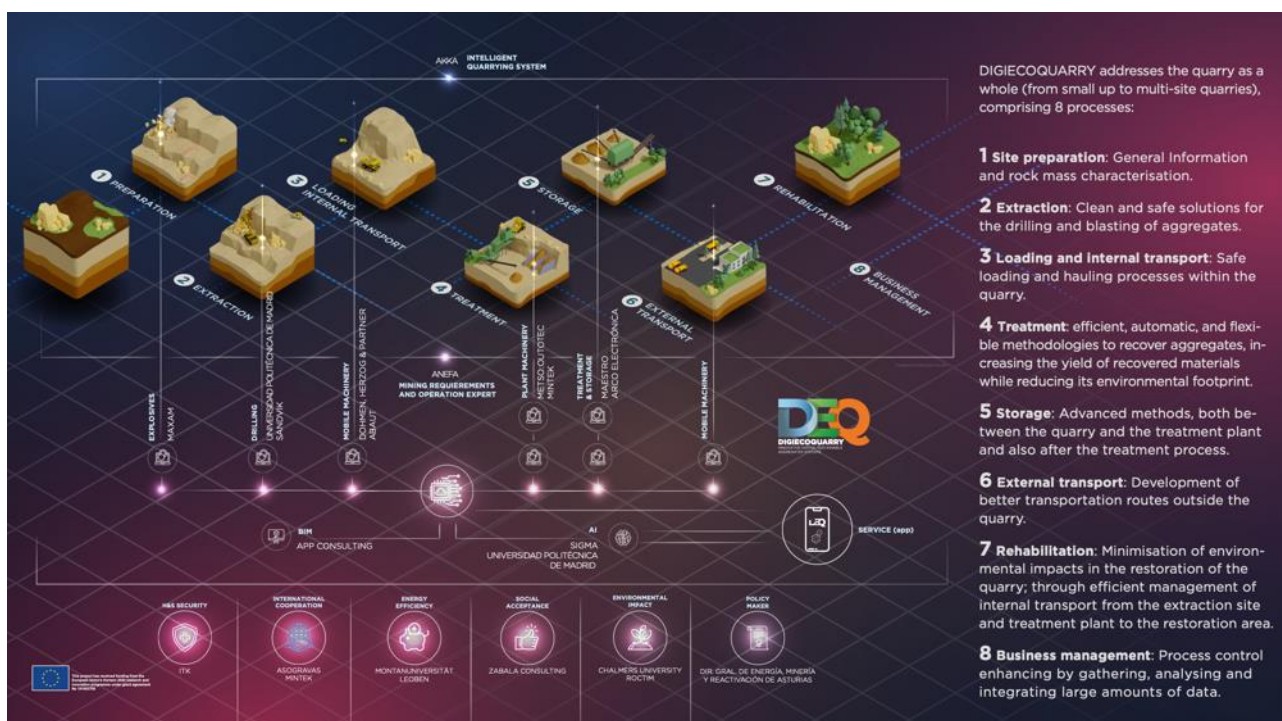
Environmental Impact

Maximised Sustainability and Resource Efficiency by reducing emissions, improving the management of water and fostering a sustainable supply of Raw Materials.



Social Acceptance

Improved social acceptance through the communication with policy makers, citizens and relevant actors to get them involved in the value chain.



International Advisory Board

Composed by external experts and aggregates' relevant stakeholders, it plays a key consulting role. It provides external input, advice, and feedback when the project experiences difficulties during its execution



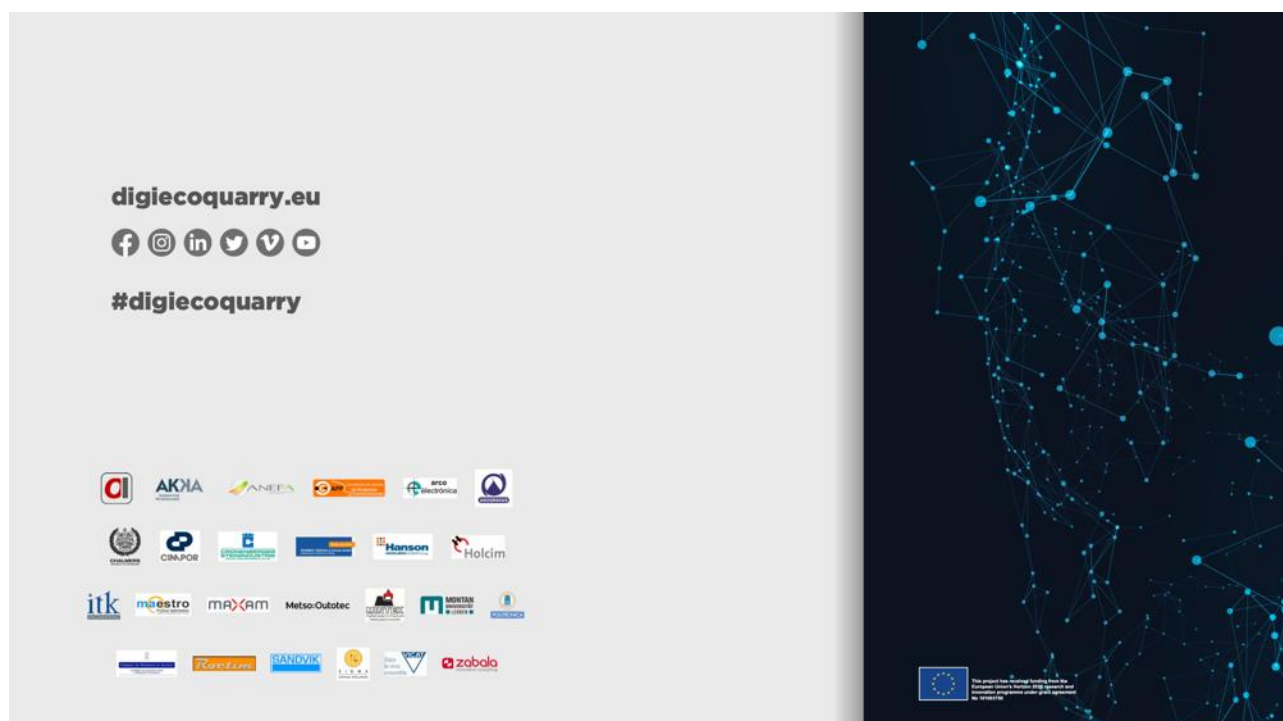


Figure 10. DEQ leaflet online version.

Other leaflets will be produced during the project.

5.1.4 Posters

A 50 x 70 cm poster has been created, which highlights the 4 main pillars of the project.



Figure 11. DEQ poster.

Other posters will be produced during the project.

5.1.5 Flyers

Also, flyers with specific information about the partners have been produced. Below the one corresponding to ITK is displayed.



Figure 12. DEQ flyer.

Other flyers will be produced during the project.

The list of future communication materials is shown in Annex II.

5.2 Publications

5.2.1 Press releases

Several press clips have been released since the start of the project. They can be found in Annex III. The titles are the following:

- DIGIECOQUARRY a key project for the digitalisation of the aggregates industry, has been launched.
- ANEFA visits Hanson Heidelberg.
- ANEFA visits Holcim.
- ANEFA team visited Agrepor Agregados – Extração de Inertes.
- Granulats Vicat – the French pilot site of the project DigiEcoQuarry.

- ANEFA visited Cronenberger Steinindustrie.

5.2.2 Online newsletter

An online newsletter is under preparation to outline the achieved results, upcoming activities and events, news from similar initiatives and news in the relevant scientific fields.

The frequency of the newsletter will depend on the amount and importance of news to be presented, with the target to produce a newsletter at least every 6 months, however additional ad-hoc newsletters may be added if deemed necessary.

5.2.3 Dissemination and communication articles in journals and magazines

Technical and Business-wise publications will be also pursued. DIGIECOQUARRY aims to use such channels and perform targeted dissemination towards business and technical oriented audiences, through publications at relevant business journals and magazines.

‘ANEFA actualidad’, ANEFA’s quarterly magazine has published news about the project on all 2021 issues.



Figure 13. Anefa actualidad. Jan - Feb - Mar issue

Actualidad del sector

El Proyecto DIGIECOQUARRY para la digitalización de la industria se inició el 1 de junio

El nuevo proyecto europeo, llamado "CARRETERA INNOVADORA, DIGITAL Y SOSTENIBLE - DIGIECOQUARRY", está financiado por el programa de la UE Horizon 2020 (No 101003750) (n.º 4), se busca diseñar, desarrollar y validar en 5 empresas de áridos un sistema innovador de gestión IQS (que se aplica en inglés Intelligent Quarrying System) que abarca sensores, procesos, herramientas y métodos de captura y procesamiento de datos, orientado a dar un servicio de control integrado, digital, automatizado y en tiempo real a las explotaciones de áridos.

El consorcio DIGIECOQUARRY combinará las últimas tecnologías investigadas del sector, junto con la integración de las soluciones digitales más avanzadas, de esta forma se conseguirá impulsar la capacidad de la industria de los áridos, mejorar las condiciones de seguridad y salud de los trabajadores, mejorar la productividad y la eficiencia de las explotaciones, maximizar la sostenibilidad y la eficiencia de los recursos y fomentar la aceptación social.

Durante los próximos 4 años, 25 socios y zona de casi 150 profesionales trabajarán mano a mano para conseguir que DIGIECOQUARRY sea un éxito. Los socios de Anefa ANEFA, este proyecto incluye a 25 socios de España, Portugal, Francia, Alemania, Italia, Austria, Suecia, Finlandia, Colombia y Sudáfrica.

Debido a la situación causada por la pandemia, la reunión de lanzamiento oficial se celebró de forma telemática los días 2 y 3 de junio. A la convocatoria de hecho se conectaron más de 70 personas de todas las compañías que conforman el consorcio: canteras (Granulats Vicat, Haimon Hispania, S.A., Holcim Aggregat Calcestruzzo, S.R., Cimentbagger Steindammte Fama Trichet GmbH & Co y Aggregat Aggregat - Estrada de Berles, S.A.), empresas mineras y tecnológicas (Sandvik Mining and Construction Oy, Metso Outotec Finland Oy, Ausimcorp International S.L., IFX Engineering GmbH, Akka High Tech, Acca Electrodinámica S.A., Ila este SL, DOMIN HEDDOL, el Partner GmbH, Akka GmbH, Sigma Technologies, S.L.U., Mintek, RCTM AB), consultoras (APP Consultoría de Gestión de Proyectos, S.L., Global Innovation Consulting, S.A.), universidades (Universidad Politécnica de Madrid, Montanuniversität Leoben, Chalmers Tekniska Högskolan AB) y otras entidades (Asociación Colombiana de Productores de Agregados Píricos, Consorcio de Industria, Empleo y Promoción Económica del Principado de Asturias).

Actualmente, se está trabajando en la coordinación de los distintos paquetes de trabajo. Entre los que están distribuidos en 11, a saber: WP1, "Hacia una cantera digital e innovadora", WP2 "Selección y desarrollo de técnicas innovadoras", WP3 "Identificación de requerimientos clave, desarrollo de sensores, automatización y procesos de control", WP4 "Desarrollo de una plataforma IQS/WHMIA para una cantera inteligente", WP5 "Desarrollo de un sistema integrado de seguridad y salud y medioambiente", WP6 "Plataforma para monitorización y evaluación", WP7 "Mecanismos de adaptación social e interacción con actores políticos", WP8 "Actividades de clustering", WP9 "Trabajo de diseminación, comunicación y engagement", WP10 "Dirección del proyecto" y WP 11 "Aspectos éticos".



Durante los meses de preparación y lanzamiento se han realizado un total de 37 reuniones, incluyendo una primera visita a una cantera de un socio (tanto del proyecto como de ANEFA).

Actualmente los trabajos del equipo se centran en varias frentes. Por un lado, se está evaluando el estado inicial de las explotaciones de áridos que forman parte del proyecto. Conocer esta información es de vital importancia para poder medir y evaluar de forma precisa las mejoras que se van a producir al final de proyecto gracias a los procesos y tecnologías implementados y los beneficios que generan. Y por otro lado se está trabajando en la identificación de los datos clave para desarrollar las bases de datos necesarias para implementar la digitalización y el uso de Machine Learning.

Comienzan las visitas a las explotaciones piloto del proyecto DIGIECOQUARRY

El pasado día 16 de julio tuvo lugar la primera visita del equipo de ANEFA, como coordinador de DIGIECOQUARRY, a la cantera de la compañía Hanson Heidelberg de Valdelella (Madrid), que participa en el proyecto.

Fue una larga y fructífera reunión, en la cual se pusieron sobre la mesa las prioridades de la explotación y se afianzaron los objetivos a alcanzar, se procedió a una visita guiada por las instalaciones.

La primera parada fue la planta de tratamiento, de la que se realizó una explicación en profundidad. A continuación, los trabajadores del taller describieron el automatizado procedimiento a seguir para el mantenimiento de la maquinaria, tanto preventivo como correctivo, que realizan mediante smartphones.

Por último, se visitó el banco y las medidas de remediación que se están llevando allí a cabo.

Además, en el marco del proyecto DIGIECOQUARRY se visitó la explotación de áridos Holcim Aggregati Calcestruzzi (Milán, Italia) el pasado 19 de julio. En esta explotación se analizaron las mejoras que el IQS (Intelligent Quarrying System) va a lograr. En especial en el desarrollo de actuaciones para mejorar la conectividad del trabajo productivo en el sector de los áridos, desconviniendo actuaciones específicas para el sector. Y sobre todo, teniendo en cuenta la naturaleza de las mismas y sin dejar de lado los problemas a los que se tienen que enfrentar.

En cuanto al impulso del IQS, se profundizó en el desarrollo de los principales KPI (Indicador Clave de Desempeño o Medidor de Desempeño)

para impulsar las explotaciones de áridos y permitir el diagnóstico de las mismas. En ambas reuniones se analizaron iniciativas que permitieran aprovechar las oportunidades que ofrece la digitalización, destacando el uso de machine learning (aprendizaje automático) y el big data (datos masivos) para adaptar las explotaciones a las demandas del mercado actual. Cabe destacar el apoyo recibido por parte del equipo técnico de ambas explotaciones.

En los próximos meses, esta prevista la visita al resto de canteras que forman parte del consorcio. Tras analizar el estado inicial (y de esta desarrollando a través de una encuesta específica) más detallada a todos los participantes del proyecto) donde se tienen en cuenta las necesidades de las canteras, esta previsto dar a conocer los primeros resultados y conclusiones iniciales del proyecto.



Figure 14. Anefa actualidad. Apr – May – Jun



Figure 15. Anefa actualidad. Jul - Aug - Sep.

Another article of DIGIECOQUARRY has been published by the specialized journal Aggregates Business Europe posted the 26th October 2021, with an interview to the project coordinator.

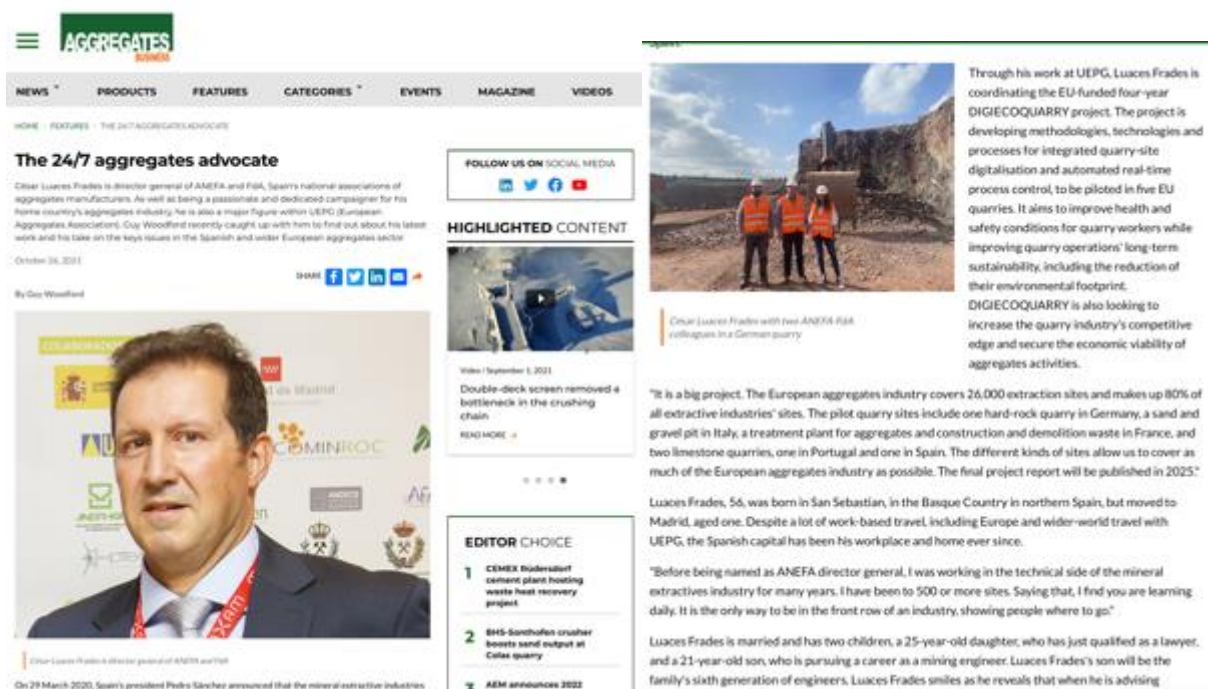


Figure 16. DEQ in Aggregates Business Europe.

A list of identified journals and magazines for dissemination and communication articles can be seen in D9.1 Annex V.

5.2.4 Scientific publications

Scientific knowledge generated during the project will be shared, as far as possible, in open-access scientific conferences and journals.

Each beneficiary will be able to freely choose where to publish. In the event of no preferences, the WP leader will suggest Open Research Europe, an open-access publishing platform for the publication of research stemming from Horizon 2020, Horizon Europe and Euratom (<https://open-research-europe.ec.europa.eu/about>).

The project will use Zenodo and ResearchGate as its online repository:

<https://zenodo.org/communities/digiecoquarry/?page=1&size=20>

<https://www.researchgate.net/profile/Digiecoquarry-Project>

Targeted scientific publications can be found in D9.1 Annex VII.

5.2.5 Public deliverables

DIGIECOQUARRY's public deliverables are being posted on the website without any access restriction. By now, the following public deliverables have been released.

- D7.6 Requirements for Communication with policy makers & public bodies.
- D8.1 Clustering plan.

- D8.2 Protocols to cooperate with RMIS and EURMKB.
- D9.2 DIGIECOQUARRY's website.
- D9.3. Dissemination and Communication Materials (1|3).
- D10.4 Data Management Plan (1|2).
- D11.1 Ethics Requirements.

The list of public deliverables and their publication date is shown in D9.1 Annex IX.

5.2.6 Joint public-private publications coming from the project, from partners or from organisations outside the consortium

At least 3 joint publications are expected from the Project:

- A technical roadmap for the implementation and improvement of sustainable management of climate change prevention and ecological transition in the extractive industry (including better energy and water efficiency and a reduction in waste, wastewater and emissions) and significantly improving the performance of the solutions provided throughout the whole life cycle.
- A technical roadmap for the implementation and improvement of H&S performance in the extractive industry.
- An improvement roadmap for SMEs with technical proposals to improve each indicator in each production process phase.

5.3 Events

5.3.1 Participation in scientific conferences

The partners of the DIGIECOQUARRY consortium will participate in several scientific conferences, presenting papers, networking with relevant market players for future collaborations, publications, finding out what's new, adding research value, etc.

In the Spanish National Congress, that is going to be held in Oviedo – Spain in May 2022, DIGIECOQUARRY has already committed the following presentations:

- DIGIECOQUARRY: the future of the aggregates sector is already the present.
- The four main pillars for optimal aggregates operation management.
- Benchmarking and Balanced Scorecard in the aggregates sector - Transfer of best practice and continuous improvement.
- Digitisation in the Aggregates Industry - Implementation Uses and Success Stories.

A list of identified scientific conferences can be found in D9.1 Annex X.

5.3.2 Participation in events, trade fairs and workshops

The partners of the DIGIECOQUARRY consortium have participated in some external events with the aim to boost the dissemination of project's activities and results.

During this six months, DIGIECOQUARRY has been disseminated in SMOPYC, International Show of Public Works, Construction and Mining Machinery (17 to 19 November 2021 – Zaragoza – Spain) and MIRO Forum (24 to 26 November – Berlin – Germany).



Figure 17. DEQ in SMOPYC.



Figure 18. DEQ in MIRO Forum.

A list of identified events, fairs and workshops can be found in D9.1 Annex XII.

5.3.3 DIGIECOQUARRY's workshops, seminars & panel presentations

During the project, four workshops will take place.

The first workshop, organised by ANEFA, aims to familiarise all interested parties with the project and the IQS platform and to obtain insights from relevant stakeholders. This will take place In the Spanish National Congress, that is going to be held in Oviedo – Spain in May 2022, where DIGIECOQUARRY has already committed a Workshop Aggregates 4.0 – DIGIECOQUARRY (Thursday, 22nd May).

The remaining workshops, seminars & panel presentations will include parallel demonstrations and training sessions, so as to showcase the project's benefits, gather end-user feedback for further improvements, as well as to investigate the interest for the commercial exploitation of the DIGIECOQUARRY solution.

A list of identified workshops, seminars & panel presentations can be found in D9.1 Annex XIV.

5.4 On-line presence

5.4.1 Project's website to foster the IQS platform, dissemination and act as a central point to reach the network of partners sites

The project's web portal (<https://digiecoquarry.eu/>) has already been developed, in its first version, by M2 of the project and it constitutes the main gateway to DIGIECOQUARRY's activities, deliverables, news and events.

At this point the web portal contains information about the project's concept and approach, its objectives, the consortium, the most recent and active related projects as well as some initial news.

As the project evolves, the web portal will be permanently updated and further enriched with all publishable deliverables, promotional material and events. Links to relevant initiatives, to social media accounts of the project and to project partner's webpages are also included.

ANEFA is responsible for the design, operation and update of the project's web-portal. All partners are required to create links (banners) to the project web-portal on their websites and to contribute with the news to be uploaded as well as to publish occasionally news of the project to the web-portals of their organisations.

The DIGIECOQUARRY's portal will be mentioned in all publicity material generated by the project Consortium.

The current simplified structure of the website is:

- What is DEQ?
- About us
- Objectives
- Concept
- News
- Contact us

This simplified structure is temporary, to avoid sections without any relevant content.

In the coming months, according with the developments and new materials, this simplified structure will be improved and extended (see Figure 19), in order to gather all the information about the project:

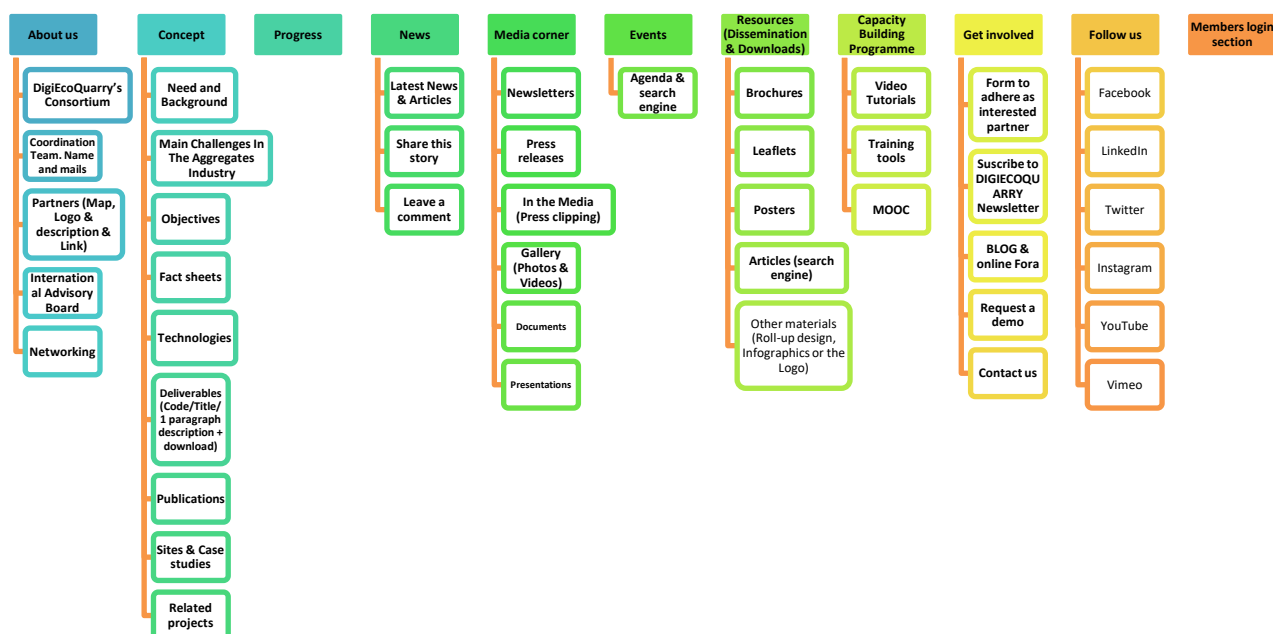


Figure 19. DIGIECOQUARRY's final structure of the Website.

Other sections of the Website will be:

- Follow us on social media: Facebook / LinkedIn / Twitter / Instagram / YouTube / Vimeo.
- DIGIECOQUARRY PROJECT - CONCEPT (text + visual description with infographics) / AIMS (text + visual description with infographics) / APPROACH (text + visual description with infographics) / IMPACTS (text + visual description with infographics).
- Next Event - Announcement & Registration.
- Access to the DIGIECOQUARRY platform.
- Videos.
- Partner Logos Display.
- Map.
- International Advisory Board.
- Drone video-visits to the sites.
- Agenda.
- NEWS (latest news).
- Contact.
- EU Flag “This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 101003750”.
- Members only section.

The traceability between the first version of the site and the final configuration is shown in Table 3.

Table 3. Evolution of www.digiecoquarry.eu.

Initial configuration of www.digiecoquarry.eu	Final configuration of www.digiecoquarry.eu
What is DEQ?	What is DEQ?
About us DigiEcoQuarry's Consortium Coordination Team. Name and mails Partners (Map, Logo & description & Link) International Advisory Board Networking	About us DigiEcoQuarry's Consortium Coordination Team. Name and mails Partners (Map, Logo & description & Link) International Advisory Board Networking
Objectives Health & Safety and Security Efficiency, Selectivity and Profitability Environmental Impact Social Acceptance	Concept Need and Background Main Challenges In The Aggregates Industry Objectives Health & Safety and Security Efficiency, Selectivity and Profitability Environmental Impact Social Acceptance
Concept Need and Background Main Challenges In The Aggregates Industry Fact Sheets	Fact Sheets Technologies Deliverables (Code/Title/1 paragraph description + download) Publications Sites & Case studies Related projects
	Progress
News	News

Latest news and articles Share This Story, Choose Your Platform! Leave a comment	Latest news and articles Share This Story, Choose Your Platform! Leave a comment
	Media corner Newsletters Press releases In the Media (Press clipping) Gallery (Photos & Videos) Documents Presentations
	Events Agenda & search engine
	Resources (Dissemination & Downloads) Brochures Leaflets Posters Articles (search engine) Other materials (Roll-up design, Infographics or the Logo)
	Capacity Building Programme Video Tutorials Training tools Massive Online Open Course – MOOC
Contact us How Can We Help? Follow us in social media Get In Touch	Get involved Form to adhere as interested partner Subscribe to DIGIECOQUARRY Newsletter BLOG & online Fora Request a demo Contact us How Can We Help? Follow us in social media Get In Touch
Follow us Facebook LinkedIn Twitter Instagram YouTube Vimeo	Follow us Facebook LinkedIn Twitter Instagram YouTube Vimeo
	Member's login section

The list of websites of the partners is shown in Annex IV and a further explanation on the website in D9.2.

5.4.2 Project's social media accounts & network with partner's social media profiles

The creation of accounts & channels in Facebook, LinkedIn, Twitter, Instagram, YouTube and Vimeo is considered key to the communication of the project's news, events and outcomes.

The list of URLs of DIGIECOQUARRY's social media is:

- Facebook: <https://www.facebook.com/Digiecoquarry>

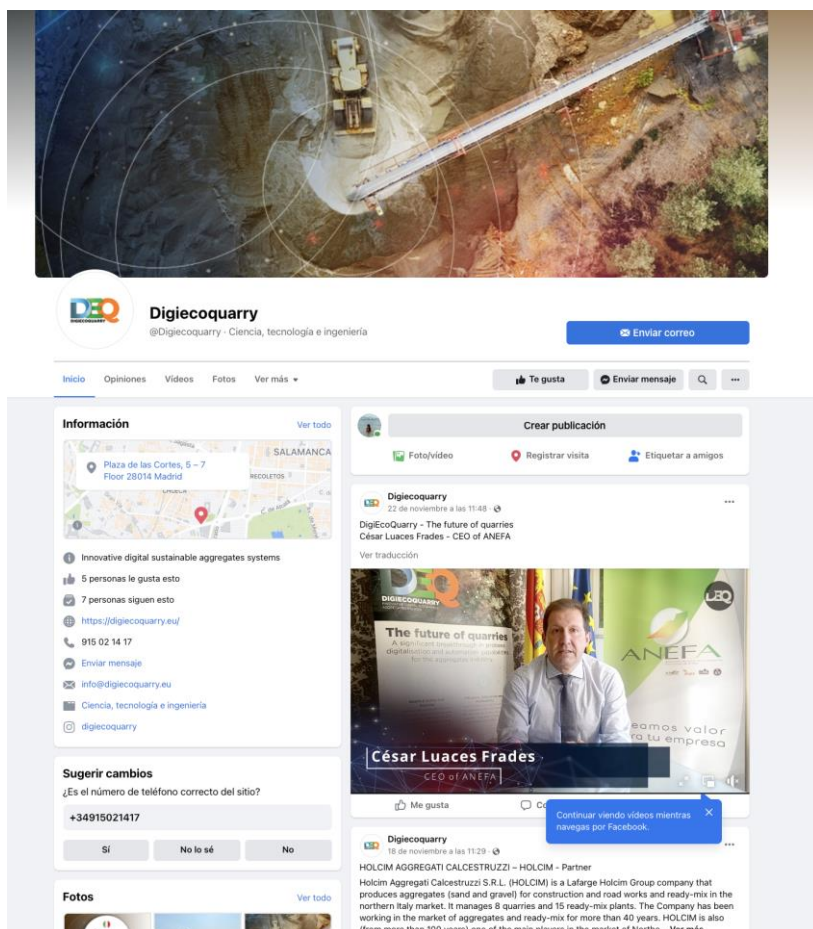


Figure 20. Facebook profile.

- LinkedIn: <https://www.linkedin.com/company/digiecoquarry/>

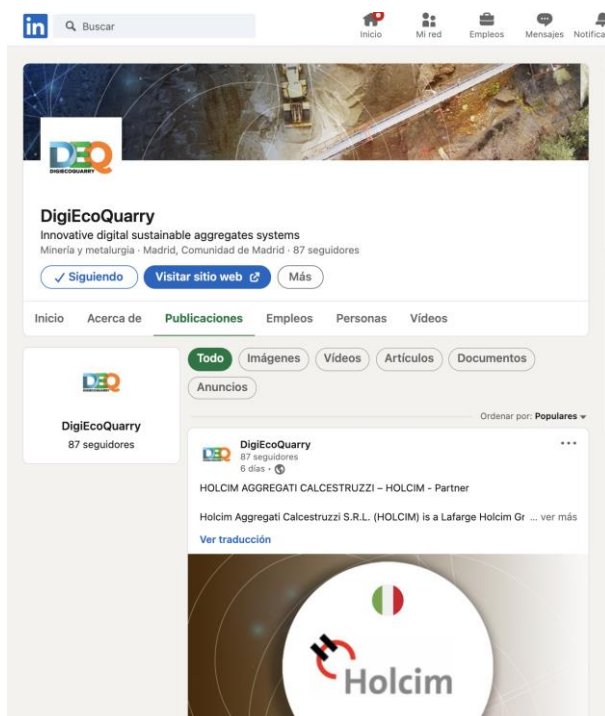


Figure 21. LinkedIn profile.

- Instagram: @digiecoquarry

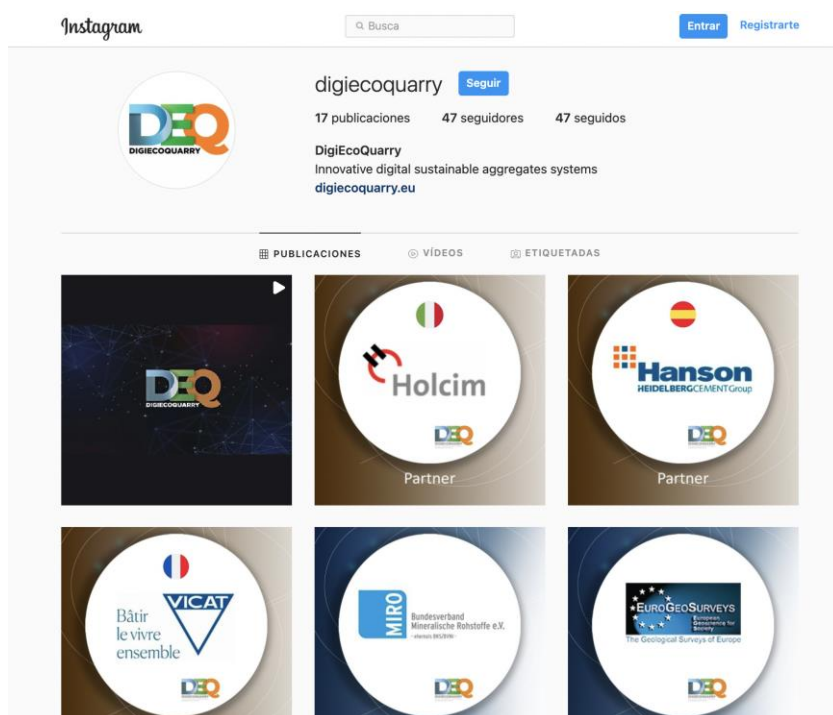


Figure 22. Instagram profile.

- Twitter: @digi_eco

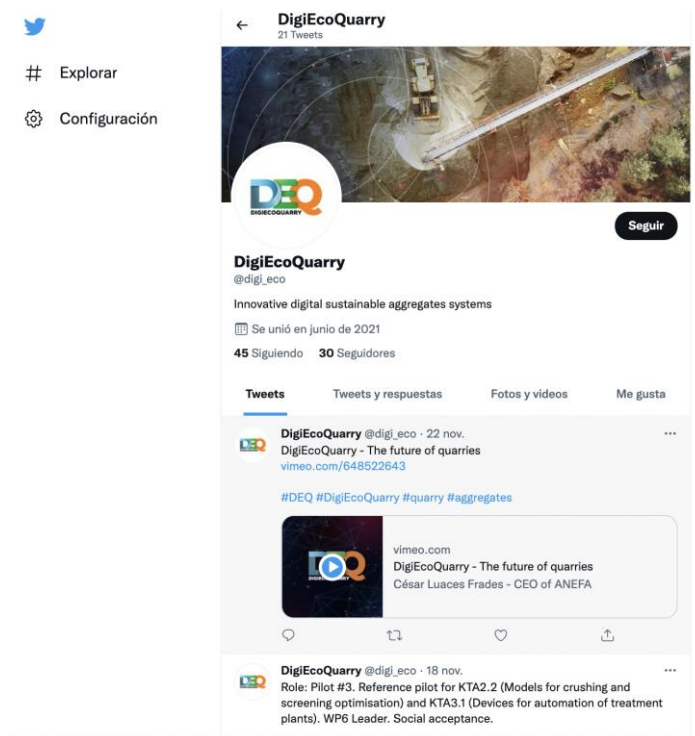


Figure 23. Twitter profile.

- YouTube: <https://www.youtube.com/channel/UCdxXOC0k6kY5YEiW-sw1McA>

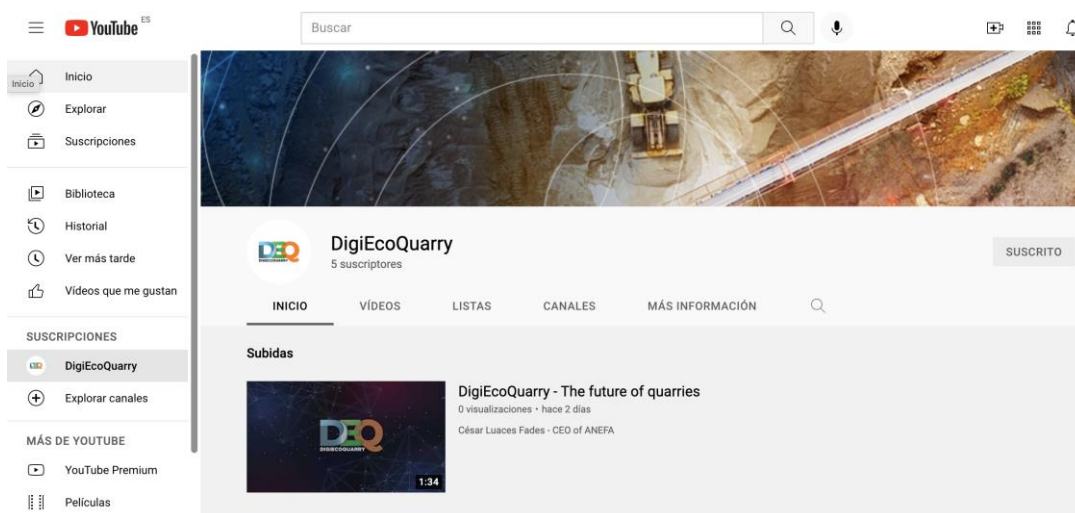


Figure 24. YouTube profile.

- Vimeo: <https://vimeo.com/digiecoquarry>

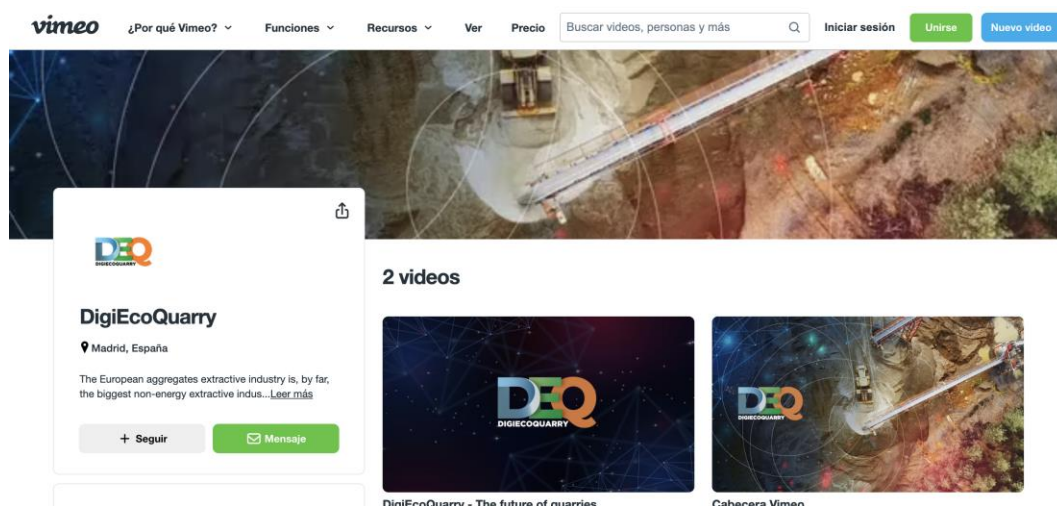


Figure 25. Vimeo profile.

The project's social media are continuously updated in English with news about the project's activities and results, various events, scientific news, news from several organizations and associations, news from related EU projects etc.

The frequency of social media posts depends on the availability of news about the activities and results of the project.

Regarding the YouTube channel, promotional videos will be produced so as not only to create awareness but also to exploit viral marketing effects.

The videos will be uploaded to the project's YouTube & Vimeo channels and emphasize on promoting the project's results along with their value propositions as well as its events and demonstration activities.

ANEFA is responsible for the administration of the DIGIECOQUARRY's social media sites.

All partners are required to become a member or a follower of the social media accounts, to actively comment the social media posts of the project and also to disseminate publishable material through their contact networks. Partners are also asked to interact with news, uploads, tweets and retweets, conversations and comments in the social media sites of the project, during the whole three-years duration of the grant, as well as to publish posts and news about DIGIECOQUARRY regularly, through the social media of their organizations.

The list of social media of the partners is shown in Annex V.

The direct accesses to DIGIECOQUARRY's social media is available on the website.

5.4.3 Blog and on-line Fora

All partners will contribute to the blog and on-line fora with scientific (articles in scientific journals / conferences) and non-scientific (press releases, magazine articles, blogs) publications, that is currently under design.

5.4.4 Videos

Drone flight videos of each site are being currently recorded and dissemination and communication videos will be produced in the next months.

The script of the videos is under preparation.



Figure 26. Bumper video.

5.4.5 Capacity Building Programme (CBP) oriented to potential users and adopters

This will comprise video tutorials, a Massive Online Open Course – MOOC, a simulator for professionals and virtual workshops with third parties, but this will be detailed later.

The actions of the DIGIECOQUARRY's Capacity Building Program (CBP) will be included and announced in the agenda of the website.

The programmes of the DIGIECOQUARRY's Capacity Building Program (CBP) will be available in the project website.

5.5 Other channels & tools

5.5.1 Partners' communication channels

DIGIECOQUARRY takes advantage of the support of Partners' communication channels. Some of them, have published press clips about the project, that can be found in Annex VI

The list of Partners' communication channels is shown in Annex VII.

5.5.2 EU dissemination channels

DIGIECOQUARRY's communication and dissemination plan will take advantage of the following EU dissemination channels that could be used during the project:

- EU-OSHA.

- CEDEFOP. The European Centre for the Development of Vocational Training brings together policy-makers, social partners, researchers and practitioners to share ideas and debate the best ways to improve vocational education and training policies.
- European Enterprise Network (EEN). The EEN is an EU network of around 600 business support organizations from more than 60 countries, including chambers of commerce and industry, technology centres, research institutes and development agencies.
- CORDIS (Community Research and Development Information Service) WIRE. CORDIS WIRE is a CORDIS online service that helps research and business community to promote projects' activities by publishing news and events on CORDIS
- EU Info-days, workshops and conferences.

5.5.3 Links and interactions with the exploitation plan

A specific strategy will be defined to create synergies between the DIGIECOQUARRY communication and dissemination plan and the exploitation plan, in order to optimise them.

5.5.4 IP and knowledge management plan

The IP and knowledge management strategy for DIGIECOQUARRY will be defined according to the background of each partner, the ownership of the foreground identified and the exploitation agreements among the parties (in line with the Data Management Plan defined in WP10).

5.5.5 Synergies with relevant projects and initiatives

So far, DIGIECOQUARRY has been disseminated within two clustering activities of other H2020 projects.

On 29th September, a presentation was made in SUMEX clustering activities under the theme 'E-learning'. The SUMEX Project (Sustainable Management in the Extractive Industries) aims to promote increased but sustainable mineral production in the EU, establishing a sustainability framework for the extractive industries in Europe. It will take into account the Sustainable Development Goals, the European Green Pact and the EU's Social License to Operate considerations, and will involve stakeholders from civil society, industry, academia and governments across the EU.

The project coordinator is Montanuniversität Leoben and the clustering activities leader is the University of Lapland. The following links leads to their press clip about it:

<https://www.sumexproject.eu/2021/10/12/sustainability-outside-the-box-lessons-from-natural-resource-projects-architecture-and-e-learning/>

On 18th November, the coordination participated in ROBOMINERS clustering activities on the topic of 'The key technological obstacles towards a fully autonomous robotic mining (eco)system'. Their press clip can be found here:

<https://robominers.eu/2021/10/01/robominers-twinning-clustering-event-18-november-2021/>

5.5.6 Meetings with neighbourhood or community reference groups

Under WP7 it is foreseen to organise meetings at pilot site level with neighbourhood representatives or community reference groups to address social issues.

5.5.7 Enquiries and surveys for citizens

In connection to the previous activities (section 5.5.6), it is foreseen to organise enquiries & surveys for citizens to address social issues.

5.5.8 Meetings with policy makers (at EU and national levels)

ANEFA and WP8 leader (UPM-AI) are closely collaborating and coordinating the organisation of meetings with policy makers at EU and national levels to explain DIGIECOQUARRY. Also, to discuss potential issues and difficulties identified that could require political actions (draft of new policies, legislation or other).

5.5.9 Meetings with relevant related organisations (at EU and national levels)

ANEFA and WP8 Leader (UPM-AI) are closely collaborating and coordinating the organisation of meetings with related organisations (entrepreneur organisations, Trade Unions, Accademia, Technological Centres, NGOs, etc.) at EU and national level to explain DIGIECOQUARRY. Also, to discuss potential issues and difficulties identified that could require political actions (policy, legislation or other).

ANEFA has made a preliminar announcement of DIGIECOQUARRY in the European Aggregates Association – UEPG Committee Meetings (Health & Safety Committee, Environment Committee and Economic Committee) held in Brussels in the 14 & 15 October 2021, and it has been agreed that a permanent updated presentation will be made in the biannual meetings in the coming years. The attendants to this meetings are the technical representatives of the EU National Aggregates Associations.

5.5.10 Ensuring the development of the Gender Management Plan (under WP10)

DIGIECOQUARRY's Gender Management Plan deals with the implementation of the evaluation and monitorization of women and men in the team, as part of H2020 principles.

This Plan and its objectives have been developed through a series of specific activities that will be carried out for its achievement, and indicators that will allow to measure and evaluate its level of success and fulfilment.

The DIGIECOQUARRY Gender Action Plan will analyse the gender dimension and propose measures regarding:

- 1 Gender dimension throughout research: gender impact within the European aggregates sector and in the field of technological development and ICT solutions will be analysed.
- 2 Measures to ensure gender-balanced research team: decision-making process and total number of workers involved in research teams.

6 KPIs

An evaluation of the KPIs for the implementation of the Dissemination and Communication Plan will be prepared and shared by M12 of the project.

7 Timetable

A table with the name of the activity, the responsible partner and the 48 months of the project has been prepared and updated, to organise and prioritise the dissemination, communication and exploitation plan.

This table, enclosed in Annex VIII, will be used as a management tool and updated when required.

The final timetable of the dissemination, communication and exploitation plan will be reported in an updated version of the “DIGIECOQUARRY Communication and Dissemination Activities report” (deliverable D9.4).

8 Conclusions

This document, titled “Dissemination and Communication Materials”, describes the activities and materials that have been done and produced during this months to disseminate DIGIECOQUARRY.

As the project evolves, this document will be updated in months 24 and 36.

9 References

The following references have been used for the preparation of this deliverable:

- EU Horizon 2020 call.
- DIGIECOQUARRY Grant Agreement number 101003750.
- DIGIECOQUARRY Consortium Agreement.

10Annex I. DIGIECOQUARRY's branding report



Index

Introduction.....	2
The brand	3
Lettermarks (Monograms)	4
Concept development	5
Conformation	7
1 Ink monogram	9
Applications.....	11
Color range	12
Types	13
Monogram Pantone Inks.....	15

Introduction

This document gathers the basic tools for the correct use and graphic application of the visual identity elements of the DigEcoQuarry project in all their possible expressions. It has been designed taking into account the needs of the people responsible for interpreting, articulating and implementing the brand in different areas.

The consolidation of the brand requires special attention to the recommendations set forth in this manual, as a document that guarantees a unity of criteria in our communication and public dissemination.

The correct and consistent use of the brand will help us achieve the objectives of identification, coherence and reinforcement of the project.

The brand

DigEcoQuarry must be understood and recognized as an ambitious project, but also well defined, well structured, serious, solid and powerful. The name itself contains the three basic concepts of the project, which are its essential values.

The project, in all its communicative aspects, must clearly transmit these values and intentions. For this reason, the correct management and use of the set of assets linked directly or indirectly to the name or visual identity of the project is important.

Digitalisation

R&D
Innovation
Modernization

Ecology

Environment
Biodiversity
Sustainable

Quarry

Efficiency
Safety

Brand

A brand is a primary commercial identification and / or the set of various identifiers with which it relates and offers a product or service in the market.

The trademark is one of the set of distinctive signs of a product or service in the market. Some people highlight the psychological aspect of the brand from the experiential aspect. The experiential aspect consists of the sum of all the points of contact with the brand and is known as the brand experience. The psychological aspect sometimes referred to as brand image, is a symbolic construction created within people's minds and consists of all the information and expectations associated with the product, services, or, in our case, the project.

Lettermarks (Monograms)



Concept development

Identity's development was based on the three key concepts of the project: Digitalisation, Ecology (biodiversity, environment) and the Aggregates Industry. And we have tried to avoid the simple grouping of easy and hackneyed graphic representations of each of the concepts. For this reason, a clear and simple Monogram has been chosen, easily recognizable, and without isotypes or iconography that would limit the scope of the project.

The representation of each concept is simply abstracted in the colors of each letter, only the 'D' incorporates a development of almost metallic layers that add more weight to its complex technological significance and that will serve us for more elaborate animated developments.

The arrangement of the letters superimposed on top of each other, on the one hand, gives the monogram solidity and unity, ceasing to be single letters to be a single symbol of identity, and on the other hand, it gives each concept specific weight and supports it in the following, being a clear representation of the structure and philosophy of the project.



Confirmation



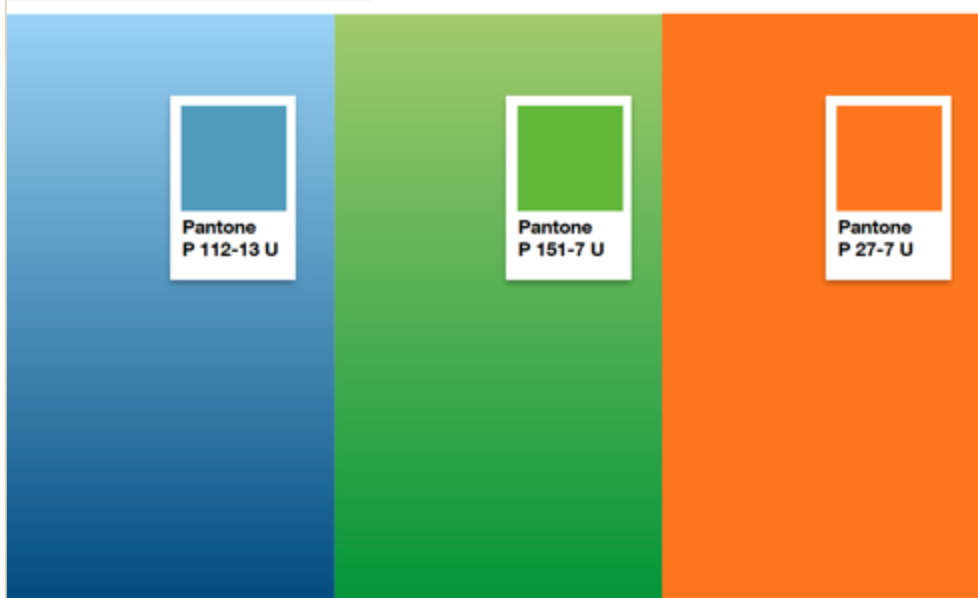
1 ink monogram

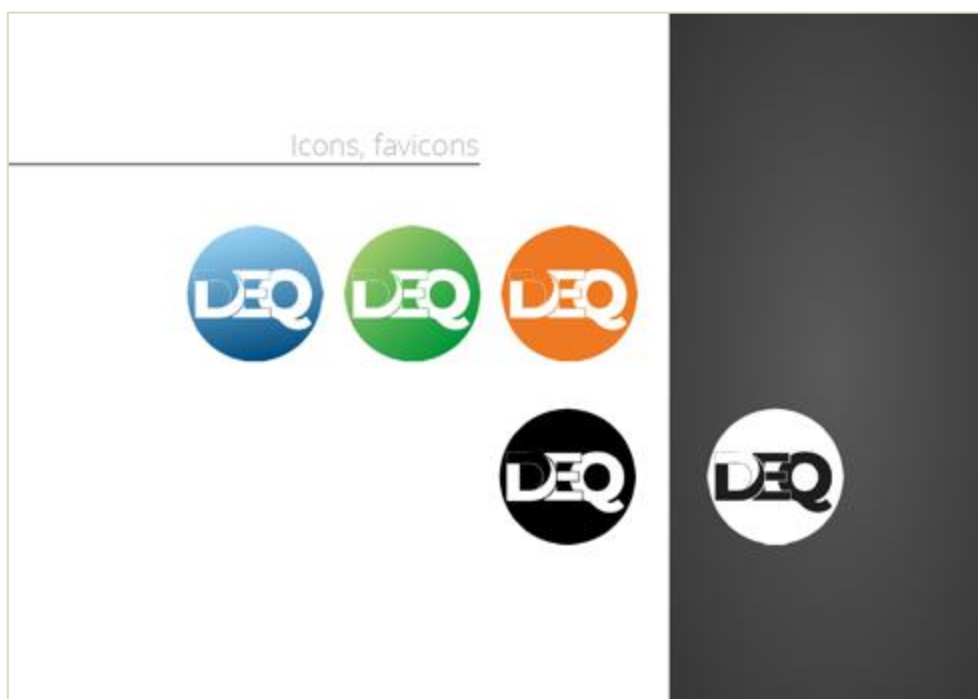


European flag



Color range







Monogram Pantone Inks





11Annex II. List of brochures, leaflets, flyers, posters and roll-up

Table 4. Annex II. List of brochures, leaflets and posters.

	POSTERS	LEAFLETS	FLYERS	BROCHURES	ROLL-UP	INFOGRAPHICS	AVAILABILITY DATE
CONCEPT & PRESENTATION	1	1	1	0	1	1	M6
INTERIM STATUS & PRELIMINARY CONCLUSIONS	1	1	1	2	1	1	M24
PLATFORM	1	1	1	1	1	1	M46
CONCLUSIONS	1	1	1	1	1	1	M48

12 Annex III. Press releases

12.1 DigiEcoQuarry a key project for the digitalisation of the aggregates industry, has been launched

On June 2 & 3, 2021, took place DIGIECOQUARRY's Kick-off Meeting. This new European project, named 'INNOVATIVE DIGITAL SUSTAINABLE AGGREGATES SYSTEMS — DIGIECOQUARRY', which receives funding under the EU Horizon 2020 program (No 101003750), aims to design, develop and validate in 5 pilot environments an Innovative Quarrying System (IQS) comprising sensors, processes, tools and methods for data capture, processing and sharing to provide integrated, digitalised, automatic and real-time process control for aggregates quarries.

The DIGIECOQUARRY consortium will combine the latest researched and advanced technologies applied to quarry operation together with the integration of selected innovative digital solutions to boost the capacity of the aggregates industry, to enhance Health & Safety conditions for workers, to improve Selectivity and Efficiency of the aggregates extractive sites, to maximise Sustainability and Resource Efficiency in the quarry operations and to foster Social Acceptance.

Over the next 4 years, hard work will be carried out by the 25 partners and the outstanding professional team of nearly 100 experts involved in it. Led by the Spanish Aggregates Association ANEFA, this international project gathers 25 partners from Spain, Portugal, France, Germany, Italy, Austria, Sweden, Finland, Colombia and South Africa.

Due to the current pandemic situation, the meeting was held telematically. The Teams meeting was attended by more than 70 people from all the entities that make up the consortium: quarries (Granulats Vicat, Hanson Hispania SA, Holcim Agregati Calcestruzzi SRL, Cronenberger Steinindustrie Franz Triches GmbH & Co and Agrepor Agregados – Extracção de Inertes, S.A), technology and mining companies (Sandvik Mining and Construction OY, Metso Outotec Finland OY, Maxamcorp International S.L., ITK Engineering GMBH, Akka High Tech, Arco Electrónica SA, Ma-estro SRL, DOHMEN HERZOG & Partner GmbH, Abaut GmbH, Sigma Technologies S.L.U., Mintek, ROCTIM AB), consultancy firms (APP Consultoria de Gestión de Proyectos SL, Zabala Innovation Consulting SA), academia (Universidad Politécnica de Madrid, Montanuniversität Leoben, Chalmers Tekniska Högskola AB) and other entities (Asociación Colombiana de Productores de Agregados Pétreos, Consejería de Industria, Empleo y Promoción Económica del Principado de Asturias).



On these two sessions, participants introduced their 10 work packages, tasks, global schedules and work plans for the next 6 months. It culminated with a virtual cocktail in which attendees were able to network and get to know each other.

12.2 ANEFA visits Holcim

Last 19th of July, ANEFA visited Holcim Aggregati Calcestruzzi's aggregates quarry in Milan (Italy), to analyse the improvements that the IQS (Intelligent Quarrying System) will bring to the site.

Emphasis was placed on the improvement of the aggregates sector activities' connection, considering the nature of these actions and without neglecting the problems they must face.

Also, the main KPIs (Key Performance Indicator) to promote the quarry's operation and enable its correct diagnosis were discussed. A set of initiatives were analysed to take advantage of the opportunities offered by digitalisation, highlighting the use of machine learning and big data to adapt the site to the demands of the current market.

In the coming months, visits to the other quarries comprising the consortium are planned. After analysing their initial state, where the needs of the quarries will be considered, the first results and initial conclusions of the project are expected to be announced.



<https://digiecoquarry.eu/2021/08/18/anefa-visits-holcim/>

12.3 ANEFA visits Hanson Heidelberg

On the 16th of July, ANEFA's team – DIGIECOQUARRY's coordinator – visited Valdilecha's quarry in Madrid, property of Hanson HeidelbergCement group. This quarry participates on the project as one of the five pilot sites, where advanced rock mass characterisation and innovative drilling & blasting technologies will be tested.

After a long and fruitful meeting, in which the priorities of the site were manifested and the objectives to be achieved were consolidated, a guided tour of the facilities took place.

The first stop was the treatment plant, which was fully explained. Then, the warehouse workers described the automated procedure to be followed for the maintenance of the machinery, both preventive and corrective, which they monitor from their smartphones.

Finally, a visit was made to the pit and the company's manager listed the remediation measures that are being carried out there.



<https://digiecoquarry.eu/2021/08/18/anefa-visits-hanson-heidelberg/>

12.4 ANEFA's team visited Agrepor Agregados – Extração de Inertes

The ANEFA team met with Agrepor Agregados members at their facilities near Lisbon (Portugal) on Monday 30 August. This visit provided first-hand knowledge of their facilities as part of DigiEcoQuarry.

The meeting was part of the scheduled work plan to visit all the quarries that are integrated in the project (5 European quarries) in the first months since the launch of the project. This meeting allowed ANEFA to learn more about the pilot problems associated with the project as well as to document its requirements.

During the working session, Agrepor Agregados presented the company and described their project. Subsequently, ANEFA had the opportunity to analyse the project in situ, visiting the quarry, the production facilities and product dispatch. The meeting was used to discuss fundamental issues for the development of the IQS (Intelligent Quarrying System). Among the topics discussed was the development of the main KPIs (Key Performance Indicators) that would help in the efficient and intelligent management of a quarry. These KPIs cover different aspects that affect the management of a quarry including economic, technical, environmental, and social perspectives.



<https://digiecoquarry.eu/2021/09/13/anefa-team-visited-agrepor-agregados-extracao-de-inertes/>

12.5 Granulats Vicat – the French pilot site of the project DigiEcoQuarry

ANEFA's team arrived at Granulats Vicat, the French pilot site of the project DigiEcoQuarry, on Tuesday, 24th of August. The day started with a visit around the site, Fenouillet, where the facilities were explained, as well as the casuistry of the quarry.

Originally, Fenouillet was located in the surroundings of Toulouse, but nowadays, as the city has dramatically grown, it is right in the middle of an industrial area. To give the reader an idea, right next door there is a shop of the French sports giant, Decathlon and opposite we can find both McDonald's and Burger King.

There is no excavation on this site but the washing of materials brought to it. On the other hand, waste is also stored here, which the company treats and uses as backfilling in other of their quarries. This is due to the strategic location of the site.



In the afternoon the team got to know another quarry property of Granulats Vicat, Carbonne.

It must be highlighted the great rehabilitation plan that is being carried out by Vicat in both sites. In Fenouillet, they are building land walls, growing grass, and conditioning a lake, to make the quarry better looking for their local community. While in Carbonne, a useless land, a former cornfield, has been turned into a huge lake. It even has a restaurant and water adventure activities, such as water air mats, and water skiing!

On the afternoon, as well as on the following morning, meetings were held with the workers of the quarries. They detailed their KPIs, procedures, and stated what they expect from DIGIECOQUARRY.

<https://digiecoquarry.eu/2021/09/14/granulats-vicat-the-french-pilot-site-of-the-project-digiecoquarry/>

12.6 ANEFA visited Cronenberger Steinindustrie

On Wednesday, 1st of September, ANEFA visited Cronenberger Steinindustrie, thus concluding the tour of DigiEcoQuarry's pilot sites. Part of Pescher Beteiligungen GmbH & Co. KG, CSI is an andesite quarry located near the city of Magdeburg, Germany.



After a company presentation, the coordination team was given an explanatory walk through the quarry and got to see a blasting. The treatment plant as well as the auxiliary facilities were also shown. In addition to all this, the hosts took ANEFA's team to see the environmental and social measurements they are taken to improve the impact the site makes in the surroundings.

CSI is the reference pilot for mobile equipment digitalisation, real-time modelling, and data collection and geofence, so, once the dynamic of the site was understood, meetings during two days were held to clarify the priorities of the company within the project.

<https://digiecoquarry.eu/2021/09/14/anefa-visited-cronenberger-steinindustrie/>

13Annex IV. List of websites of the partners

Table 5. Annex IV. List of websites of the partners

PARTNER	WEBSITE	
ANefa	https://www.aridos.org	
GRANULATS VICAT	http://www.granulats-vicat.fr	https://www.vicat.com
HANSON	https://www.heidelbergcement.com	
HOLCIM	https://www.holcim.it	
CSI	https://www.cronenberger-steinindustrie.de	
CIMPOR	https://www.cimpor.com	
SANDVIK	https://www.sandvik.coromant.com	
METSO OUTOTEC	www.mogroup.com	
MAXAM	https://www.maxamcorp.com	
ITK	https://www.itk-engineering.de	
MUL	https://www.unileoben.ac.at	www.unileoben.ac.at/bbk
CHALMERS	https://www.chalmers.se	
UPM	https://www.upm.es	https://www.minasyenergia.upm.es
AKKA	https://www.akka-technologies.com	
ARCO	https://www.arcoelectronica.es	
MAESTRO	http://www.ma-estro.com	
DH&P	https://www.dhp-gmbh.de	
ABAUT	https://abaut.de	
APP	https://www.app-consultoria.com	
SIGMA	https://sigma-ai.com	
DGASTUR	https://www.asturias.org	
ASOGRAVAS	https://asogras.org	
MINTEK	https://www.mintek.co.za	
ROCTIM	https://www.roctim.com	
ZABALA	https://www.zabala.es	

14Annex V. List of social media of the partners

Table 6. Annex V. List of social media of the partners.

PARTNER	LinkedIn	Twitter	Instagram	Facebook	YouTube
ANFEA	https://www.linkedin.com/company/asociaci%C3%B3n-nacional-de-empresarios-fabricantes-de-%C3%A1ridos-anefa/	@ANEFaridos		https://www.facebook.com/ANEFaridos/	https://www.youtube.com/channel/UC4ACayc0OwcxAHWafQnh9gA
GRANULATS VICAT	https://www.linkedin.com/company/vicat/?originalSubdomain=fr	@GroupeVicat		https://www.facebook.com/Groupe.Vicat/	https://www.youtube.com/VicatGroupe
HANSON	https://www.linkedin.com/company/heidelbergcement/	@HC_Hispania	@heidelbergcement_group		https://www.youtube.com/user/HeidelbergCementCom
HOLCIM	https://www.linkedin.com/company/holcim-italia-spa				
CSI			Incluir cuenta		
CIMPOR	https://www.linkedin.com/company/grupo-cimpor/				
SANDVIK	https://www.linkedin.com/company/sandvik-coromant/	@SandvikCoromant		https://www.facebook.com/SandvikCoromantOfficial	https://www.youtube.com/user/sandvikcoromant
METSO OUTOTEC	https://www.linkedin.com/company/metsooutotec	@MetsoOutotec	@metsooutotec	https://www.facebook.com/MetsoOutotec	https://www.youtube.com/c/MetsoOutotec
MAXAM	https://www.linkedin.com/company/maxam/	@MAXAMCorp	@Maxamcorp	https://www.facebook.com/MAXAMCorp	https://www.youtube.com/channel/UCuqAZPgay4halxYTia1pWiw
ITK	https://de.linkedin.com/company/itk-engineering/				https://www.youtube.com/channel/UCdFA7NS5L8jiacKK0HL5nA
MUL	https://www.linkedin.com/school/montanuniversität-leoben	@unileoben	@montanunileoben	https://www.facebook.com/MULeoben	https://www.youtube.com/c/MontanuniversitätLeoben
CHALMERS	https://www.linkedin.com/school/chalmers-university-of-technology/		@chalmers_production	https://www.facebook.com/ChalmersProduction/	
UPM	https://www.linkedin.com/school/universidad-politecnica-de-madrid/?originalSubdomain=es	@La_UPM	@somosupm	https://www.facebook.com/universidadpolitecnicaademadrid	https://www.youtube.com/user/UPM
	https://www.linkedin.com/company/etsimeupm/?originalSubdomain=es	@minasenergiupm	@etsimeupm	https://www.facebook.com/etsimeupm/	https://www.youtube.com/user/EscueladeMinas
	https://www.linkedin.com/company/explosives-blasting-lab/				

PARTNER	LinkedIn	Twitter	Instagram	Facebook	YouTube
AKKA	https://www.linkedin.com/company/akka-technologies/	@akka_tech	@akkatechnologies	https://www.facebook.com/AKKATechnologiesGroup/	https://www.youtube.com/user/AKKATechnologies1
ARCO	https://www.linkedin.com/company/arco-electric%C3%B3nica-s-a-/?originalSubdomain=es				https://www.youtube.com/channel/UCnNwPatyJED9Fj31SxtgvHg
MA ESTRO	https://www.linkedin.com/company/ma-estro/			https://www.facebook.com/maestrocrushingcontrol	https://www.youtube.com/user/mestrosrl
DH&P	https://www.linkedin.com/company/dohmen-herzog-&-partner-gmbh/mycompany/				
ABAUT	https://www.linkedin.com/company/abaut-gmbh/				
APP	https://www.linkedin.com/company/appconsultoria-project-management-consulting/	@APP_Consultoria	@app.consultoria	https://www.facebook.com/APP.Consultoria	https://www.youtube.com/channel/UCIWOQBIRQxIQjBfH1NEBTpQ
SIGMA	https://www.linkedin.com/company/sigma-ai/mycompany/				
DGASTUR	https://es.linkedin.com/company/gobierno-de-asturias	@GobAsturias		https://es-es.facebook.com/gobierno-deasturias/	https://www.youtube.com/channel/UCyssDZ4splBnG9_jD-FOpFA
	https://www.linkedin.com/company/fundacionfaen	@FundacionFaen	@FundacionFaen	https://www.facebook.com/FAEN.FundacionAsturianaDeLaEnergia	https://www.youtube.com/channel/UCQVhIMG2-dgL8FJftf8-yQ
ASOGRAVAS	https://www.linkedin.com/in/asogras-org-7bb72b112	@Asogras	@asogras	https://www.facebook.com/ASOGRAS/	https://www.youtube.com/channel/UC301rVZjpxOzolsIV00-nSA
MINTEK	https://www.linkedin.com/company/mintek/	@Mintek_RSA	@Mintek_RSA	https://www.facebook.com/minteksa	
ROCTIM	https://www.linkedin.com/company/roctim/				
ZABALA	https://www.linkedin.com/company/zabala-innovation/	@Zabala_IC	@Zabala_IC		https://www.youtube.com/channel/UCkiodHs_4czqN9lIgb82QGA

15Annex VI. Press clips released by the partners

15.1 ANEFA I:

+34 915 021 417 |



ANEFA LA INDUSTRIA MIEMBROS COMUNICACIÓN ÁREAS TEMÁTICAS

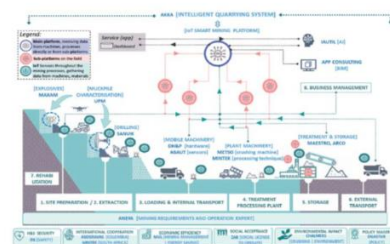


Inicio / Noticias / Empresas / ANEFA / H2020 de la Comisión Europea aprueba financiar el Proyecto DIGIECOQUARRY ideado y liderado por ANEFA

< Anterior Siguiente >



H2020 de la Comisión Europea aprueba financiar el Proyecto DIGIECOQUARRY ideado y liderado por ANEFA



ANEFA, con el apoyo de ZABALA INNOVATION CONSULTING, S.A. y la Escuela de Minas y Energía de Madrid de la Universidad Politécnica de Madrid, ha ideado, organizado y

promovido la preparación de una solicitud de subvención de fondos europeos H2020 para el proyecto DIGIECOQUARRY, para la digitalización de la industria europea de áridos.

Actualmente, las canteras están perdiendo las grandes oportunidades de la digitalización. De hecho, utilizan $\leq 1\%$ de los datos producidos. Así, el mayor desafío es conectar todos los procesos que tienen lugar en una explotación e

Entradas recientes

- > Conoce la Hoja de Ruta 2030 para los áridos de la UEPG en español
- > Código de Conducta para la Protección de las Especies del Sector Extractivo
- > Queda un mes para poder presentar tu candidatura a los Premios Nacionales de Desarrollo Sostenible 2022- PNDS 2022
- > Disponible la nueva App del VI CNA
- > Finalizados con éxito los cursos de



<https://www.aridos.org/h2020-de-la-comision-europea-aprueba-financiar-el-proyecto-digiecoquarry-ideado-y-liderado-por-anefa/>

1/4

16/11/21 9:59

H2020 de la Comisión Europea aprueba financiar el Proyecto DIGIECOQUARRY ideado y liderado por ANEFA - ANEFA

integrar su gestión en tiempo real, para mejorar y optimizar su régimen operativo.

formación en
seguridad
subvencionados por el
MITERD

El objetivo es gestionar integralmente todos los elementos de una explotación de áridos, a través de sensores y de inteligencia artificial.

1. Preparación de la explotación: Información general y caracterización del macizo rocoso.

2. Extracción: soluciones limpias y seguras para la extracción de áridos mediante perforación y voladura.

3. Carga y transporte interno: procesos seguros de carga y transporte dentro de la explotación.

4. Planta de tratamiento de tratamiento: implementación de metodologías eficientes, automáticas y flexibles para la producción de áridos, aumentando la calidad y las prestaciones de los materiales procesados, al tiempo que se reduce la huella ambiental del proceso.

5. Almacenamiento: tanto entre la cantera y la planta de tratamiento como después del proceso de producción.

6. Transporte externo: rutas de transporte optimizadas fuera de la cantera, en el transporte al cliente.

7. Rehabilitación: minimización de impactos ambientales en la restauración de canteras en términos de gestión eficiente del transporte interno desde el sitio de extracción y planta de tratamiento hasta el área de restauración.

8. Gestión empresarial: desarrollo de un control de procesos optimizado integrando y gestionando las enormes cantidades de datos que se pueden generar.

DIGIECOQUARRY es un gran proyecto, uno de los más importantes destinados a áridos, con una subvención de alrededor de 12.980.000 de euros por un total de alrededor de 16.714.828 de euros, con una duración de 4 años.

Se ha presentado en el marco de la iniciativa Acción climática, medio ambiente, eficiencia de recursos y materias primas, a la convocatoria – Greening the economy in line with the Sustainable Development Goals (SDGs) (Ecologizar la economía de acuerdo con los Objetivos de Desarrollo Sostenible (ODS)), dentro de la línea SC5-10-2019-2020: Acciones de innovación de materias primas: exploración y observación de la Tierra en apoyo de la minería sostenible.

Tras haber superado la primera fase de selección, entre cerca de 30 proyectos, a mediados de diciembre, se ha recibido la comunicación de la Comisión Europea confirmando que el proyecto ha sido uno de los dos seleccionados, con el 100% de la cantidad solicitada.



<https://www.aridos.org/h2020-de-la-comision-europea-aprueba-financiar-el-proyecto-digiecoquarry-ideado-y-liderado-por-anefa/>

2/4

16/11/21 9:59

H2020 de la Comisión Europea aprueba financiar el Proyecto DIGIECOQUARRY ideado y liderado por ANEFA - ANEFA

En estos momentos, se está procediendo a las formalidades administrativas, con los restantes 23 miembros del consorcio internacional que cubre Europa, América del Sur y Sudáfrica y que forman una gran asociación internacional: España- 10 socios, Suecia – 1 socio, Finlandia– 2 socios, Alemania- 3 socios, Francia- 2 socios, Italia- 2 socios, Portugal- 1 socio, Austria- 1 socio, Colombia- 1 socio, Sudáfrica- 1 socio.

Además de ANEFA, participan:

- 5 empresas de áridos: Vicat (Francia), Hanson Hispania, S.A. Heidelberg Cement Group (España), LafargeHolcim (Italia), Cronenberger Steinindustrie Franz Triches GmbH & Co. KG (Alemania), CIMPOR (Portugal).
- 8 empresas de bienes de equipo y servicios: Sandvik, Metso: Outotec, Maxam, Arco Electronica S.A., Maestro, Abaut GmbH, DOHMEN, HERZOG & Partner GmbH, ITK / NW Baumaschinen- Network Construction Machinery and Commercial Vehicles.
- 3 Universidades: Montan University of Leoben (Austria), Chalmers University of Technology (Suecia), Universidad Politécnica de Madrid (España).
- 3 empresas expertas en digitalización, inteligencia artificial y BIM: AKKA (Francia), APP Consultoría de Proyectos, Sigma.
- La Dirección General de Energía, Minas y Reactivación del Principado de Asturias, como representación de la Administración.
- 2 entidades que aseguran la dimensión internacional: ASOGRAVAS, asociación de áridos de Colombia y MINTEK, centro tecnológico Sudafricano.
- Zabala Innovation Consulting.



El proyecto se iniciará en mayo de 2021 y se desarrollará hasta mayo de 2025.

En próximos números, se irán ofreciendo más detalles del proyecto, que está llamado a contribuir decisivamente al salto digital de la industria de los áridos en Europa y, desde luego, en España.

Para compartir esta historia, elija     

<https://www.aridos.org/h2020-de-la-comision-europea-aprueba-financiar-el-proyecto-digiecoquarry-ideado-y-liderado-por-anefa/>



3/4

15.2 ANEFA II:

16/11/21 10:00

Arranca el proyecto DIGIECOQUARRY - ANEFA

+34 915 021 417 |



ANEFA

LA INDUSTRIA

MIEMBROS

COMUNICACIÓN

ÁREAS TEMÁTICAS



Inicio / ANEFA, Empresas, Noticias, Sin categoría / Arranca el proyecto DIGIECOQUARRY

< Anterior Siguiente >



Arranca el proyecto DIGIECOQUARRY



El pasado miércoles 2 de junio tuvo lugar la primera sesión del Kick off Meeting, la reunión de lanzamiento oficial del proyecto europeo DigiEcoQuarry, en el cual ANEFA participa como coordinador del proyecto y líder de varias de sus tareas.

El objetivo de este proyecto, que ha recibido una subvención de fondos europeos H2020 de 13 millones de euros, es desarrollar una aplicación para la gestión integral de una explotación de áridos. Durante los próximos 4 años, se trabajará en proporcionar una solución que resuelva el problema

<https://www.aridos.org/arranca-el-proyecto-digiecoquarry/>

Entradas recientes

- > Conoce la Hoja de Ruta 2030 para los áridos de la UEPG en español
- > Código de Conducta para la Protección de las Especies del Sector Extractivo
- > Queda un mes para poder presentar tu candidatura a los Premios Nacionales de Desarrollo Sostenible 2022- PND 2022
- > Disponible la nueva App del VI CNA
- > Finalizados con éxito los cursos de



1/3

16/11/21 10:00

Arranca el proyecto DIGIECOQUARRY - ANEFA

de manejo de los datos generados en el proceso productivo, y que cree nuevas propuestas de valor para los usuarios.

Debido a la situación actual provocada por la pandemia, la reunión se realizó de forma telemática. A la convocatoria de Teams se unieron más de 60 personas pertenecientes a las 25 entidades que conforman el consorcio del proyecto: canteras (Granulats Vicat, Hanson, Holcim, CSI y CIMPOR), empresas tecnológicas y mineras (Sandvik, Metso: Outotec, Maxam, ITK Engineering, AKKA, Arco Electrónica, Ma-estro, Dohmen, Herzog & Partner, Abaut, SIGMA Technologies, Mintek, Roctim), consultoras (APP Consultoría, Zabala Innovation Consulting), universidades (Universidad Politécnica de Madrid, Montanuniversität Leoben, Chalmers Tekniska Högskola AB) y otras entidades (ASOGRAVAS, DGASTUR).

En esta primera jornada se han presentado los planes de trabajo para los próximos 6 meses de la mitad de los grupos de trabajo, culminando con un cóctel virtual en el que los asistentes han podido hacer networking y conocerse los unos a los otros.



formación en seguridad subvencionados por el MITERD



Para compartir esta historia, elija cualquier plataforma



Artículos relacionados



WEB

ANEFA

Asociación Nacional de Empresarios Fabricantes de Áridos

Plaza de las Cortes, 5 -7º

[Presentación](#)

[Contacto](#)

[Aviso Legal](#)

[Política de Privacidad](#)

<https://www.aridos.org/arranca-el-proyecto-digiecoquarry/>

LOG IN

Por favor identifíquese.

Username

Password

Privacidad - Términos

2/3

15.3 ANEFA III

16/11/21 10:01

El "International Advisory Board" del proyecto DIGIECOQUARRY - ANEFA



ANEFA

LA INDUSTRIA

MIEMBROS

COMUNICACIÓN

ÁREAS TEMÁTICAS



Inicio / Noticias / Empresas / ANEFA / El "International Advisory Board" del proyecto DIGIECOQUARRY

< Anterior Siguiente >



El "International Advisory Board" del proyecto DIGIECOQUARRY

El proyecto DIGIECOQUARRY cuenta con un "International Advisory Board" compuesto por actores relevantes de la cadena de valor de los áridos para dar una visión externa, consejo y feedback cuando DEQ se tope con alguna dificultad.

Esta mesa la forman las siguientes entidades:

– European Agency for Safety and Health at Work (OSHA): EU-OSHA es la agencia de información de la Unión Europea en materia de seguridad y salud en el trabajo. Su trabajo contribuye al Marco Estratégico de Salud y Seguridad en el Trabajo 2021-2027 de la Comisión Europea y a otras estrategias y programas pertinentes de la UE.

– Global Aggregates Information Network (GAIN): Es una red totalmente voluntaria de las principales asociaciones regionales de áridos del mundo; no tiene intereses comerciales. El objetivo de GAIN es compartir las experiencias y las mejores prácticas del sector con el fin de promover una mayor sostenibilidad y rendimiento de la industria a nivel mundial.

– International Union for Conservation of Nature's (IUCN): La UICN es una Unión democrática que reúne a las organizaciones más influyentes del mundo y a los mejores expertos en un esfuerzo conjunto para conservar la naturaleza y acelerar la transición al desarrollo sostenible. Compuesta por organizaciones gubernamentales y de la sociedad civil, aprovecha la experiencia, los recursos y el alcance de sus más de 1.400 organizaciones miembros y la aportación de más de 18.000 expertos. Esta diversidad y amplia experiencia convierten a la UICN en la autoridad mundial sobre el estado del mundo natural y las medidas necesarias para salvaguardarlo.

Entradas recientes

> Conoce la Hoja de Ruta 2030 para los áridos de la UEPG en español

> Código de Conducta para la Protección de las Especies del Sector Extractivo

> Queda un mes para poder presentar tu candidatura a los Premios Nacionales de Desarrollo Sostenible 2022- PNDS 2022

> Disponible la nueva App del VI CNA

> Finalizados con éxito los cursos de formación en seguridad subvencionados por el MITERD


<https://www.aridos.org/el-international-advisory-board-del-proyecto-digiecoquarry/>

1/3

16/11/21 10:01

El "International Advisory Board" del proyecto DIGIECOQUARRY - ANEFA



Route One Publishing son expertos reconocidos cuyos escritos gozan de una gran confianza y que son invitados regularmente a moderar en las principales conferencias del sector.



– European Aggregates Association (UEPG): Desde 1987, la UEPG representa al sector europeo de los áridos en Bruselas, con 26 miembros en 25 países. Lleva a cabo actividades de asuntos públicos. Promueve los intereses de los miembros a nivel nacional y europeo en políticas económicas, técnicas, de seguridad y salud y medioambientales. Coordina la red de la UE e identifica de forma proactiva las iniciativas y políticas de la UE que puedan tener un impacto en los productores europeos de áridos, manteniendo a los miembros actualizados sobre los desarrollos políticos relevantes y asegurando que las posiciones de la UEPG sean consideradas por los responsables de la toma de decisiones de la UE.

– EuroGeoSurveys (EGS): Es una organización que representa a 38 Servicios Geológicos Nacionales en Europa y cuenta con una plantilla de varios miles de expertos. La misión de EuroGeoSurveys (EGS) es proporcionar conocimientos públicos sobre las ciencias de la Tierra para apoyar la competitividad, el bienestar social, la gestión medioambiental y los compromisos internacionales de la UE.

– German Federal Association of Mineral Raw Materials E.V. (BV MIRO): MIRO es el organismo que representa a la industria de los áridos en Alemania, con sede en Duisburgo y Berlín. Representa los intereses de la industria de la piedra natural, la grava, la arena y la arena de cuarzo a nivel federal y europeo. La asociación esta formada por a unas 1.600 empresas que explotan unas 2.700 plantas.



Para compartir esta historia, elija cualquier plataforma


<https://www.aridos.org/el-international-advisory-board-del-proyecto-digiecoquarry/>

2/3

15.4 ARCO ELECTRÓNICA

16/11/21 9:52

Participación Proyecto DIGIECOQUARRY - AUTOMATIZACION PROCESOS - ARCO ELECTRONICA

VISITE NUESTRA TIENDA ONLINE >>

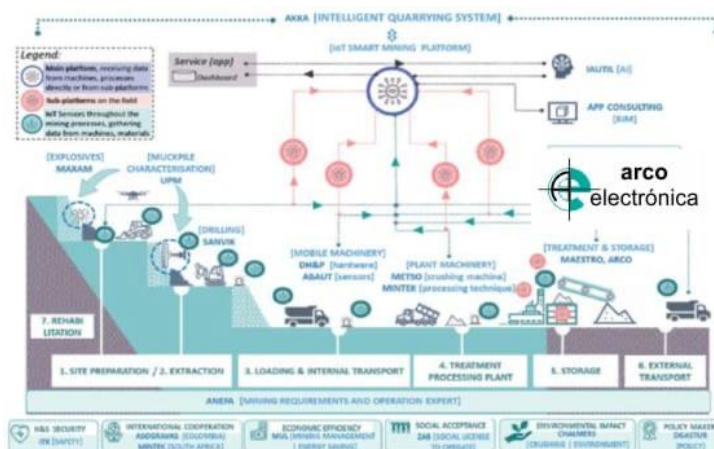
Búsqueda... Buscar

ESPAÑOL



Participación Proyecto DIGIECOQUARRY

Mar 18, 2021 | ÁRIDOS, NOTICIAS



Vamos a participar en el **Proyecto Europeo Digiecoquarry**, promovido y organizado por ANEFA, para la digitalización y automatización de la industria europea de áridos.

Para la realización del proyecto se ha formado un consorcio internacional, con 24 miembros.

El objetivo es gestionar íntegramente todos los elementos de una explotación de áridos, a través de sensores de inteligencia artificial.

En concreto, participaremos en la planta de tratamiento / producción, donde se

Este sitio web utiliza cookies para que usted tenga la mejor experiencia de usuario. Si continúa navegando está dando su consentimiento para la aceptación de las mencionadas cookies y la aceptación de nuestra política de cookies.

ACEPTAR

<https://www.arcoelectronica.es/noticias/participacion-proyecto-digiecoquarry/>

1/3

16/11/21 9:52

Participación Proyecto DIGIECOQUARRY - AUTOMATIZACION PROCESOS - ARCO ELECTRONICA

El proyecto se desarrollará en 5 empresas productoras de áridos: VICAT (Francia), Hanson Hispania (España), LafargeHolcim (Italia), Cronenberger Steinindustrie (Alemania), Cimpor (Portugal).

Arco Electrónica implantará el sistema de automatización bajo los estándares de la Industria 4.0 y **Arco Met 7** maquinaria de ensacado completamente automática y eficiente que incorporará tecnología Machine Learnig y cálculo del OEE (Overall Equipment Effectiveness o Eficiencia General de los Equipos).

El proyecto empezará a de desarrollarse en mayo de este año.

Además, para obtener más información sobre el proyecto puede consultar esta noticia de ANEFA.

BUSCAR

ENTRADAS RECIENTES

Arco Electrónica en SMOPYC 2021

Industria 4.0 en el sector del hormigón

Arco Electrónica en ExpoBiomasa 2021

Participación Proyecto DIGIECOQUARRY

Importancia de la medición de humedad en la fabricación de hormigón / prefabricado.

Compartir esta noticia

Empresas del grupo

Miembro de:



Ami5



Este sitio web utiliza cookies para que usted tenga la mejor experiencia de usuario. Si continúa navegando está dando su consentimiento para la aceptación de las mencionadas cookies y la aceptación de nuestra política de cookies.

ACEPTAR

<https://www.arcoelectronica.es/noticias/participacion-proyecto-digiecoquarry/>

2/3

15.5 FAEN

16/11/21 9:50

Arranca el proyecto DIGIECOQUARRY - FAEN

☎ +34 985 46 71 80 ✉ info@faen.es (<mailto:info@faen.es>)(<https://www.faen.es/index.php>)

Arranca el proyecto DIGIECOQUARRY

Inicio (<https://www.faen.es>) / Noticias (<https://www.faen.es/noticias/>) / Arranca el proyecto DIGIECOQUARRY



Compartir

Jun 7, 2021
Uso de cookies

Este sitio web utiliza cookies para que usted tenga la mejor experiencia de usuario. Si continúa navegando está dando su consentimiento para la aceptación de las mencionadas cookies y la aceptación de nuestra política de cookies (Puedes cambiar la configuración de cookies desde el pop-up correspondiente). Para mayor información.

Arranca el proyecto DIGIECOQUARRY

ACEPTAR

<https://www.faen.es/arranca-el-proyecto-digiecoquarry/>

1/4

16/11/21 10:01

El "International Advisory Board" del proyecto DIGIECOQUARRY - ANEFA



ANEFA

LA INDUSTRIA

MIEMBROS

COMUNICACIÓN

ÁREAS TEMÁTICAS



Inicio / Noticias / Empresas / ANEFA / El "International Advisory Board" del proyecto DIGIECOQUARRY

< Anterior Siguiente >



El "International Advisory Board" del proyecto DIGIECOQUARRY

El proyecto DIGIECOQUARRY cuenta con un "International Advisory Board" compuesto por actores relevantes de la cadena de valor de los áridos para dar una visión externa, consejo y feedback cuando DEQ se tope con alguna dificultad.

Esta mesa la forman las siguientes entidades:

– European Agency for Safety and Health at Work (OSHA): EU-OSHA es la agencia de información de la Unión Europea en materia de seguridad y salud en el trabajo. Su trabajo contribuye al Marco Estratégico de Salud y Seguridad en el Trabajo 2021-2027 de la Comisión Europea y a otras estrategias y programas pertinentes de la UE.

– Global Aggregates Information Network (GAIN): Es una red totalmente voluntaria de las principales asociaciones regionales de áridos del mundo; no tiene intereses comerciales. El objetivo de GAIN es compartir las experiencias y las mejores prácticas del sector con el fin de promover una mayor sostenibilidad y rendimiento de la industria a nivel mundial.

– International Union for Conservation of Nature's (IUCN): La UICN es una Unión democrática que reúne a las organizaciones más influyentes del mundo y a los mejores expertos en un esfuerzo conjunto para conservar la naturaleza y acelerar la transición al desarrollo sostenible. Compuesta por organizaciones gubernamentales y de la sociedad civil, aprovecha la experiencia, los recursos y el alcance de sus más de 1.400 organizaciones miembros y la aportación de más de 18.000 expertos. Esta diversidad y amplia experiencia convierten a la UICN en la autoridad mundial sobre el estado del mundo natural y las medidas necesarias para salvaguardarlo.

Entradas recientes

- > Conoce la Hoja de Ruta 2030 para los áridos de la UEFG en español
- > Código de Conducta para la Protección de las Especies del Sector Extractivo
- > Queda un mes para poder presentar tu candidatura a los Premios Nacionales de Desarrollo Sostenible 2022- PND5 2022
- > Disponible la nueva App del VI CNA
- > Finalizados con éxito los cursos de formación en seguridad subvencionados por el MITERD


<https://www.aridos.org/el-international-advisory-board-del-proyecto-digiecoquarry/>

1/3

15.6 HOLCIM



Lanciato Digiecoquarry: il progetto chiave per la digitalizzazione del settore degli Aggregati

9 Giugno 2021



La scorsa settimana 2021 si è aperto ufficialmente, in modalità virtuale, Digiecoquarry: il progetto chiave per la digitalizzazione del settore degli aggregati, di cui Holcim è sito pilota.

Il progetto è stato selezionato tra oltre 80 progetti concorrenti, e co-finanziato dalla Commissione EU nell'ambito del programma Horizon2020 con circa 13 Milioni di euro.

Il Consorzio, di cui Holcim Aggregati Calcestruzzi fa parte per l'Italia, conta 25 partner a livello Europeo e internazionale tra Società (Metso, Sandvik, Akka, Maxam, ecc) Università (Chalmers, Universidad Politecnica de Madrid, ecc), Associazioni di categoria (ANEFA, Asogras) e centri di ricerca (Mintek, Zabala, ecc).

Il progetto, coordinato da César Luaces Frades (Segretario Generale di ANEFA - Asociación nacional de empresarios fabricantes de áridos) con il supporto di Zabala, si svilupperà su un periodo di 4 anni. E' finalizzato a sviluppare e testare un nuovo sistema digitale nelle cave di aggregati dall'escavazione, alla produzione e trasporto.



l'elaborazione e la condivisione dei dati per fornire un controllo di processo integrato digitalizzato, automatico con l'AI in tempo reale per le cave di aggregati. Questo si tradurrà in:

- 1 Migliori condizioni di salute e sicurezza per i lavoratori, che attraverso processi automatizzati e controllati non verranno più esposti ad operazioni pericolose;
- 2 Miglioramento dell'efficienza dei siti estrattivi degli inerti, con conseguente aumento della redditività dei processi estrattivi e della sostenibilità operativa a lungo termine;
- 3 Massima sostenibilità ed efficienza delle risorse nelle operazioni di cava attraverso la riduzione delle emissioni, il miglioramento della gestione dell'acqua e la promozione di un approvvigionamento sostenibile delle materie prime per alimentare le catene del valore nuove ed esistenti chiudendo i cicli dei materiali e garantendo la produzione a lungo termine;
- 4 Migliore accettazione sociale attraverso la comunicazione con i responsabili politici, i cittadini e gli attori rilevanti.

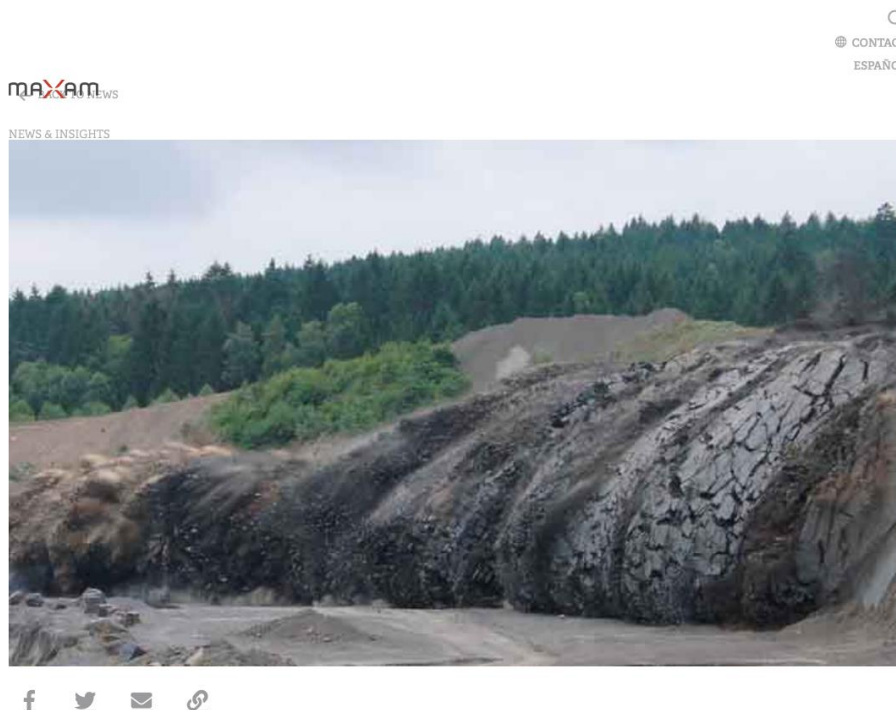
Holcim Aggregati Calcestruzzi, coordinerà i 5 siti pilota europei dove il sistema verrà testato (Vicat-Francia, Hanson-Spagna, Holcim Aggregati Calcestruzzi-Italia, Cronenberger-Germania, Cimpor-Portogallo) sperimentando il nuovo sistema per la parte di lavorazione dei materiali alluvionali (Sabbia e la Ghiaia).

Visita anche

- > [Holcim Italia lancia ECOPlanet Prime \(https://www.holcim.it/holcim-italia-lancia-ecoplanet-prime\)](https://www.holcim.it/holcim-italia-lancia-ecoplanet-prime)
- > [Calcestruzzo Ductal al Lake Como Design Festival \(https://www.holcim.it/calcestruzzo-ductal-al-lake-como-design-festival\)](https://www.holcim.it/calcestruzzo-ductal-al-lake-como-design-festival)
- > [Holcim Italia sponsor della terza edizione del Lake Como Design Festival \(https://www.holcim.it/holcim-italia-sponsor-della-terza-edizione-del-lake-como-design-festival\)](https://www.holcim.it/holcim-italia-sponsor-della-terza-edizione-del-lake-como-design-festival)
- > [Inaugurato Striatus, il ponte unico nel suo genere realizzato in calcestruzzo stampato in 3D \(https://www.holcim.it/inaugurato-striatus-il-ponte-unico-nel-suo-genere-realizzato-calcestruzzo-stampato-3d\)](https://www.holcim.it/inaugurato-striatus-il-ponte-unico-nel-suo-genere-realizzato-in-calcestruzzo-stampato-in-3d)
- > [Il brand Holcim al convegno "Tall Buildings": soluzioni sostenibili e innovative per le torri di Milano. \(https://www.holcim.it/comstampa-july7th-2021\)](https://www.holcim.it/comstampa-july7th-2021)

15.7 MAXAM

16/11/21 9:55

<https://www.maxamcorp.com/en/newsinsights/news/maxamannouncesparticipationdigiecoquarry>


NEWS

6/2/2021

MAXAM announces its participation in the DIGIECOQUARRY project

The European Commission's Horizon 2020 program for research and innovation is to support a project called DIGIECOQUARRY - INNOVATIVE DIGITAL SUSTAINABLE AGGREGATES SYSTEMS. A consortium of 24 entities from eight countries, comprising of universities, institutions, and leading European companies, will be partnering in this project. MAXAM is proud to be part of the DIGIECOQUARRY project.

The 4-year DIGIECOQUARRY project begins this week and represents a significant breakthrough to digitalize and automate the operations of the European aggregate industry to make them safer and more sustainable.

As part of its work in the DIGIECOQUARRY project, MAXAM will develop innovative technologies of its X-Energy platform in a quarry of the Hanson group, a member of the project consortium. X-Energy digitalization tools like the MAXAM Blast Center, X-Logger and RIOBLAST, combined with smart explosives and adaptive delivery systems, will enable quarries to leverage data and the use of selective

<https://www.maxamcorp.com/en/newsinsights/news/maxamannouncesparticipationdigiecoquarry>

1/3

16/11/21 9:55

<https://www.maxamcorp.com/en/newsinsights/news/maxamannouncesparticipationdigiecoquarry>

energy to enhance safety, reduce environment impact, and optimize the total cost of ownership.

Vicente Huelamo, MAXAM's Senior Technical Advisor, explains, "MAXAM is delighted to be part of the DIGIECOQUARRY project. We look forward to developing new technologies of our X-Energy platform specifically for the aggregate industry. Our focus would be to improve rock fragmentation, wall damage, ground vibrations, and airblast overpressure. The work will also help improve the performance of downstream operations like excavation, hauling, conveying, and crushing."

The DIGIECOQUARRY project is receiving funding under the Horizon 2020 program.



ABOUT MAXAM

Our company

Global Presence

Management Team

Technology

Our Brand

INDUSTRIES & GLOBAL SOLUTIONS

Blasting Solutions

Cartridges and Components

Defense & Security

Nitro chemical Products

OUR COMMITMENT

Safety Culture

<https://www.maxamcorp.com/en/newsinsights/news/maxamannouncesparticipationdigiecoquarry>

2/3

15.8 MONTANUNIVERSITÄT LEOBEN

16/11/21 9:53

Digitalisation for a more sustainable mining industry



Montanuniversität Leoben

Digitalisation for a more sustainable mining industry

Making mining greener is a major goal of a new EU project in which Montanuniversität Leoben is significantly involved. Digital solutions are to make mining and the associated framework conditions more efficient and resource-conserving. 06/22/2021

At the beginning of June, the official starting signal was given for DIGIECOQUARRY - INNOVATIVE DIGITAL SUSTAINABLE AGGREGATES SYSTEMS. This new European project is funded under Horizon 2020 (No. 101003750), runs for four years (until May 2025) and aims to design, develop and validate an Innovative Quarry System (IQS). The project includes sensors, process tools and methods for data collection, processing and sharing to enable integrated, digitised, automated, real-time process control for quarries.

More safety

"The DIGIECOQUARRY - consortium combines the latest technology with innovative digital solutions to increase capacity, improve health and safety conditions for workers, increase mining selectivity and efficiency, and promote sustainability, resource efficiency and social and acceptance," explains Dr Philipp Hartlieb from the Chair of Mining Engineering and Mineral Economics, who is largely responsible for the project on site of Montanuniversität Leoben.

Montanuniversität Leoben is one of 25 partners from Spain, Portugal, France, Germany, Italy, Austria, Sweden, Finland, Columbia and South Africa. "The team from the Chair of Mining Engineering will work on the digitalisation of mining and automated process recognition, with a special focus on the environmental impact of individual process steps and innovative tools based on image recognition," Hartlieb outlines

More Information

Dr. Philipp Hartlieb
Chair Mining Engineering and Mineral Economics
E-Mail: philipp.hartlieb@unileoben.ac.at
Phone.: +43 3842 402 2025
Mobil: +43 664 5009421


[BACK](#)
<https://www.unileoben.ac.at/en/newsdetail/durch-digitalisierung-zu-einem-nachhaltigerem-bergbau>

1/2

16Annex VII. List of partner's communication channels

Table 7. Annex VII. List of partner's communication channels.

PARTNER	NEWSLETTER & PUBLICATION	PRESS RELEASES
ANefa	ANefaonline Monthly	Yes
GRANULATS VICAT	Yes	Yes (punctually)
HANSON	Yes Quarterly	Yes
HOLCIM	Yes (in ANEPLA – FEDERBETON)	Yes
CSI	No	Yes
CIMPOR	No	Yes
SANDVIK	No	Yes
METSO OUTOTEC	Yes	Yes
MAXAM	Yes	Yes
ITK	No	Yes
MUL	Yes	Yes
CHALMERS	Yes (in Swedish aggregate producers' association) Quarterly	No
UPM	No	No
AKKA	No	Yes
ARCO	No	Yes
MA ESTRO	Yes Quarterly	No
DOHMEN	No	No
ABAUT	No	No
APP	Yes	Yes
SIGMA	No	Yes
DG ASTUR	No	No
ASOGRAVAS	Yes Monthly	Yes
MINTEK	Yes Monthly	Yes
ROCTIM	No	No
ZABALA	Yes	Yes

18Annex IX. List of Figures

Figure 1. DIGIECOQUARRY's concept.....	9
Figure 2. DCEP strategy.....	10
Figure 3. Relationship between WPs.	11
Figure 4. DIGIECOQUARRY's dissemination assets.....	13
Figure 5. DIGIECOQUARRY's stakeholders.	14
Figure 6. DEQ Roll up.	16
Figure 7. DEQ vertical infographic.....	17
Figure 8. DEQ horizontal infographic.	18
Figure 9. DEQ leaflet print version	19
Figure 10. DEQ leaflet online version.....	22
Figure 11. DEQ poster.	23
Figure 12. DEQ flyer.	24
Figure 13. Anefa actualidad. Jan - Feb - Mar issue.....	25
Figure 14. Anefa actualidad. Apr – May – Jun.....	26
Figure 15. Anefa actualidad. Jul - Aug - Sep.	27
Figure 16. DEQ in Aggregates Business Europe.	28
Figure 17. DEQ in SMOPYC.....	30
Figure 18. DEQ in MIRO Forum.	31
Figure 19. DIGIECOQUARRY's final structure of the Website.....	32
Figure 20. Facebook profile.....	35
Figure 21. LinkedIn profile.	36
Figure 22. Instagram profile.....	36
Figure 23. Twitter profile.	37
Figure 24. YouTube profile.....	37
Figure 25. Vimeo profile.....	38
Figure 26. Bumper video.....	39

19Annex X. List of Tables

Table 1. Dissemination Strategy per partner profile.	12
Table 2. Target audiences, aims and key messages.	15
Table 3. Evolution of www.digiecoquarry.eu	33
Table 4. Annex II. List of brochures, leaflets and posters.	55
Table 5. Annex IV. List of websites of the partners	62
Table 6. Annex V. List of social media of the partners.	63
Table 7. Annex VII. List of partner’s communication channels.....	81
Table 8. Timetable.	82
Table 9. ANEFA's dissemination track record.....	86
Table 10. GRANULATS VICAT's dissemination track record.	88
Table 11. HANSON’s dissemination track record.	89
Table 12. HOLCIM’s dissemination track record.	90
Table 13. CSI’s dissemination track record.	91
Table 14. CIMPOR’s dissemination track record.	92
Table 15. SANDIVIK’s dissemination track record.	93
Table 16. METSO OUTOTEC’s dissemination track record.	94
Table 17. MAXAM’s dissemination track record.	95
Table 18. ITK’s dissemination track record.	96
Table 19. MONTANUNIVERSITÄT LEOBEN’S dissemination track record.	97
Table 20. CHALMER’s dissemination track record.	98
Table 21. UPM-M’s dissemination track record.....	99
Table 22. UPM-AI’s dissemination track record.	100
Table 23. AKKA’s dissemination track record.....	101
Table 24. ARCO’s dissemination track record.	102
Table 25. MAESTRO’s dissemination track record.	103
Table 26. DH&P’s dissemination track record.....	104
Table 27. ABAUT’s dissemination track record.	105
Table 28. APP’s dissemination track record.	106
Table 29. SIGMA’s dissemination track record.	107
Table 30. DGASTUR’s dissemination track record.....	108

Table 31. ASOGRAVAS's dissemination track record.....	109
Table 32. MINTEK's dissemination track record.....	110
Table 33. ROCTIM's dissemination track record.	111
Table 34. ZABALA's dissemination track record.	112

20Annex XI. Partners' dissemination track record

Tables 9 - 34 show dissemination-related activities carried out by each partner since the beginning of the project. This table will be updated in D9.6: Report on dissemination and communication activities.

Table 9. ANEFA's dissemination track record.

PARTNER: ANEFA		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		3
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		4
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		4
Title	Link	Details in Deliverable
Anefa actualidad. Jan - Feb - Mar 2021 issue	https://issuu.com/mythagosestudio/docs/anefa-actulidad_64	D9.3
Anefa actualidad. Apr – May – Jun 2021 issue	https://issuu.com/mythagosestudio/docs/anefa_65	D9.3
Anefa actualidad. Jul - Aug – Sep 2021 issue	https://issuu.com/mythagosestudio/docs/anefa66	D9.3
H2020 de la Comisión Europea aprueba financiar el proyecto DIGIECOQUARRY ideado y liderado por ANEFA	https://www.aridos.org/h2020-de-la-comision-europea-aprueba-financiar-el-proyecto-digiecoquarry-ideado-y-liderado-por-anefa/	D9.3
Arranca el proyecto DIGIECOQUARRY	https://www.aridos.org/arranca-el-proyecto-digiecoquarry/	D9.3
El “international Advisory Board” del Proyecto DIGIECOQUARRY	https://www.aridos.org/el-international-advisory-board-del-proyecto-digiecoquarry/	D9.3
Anefa actualidad. Oct - Nov – Dec 2021 issue	https://issuu.com/mythagosestudio/docs/anefaactualidad67	9.4

Anefa actualidad. Jan - Feb – Mar 2022 issue	https://issuu.com/mythagosestudio/docs/anefa_68_v2	9.4
Anefa actualidad. Apr - May – Jun 2022 issue	https://issuu.com/mythagosestudio/docs/anefa_actualidad_69	9.4
Anefa Online 179	https://www.aridos.org/novedades-en-el-proyecto-digiecoquarry/	9.4
Anefa Online 180	https://www.aridos.org/reunion-del-comite-tecnico-del-proyecto-digiecoquarry/	9.4
Anefa Online 181	https://www.aridos.org/digiecoquarry-empieza-a-tomar-forma-la-plataforma-para-la-gestion-inteligente-de-la-cantera/	9.4
Anefa Online 182	https://www.aridos.org/primer-hito-del-proyecto-digiecoquarry-superado/	9.4
Anefa Online 183	https://www.aridos.org/olimpiadas-y-sprints-finales/	9.4
Anefa Online 184	https://www.aridos.org/digiecoquarry-continua-su-trabajo-de-campo/	9.4
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		4
Name of the conference	Date	Details in Deliverable
SMOPYC, International Show of Public Works, Construction and Mining Machinery	17 - 19 November 2021. Zaragoza, Spain	D9.3
European Minerals Days	March 2022	D9.4
5. OTHER		
Action		Details in Deliverable
Interview to César Luaces Frades (PC) in Aggregates Business Europe		D9.3

Table 10. GRANULATS VICAT's dissemination track record.

PARTNER: GRANULATS VICAT		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		1
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 11. HANSON's dissemination track record.

PARTNER: HANSON		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		1
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 12. HOLCIM's dissemination track record.

PARTNER: HOLCIM		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		1
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
Lanciat Digiecoquarry: il Progetto chiave per la digitalizzazione del settore degli Aggregati	https://concretenews.it/2021/06/11/lanciat-digiecoquarry-il-progetto-chiave-per-la-digitalizzazione-del-settore-degli-aggregati/	D9.3
	https://www.edizionipei.it/notizie/news/lanciat-digiecoquarry-il-progetto-chiave-per-la-digitalizzazione-del-settore-degli-aggregati.htm	D9.3
	https://www.gowem.it/DigiEcoQuarry-Holcim	D9.3
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 13. CSI's dissemination track record.

PARTNER: CSI		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		1
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 14. CIMPOR's dissemination track record.

PARTNER: CIMPOR		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		1
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 15. SANDIVIK's dissemination track record.

PARTNER: SANDIVK		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 16. METSO OUTOTEC's dissemination track record.

PARTNER: METSO OUTOTEC		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 17. MAXAM's dissemination track record.

PARTNER: MAXAM		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
A novel borehole surveying system for underground mining: Design and performance assessment	https://www.sciencedirect.com/science/article/pii/S0263224122002895	D9.4
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
MAXAM announces its participation in the DIGIECOQUARRY project	https://www.maxamcorp.com/en/newsinsights/news/maxamannouncesparticipationdigiecoquarry	D9.3
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 18. ITK's dissemination track record.

PARTNER: ITK		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
MIRO Forum	24 - 26 November 2021. Berlin, Germany	D9.3
5. OTHER		
Action		Details in Deliverable

Table 19. MONTANUNIVERSITÄT LEOBEN'S dissemination track record.

PARTNER: MONTANUNIVERSITÄT LEOBEN		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		3
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
Digitalisation for a more sustainable mining industry	https://www.unileoben.ac.at/en/newsdetail/durc-h-digitalisierung-zu-einem-nachhaltigerem-bergbau/	D9.3
Stein und Kies	Paper	D9.4
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 20. CHALMER's dissemination track record.

PARTNER: CHALMERS		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		3
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 21. UPM-M's dissemination track record.

PARTNER: UPM-M		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		3
Title	Link	Details in Deliverable
A novel borehole surveying system for underground mining: Design and performance assessment	https://www.sciencedirect.com/science/article/pii/S0263224122002895	D9.4
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action	Details in Deliverable	

Table 22. UPM-AI's dissemination track record.

PARTNER: UPM-AI		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		3
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
XIII Iberian Geochemical Congress	25 th – 27 th April 2022. Puertollano, Spain	D9.4
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
JRC / HaDEA Technical Workshop "Channelling knowledge from European projects into the Raw Materials Information System"	3 rd December 2021	D9.4
Spanish Geology Olympics	3 rd March 2022 - Madrid, Spain	D9.4
Expominerals	13 th March 2022 - Madrid, Spain	D9.4
Field trips of the School of Mines and Energy of Madrid	April 2022 - Madrid, Spain	D9.4
Raw materials for the Green Transition	April 2022	D9.4
5. OTHER		
Action		Details in Deliverable

Table 23. AKKA's dissemination track record.

PARTNER: AKKA		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 24. ARCO's dissemination track record.

PARTNER: ARCO		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		2
Title	Link	Details in Deliverable
Participación Proyecto DIGIECOQUARRY		D9.3
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 25. MAESTRO's dissemination track record.

PARTNER: MAESTRO		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		2
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 26. DH&P's dissemination track record.

PARTNER: DH&P		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
MIRO Forum	24 th - 26 th November. Berlin, Germany	D9.4
5. OTHER		
Action		Details in Deliverable

Table 27. ABAUT's dissemination track record.

PARTNER: ABAUT		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
VI Congreso Nacional de Áridos	26 th May 2022. Oviedo, Spain	D9.4
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 28. APP's dissemination track record.

PARTNER: APP		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 29. SIGMA's dissemination track record.

PARTNER: SIGMA		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
Sigma cognition	https://sigmacognition.ai/digiecoquarry/	D9.4
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 30. DGASTUR's dissemination track record.

PARTNER: DGASTUR		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
Arranca el Proyecto DIGIECOQUARRY	https://www.faen.es/arranca-el-proyecto-digiecoquarry/	D9.3
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 31. ASOGRAVAS's dissemination track record.

PARTNER: ASOGRAVAS		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		3
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 32. MINTEK's dissemination track record.

PARTNER: MINTEK		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		1
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
Joint Research Centre (JRC) Training Webinar	21 st October 2021	D9.4
South African Institute of Quarrying Conference	16 th March 2022	D.4
5. OTHER		
Action		Details in Deliverable

Table 33. ROCTIM's dissemination track record.

PARTNER: ROCTIM		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		2
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		1
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		1
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

Table 34. ZABALA's dissemination track record.

PARTNER: ZABALA		
1. SCIENTIFIC PUBLICATIONS		
Expected number of publications by M48		0
Title	Link	Details in Deliverable
2. SCIENTIFIC CONFERENCES		
Expected number of participations in scientific conferences by M48		0
Name of the conference	Date	Details in Deliverable
3. JOURNALS AND MAGAZINES		
Expected number of articles by M48		0
Title	Link	Details in Deliverable
4. EVENTS, FAIRS AND WORKSHOPS		
Expected number of participations in events by M48		2
Name of the conference	Date	Details in Deliverable
5. OTHER		
Action		Details in Deliverable

