

## WP5.A2. IT produkcija RockChain otvorenog obrazovnog resursa (OER).



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Transilvania  
University  
of Brasov





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## Sadržaj

|                                           |    |
|-------------------------------------------|----|
| 1. UVOD .....                             | 3  |
| 2. OTVORENI OBRAZOVNI RESURSI (OER) ..... | 4  |
| 3. MATERIJALI ZA OBUKU .....              | 6  |
| 4. PRISTUP KURSU .....                    | 8  |
| 5. TOOL ACCESS .....                      | 15 |

## 1. UVOD

Ovaj dokument predstavlja rezultate aktivnosti WP5.A2 "IT produkcija otvorenog obrazovnog resursa" koja odgovara radnom paketu 5 "RockChain otvoreni obrazovni resurs (OER)" projekta RockChain.

Ovaj dokument detaljno opisuje RockChain otvoreni obrazovni resurs (OER), glavni rezultat ovog radnog paketa. Otvoreni obrazovni resursi (OER) odnose se na digitalne materijale za podučavanje, učenje i istraživanje koji omogućuju njihovo korištenje, prilagodbu i redistribuciju od strane drugih bez ograničenja ili s ograničenim ograničenjima. OER pristup posebno je relevantan za strukovno obrazovanje i obrazovanje odraslih jer omogućuje fleksibilno učenje vlastitim tempom i podržava ponovnu upotrebu visokokvalitetnih materijala u različitim zemljama i među različitim dionicima.

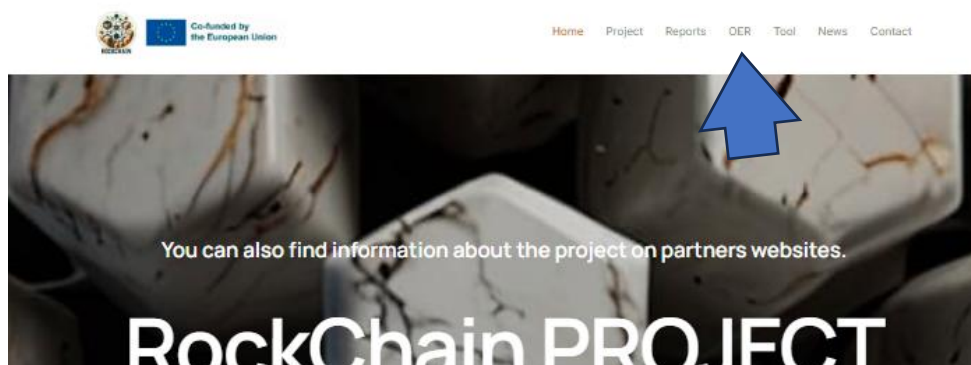
Iz tog je razloga razvijena internetska platforma za objavljivanje i širenje rezultata i materijala za obuku proizvedenih u sklopu projekta, čime se oni čine dostupnima stručnjacima, trenerima i drugim dionicima u ekosustavu obrade ukrasnog kamena i građevinarstva.

OER je dostupan s internetske stranice projekta: <https://rockchain.eu/> koji je osmišljen kako bi se olakšala navigacija i kako bi projekt i njegovi rezultati bili dostupni široj publici.

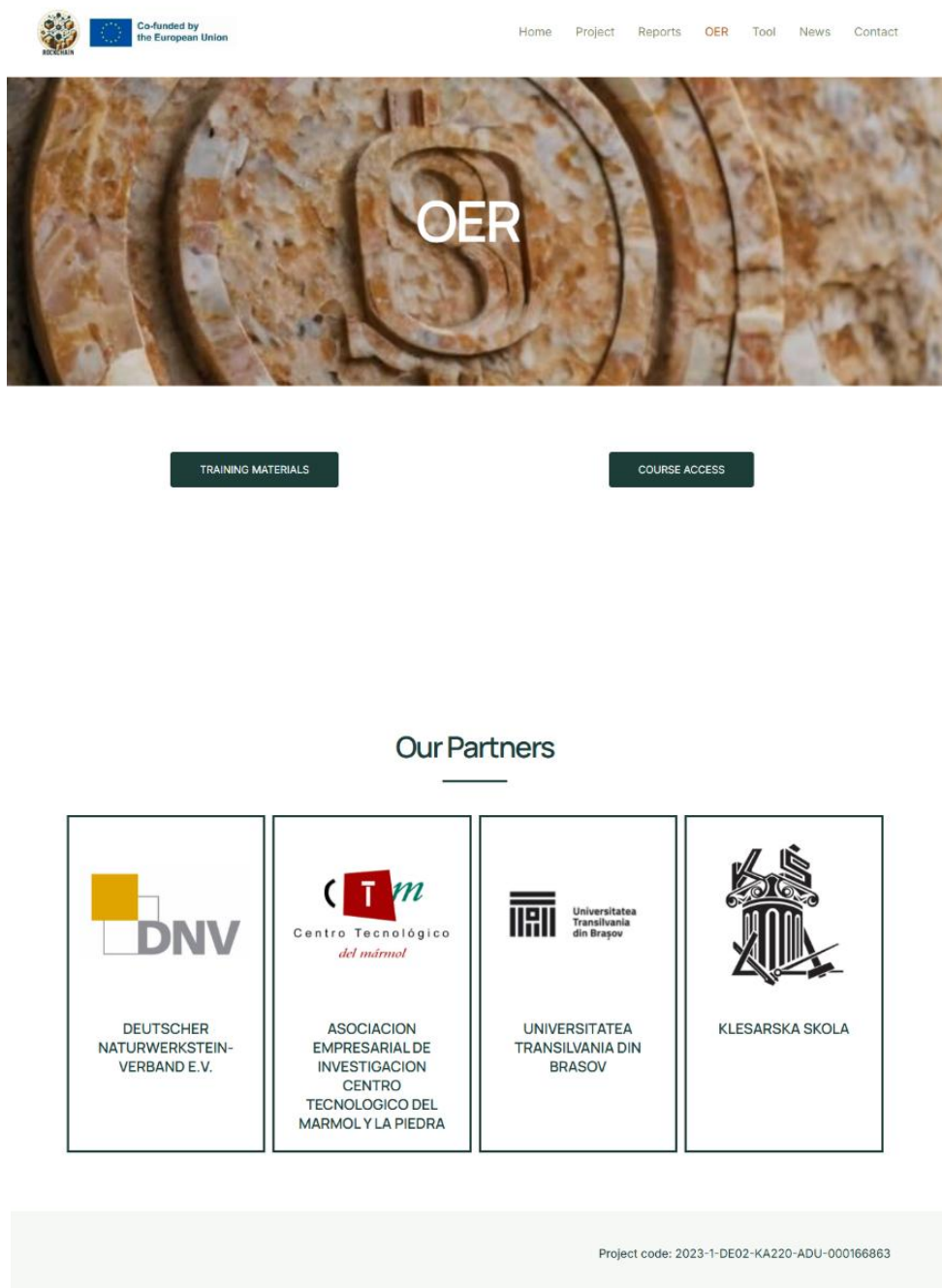
## 2. OTVORENI OBRAZOVNI RESURSI (OER)

OER slijedi dizajn predložen u prethodnom zadatku i održava koherentnost s korporativnim identitetom projekta. Slobodno je dostupan, intuitivan za korištenje i optimiziran za neprekidan rad. OER integrira obrazovne materijale razvijene unutar RockChaina i pripremljen je za ažuriranje tijekom cijelog trajanja projekta: doprinosi se prikupljaju putem kontakt kanala projekta i konzorcij ih pregledava prije uključivanja, osiguravajući kvalitetu i relevantnost objavljenog sadržaja.

OER je dostupan na web-stranici projekta: <https://rockchain.eu/>



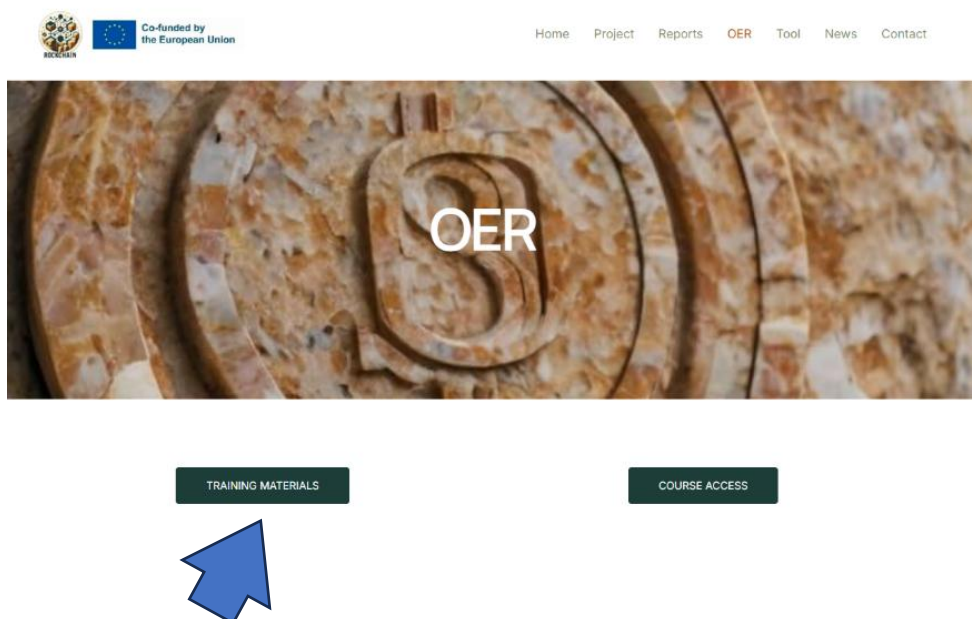
Ili također s sljedeće poveznice: <https://rockchain.eu/oer/>



Unutar OER-a imamo dva odjeljka:

- Materijali za obuku
- Pristup tečaju

### 3. MATERIJALI ZA OBUKU



U prečacu za materijale za obuku korisnici mogu pristupiti materijalima za obuku i isporukama projekta koje je objavio RockChain. Sadržaj je organiziran po paketima rada i dostupan je putem repozitorija projektnih dokumenata (odjeljak Izvještaji), kao što je prikazano u nastavku:

## HERE YOU WILL FIND ALL DOCUMENTS AND REPORTS OF THE RockChain PROJECT

WP2 - European common curricular on Waste Management applying Blockchain technologies for Ornamental Rock Industry focused on professionals over 45 years old.

| REPORTS                                                                                                                         | DOWNLOAD OPTIONS |
|---------------------------------------------------------------------------------------------------------------------------------|------------------|
| WP2-A1 Roadmap of the Methodology.                                                                                              | Available soon!  |
| WP2-A2 Awareness of needs surveys to identify specific learning difficulties.                                                   | Available soon!  |
| WP2-A3 Report of data analysis and conclusions.                                                                                 | Available soon!  |
| WP2-A4 Handbook for an educational approach for people with different skills focused on transversal capacities in stone sector. | Available soon!  |
| WP2-A5 Report on the results of First International Seminar in Split (Croatia).                                                 | Available soon!  |
| WP2-A6 RockChain Curriculum: Production of a rock ornamental waste management curriculum using blockchain technology.           | Available soon!  |
| WP2-A8 First International Seminar in Pucisca (Croatia).                                                                        | Available soon!  |

WP3 - Learning materials for interdisciplinary Blockchain-Rock Ornamental Waste Management.

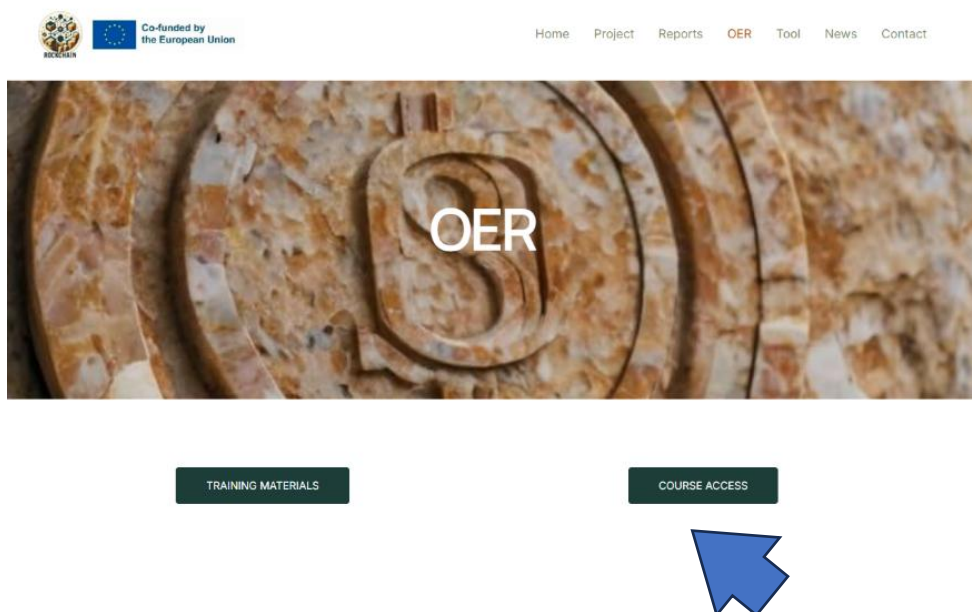
| REPORTS                                                                                                             | DOWNLOAD OPTIONS |
|---------------------------------------------------------------------------------------------------------------------|------------------|
| Comparative study of Rock Ornamental Waste management regulations in each country.                                  | Available soon!  |
| Comparative study of information technologies applied to waste management at international level in stone sector.   | Available soon!  |
| Develop of training Material for e-Handbook based on the curricula.                                                 | Available soon!  |
| eHandbook of Circular Economy strategies applied to Rock Ornamental Waste Management using Blockchain technologies. | Available soon!  |
| Participation in a congress to disseminate the results of WP3.                                                      | Available soon!  |
| Second International Seminar in Brasov (Romania).                                                                   | Available soon!  |

Za svaki paket rada korisnici mogu pronaći povezane isporuke i resurse za obuku (s poveznicama za preuzimanje koje se objavljuju postupno kako se ishodi validiraju i objavljuju).

Da biste se vratili na glavni OER izbornik, upotrijebite kontrole za navigaciju preglednika ili ponovno odaberite stranicu OER iz izbornika web-stranice.

## 4. PRISTUP KURSU

Prilikom pristupa kartici Pristup tečaju korisnici se preusmjeravaju na online okruženje tečaja RockChain, gdje su smještene nastavne cjeline i aktivnosti samostalnog učenja.

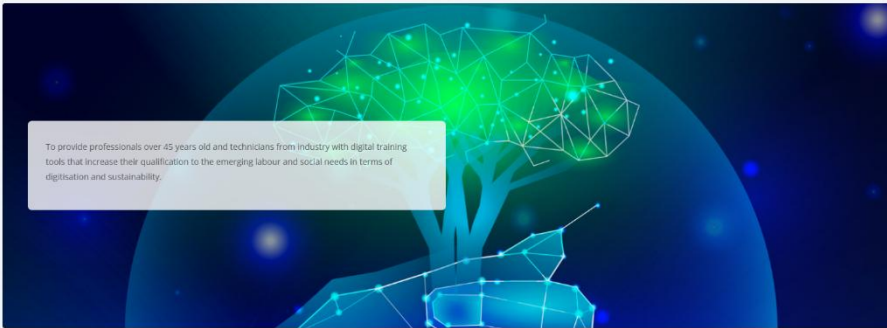


Odatle ćete biti preusmjereni na platformu tečaja (URL kojeg održava konzorcij), obično dostupnu na: <https://class.rockchain.eu/>



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Username  Password  
  
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To provide professionals over 45 years old and technicians from industry with digital training tools that increase their qualification to the emerging labour and social needs in terms of digitisation and sustainability.

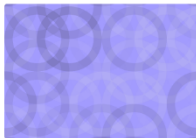
REGISTER

You can register for free at this [link](#)

User: studentzero

Password: #RockChainStudent0

Available courses



RockChain course\_EN  
 Category 1  
 Teacher: David Caparros

[Click to enter this course](#)

[REGISTER FOR FREE](#)

Možete koristiti opći pristup putem korisnika "studentzero" ili zatražiti/dobiti pristup okruženju tečaja putem obrasca za registraciju kako biste sudjelovali u online tečaju RockChain:

<https://docs.google.com/forms/d/e/1FAIpQLSfN5Rcu-HV0boWFvnFEzdworaQ3yuFC8Yap6HusHyM9j23Drw/viewform?usp=header>

## RockChain. Register for our free courses!

Transversal technological skills for the ornamental rock industry focusing on the applicability of Blockchain in a Circular Economy.

REFERENCE:

2023-1-DE02-KA220-ADU-000166863



# ROCKCHAIN



Name: \*

Tu respuesta

Surname: \*

Tu respuesta

email: \*

Tu respuesta

Country: \*

Tu respuesta

Study/work centre: \*

Tu respuesta

Study/work centre adress: \*

Tu respuesta



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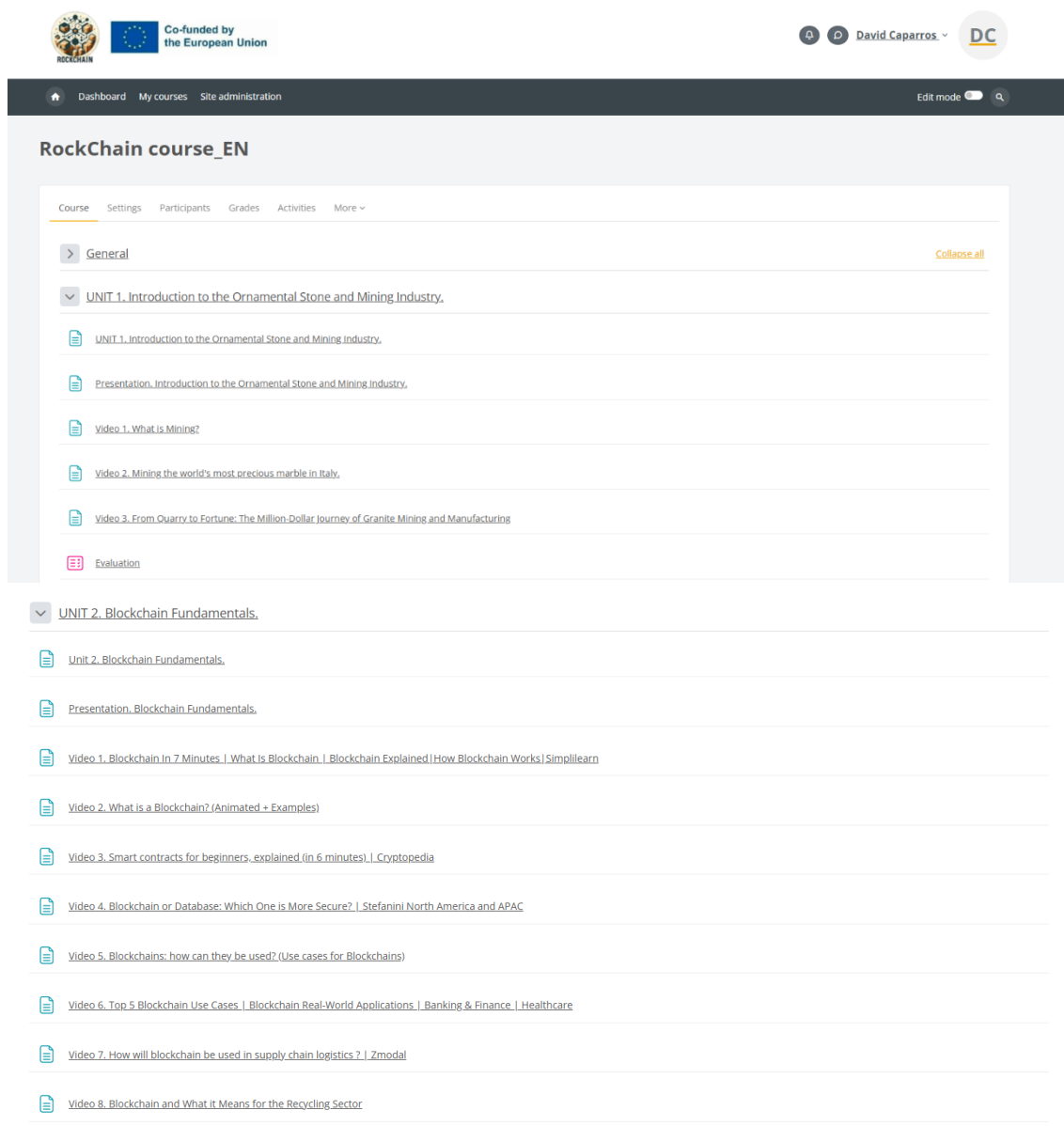
In compliance with the provisions of the LOPD (Organic Law on the Protection of Personal Data), USE informs you that your personal data reflected in our commercial documentation will be incorporated into an automated file with the purpose of being used for the development of the commercial activity itself and to inform you of those products, services and events offered by the entity and that could be of interest to you. You can select "no" in the previous question or, subsequently, exercise your rights of access, rectification, cancellation and opposition by sending a request to the following e-mail address:  
info@ctmarmol.es

☐ Yes

☐ No

U slučaju da poveznica za registraciju nije dostupna ili je platforma privremeno nedostupna, pristup se može zatražiti putem kontakt stranice projekta: <https://rockchain.eu/contact/> (ili e-poštom koordinatorsu: [info@natursteinverband.de](mailto:info@natursteinverband.de)).

## Sadržaj tečaja RockChain:



The screenshot shows the RockChain course interface. At the top, there are logos for RockChain, the European Union, and the project name. Below the logos, there is a navigation bar with links for Dashboard, My courses, and Site administration. The main content area is titled "RockChain course\_EN" and contains a list of units. The first unit is "UNIT 1. Introduction to the Ornamental Stone and Mining Industry." and the second unit is "UNIT 2. Blockchain Fundamentals." Each unit has a list of resources, including presentations and videos. The interface is clean and modern, with a dark header and a light main content area.

UNIT 3. Circular economy in the context of natural stone.

Unit 3. Circular economy in the context of natural stone.

Presentation. Circular economy in the context of ornamental stone

Video 1. Circular Economy: Beyond Recycling

Video 2. How to move from a linear economy to a circular economy?

Video 3. Where Does Mining Fit in with the Circular Economy? | DIF

Video 4. What challenges and opportunities does the circular economy bring for the mining industry?

Evaluation

UNIT 4. Blockchain applied to waste management.

Unit 4. Blockchain applied to waste management.

Presentation. Blockchain applied to waste management.

Video 1. The Key to Circularity - Digital Product Passports Explained

Video 2. The Application of Blockchain in Digital Twins Explained

UNIT 5. RockChain. Final practical exercise: integrative project.

Unit 5. RockChain. Final practical exercise: integrative project.

Presentation. RockChain. Final practical exercise: integrative project.

Evaluation

If you want to continue learning

BC4ECO

BCH4VET

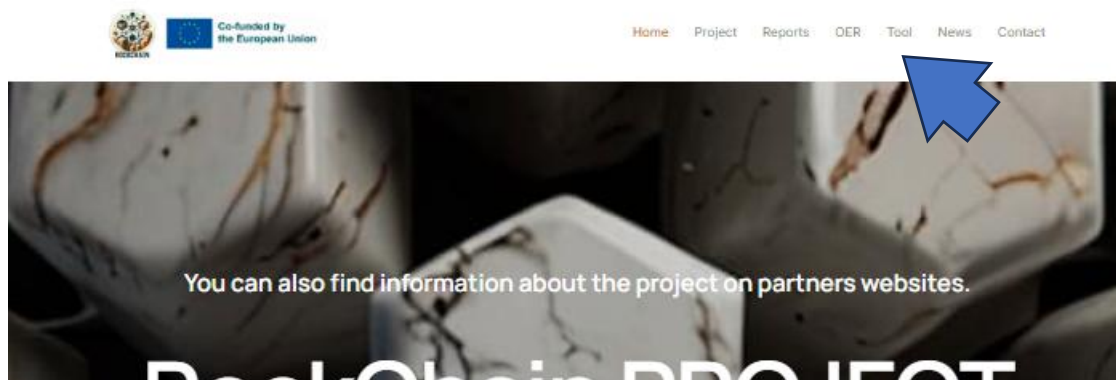
NATURE

SEGAE

Ovaj internetski tečaj podržava učenje vlastitim tempom i osmišljen je da se prilagodi rasporedima korisnika. Sadržaj obuke dostupan je besplatno i usklađen je s ciljem projekta da unaprijedi vještine stručnjaka i trenera u upravljanju otpadom i konceptima digitalne sljedivosti relevantnima za sektor ukrasnog kamena.

## 5. TOOL ACCESS

Odabirom pristupa alatu korisnici se preusmjeravaju na javnu ulaznu točku interaktivnog alata RockChain na web-stranici projekta: <https://rockchain.eu/tool/> (kao što je prikazano u nastavku). Ovaj odjeljak namijenjen je pružanju izravnog pristupa okruženju ozbiljne igre nakon dovršetka implementacije i omogućavanja pristupa korisniku.



Ovaj putokaz nadopunjuje OER povezivanjem nastavnih materijala s praktičnom primjenom. Kada je alat dostupan, stranica za pristup alatu koristit će se za komunikaciju o zahtjevima za pristup (npr. autentifikacija), kompatibilnosti uređaja i osnovnim uputama za korisnike, osiguravajući dosljedno iskustvo učenja od materijala za obuku i sadržaja tečaja do interaktivnih aktivnosti.



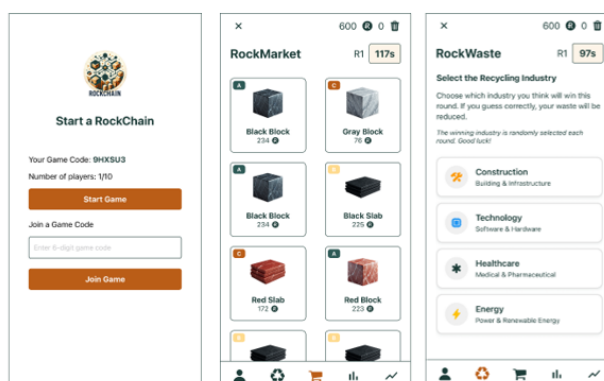
The RockChain Tool is a mobile, multiplayer serious-game that turns the course content into practice: learners make decisions about markets, materials, waste generation, circular-economy actions and traceability in a controlled training session. This interactive experience is the practical counterpart of the RockChain OER and supports classroom and workshop delivery.

### Access to the App (APK)

The pilot version of the RockChain Tool is provided as an Android APK package. Use the link below to download and install it on your device.

APK download: [Rockchain.apk](#)

For device requirements, installation steps and the recommended classroom workflow, consult the [Guideline Notes \(WP4-A4\)](#)



### Where to find the key learning content

All RockChain learning units, slides and course resources are organised in the **OER** section:

<https://rockchain.eu/oer/>

## Where to find the technical documentation (recommended)

If you need deeper technical details (architecture, data model, hosting, runtime flows), use the WP4 technical documents:

- **WP4-A1** – Production of the database (data model, Firestore structure, key flows)
- **WP4-A2** – Refined e-learning tool (improvements, UX and stability refinements)
- **WP4-A3** – Functional Specifications (what the tool does and how it behaves)
- **WP4-A4** – Guideline Notes (trainer/learner workflow, session guidance)
- **WP4-A5** – Production of the interactive Tool (architecture, deployment, access & distribution)

WP4 - e-Learning tool based-on Blockchain-Rock Ornamental Waste focused on Circular Economy.

| REPORTS                                                                               | DOWNLOAD OPTIONS |
|---------------------------------------------------------------------------------------|------------------|
| Production of the database for the e-Learning Tool.                                   | Available soon!  |
| Refined of e-learning tool.                                                           | Available soon!  |
| Functional specifications.                                                            | Available soon!  |
| Outline notes.                                                                        | Available soon!  |
| Production of Interactive RockChain Tool.                                             | Available soon!  |
| Pedagogical test and implementation of IT improvements of Interactive RockChain Tool. | Available soon!  |
| Technical test and implementation of IT improvements Interactive RockChain Tool.      | Available soon!  |
| Producing a scientific article related to results of WP4.                             | Available soon!  |

## Our Partners

