

Regione Toscana

Comune di Minucciano – Pilot projects



Interreg
Euro-MED



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BAUHAUS4MED



Školski fakultet u Zagrebu
Arhitektonski fakultet
University of Zagreb
Faculty of Architecture



Platoniq
Foundation



Regione Toscana



Projects Overview

SOHAM

Circular design meditation seat made from **marble processing waste**, designed to support ergonomic posture and create a silent space for **outdoor meditation and well-being in nature**.

TRACES OF MARBLE

An **educational illustrated book for children (8-10)** that narrates the world of marble, enhancing **intangible heritage and craftsmanship knowledge** through stories, illustrations, and hands-on activities.

ARDE

Outdoor lamp inspired by the **Natalecci ritual of Gorfigliano**, combining cultural heritage and contemporary design to recreate the **warm atmosphere of traditional bonfires**.

MATERIA FONDENTE

Experimental research exploring **marble dust as a sustainable flux for ceramic glazes**, transforming industrial waste into a **resource for circular production processes**.

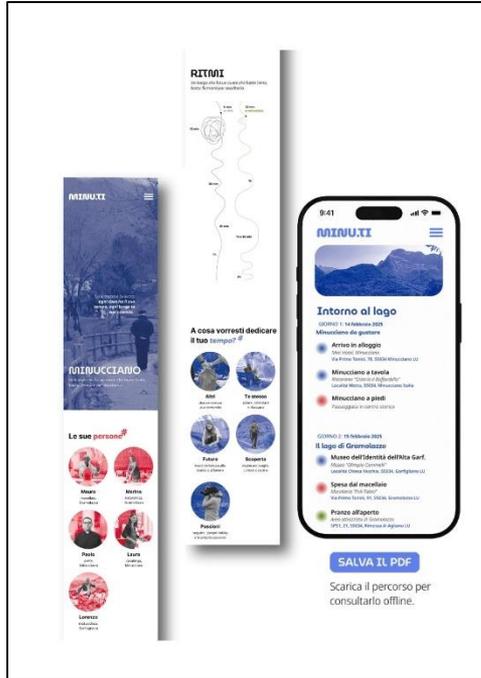
S-TOOLS

Sound installations that recreate **the traditional sounds of quarry work**, forming a storytelling path that **connects urban spaces, memory, and the landscape of Minucciano**.

MINU.TI

Digital storytelling platform sharing **voices, stories, and opportunities** from Minucciano, promoting **local identity, tourism, and new professional possibilities**.

Projects Overview



Problem Statement

Minucciano faces gradual depopulation and limited economic diversification while its cultural and natural assets remain under-communicated; the town needs new, place-sensitive channels that reconnect residents, visitors, and everyday practices with meaningful opportunities for wellbeing and local value creation

Turbulences

- Local identity and knowledge are fragmented and not effectively communicated to visitors or partners
- Seasonal tourism and limited services reduce opportunities for longer stays and stable local income
- Young people lack jobs, training, and place-based learning, weakening talent retention and knowledge transfer
- Lake areas lack lighting and visitor infrastructure, limiting safe and extended use of the landscape
- Marble waste represents an environmental burden, while circular synergies with other sectors remain underexplored
- Quarry heritage and traditional skills risk disappearing without new forms of storytelling and engagement.

Bold Vision

SOHAM: A network of meditative seats made from recovered marble, integrating mindful design, natural cues, and small-scale community practices to reconnect people with the landscape

TRACES OF MARBLE: An illustrated book and workshop kit that transforms marble heritage into an educational tool, fostering craft awareness, learning, and youth engagement

ARDE: A solar-powered lighting system inspired by the Natalecci ritual, enhancing the lakeshore at night while strengthening cultural identity and sustainable tourism

MATERIA FONDENTE: A circular innovation turning marble dust into ceramic glazes, creating value from waste and linking craftsmanship with scientific experimentation

S-TOOLS: A sound and sculptural installation path that narrates quarry heritage and reactivates the lakeshore through interactive storytelling

MINU.TI: A digital platform collecting residents' stories and local opportunities, encouraging longer stays, youth engagement, and community-driven development

Where We are Now:

SOHAM

Concept by DiDA students Gabriela Caballero Villa and Aurora Giuntini. **1st Prize Overall and Citizens' Choice Award** at the NEB Festival (Gramolazzo, 14 June 2025).

TRACES OF MARBLE

Concept by DiDA students Laura Coppioni and Marco Altemura. **2nd Prize** at the NEB Festival (Gramolazzo, 14 June 2025).

MATERIA FONDENTE

Concept by DiDA student Victoria Sabba. **Most Sustainable Concept Award and 4th Prize** at the NEB Festival (Gramolazzo, 14 June 2025).

S-TOOLS

Concept by DiDA students Jacopo Fillini and Simone Giannini. **5th place** at the NEB Festival (Gramolazzo, 14 June 2025).

MINU.TI

Concept by DiDA students Giulia Costa and Virginia Piombino. **Most Beautiful and Inclusive Concept Award** at the NEB Festival (Gramolazzo, 14 June 2025); **only project with a prototype available.**

General pilots status: now in their prototyping phase

How did we get here?

II semester 2024:

- a B4M local node was created in Minucciano, with the involvement of 4-Helix stakeholders.
- thanks to an agreement between the Tuscany Region and DiDA, a group of international students was engaged in an idea contest, after a study visit onsite.

I semester 2025:

- all concept designs were presented to the local population in a public event and then voted by a jury of experts (weighted 60%) as well as by the citizens themselves (weighted 40%) through a combined online and offline polling system.

II semester 2025:

- private funds were mobilised to support the prototyping phase.

What if...

What if...

SOHAM: Residents & visitors could pause and reconnect with nature through meditative seats made from recovered marble, integrating wellbeing into everyday life.

THE TRACES OF MARBLE: Young learners could discover local crafts and creative careers through hands-on workshops and interaction with artisans.

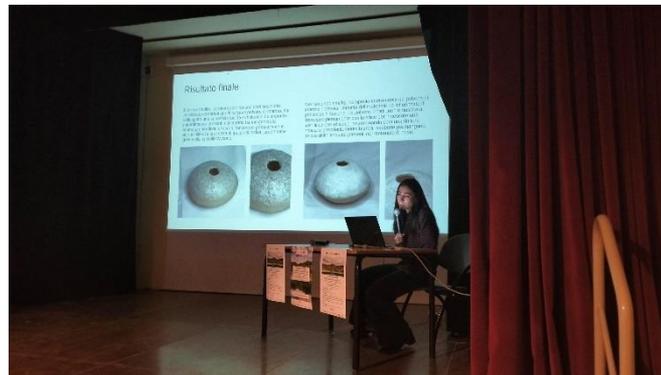
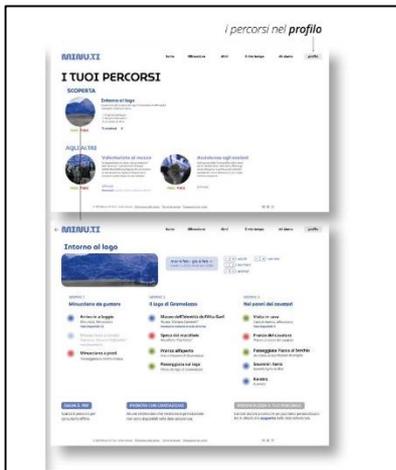
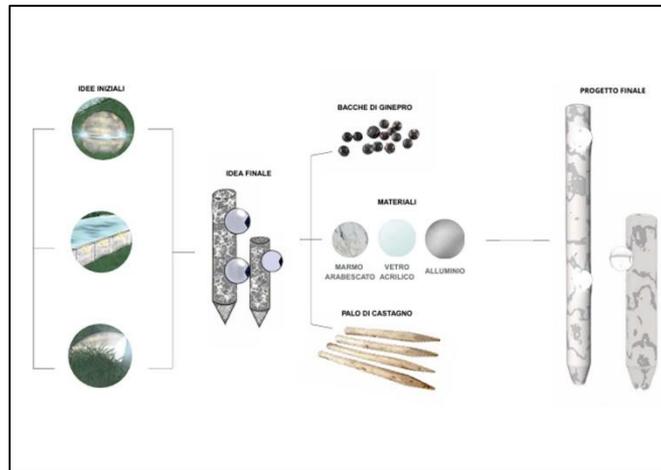
ARDE: Visitors could experience the Natalecci atmosphere every evening through warm lighting and cultural interpretation along the lake.

MATERIA FONDENTE: Local industries could transform marble dust into ceramic glazes, turning waste into value through circular innovation.

S-TOOLS: Visitors could explore the quarrymen's heritage through interactive sound installations and storytelling along the landscape.

MINU.TI: Residents and newcomers could access jobs, training, and collaborations, supporting new opportunities while preserving local identity.

What if...



Who will benefit?

Target Groups

Residents: They are the primary custodians of place identity; involving them ensures authenticity and long-term stewardship

Families: They transmit local knowledge across generations, making them essential for cultural continuity

Young people: They represent future capacity; offering them skills and opportunities directly counters depopulation

Newcomers: They bring new energy and perspectives, helping diversify the local social ecosystem

Local communities: They collectively validate whether an initiative feels meaningful, inclusive, and worth sustaining.

Key Learnings

Wellbeing and Circular Design (SOHAM)

Silence, nature, and mindful pauses emerge as **territorial resources**. Circular design proves capable of transforming marble waste into **high-value, ergonomic objects**, showing that wellbeing can become a driver of **rural regeneration** and year-round activity.

Heritage Education and Material Literacy (Le Tracce del Marmo)

Narrative tools and playful, place-based learning make **intangible craft knowledge teachable**. Schools and families act as powerful channels for distributing heritage content, while early exposure to materials and gestures can **spark creative pathways** and future local skills.

Ritual, Light, and Landscape Activation (ARDE)

Translating a local ritual into contemporary design shows that **cultural cues must be interpreted, not replicated**. Combining natural materials with sustainable technology enables respectful placemaking, while pilot installations and social-impact monitoring are essential for scaling.

Circular Material Innovation (MateriaFondente)

Systematic experimentation reveals that marble dust can become a **technically reliable and aesthetically rich** ingredient in ceramic glazes. Scientific methods like the Currie grid make the process replicable, while substituting virgin materials reduces **environmental impact**.

Sound, Gesture, and Landscape Interpretation (S-TOOLS)

Heritage-driven design activates the landscape in ways infrastructure alone cannot. Translating quarry gestures and sounds into installations shows that **authentic materials and site-specific forms** are crucial. Narrative routes reconnect fragmented places, linking lake, quarries, and community.

Community Storytelling and Territorial Identity (MINU.TI)

Local narratives become a **strategic resource**: resident-led stories create an authenticity no external campaign can match. By organising experiences around different “tempi”, the platform reframes slowness as value. Visibility and coordination counter fragmentation and support **sustainable development** rooted in everyday life.

NEB Values

SOHAM – Silence, circularity, and shared wellbeing

Beautiful - To Contemplate

SOHAM reveals the quiet beauty of Minucciano by shaping spaces where silence, posture, and landscape converge, turning overlooked corners into places of calm and introspection.

Sustainable - To Regenerate

The project repurposes marble waste into an ergonomic meditation seat, demonstrating how circular design can reduce environmental impact while creating meaningful, durable objects.

Together - To Restore

SOHAM creates shared spaces for mindfulness and intergenerational exchange, strengthening community bonds through guided practices and nature-based activities.

LE TRACCE DEL MARMO – Material storytelling and intergenerational learning

Beautiful - To Tell

An illustrated narrative make marble the protagonist, transforming material traces into stories that spark curiosity and imagination.

Sustainable - To Teach

Storytelling and simple workshops preserve intangible know-how and promote low-impact, educational reuse of local material culture.

Together - To Pass On

The book and itinerant labs connect artisans, schools, families, and visitors, creating shared learning moments that reinforce intergenerational transmission.

ARDE – Ritual, light, and emotional placemaking

Beautiful - To Evoke

ARDE translates the Natalecci's symbolic forms into a refined language of marble and warm light, creating poetic, site-specific atmospheres that resonate with place.

Sustainable - To Save

Solar power, warm-spectrum LEDs, durable materials, and modular design minimise energy use, maintenance, and ecological impact.

Together - To Unite

The lamps act as communal focal points that foster cultural participation, local stewardship, and intergenerational connection.

NEB Values

MATERIAFONDATE – Circular material innovation and collaborative research

Beautiful - To Reveal

The project uncovers the hidden aesthetic potential of marble dust, transforming natural impurities into unique colours and textures for contemporary ceramics.

Sustainable - To Reuse

By replacing virgin calcium carbonate with marble waste, the project reduces extraction impacts and demonstrates a circular, low-impact approach to material innovation.

Together - To Connect

Implementation links quarries, ceramic studios, researchers, students, and institutions, creating new synergies and a culture of collaborative experimentation.

S-TOOLS – Sound, gesture, and landscape interpretation

Beautiful - To Reveal

S-TOOLS transforms quarry gestures, tools, and sounds into sculptural, site-specific installations that make the craft's material and symbolic richness visible.

Sustainable - To Respect

By activating existing paths and viewpoints rather than adding intrusive structures, the project supports low-impact tourism and sensitive territorial regeneration.

Together - To Reconnect

The installations become touchpoints where residents, visitors, and youngersters gather to listen, interact, and reconnect with quarry stories.

MINU.TI – Community storytelling and territorial identity

Beautiful - To Portray

MINU.TI reveals the beauty of Minucciano through the voices of its people, turning everyday stories and slow rhythms into an emotionally resonant collective portrait.

Sustainable - To Revive

By connecting initiatives, services, and opportunities in one platform, the project supports year-round tourism, new livelihoods, and a model that counters depopulation.

Together - To Connect

The digital platform brings residents, visitors, youth, and local actors into a shared ecosystem where stories and opportunities circulate, strengthening cohesion and belonging.

NEB Working Principles

Participatory Process Ambition: To Engage

- 4-Helix Stakeholder Involvement
- Consultation of the Local Population
- Heritage-driven Design

Multi-Level Engagement Ambition: To Liaise

- Local B4M Node as starting point & network hub
- Regional Government as prime motor (with B4M)
- Now building links with the European NEB hub

Transdisciplinarity Ambition: To Merge

- Technological innovation with community knowledge
- Generations and professional backgrounds
- Systems, practices, and forms of expression

Common Themes

Living with Landscape, Materials, and Rhythms

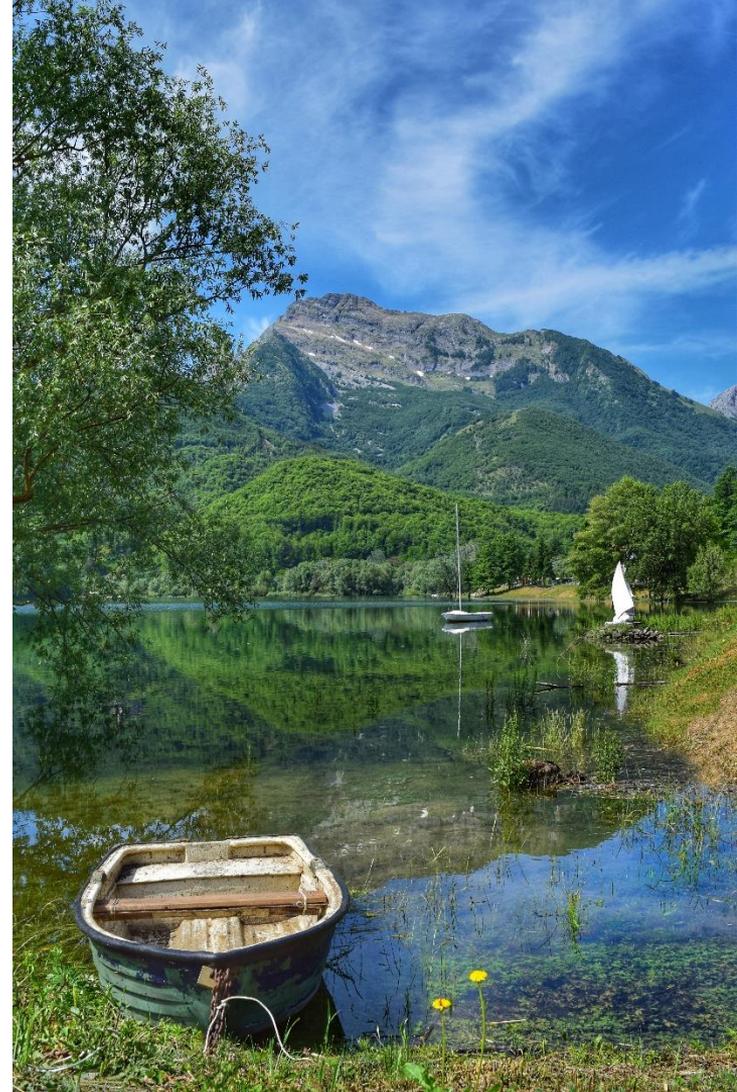
- Living with landscape, natural rhythms, and natural materials
- Craft, symbolism, and contemporary reinterpretation
- Outdoor sociality and the culture of slow, shared public space

Circularity, Sustainability, and Territorial Resilience

- Circularity of materials, resources, and opportunities
- Climate adaptation, solar resilience, and sustainable production
- Sustainable regeneration, repopulation, and territorial resilience

Community, Memory, and Learning Through Storytelling

- Community, memory, and contemporary wellbeing
- Narrative as pedagogy, playful hands-on learning, and place-based education
- Intergenerational transmission, local activation, and collective storytelling



Lessons Learned

SOHAM

- Silence can be treated as an active design material, capable of shaping perception, presence, and wellbeing in public space.
- Circular design generates **environmental and cultural value**, proving that waste can become a refined, meaningful object.

Le Tracce del Marmo

- Narrativising craft gestures helps children and aspiring makers **grasp complex processes** through characters, images, and step-by-step activities.
- Early exposure to material practices increases **artisan visibility** and can stimulate small-scale enterprises that help retain local talent.

ARDE

- Heritage-driven design carries **strong social and territorial weight**, especially in rural contexts where symbols matter as much as infrastructure.
- Implementation challenges emerge across **design, technical, and social dimensions**, requiring adaptive strategies.

Materia Fondente

- Waste-based substitutions can **maintain technical performance**, proving marble dust can replace calcium carbonate without compromising fusibility.
- Market-ready scaling requires **investments beyond the reach of small start-ups**, making broader alliances essential.

S-TOOLS

- Design has significant **social and territorial impact**, especially where gestures, symbols, and craft memory shape collective identity.
- Material choices strongly influence **narrative credibility**, reinforcing authenticity and community connection.

MINU.TI

- Slowness is a **strategic asset**, turning local rhythms into a distinctive value for visitors and a foundation for mindful living.
- Heritage, nature, and everyday practices can become **drivers of sustainable development** when framed through community-led storytelling.

Sharing for the Future

What knowledge
can contribute
to the B4M
Toolbox

Place-based knowledge and material intelligence

- How to transform local materials, waste streams, and geological identity into new resources, aesthetic languages, and durable public objects
- How to translate quarry gestures, rituals, sounds, and stories into contemporary design, installations, and learning tools without folklorising them
- How to design outdoor experiences—meditative, narrative, or sensory—where landscape, material cues, and natural rhythms guide perception and sociality

Heritage, narrative, and community activation

- How to turn intangible know-how into accessible formats: illustrated books, tactile kits, micro-rituals, seasonal gatherings, and digital storytelling
- How to involve artisans, elders, quarry workers, cultural custodians, and families in co-design processes that strengthen authenticity and intergenerational transmission
- How to use narrative and slowness as drivers of regeneration, helping communities recognise the value of their own knowledge and rhythms.

Circularity, innovation, and regenerative design

- How to repurpose industrial by-products into functional substitutes for virgin materials, supported by scientific validation and replicable protocols
- How to pair circular materials with sensory, low-impact design to support wellbeing, education, and local cultural operators
- How to design systems—physical, social, and digital—that reduce seasonality, activate dispersed areas, and build long-term territorial resilience.