



## “Youth Climate Awareness and Leadership Programme” Climate Walk at Melidoni Cave – Rethymno | Thursday 21.11.2024

**Thursday 21 November 2024**

**Rethymno: Melidoni Cave (Geosite of the UNESCO Global Geopark of Psiloritis)**

### ACTIVITY OVERVIEW CLIMATE WALK AT MELIDONI CAVE

This **Climate Walk** invites students aged 12 to 16 to visit **Melidoni Cave**, an important Geosite within the UNESCO Global Geopark of Psiloritis. They will explore the natural formations inside the cave, learn about ancient climate patterns, and discuss how climate change affects caves and underground ecosystems. The role of geoparks in educating the public about climate change throughout Earth’s history will also be highlighted.

### MELIDONI CAVE AND THE UNESCO GLOBAL GEOPARK OF PSILORITIS

Melidoni Cave, located in Rethymno, Crete, is a geosite of great geological and historical importance. It is part of the **UNESCO Global Geopark of Psiloritis**, a region recognised for its unique geological formations that provide insights into the Earth’s climatic past. Inside the cave, students will witness stunning stalactites and stalagmites that have formed over thousands of years, influenced by climate and water movement changes.

The Psiloritis Geopark includes caves, fossil sites, and other natural features and is a valuable educational resource. It preserves the history of past climate changes and helps explain how these natural formations record important information about the Earth’s environmental evolution. From these geosites, students can understand how past climatic events shape current environmental conditions and future challenges.

### CLIMATE WALK FACILITATORS

**Isidoros Kampolis**, MSc Geologist – Geomorphologist, PhDc, EU Climate Pact Ambassador

**Ourania Konstanti**, PhD, Cell Biology and Bioinformatics, Laboratory Teaching Staff, Department of Biology, NKUA, EU Climate Pact Ambassador

**Alexandros Stefanakis**, Assistant Professor, Technical University of Crete, EU Climate Pact Ambassador

**Maria Kolendrianou**, Geoscientist of Psiloritis Geopark

**Alice Corovessi**, Head of EU Climate Pact CC in Greece

**Georgia Mouriadou**, Production & Manager Engineer, EU Climate Pact CC in Greece Team Member

### INTERACTIVE ELEMENTS

- **Geological Exploration:** Geologists and climate experts will guide students through Melidoni Cave during the Climate Walk. The experts will explain how the cave’s formations—stalactites, stalagmites, and other geological features—are key indicators of past climate conditions. The students will learn how these formations provide clues to ancient weather patterns and water cycles, offering a deeper understanding of how natural environments reflect long-term climate changes. They will also discover how Melidoni Cave contributes to the broader geological knowledge of climate history within the Psiloritis Geopark.
- **Discussion Prompt:** After the cave exploration, the students will engage in a guided discussion centred around the prompt: ***“What can Melidoni Cave tell us about past climates, and how can this knowledge help us understand future climate challenges?”***  
This discussion will help students reflect on how natural environments, like caves, serve as records of Earth’s climate history. They will explore the importance of learning from these records to understand current environmental issues, particularly the impact of climate change on ecosystems and human life. Experts will guide the conversation, encouraging the students to think critically about how studying ancient climate patterns can inform strategies for addressing future climate-related challenges.

### BENEFITS FOR YOUNG STUDENTS

- Young students will learn more about how natural systems, such as caves, preserve evidence of past climate conditions, helping them connect geological features to broader climate science topics.
- The discussion format will encourage students to engage in reflective and critical thinking, helping them link their observations in the cave to the wider implications of climate change on the environment.



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- By experiencing the cave firsthand, students will see the practical application of classroom concepts related to climate change and Earth sciences, making learning more tangible and relevant.
- The Climate Walk will inspire students to care more deeply about the environment. They will learn about preserving natural landscapes and how these spaces help us understand climate change.
- The combination of an outdoor learning environment, geological exploration, and thoughtful discussion will provide students with an engaging and memorable experience, enhancing their educational journey.

**Organised by the Country Coordinator in Greece INZEB, in collaboration with the Region of Crete**

