

Naturally Occurring Asbestos in the asbestos-free European Union approach. Is asbestos exposure prevention being understood correctly?



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The European Green Deal and asbestos exposure

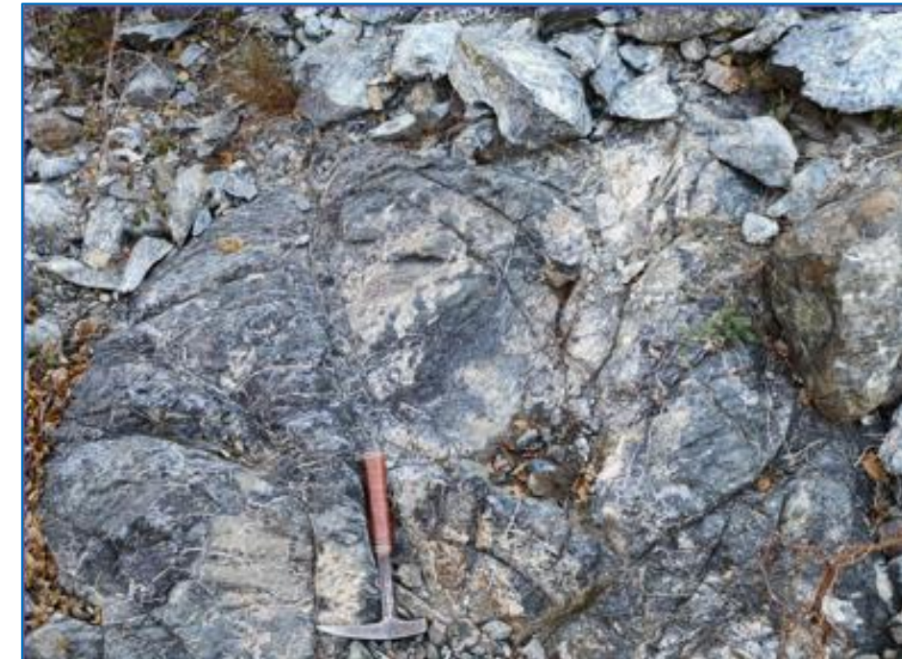


The Renovation Wave Strategy

- double annual renovation rates by 2030
- improve health and living conditions for consumers
- increase the number of workers and citizens potentially **exposed to asbestos** while the renovations take place

Asbestos - a group of **naturally occurring fibrous minerals** (chrysotile, actinolite, anthophyllite, grunerite, riebeckite, tremolite)

Type 1 carcinogen agents regardless of the asbestos mineral species. *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans (2012)*



chrysotile
Gomsiqe massif, Korthpule outcrop, Albania

A timeline of asbestos policy (EU in focus)

Occupational



- 89/391/EEC, 85/610/EEC directive
Protection of workers from the risk to exposure to asbestos
- 99/77/EC- Prohibition of chrysotile by 2005
- 2009/148/EC Worker permissible exposure limit (TWA, 8 hours)- 0.1 fibre/cm³
- 2020/C 375/01 Hazardous waste in households
- Proposal for 2009/148/EC amendment

NOA



Only in national level:
Guidance documents- Australia EPA, California
Mapping projects- California, Italy, France, Spain

1989-1992

1999

2009

2020

2022

2001 Asbestos Airborne Toxic Control Measure- Minimization of NOA during construction, quarrying activities
California Air Resources Board

2007 Memorandum on NOA to be addressed in California Environmental Quality Act

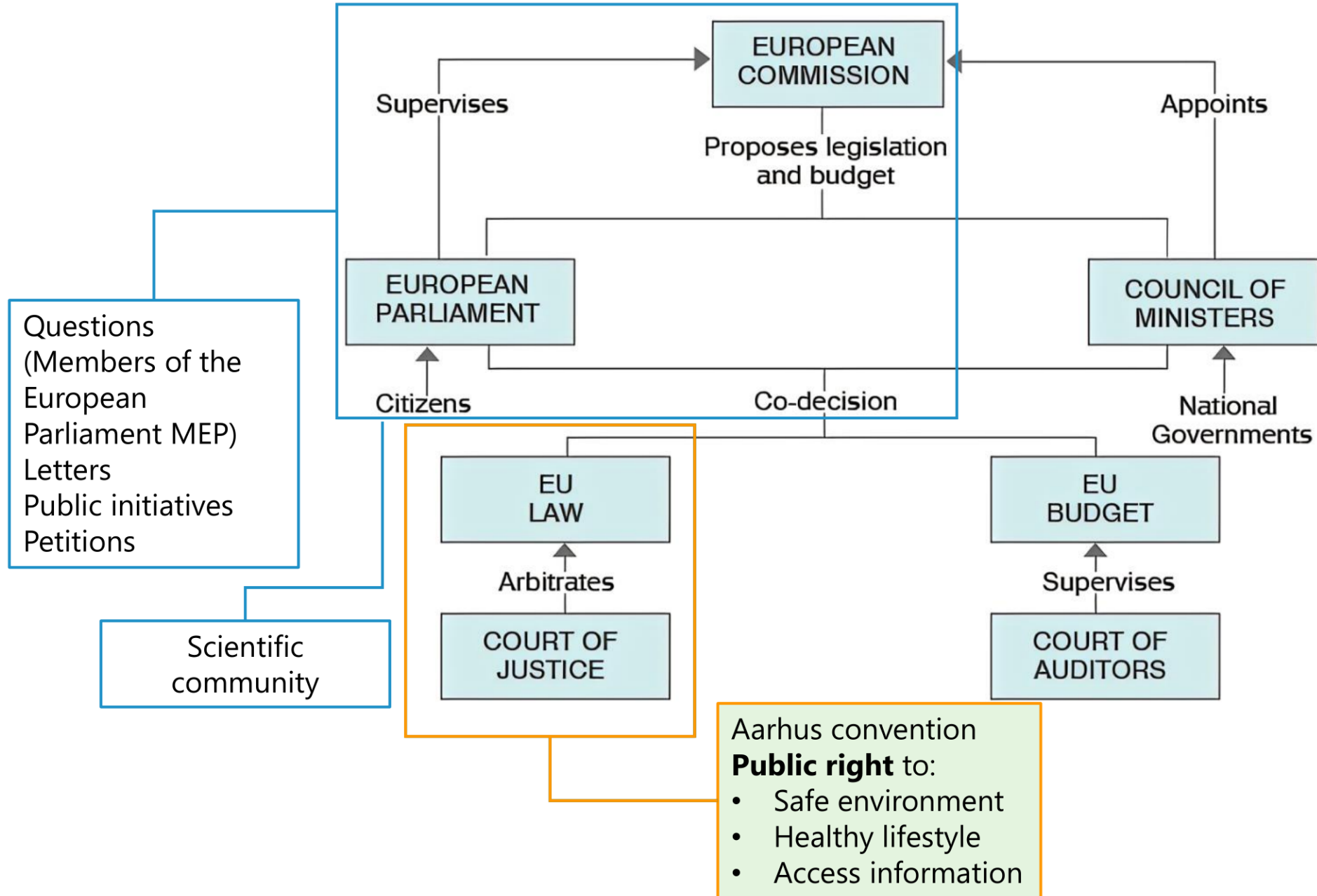
2016 Management of Naturally Occurring Asbestos (NOA), California Department of Transportation

Asbestos in our environment

	Solid material/rock	Soil	Air	Sediment	Water
Built-in asbestos	Monitored and removed in a controlled way	No regulation	Properly regulated (including removal activities)	No regulation	No regulation
Naturally Occurring Asbestos (NOA)	mapping outcrops and near surface bodies (no way to remove: all activities like constructions should be completed by monitoring)	Agricultural activity to be controlled and monitored	Regular monitoring if human activities around are expected	Potential redeposition of original solid material to be controlled	Potential transportation to be controlled

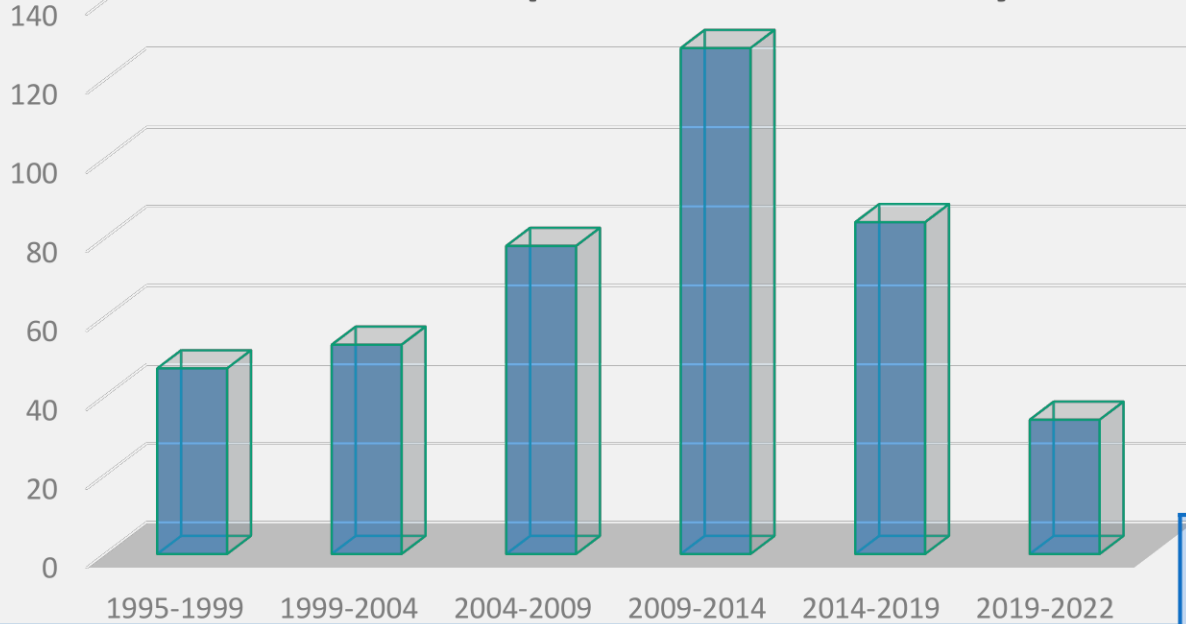
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To do

Who takes decisions? Who should be informed?



Members of the European Parliament MEP ask European commission

The number of questions raised in years



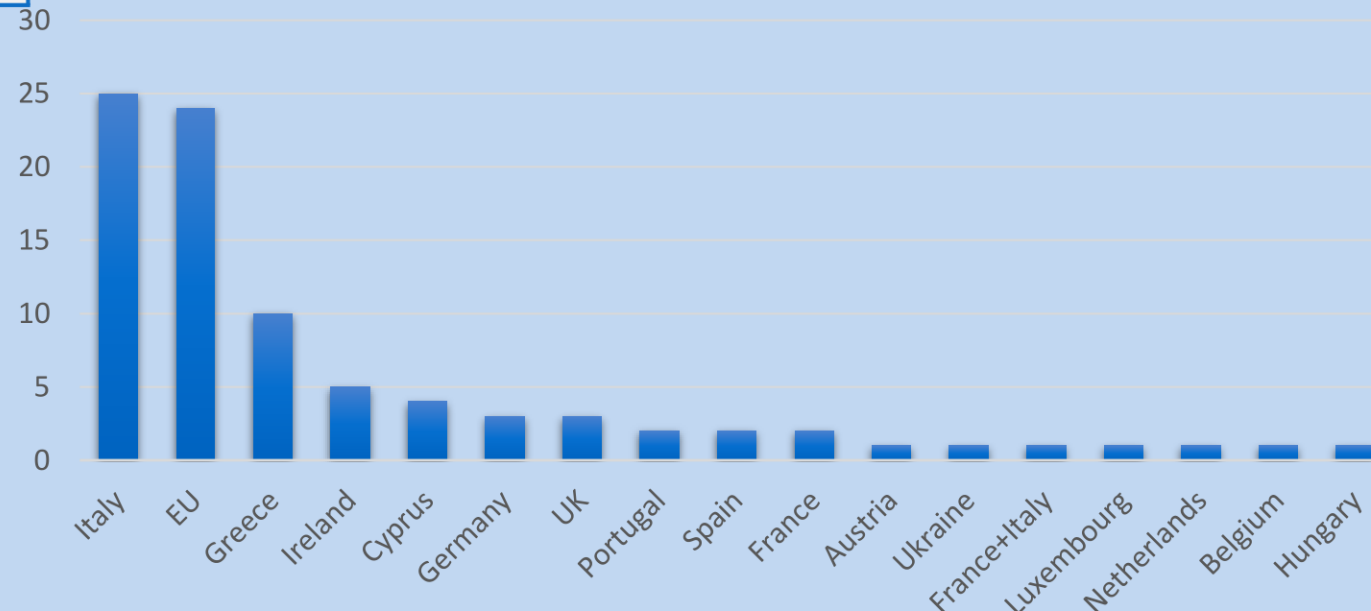
425 questions in total

Time period: February 1995-December 2022

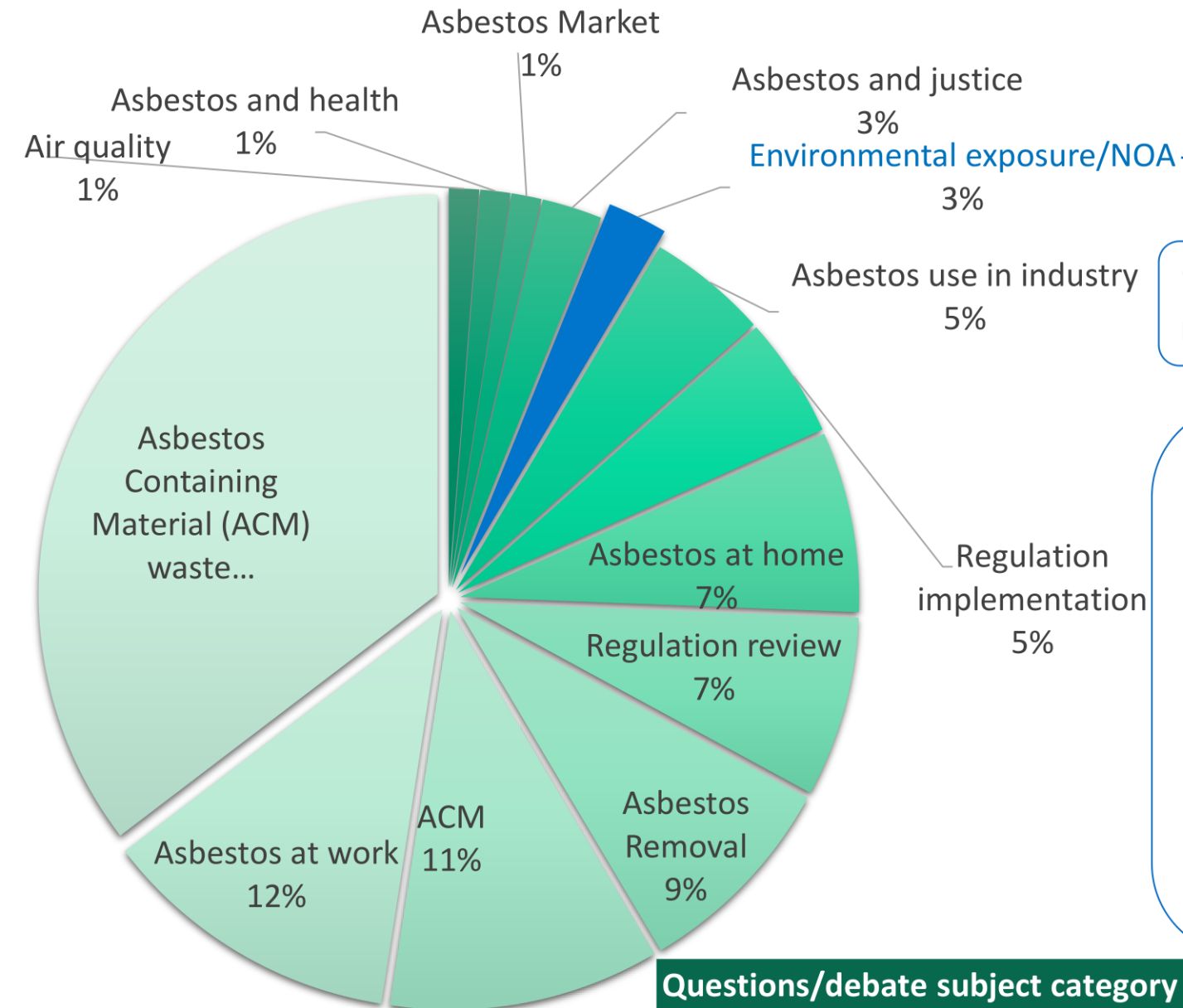
Highest number of questions between 2009 and 2014 referring mostly to *Regulation Implementation* (4-10 years after the asbestos ban regulation)

Each question had a subject country
16 countries were included
1 category is specific to the European Union level
(including all Member States)

Which country was the question raised for?



Members of the European Parliament MEP ask European commission



European Commission Answers

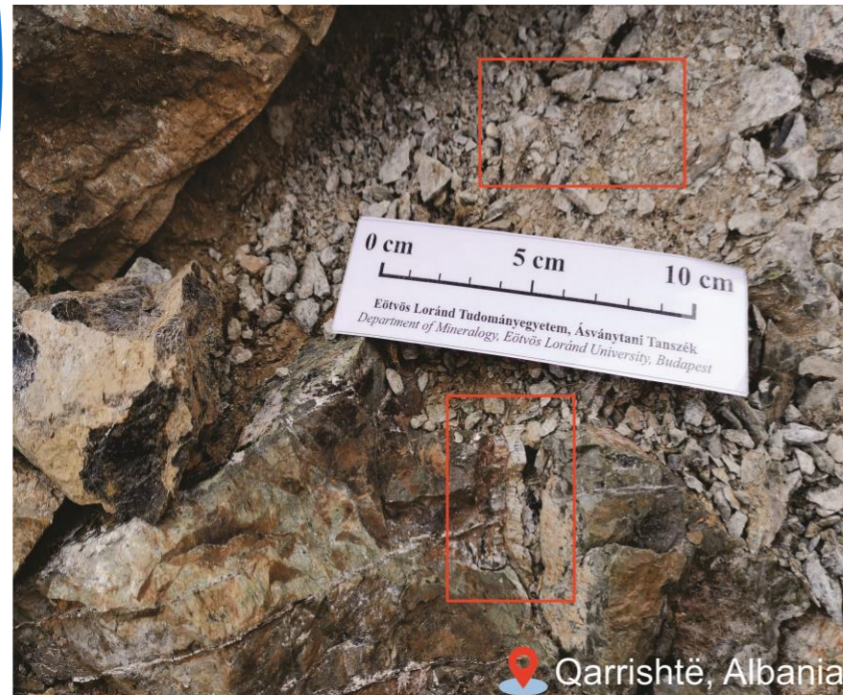
“The matter falls outside the scope of this legislation...” referring to Asbestos at Work directive 2009/148/EC


“Environmental pollution Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos focuses on pollution control at the level of plants using asbestos or asbestos products. The transport of **asbestos waste** from such plants is also covered by this directive, but the directive does not cover the transport of asbestos minerals, nor processes directly associated with the mining of asbestos.”



*Asbestos-free... asbestos let it be
Asbestos-free... asbestos let it be*

While we try to remove asbestos containing materials from buildings, **we cannot ban or remove asbestos from the natural environment.** The natural processes will find their way



 Qarrishtë, Albania



 Gomsiqe, Albania

NOA in Europe – possibility for a complete database

Large deposit
Medium deposit
Small deposit
Occurrence / Not specified

CTRL + click to select more than one entry.

Commodity group:

- Energy commodities
- Fertilizer minerals
- Iron and ferro-alloys metals
- Minerals for chemical use
- Precious and semi-precious gemstones
- Precious metals
- Special and rare metals
- Specialty and other industrial rocks and minerals

CTRL + click to select more than one entry.

Commodity:

- Arsenic
- Asbestos**
- Asphalt
- Barium
- Baryte
- Basalt
- BaseMetal

Go to location... 🔍 🏠 📍 🔄

Zoom Area Path N North

Privacy & Cookies Policy

1000 km

EPSG:3034 : EPSG:4326 :

ZOOM: Shift + Drag SELECT: Ctrl + Drag

Some of the missing localities in the current only database for raw materials in Europe including asbestos!

(Karkanis et al., 1995; Hyskaj et al., 2020; Vitale et al., 2013; Apollaro et al., 2010; Iannace et al., 2007)

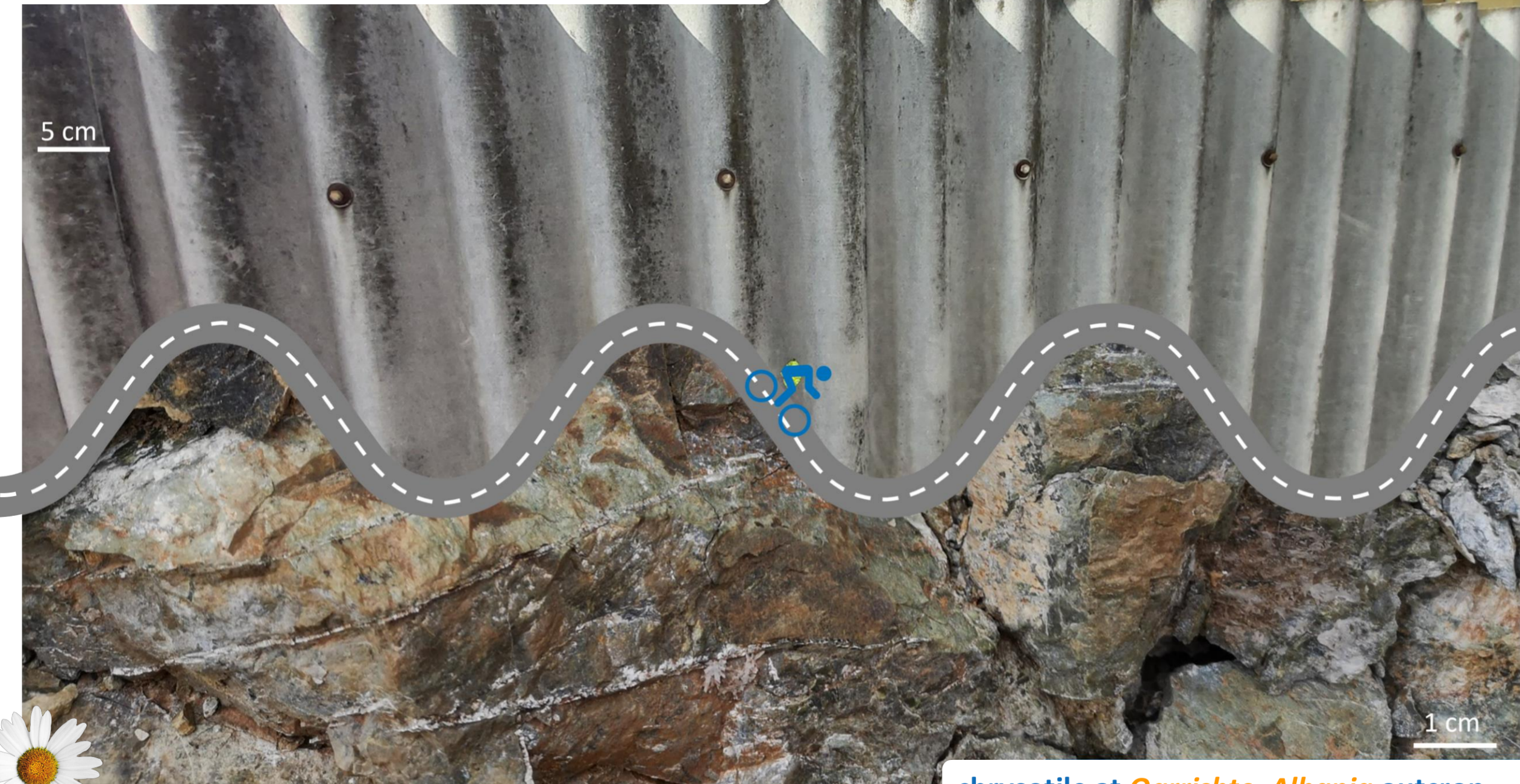


Take home message

“In 10 years, the buildings of Europe will look remarkably different. Buildings will be the microcosms of a more **resilient, greener** and digitalized society, operating in a circular system by **reducing energy needs, waste generation and emissions** at every point and reusing what is needed.” *A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, 2020*

In 10 years, we will still have asbestos around. What we need to do is prevent unnecessary exposure to hazardous asbestiform minerals by:

- strengthening the management tools to asbestos containing materials
- acknowledging, identifying NOA occurrences and prepare guidelines on
 - land use
 - urban planning
 - risk management
 - mining activities





He loves me he loves me not
Eugenio Zampighi (1859–1944)

“The Daisy Oracle” (effeuiller la marguerite, plucking the daisy) is thought to be of French origin but the evidence is anecdotal.

Plucking the petals of daisy flower would bring to a desired answer, usually a joyful game played by girls to know whether their affection loved them or not.

I bring this parallelism to remind ourselves that eventhough an asbestos- free world would be ideal, simplicity of the natural processes has shown us to have greater power. Therefore, we can work with the known answer to improve our and environment wellbeing.

Acknowledgements

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