



8 facts about

The circularity of stone wool



Across the world, the building sector consumes too many resources and produces too much waste.

Twenty five percent of the world's water and 40 percent of its resources are used by buildings, while creating one-third of all waste and 40 percent of global carbon emissions¹.

We all have a part to play in protecting the environment and our planet. By selecting sustainable and circular construction materials, we can save energy and resources, and limit waste.

Here are eight facts about stone wool's contribution to circularity:

1

Stone is recyclable

Stone is one of the world's most abundant raw materials, but there is still a need to make better use of our planet's resources. Stone wool can be recycled infinitely without affecting its quality.

By recycling stone wool, the consumption of primary materials is reduced and replaced by recycled wool, and the waste going to landfill is also reduced.

3

Stone wool does not contain any toxic flame retardants

Stone wool is inherently non-combustible, and adds to the fire resilience of buildings, limiting the impacts of fire. Stone wool does not contain any brominated or chlorinated flame retardants, which are Persistent Bioaccumulate Toxins, nor does it contain Boric acid flame retardants that are classified as Substances of a Very High Concern.

2

Stone wool does not contain any greenhouse gases or ozone-depleting gases - such as CFCs, HCFCs or CO₂

CFCs and HCFCs contribute to the depletion of the ozone layer and the creation of summer smog, while CFCs, HCFCs, HFCs, and CO₂ contribute to global warming. Stone wool has an open structure, which means that there is simply air and no gases in between the fibers. That's why none of these substances are mentioned in the relevant Environmental Product Declarations (EPD)².

4

Stone wool is a circular product

Stone wool can be recycled infinitely into new products, which is a crucial element of our "circular" business model. When a building is demolished or refurbished, the stone wool is recyclable. In an increasing number of countries ROCKWOOL recycling services will collect your used products to recycle.

ROCKWOOL Group currently offers this service in 10 countries, with an ambitious target to increase this to 15 by 2022 and 30 by 2030³. Through our existing product recycling service, we collected 130,000 tonnes of stone wool from the market³ in 2018.

1 - COM(2011) 571, 'Roadmap to a Resource Efficient Europe' available via <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0571>, accessed at 23 Jan.2020
2 - ROCKWOOL EPD, e.g. [https://www.epd-norge.no/getfile.php/1310353-1556196117/EPDer/Utenlandsk percent20registrerte percent20registrerte percent20EPD/NEPD-1762-738_ROCKWOOL-stone-wool-thermal-insulation.pdf](https://www.epd-norge.no/getfile.php/1310353-1556196117/EPDer/Utenlandsk%20registrerte%20registrerte%20EPD/NEPD-1762-738_ROCKWOOL-stone-wool-thermal-insulation.pdf)
3 - ROCKWOOL sustainability report, 2018, available via: <https://www.rockwoolgroup.com/about-us/sustainability/sustainability-report/>, accessed at 23 Jan.2020



5

Stone wool is a durable insulation material

Durability is an important aspect of circularity. The insulation performance of our stone wool products remains unchanged during the lifetime of a building. The thermal properties and dimensional stability of our products do not deteriorate during their lifetime.

In fact, tests from old construction sites show that our products have retained their insulation characteristics and properties for more than 55 years⁴.

6

Stone wool can have a high percentage of recycled content

In 2018, our stone wool products had a recycled content of up to 50 percent, excluding closed-loop recycling of waste generated in the factory.

7

Stone wool can also be manufactured from secondary materials (materials that are recycled and used again)

The technologies used to create ROCKWOOL products also enable us to utilise waste from other industries as a raw material, which is why we practice upcycling on an industrial scale.

This means that rather than being sent to landfill, low-value by-products such as slag from the metal industry are used in producing stone wool insulation. It's also why our products are a natural fit for the circular economy and for sustainable buildings of the future.

8

Stone wool is a sustainable solution for your construction project

ROCKWOOL Group's products contribute to achieving a number of credits under all major sustainable building rating schemes. Stone wool insulation, ceiling panels and cladding solutions gain credits for:

- Creating energy-efficient buildings with high thermal comfort
- Being durable, recyclable and non-toxic
- Contributing to superior acoustic performance
- Having Environmental Product Declarations (EPDs)

Additionally, you can find useful information regarding the environmental performance of ROCKWOOL products in our Environmental Product declarations (EPD) which we list in national EPD programs or databases or you can find via our local sales representatives. Please visit this [blog](#) for some simple facts about environmental product declarations (EPDs) and how you can use them effectively in your projects.

It is clear that stone wool can help to overcome some of the key environmental challenges posed by our built environment. By choosing stone wool materials, you are future-proofing your buildings to make them more efficient, healthier, robust and circular.

Now you know the key facts about the circularity of stone wool, you can learn more by visiting:

- [Sustainability and Circularity in ROCKWOOL](#)
- [Video about the circularity of stone wool](#)

4 - FIW, Durability Project Mineral Wool (2016), "Conclusions and Outlook." Available via EURIMA (European Insulation Manufacturers Association) at https://www.eurima.org/uploads/ModuleXtender/Publications/168/2017-02-21_EURIMA-55YearsOfUse_Info_Sheet_V08_final.pdf, accessed at 23 Jan.2020