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ROCKWOOL on decarbonisation

Climate change is one of the most significant threats facing our planet today. Reducing the use of carbon-emitting fossil fuels plays a major role in mitigating this threat. All manufacturing requires energy, however. Producing stone wool requires high and consistent temperatures to melt rock, and that process – as with much of global manufacturing – is still powered by fossil fuels in some geographies.

In 2020, we announced ambitious, science-based global decarbonisation targets that will help us significantly reduce our carbon emissions. Key elements of our targets, which have been verified and approved by the Science Based Targets initiative (SBTi)¹, include:

- Reducing factory absolute greenhouse gas emissions by 38 percent by 2034 (relative to baseline year 2019)²; and,
- Reducing non-factory, absolute lifecycle greenhouse gas emissions by 20 percent by 2034 (relative to baseline year 2019)³.

These absolute emission reduction targets, which supplement our existing sustainability goals, equate to an ambitious one-third reduction of ROCKWOOL's lifecycle (Scope 1, 2, and 3) greenhouse gas emissions by 2034, while at the same time ensuring continued reduction in the carbon intensity (carbon emitted per tonne produced) of our production.

These decarbonisation commitments strengthen ROCKWOOL's existing status as net carbon (CO₂e) negative company, in that over the lifetime of its use, the building insulation ROCKWOOL sold in 2020 will save 100 times the carbon emitted in its production⁴. The ability to infinitely recycle stone wool without any loss of performance also sets it apart from non-recyclable construction materials that might otherwise be incinerated, resulting in end-of-life emissions. Recycling stone wool at our factories contributes to reducing production-related carbon emissions.

Building on our decades-long efforts to improve the energy efficiency of our own operations, reducing the direct emissions from our production is a key focus of our technology innovation. For example, we are developing large-scale electric melting technology, which is environmentally well-suited in countries where the electricity grid is already low carbon. That's why we chose our factory in Moss, Norway to pilot what has become the stone wool industry's largest electric melter. With the new melter's start-up, the Moss factory's carbon emissions will drop by approximately 80 percent.

As we continue decarbonising, we are already reaping the benefits of our investments in industry-leading fuel-flexible melting technology that allows us to shift from coal to less carbon-intensive fuels such as natural gas or biogas in the facilities where this technology is being used. Going forward, the learnings we gain from these multiple innovations and our ongoing energy efficiency efforts will be applied elsewhere in ROCKWOOL's global operations.

¹ SBTi is a joint initiative by CDP, UN Global Compact (UNGC), World Resources Institute (WRI) and WWF whose mission is to increase corporate ambition on climate action by mobilising companies to set greenhouse gas emission reduction targets consistent with science-based requirements to limit global warming to less than 1.5°C / 2°C compared to preindustrial temperatures.

² The 38 percent target covers Scope 1 and 2 emissions.

³ The 20 percent target covers Scope 3 emissions.

⁴ Including upstream emissions from the extraction and transportation of raw materials and fuels