Current statistics concerning quarry waste demonstrate that around 50% of extract-ed material is classified as waste due irregular shapes. Moreover, present circular approaches to reduce the amount of quarry waste include turning it into aggre-gates, pebble stone, rubble, sawdust, and stone sludge for agriculture, breakwater and paving. Thus, due to legislation issues and waste definitions, large, defective blocks are crushed and downcycled despite the fact that their physical-chemical and mechanical properties are often defined as equal to raw material (Carredu 2019).

Carredu N (2019) Dimension stones in the circular economy world. Resour. Poli-cy 60:243-245

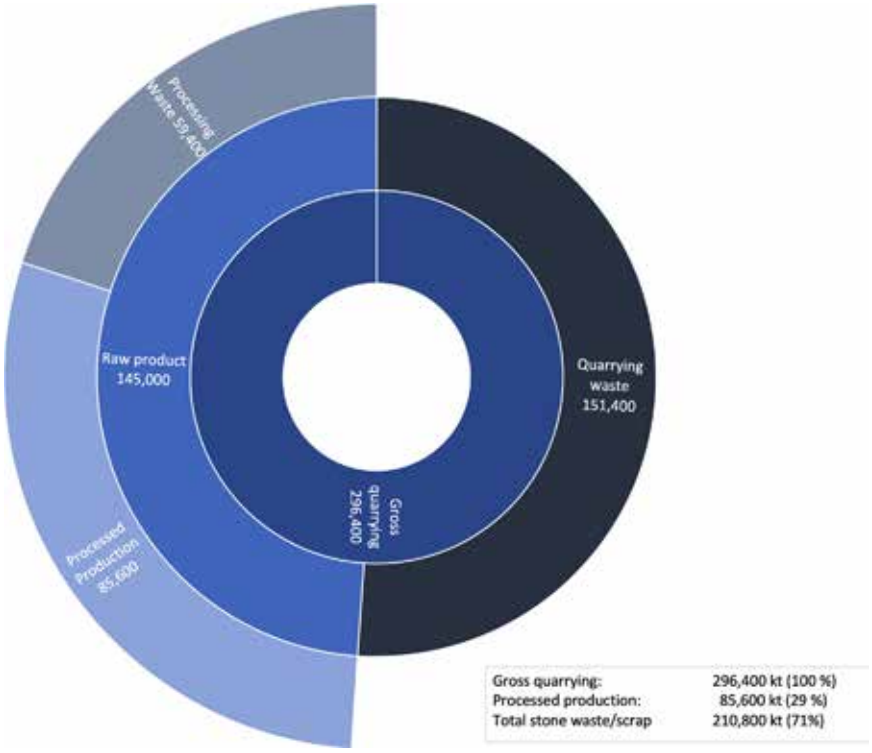

Fig. 1. Dimension stone industry world production in kt (data from Montani, 2017, elaborated by author).

Carredu N (2019) Dimension stones in the circular economy world. Resour. Poli-cy 60:243-245

Existing policies concerning quarry landscape regeneration (Jorba, Vallejo 2010) are often limited to filling in the excavated territories that look the same as they did before extraction. Although quarry pits are often seen as deep scars in the landscape today (Palmer 2015), this visual approach seems to forget that ter-raforming is a multi-species practice and that extraction transforms chemical and physical soil composition and embedded ecosystems that unfold around the zone of direct interference (Ait-Touati et al. 2022).

Jorba M, Vallejo V (2010) Manual para la restauración de canteras de roca caliza en clima mediterráneo. Generalitat de Catalunya
Palmer L (2014) In the Aura of a Hole : Exploring Sites of Material Extraction. Black Dog Publishing, London UK
Ait-Touati F, Arenes A, Gregoire A (2022) Terra Forma. A Book of Speculative Maps. MIT Press, Cambridge

in Larvik, Norway, which exemplifies most extractive practices in stone today. Here, the local stone, known as larvikite, is extracted in large blocks of 15-20 tons to be shipped to processing facilities elsewhere in Europe, where they are usually turned into finished elements. Due to the high reliance on marketable, aesthetic standards, the waste generated during the extraction process in Larvik constitutes approximately 50% of extracted resources. This is actually quite low in relation to the global standard, which can yield up to 70% waste (Carredu 2019). Optimal carbon trajectories are less obvious as Portuguese, Spanish or Italian facilities score better than the ones located in Norway due to the heavy reliance on sea transport over truck freight. However, the apparent disconnect between the extrac-tion site and architectural element results in relatively inefficient use of the finite resource, not to mention other displaced impacts.

Carredu N (2019) Dimension stones in the circular economy world. Resour. Poli-cy 60:243-245