Circular Economy: A Solution for Construction Waste in Malta

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Significant waste is generated by the construction industry. 34.7% of all EU28 waste is generated by the construction sector leading to ca 28% of all CO_2 emissions. Construction and Demolition Waste (CDW) varies depending on the type of project, for example civil engineering works and infrastructure as against buildings. It includes materials such as masonry blocks, concrete, tiles and ceramics. CDW is usually non-hazardous although a small percentage can be hazardous and harmful to humans and the environment. Excavation waste amounts to a large and significant portion of the waste generated in construction activity. In less developed European countries, less than half of CDW is recycled. This has negative environmental impacts directly as a result of disposal and pressures on land and scarce resources but also pollution and greenhouse gas emissions. A way to decrease the negative impact of the construction sector is to foster its transition towards a circular business model in which resource and material efficiency, waste reduction, material value maximization and smart design are key priories. This paper highlights the current situation concerning CDW in Malta and then moves on to discuss measures that can be adopted to incorporate recycling of building waste within the Maltese circular economy. Tools such as the Build Circular Up tool, recently developed as part of the Build-Up Circular project, funded by EIT Climate KIC are presented. The tool is aimed at supporting the construction industry to transition towards circularity by creating a self-assessment digital innovation tool for the construction sector. The tool provides a snapshot of the current positioning and opportunities for further improvement, validation and certification of the relevant stakeholders.