The study considered three pairs of formulations based respectively on zirconium silicate and alumina. In all scenarios considered, the potential environmental impact of super-white ceramic bodies (>L85) was found to be significantly (20-50%) lower in zirconium silicate-based formulations. Only ODP was similar in both scenarios.

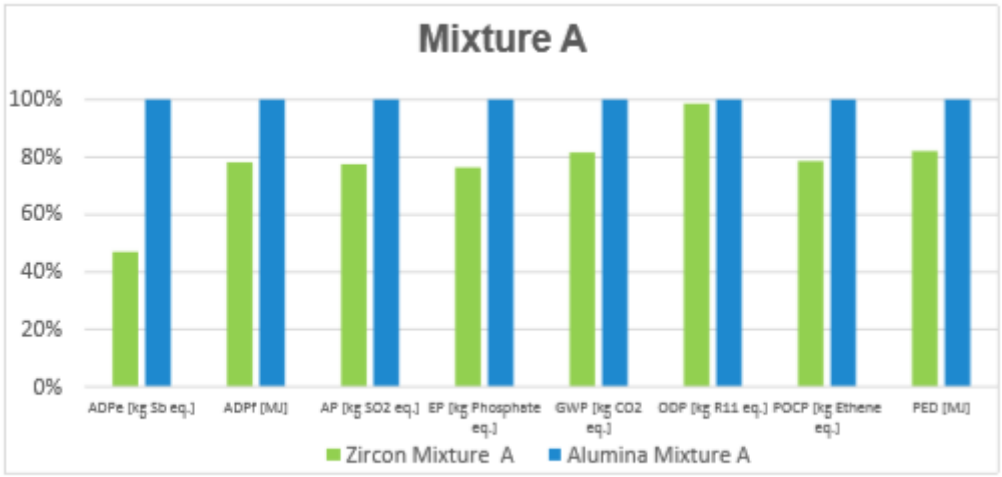

Figure 3: Comparison results, 1 kg of Mixture A

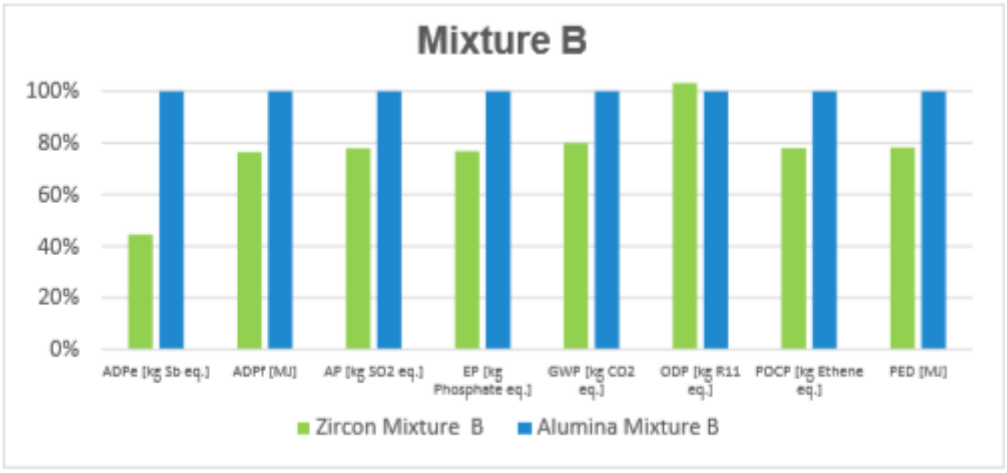

Figure 4: Comparison results, 1 kg of Mixture B

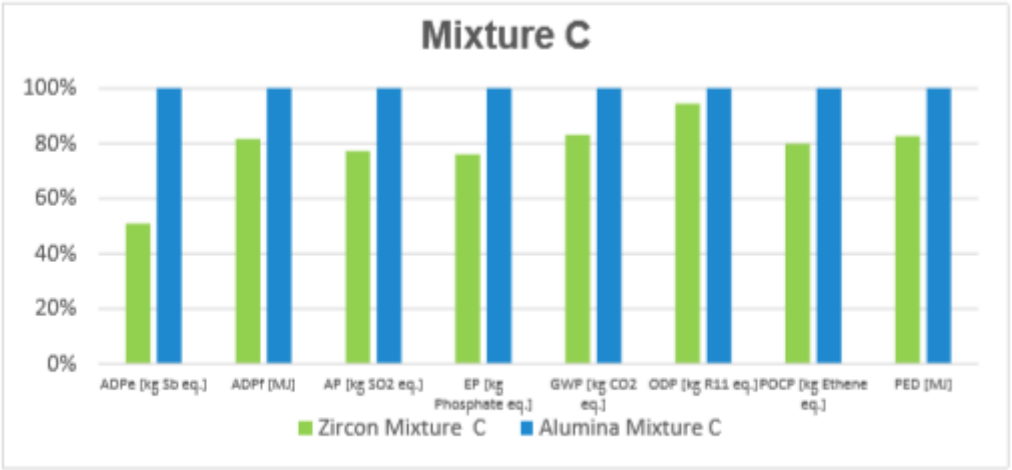

Figure 5: Comparison results, 1kg of Mixture C

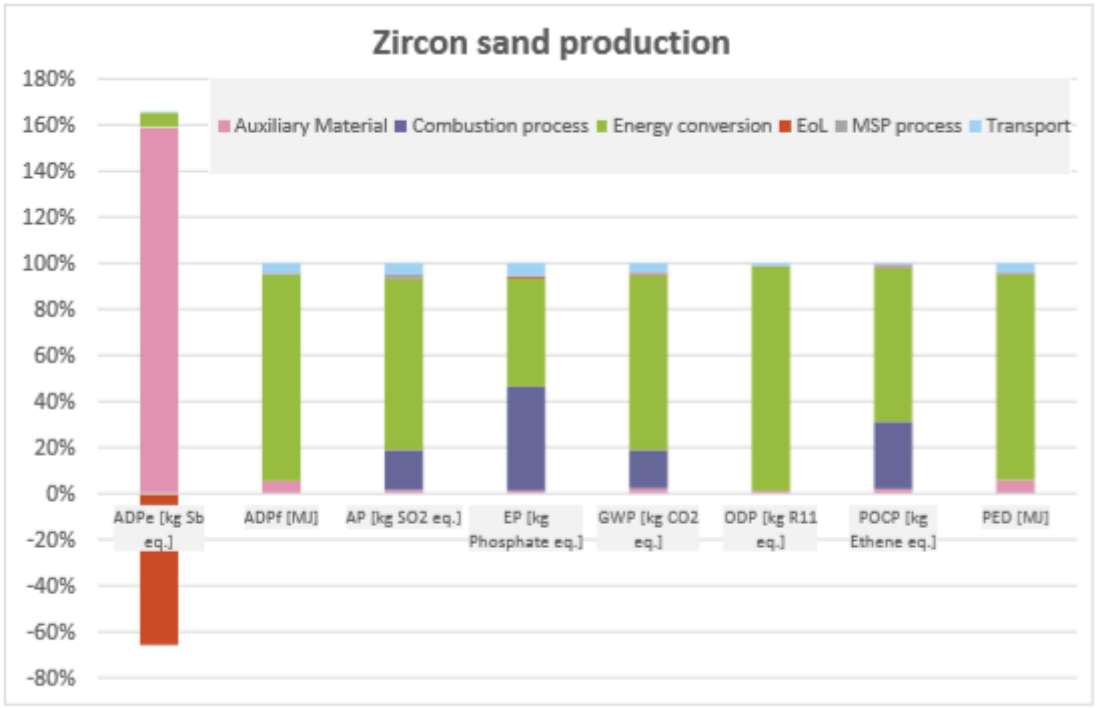

Figure 1: Potential impacts contribution for total zircon sand production