Process design for a production of sustainable materials from post-production clay

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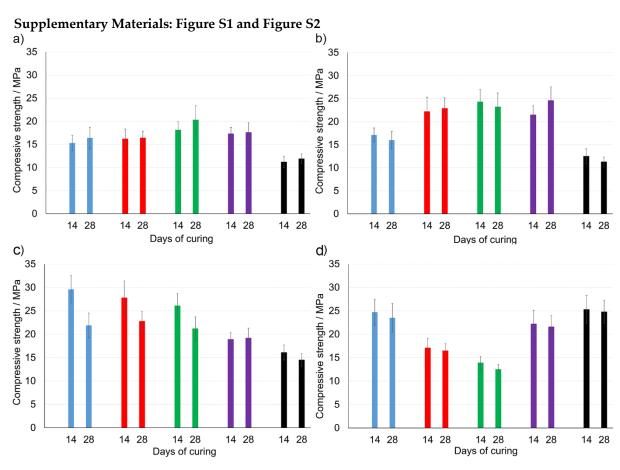


Figure S1. Compressive strength of the alkali-activated cement formed from post-production clay mixed with sand; calcined at two different temperatures: (a) 700 °C and (b) 750 °C; or formed from post-production clay mixed with sand and additives: (c) fly ash, (d) metakaolin; calcined at 750 °C; activated by NaOH (blue bars), NaOH:KOH 9:1 (red bars), NaOH:KOH 3:1 (green bars), NaOH:KOH 1:1 (purple bars), and KOH (black bars); cured for 14 and 28 days.

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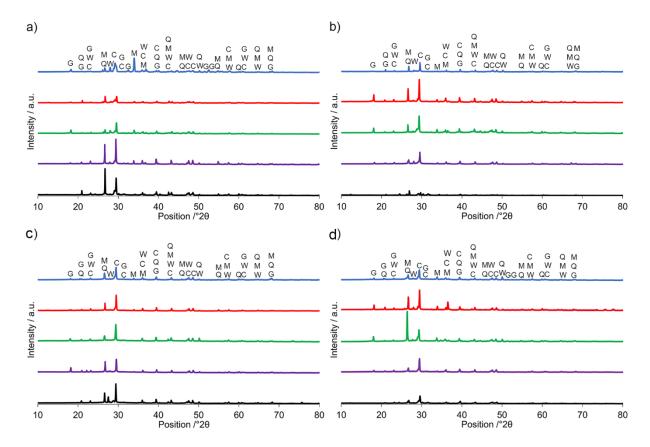


Figure S2. X-ray diffraction pattern of the alkali-activated cement formed from post-production clay mixed with sand; calcined at two different temperatures: (a) 700 °C and (b) 750 °C; or formed from post-production clay mixed with sand and additives: (c) fly ash, (d) metakaolin; calcined at 750 °C; activated by NaOH (blue), NaOH:KOH 9:1 (red), NaOH:KOH 3:1 (green), NaOH:KOH 1:1 (purple), and KOH (black); cured for 28 days.