



Photo: RMC trucks at a construction side (Credit by Hallet Group)

HALLET GROUP

Unique green cement project by Australia's Hallet Group

The Government of South Australia will provide an AUD12M loan to the Hallett Group to back a unique green cement transformation project (GCTP). Hallett is the largest integrated supplier of building, construction and mining materials in South Australia, operating a fleet of 100 RMC trucks (photo), and supplying about 500,000 m³ of concrete per year. The project consists of two infrastructure hubs, at Port Augusta and Port Adelaide, where up to 30 Mt (million tons) fly ash from Port Augusta's Northern Power station ash dam and waste products from the Nyrstar Port Pirie smelter can be harvested and reused over a period of 40 years as green cement. The GCTP project will reduce Australian CO₂ emissions by 0.3 Mta immediately after startup, growing to about 1 Mta in the following years by using the SCM products as a substitute for clinker in the cement and concrete production.

The fly ash reclamation will be performed environmentally friendly. The SCM processing facility and green cement blending and distribution hub at Port Augusta will be powered by renewable energy (wind & solar). The facility will process SCM products by grinding or inter-grinding and blending them with various activator products sourced through Hallett's Port Adelaide distribution hub and from other sources. The Port Adelaide facility will consist of a huge 52,000 t cement storage dome and 15,000 t flexible SCM storage shed with state-of-the-art blending and distribution functionality. With a location close to major SCM consumers, Port Augusta is the ideal central processing and primary distribution hub and enjoys logistical advantages for road, rail and ship out- and inbound transport particularly for the mining customers in the region. The Port

Adelaide hub will be able to supply the entire greater Adelaide market as well as export green cement products.

Major project benefits

- The replacement of 30 Mt of cement with SCMs can reduce CO₂ emissions by more than 1 Mta, which will support the State and National CO₂ emissions reduction targets.
- The green cement will help to contribute to the emission targets by the customers from the mining and other industries.
- The project will deliver long-term employment opportunities in the upper Spencer Gulf and generate >50 full-time jobs in operation, hundreds throughout the construction phase and provide extensive work for local service providers and contractors. Accordingly, the Federal Government has contributed a grant of A\$20 million to the project through the Modern Manufacturing Initiative.
- The project provides an opportunity to reduce CO₂ emissions from local infrastructure projects, including the South Road Tunnels project, which is projected to consume 780,000 m³ of concrete at an average of 320 kg of cement per m³. This equates to 250,000 tonnes of cement, which, if replaced by 50% SA produced SCM, results in a reduction of 110,000 t of CO₂ throughout the entire project vs. normal Portland cement.
- The project adds to an estimated A\$2.5 billion in capital investment in energy-related projects completed and in the pipeline for Port Augusta and the Upper Spencer Gulf since 2016.

<https://hallett.com.au/gctp/>