



Emissions Reduction Plan for 2024/2026

Simcoa Operations Pty Ltd (Simcoa) is applying for a multi-year monitoring period (MYMP) for its greenhouse gas emissions under the Safeguard Mechanism (SGM) spanning from July 2024 to June 2026 (2 years).

Background information

Simcoa Operations Pty Ltd, operates 3 submerged arc furnaces to produce silicon. Silicon is produced through a carbothermic reduction of Quartz (SiO₂) in an electric submerged arc furnace. This process is both energy intensive (scope 2) and carbon intensive (scope 1).

Simcoa produces low emission carbon in the form of charcoal on its site but does not have the production capacity to fully cover its total furnace demands. Coal supplements any shortfall in charcoal reductant and accounts for 80% of the scope 1 emissions.

An extensive maintenance shutdown on the Charcoal plant in FY2025 resulted low charcoal production and overall higher coal use increasing sites emission for the FY2025 to 112 143 tonne CO₂-e. This was above Simcoa Covered Emissions. This MYMP will allow Simcoa to balance the effect of maintenance shutdowns.

Emission Reduction Plan

Simcoa plans to curtail its silicon production for the FY2026 and subsequently decrease its scope 1 emissions. The reduction in scope 1 emissions will be achieved by reducing coal consumption and allowing the lower emissions intense charcoal and woodchip to become the dominant reductants in the furnaces.

The plan is based on suspending operations on one of its three furnaces to conduct significant maintenance and refurbishment. Curtailing production will reduce the consumption of coal & carbon electrodes by approximately 63% and 36% respectively. Activities already commenced at the start of the FY2026. Simcoa is on track to achieve the reduced emissions for FY2026.

Under the plan, the scope 1 emissions for FY2025/26 will reduce by 57% to 47 773 t CO₂-e and average 79 958 t CO₂-e for the period covered by this plan.