



PROJECT SNAPSHOT

PTES USE SOLAR RECYCLING COMPACTORS AT FMGL CLOUDBREAK AND CHRISTMAS CREEK SITES

The issue

There are many issues associated with waste and recycle bins located in public spaces, problems include; bins overflowing, odors, being emptied when they are not at full capacity wasting time and resources, and cross contamination of waste.

The solution

PTES has begun using Solar Recycling Compactors at Fortescue Metals Group Ltd (FMGL) Cloudbreak and Christmas Creek sites. Solar compactors use renewable energy to turn public spaces into clean, eco-friendly zones. Powered by the sun, it encourages recycling and reduces both greenhouse gas emissions and rubbish collection expenses. They are good for both the environment and economy.

The compactor is technically savvy and notifies you when it's full. When the unit reaches capacity, sensors trigger an internal compactor that flattens the contents, converting 0.7m³ of waste into easy-to-collect bags. A wireless system then signals that the unit is ready to be emptied.

The outcome

- Reduction in waste collection expenses as it has five times greater capacity and can reduce collection trips by up to 80%. Fewer collections means greater efficiency reducing fuel, equipment, labour and maintenance and more importantly a reduction in greenhouse gas emissions.
- Real time data through up-to-minute status on which locations need to be collected.
- Ability to track historical data to target waste stream in specific locations.
- The units are made from recycled materials and have a small footprint, similar in size to the 240L mobile garbage bins (MGB).
- Each unit gets 100% of its energy from the sun using less than 5 watts per day.
- The units don't need direct sun light to operate, they are susceptible to varying condition such as cold weather, hot weather, shade or snow coverage.
- The units can accept plastic bottles, newspapers, cardboard and other recyclables preserving valuable resources.