

Introducing a Smelting to Manufacturing Value-add products Paradigm

“Tiwai Paradigm”

“Tiwai Paradigm” Overview

For all the new technology and advance achievements being made, they have their roots and dependency for mass production firmly set in heavy industry capability. No matter how hard you try, you cannot get away from this fact going forward.

The Tiwai Paradigm is about converting raw materials directly into useful products rather than into intermediate goods. The use of resources is optimised and all associated costings are minimised, unlike the multi-step processes and functions currently in use today.

The Tiwai Paradigm is a self-sustainable group of heavy industry plants capable of turning raw material into value-added products, while minimising the impacts on the environment through full circular supply and waste recovery practices, with utilisation of the latest plant and capture technologies that can deliver very clean and green focused outcomes in a fiscally responsible manner.

The projects demonstrating the Tiwai Paradigm are very complicated in structure due to the nature of the plants and processes involved. It is all about the raw material and what can be extracted and then created in the value-added model to ensure the best margins and environmental goals are achieved.

The key function and success of the Tiwai Paradigm is a fully self-contained energy system that allows the complete project components to exist outside of any electrically charged national grid connection.

The Tiwai Paradigm model can be applied to any industry and associated manufacturing where you can control everything from the raw material through to the finished product.

Here are some common questions about projects based upon the Tiwai Paradigm:

- **Can the project meet the Tiwai Paradigm claims; Yes**
- **Are the projects fully self-contained; Yes**
- **Are the projects fully customisable to different locations; Yes**
- **Are the projects scalable in application; Yes**
- **What is an average staffing level for an average size project; estimated 10,000 FTE+**
- **Are the environmental systems fully integrated and automated; Yes as much as humanly and technologically possible**
- **What are the end product market capabilities; can meet both defence based and general market needs, as well as direct to market ready finished products.**
- **Is this system capable of supporting new economic growth in a way that affects regional and national economic environments; Yes**

Currently there are 4 projects covering 2 countries in different configurations with preliminary designs completed and ready to implement. The original Tiwai Project was used to test this paradigm, the associated desired outcomes and configuration based upon an opportunity within New Zealand.

The Tiwai Project design has been modified and adapted for three different locations in Australia requiring 3 different configurations and applications unique to the preferred locations identified.

As a result, it has proven the paradigm can be adapted and scaled to meet most environments and locations anywhere in the world.