

8 August 2024

# Engineering Contractor Appointed For Next Major HPA Project Milestone

## Highlights

- **Cadoux's high purity alumina (HPA) project advances a key stage in project development**
- **The HPA SSP Stage 1 / Phase 1 development work is finalised. Stage 1 / Phase 2 commences**
- **GR Engineering Services Limited (GRES) appointed as contractor for Phase 2 engineering study**
- **Scope of work to be completed includes Front-End Engineering Design (FEED) level detail**
- **Option for EPCM contract to be executed post FID**

Emerging critical minerals producer Cadoux Ltd (ASX: **CCM**) ("**Cadoux**" or the "**Company**") is pleased to announce the completion of a key engineering phase of the planned small scale and demonstration HPA production facility (SSP) and the appointment of GRES as our engineering contractor.

Cadoux is committed to developing its critical mineral projects which includes the production of ultra-high quality, high purity alumina (HPA) in Western Australia, the Minhub mineral sands and rare earths processing facility in the Northern Territory and associated downstream development opportunities.

**Cadoux Managing Director, Mr. Roland Hill commented:** *"The selection and appointment of GRES as the preferred engineering contractor for the SSP is a significant milestone for the project. GRES is an industry leading contract engineering company and is highly regarded for their hydrometallurgical experience and successful project completion track record. GRES will complement the HPA project delivery team exceptionally well as they were the lead engineering firm involved in the delivery of the original HPA feasibility studies (PFS and DFS). We look forward to working closely with GRES over the next development stages and together add significant value to the HPA project".*

**GRES's Managing Director, Mr. Tony Patrizi stated:** *"GR Engineering is pleased to continue working on this important project in Western Australia and looks forward to engaging closely with the Cadoux team during the study process and progressing post FID into project execution".*

Cadoux has an immediate commercial objective to finalise the engineering studies for the SSP and to accelerate the development progress of the HPA project to production.

The Stage 1. / Phase 1. engineering works have been completed as a material step to the HPA project development. The engineering studies advance to Phase 2. following the appointment of GRES as the preferred contractor to finalise the engineering workstreams and with the option to take the project into construction under an EPCM post a final investment decision (FID).

HPA project deliverables for GRES in Phase 2. engineering workstreams include:

- Updated capex estimate
- Project execution plan
- Master document register (MDR)
- HAZOP reports (process safety studies)
- Specifications and datasheets
- Final plot plan, general arrangement drawings
- Piping & Instrumentation Diagrams (P&ID drawings)

### HPA Project Development Phases

Cadoux is developing the SSP in two project stages:

**Stage 1.** Is the pre-FID project development including:

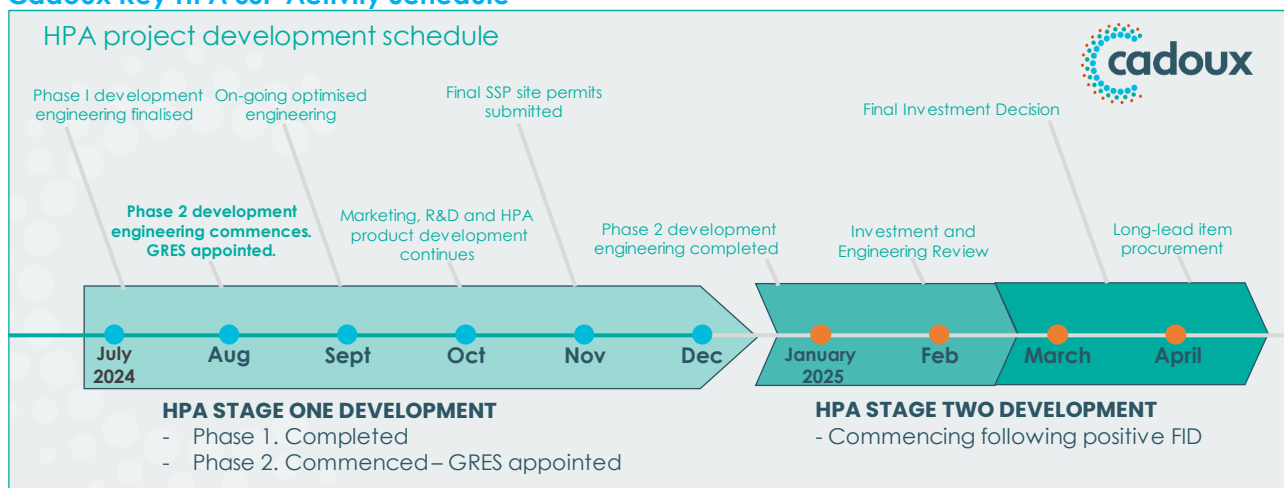
- Phase 1. Flowsheet development, optimising and engineering
- Phase 2. Front end engineering

**Stage 2.** Is the post-FID workstreams for detailed project execution and delivery framework for successful project completion.

Once completed, the Phase 1. and 2. workstreams will combine to provide a higher level of engineering confidence than a definitive feasibility study. The studies are aimed deliberately at a front end engineering and design (FEED) level to demonstrate to stakeholders that the SSP project can be constructed and operated profitably whilst meeting all relevant regulatory, environmental and legal requirements.

GRES's Stage 1. / Phase 2. completion is scheduled for December 2024.

### Cadoux Key HPA SSP Activity Schedule



Authorised for release by Roland Hill, Managing Director.

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## About Cadoux Limited

**Through the dual overlays of robust project economics and ESG, Cadoux aims to increase long term shareholder value whilst fostering increasing project sustainability.**

Cadoux is an emerging developer of critical minerals projects, focused on two key materials essential for global electrification – high purity alumina (HPA) and rare earth minerals which are key feedstock for rare earth magnets. Cadoux is positioning itself to be a significant producer in both markets to take advantage of growing demand in rapidly developing high-tech product markets and contributing significantly to the global momentum for a decarbonised future.

Both Cadoux's HPA and 'Minhub' projects align strongly with Australia's critical minerals policy by inducing new supply of essential critical minerals and creating value adding, new sovereign supply chains for strategic minerals.

HPA is increasingly becoming the preferred input material for certain high-tech products, principally for its unique characteristics and chemical properties in high specification requirements. Key markets include LEDs and other sapphire glass products, although a longer-term driver for HPA, with forecasts of >33% year-on-year growth (GAGR)\*, is the electric vehicle and static energy storage markets where the HPA increases power, functionality and safety when used as a separator material between the anode and cathode in high performance batteries.

An innovative process design by Cadoux has enabled the integrated production of high quality, high purity alumina (HPA) up to 99.999 (5N) purity at robust economically sustainable operating costs. This has been demonstrated through a pilot plant and extensive market studies. Cadoux is now looking to commercially develop that process through a staged development which includes a 1,000tpa small scale production facility in Western Australia followed by a 10,000tpa full scale commercial plant.

Cadoux's HPA strategy has won the backing of State and Federal governments, with Cadoux being the only junior developer with both Western Australian lead agency status and also designated as Major Project Status by the Federal Government.

In the Northern Territory, Cadoux is opening up a new supply chain for Australia's emerging rare earths and mineral sands projects through the development of the Minhub Project which will include a mineral separation and rare earths minerals processing facility in Darwin. Minhub aims to process 3<sup>rd</sup> party mineral concentrate and supply rare earth rich xenotime and monazite mineral products to select markets. This includes potentially supplying Arafura with the rare earth mineral xenotime, enabling a significant increase in the supply of critical magnet feed rare earth metals dysprosium and terbium for key markets such as Electric Vehicles.

\* Technavio (2024): Global High Purity Alumina Market 2024-2028.