



ASX Announcement

8 December 2022

Powerhouse Successfully Energises Remote Industrial Site & Commences Final Testing Phase

Melbourne, Australia: Technology design and development growth company, Synertec Corporation Limited (ASX: SOP, “Synertec” or “the Company”) is pleased to provide a key development update in relation to its novel and proprietary Powerhouse technology, which enables the utilisation of renewable energy to fully power industrial applications in remote locations, is rapidly deployable and portable, and has no requirement for fossil-fuel standby generation.

Highlights

- **Powerhouse has been successfully “cutover” and integrated with Santos Limited’s (“Santos”, ASX:STO) production and operating systems**
- **The cutover means Powerhouse is supplying 100% of power, emission-free, to a remote cluster of eight gas wells spread across an area of approx. 10 square kilometres, replacing the existing bank of fossil-fuelled generators**
- **Gas previously used to fuel the generators at the site can now be directed into the Australian gas network, increasing gas supply and revenue for the field operator**
- **The commercial scale field trial is the final stage of the testing process for Powerhouse**
- **Following a successful field trial, it is expected the parties will migrate to a commercial contract for Synertec to provide Powerhouse to Santos on a long-term rental basis**
- **Synertec are advancing plans for commercial scale production of Powerhouse units, with component suppliers committing to key supply chain performance criteria**

Live operation and final phase of testing commences

Powerhouse has commenced the final stage of testing on a cluster of eight production wells spread across an area of approximately 10 square kilometres in remote central Queensland. The cutover of Powerhouse to Santos’ live operating and production systems to fully energise the equipment used for each of the wells, emission-free, follows successful and extensive FAT and SAT programs over the past six months that delivered operational performance which exceeded expectations.

Importantly, the successful live operation of Powerhouse enables the existing bank of gas generators to be disconnected from the operating system and prepared for decommissioning. Gas previously used to fuel the generators at the site can now be directed into the Australian gas network, increasing gas supply and revenue for the field operator. This also saves the operator operating costs such as fuel and maintenance, and provides for a safe operation with minimal site visits required given Powerhouse’s integrated smart remote control system.

The commercial-scale field trial is the final stage of the testing process.

Synertec Managing Director, Michael Carroll, commenting on the Powerhouse technology said:

“The commencement of the field trial is a major milestone for the technology and our Company. The extensive FAT and SAT program provided positive operational performance and extensive data that has significantly de-risked the field trial cutover exercise for both parties and signals the successful deployment of Powerhouse in a commercial setting.”

“We see a significant local and global addressable market for our Powerhouse technology where remote locations operating industrial equipment can benefit from portable, stable base load renewable power supply. As the world continues to transition to a carbon-free future, technologies such as Powerhouse will allow our customers to achieve their decarbonisation goals.”

Next Steps

As the data from the field trial is generated and both parties are satisfied all Key Performance Indicators (“KPIs”) have been achieved, it is expected that the successful field trial will lead to a commercial contract for Synertec to provide the Powerhouse system to Santos on a long-term rental basis. To this end, the parties continue to progress discussions regarding commercial terms for this site and future sites. Both parties are targeting H2 FY23 for this development.



Synertec continues to advance plans for commercial scale production of Powerhouse, with local and international component suppliers committing to key supply chain performance criteria outlined by the Company.

Key Technical and Operational Milestones

Phase	Estimated Completion	Status
Concept design	Q4 FY21	Complete
Statement of requirements approved	Q1 FY22	Complete
Front End Engineering Design (FEED)	Q2 FY22	Complete
Procurement of key equipment inputs	Q3 FY22	Complete
Detailed design	Q3 FY22	Complete
Beta testing software & load management	Q3 FY22	Complete
Fabrication	Q4 FY22	Complete
Factory Acceptance Testing (FAT)	Q4 FY22	Complete
Commercial terms for prototype agreed	Q4 FY22	Complete
Site Acceptance Testing (SAT)	Q1 FY23	Complete
Field Trial commencement ('cutover' complete)	Q2 FY23	Complete
Commercial terms beyond prototype agreed	H2 FY23	In-progress
Completion/sign-off	H2 FY23	In-progress

Powerhouse Technology

Powerhouse, a novel 'smart' micro-grid system, involves the combination of a rapidly deployable and portable industrial-scale electrification power system including a foldable solar panel array, battery storage units, and sophisticated smart controls enabling predictive intelligence to optimise the generation and consumption of renewable electricity from an appropriately scaled system with minimal footprint. At present, the Santos gas wells rely on diesel, gas or hybrid powered generators. Key benefits of Powerhouse include:

- Reduced carbon emissions through 100% renewable energy (without requirement for fossil-fuelled backup)
- Flexible, scalable, portable and re-deployable infrastructure
- Increased safety and operational efficiency with reduced maintenance and remote operability
- Potential for removal of, and/or reliance upon, mains power connections in remote areas
- Commercial, cost-effective solution

-ENDS-

For more information and all media enquiries, please contact:

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This ASX announcement is authorised by the Directors of Synertec Corporation Limited (ASX: SOP).

About Synertec:

Synertec Corporation Ltd (ASX: SOP) is a technology design and development growth company enabling a low carbon future through innovative technology solutions. Commercialising scalable, environmentally friendly and energy efficient technology for global markets in energy, critical infrastructure and advanced manufacturing through innovative partnerships with a portfolio of blue-chip customers, Synertec is proactively participating in the world's transition to a low carbon economy in a practical way for the benefit of future generations.