Kidston Clean Energy Hub Factsheet



The Kidston Clean Energy Hub is a significant Australian renewable project combining solar, pumped storage hydro and wind projects in far-north Queensland.

It is being developed by Genex Power, a power generation development company focused on innovative clean energy generation and electricity storage solutions across Australia.

Kidston Clean Energy Hub Project Overview

The Kidston Clean Energy Hub is located on the site of the disused Kidston gold mine in Queensland. It integrates four renewable power generation projects spanning large-scale solar, pumped storage hydro and wind energy.

Genex has been developing the Kidston Clean Energy Hub since acquiring the Kidston Gold Mine in 2014.

A dedicated transmission line will unlock the potential of the Kidston Clean Energy Hub, and the power generated will be sold directly into the NEM, whilst the synchronous operation will add much needed system strength to the weak North Queensland grid.



KIDSTON PUMPED STORAGE HYDRO



First pumped hydro project in Australia for 40 years



900 direct jobs created



Strong financial support from **Federal** and **State** Government



Unlocks the **renewable generation potential** of North Queensland



Third largest electricity storage device in Australia



Over **\$500 million in public benefits** due to reduction in wholesale electricity prices



Adds much needed **system strength** to the weak North Queensland grid



Helps the State achieve its **Renewable Energy Target of 70%** by 2032

50MW Kidston Solar Project (KS1) is a 50MW solar farm which has been generating power for Queensland homes since 2017 and is connected to existing 132kV distribution network. It's a consistently high performing solar farm located on the old tailings storage facility at the Kidston mine.

250MW Kidston Pumped
Storage Hydro Project
(K2-Hydro) construction
commenced in April 2021
and it is on track for
energisation in the second
half of CY2024. The
underground works are well
advanced and the upper
reservoir is nearing
completion. When
operational, it will generate
250MW of power for up to 8
hours for North Queensland.

258MW Kidston Wind Project (K3-Wind) is a

258MW wind farm in the development phase. The team at Genex is working towards final investment decision within the next 12 months and is continuing discussions with potential offtake partners. K3-Wind presents the next stage of development of the Kidston Clean Energy Hub to utilize the new transmission capacity at Kidston.

Kidston Solar 2 Project (KS2)

Genex is also assessing the feasibility of building another, larger scale solar project for the Hub..



The K2-Hydro Project is truly unique because it reuses existing mining pits as the upper and lower reservoirs for the Project. The significant difference in water levels of the two pits enable the generation of power when water is dropped from the higher pit to the lower pit.

The vast quantity of water the pits can hold, means the Project has a high electrical efficiency and can support 2,000MWh of continuous power generation in a single generation cycle (250MW of peaking power generation over an 8-hour period).

The Projects at Kidston also utilise other existing infrastructure such as accommodation camp, airstrip and water supply.

People, communities and the environment

- Extensive consultation through the life-cycle of projects to ensure communicate with and are responsive to our communities, endeavoring to always act honestly and fairly
- Indigenous Engagement Strategy to promote Indigenous employment and procurement for K2-Hydro
- Strict focus on minimising disturbance, commitment to conserving and protecting the environments as illustrated by the "Recycling And Reuse Programme"
- K2-Hydro converting disturbed mine site to sustainable energy generation
- Focus on job creation in our local communities: 900 jobs created at Kidston and along the transmission route
- Lead financial sponsor for the Talaroo Hot Springs (Indigenous enterprise)





Kidston Clean Energy Hub Project Timeline

