

Powering the Interior – Standalone Solar Hybrid Power Stations

There are currently 24 solar hybrid power stations in operation throughout the interior of Sarawak, including 4 recently commissioned in 2017 benefiting 870 households in Marudi, Tatau and Belaga. Another 15 stations in various stages of implementation are expected to be commissioned within the next two to three years.

Sarawak Energy through the Rural Off-Grid Operation Division has been appointed by the government to undertake the operation and maintenance of these solar hybrid stations.



More rural communities can now enjoy reliable and renewable electricity, 24 hours a day



Long Urun Solar Hybrid Power Station

Under this programme, a remote community in Belaga now enjoys 24-hour supply of affordable and renewable electricity through the completion and commissioning of the 689-kilowatt Long Urun Solar Hybrid Power System.

Built at a cost of RM53mil, this federally funded project in Long Urun began in 2015 under Sarawak Energy's supervision and was commissioned in October 2017.

The system currently powers over 245 households in 12 villages: Long Sivau, Long Liten, Long Apok, Uma Pawa, Uma Badeng, Long Dulit, Long Ketuet, Long Balau, Rumah Pera, Long Data Sengelang, Long Tengah 1, Long Tengah 2.

Sarawak Alternative Rural Electrification Scheme (SARES)



SARES is an innovative government-community partnership model. An integrated initiative of the State Government, it aims to provide 24-hour electricity supply to remote communities where it is not feasible for connection to the State Grid.

The scheme mobilises government machinery and agencies to help villagers build and subsequently own and operate more sustainable and affordable electricity generating systems.

Three hundred isolated villages comprising 8,700 households, have been identified for this community-based scheme utilising micro-hydro and solar systems over 2016 to 2020.

Since December 2016, 57 villages in Ulu Skrang, Sebauh, Katibas, Bukit Mabong, Nanga Medamit and Ulu Pelagus have been electrified under SARES.

About 32 villages in Tatau, Sg Pila, Katibas, Sg Gaat, Marudi and Limbang, will be lighted up this year with another 27 villages in Marudi, Telang Usan, Sg Oyan and Julau will be lighted up by July 2018.

The systems cater for basic rural household electricity needs with lighting, fans, a television, freezer and cooker, and are simple in design without compromising on safety. SARES alleviates the burden on villagers by eliminating dependency on costly diesel generators with only limited hours of supply.



Community-based SARES involves the construction of standalone alternative systems utilising solar technologies



Long Banga micro hydro system

Rural Power Supply Scheme (RPSS)

The Rural Power Supply Scheme (RPSS) aims to connect rural areas to the main transmission grid, by constructing new transmission lines and substations in the rural interior to form part of the integrated transmission system.

Extra high voltage rural transmission substations planned under RPSS include Tatau 275kV, Kanowit 132kV, and Ba'Kelalan 132kV.

All of these will further strengthen supply in their respective areas, supporting future rural economic growth.

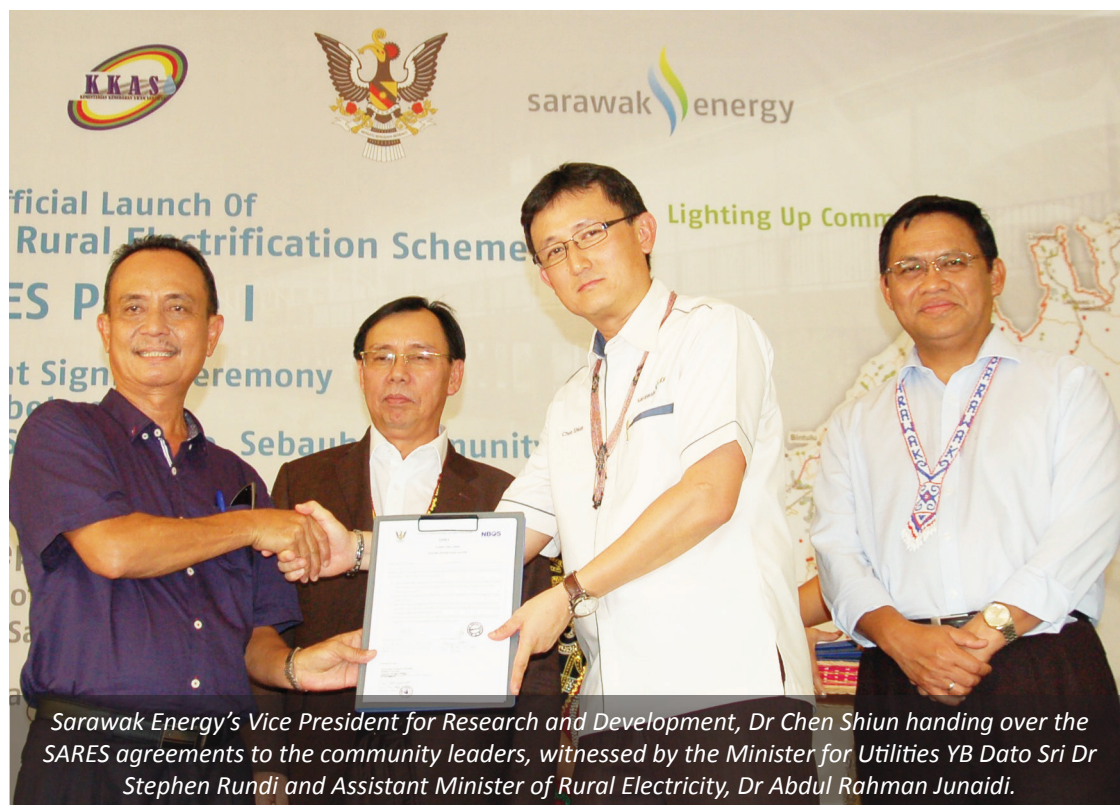
The Way Forward #LightingUpCommunities

Sarawak Energy's Research & Development team is focused on accelerating the rate of electrification in the state by looking into various innovations, ideas and technologies.

In order to prevent unnecessary interruption from vegetation and animal contact, Sarawak Energy is replacing normal bare overhead line conductors with PVC covered overhead line conductors. This also reduces the right of way required for the erection of line towers.

Feasibility studies are being conducted on utilising Station Service Voltage Transformers to electrify villages nearby existing EHV infrastructure.

Through intense efforts under the Rural Power Master Plan, the application of technological innovation, creative thinking and multi-agency collaboration, the State's vision to achieving full electricity coverage by 2025 is closer to realisation.



Sarawak Energy's Vice President for Research and Development, Dr Chen Shiun handing over the SARES agreements to the community leaders, witnessed by the Minister for Utilities YB Dato Sri Dr Stephen Rundi and Assistant Minister of Rural Electricity, Dr Abdul Rahman Junaidi.



Weir at Long Banga Micro Hydro Station at Ulu Baram