Lighting Up Rural Sarawak

In 2009, the overall state domestic coverage was 79% with rural population electricity coverage at only 56%. Today, the rural population electricity coverage is about 90%, increasing the overall coverage to about 95%. This rapid growth was made possible due to the concerted effort, cooperation and commitment to provide electricity to all Sarawakians by the relevant agencies.

The Ministry of Utilities Sarawak (MoU), in collaboration with Sarawak Energy, is aiming to connect more than 30,000 remaining rural households towards achieving full electrification by 2025. Almost half of Sarawak's population is rural-based, living in townships, bazaars, villages and longhouses spread across the state's vast geographical landscape, winding rivers, dense rainforests and rugged terrain.

The State Government's vision is to ensure all rural communities including the most remote and inaccessible upriver communities are connected to constant 24-hour electricity supply. The focus of rural electrification is to extend the grid to reachable areas while standalone systems employing alternative electricity sources are used for regions too remote for grid connection so communities can do away with expensive and noisy diesel generators.

Rural electrification in Malaysia began to accelerate in 2009 when it was made a National Key Result Area (NKRA) by the Federal Government. In Sarawak, RM3.5bil has been spent under the Rural Electrification Scheme (RES) to electrify approximately 102,000 households up to 2016 and 110,000 households in about 4,000 scattered villages as of September 2017.

RES
Rural Electrification Scheme

Conventional electrification approach by extending existing grid lines into the interior.

Has reached a critical point where the existing system is no longer able to support further extension.

SARES
Sarawak Alternative Rural Electrification Scheme

Fast track solution by providing very remote villages with standalone solar or micro hydro systems within the shortest time.

Community based system with recipients enjoying free electricity.

Rural Power Master Plan

Hybrid
Solar/Mini Hydro Hybrid

Providing off-grid solutions for villages which are deemed unable to be connected to existing grid in the immediate future.

Renewable solar or hydro supplemented by diesel generators.

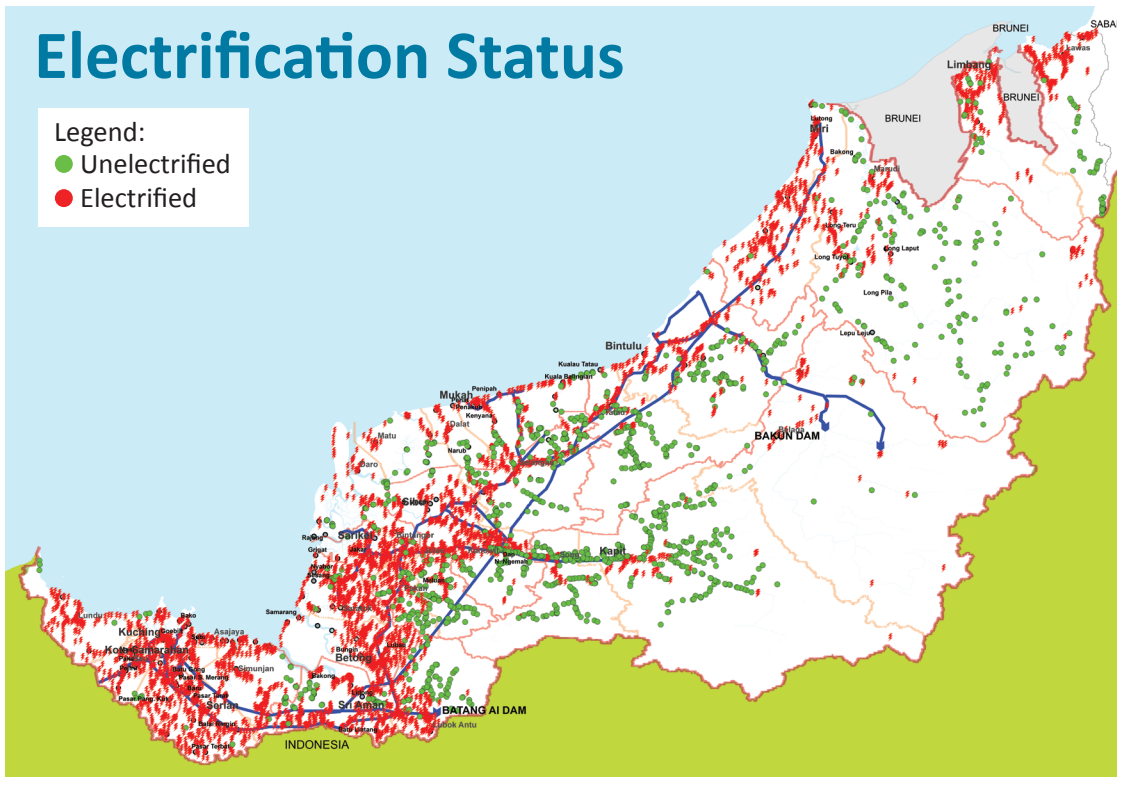
RPSS
Rural Power Supply Scheme

A new approach aims to complement RES by introducing new transmission lines and substations in the rural areas.

Enabling existing gridlines to extend into the interior.

Electrification Status

Legend:
- Unelectrified
- Electrified



Rural Electrification Scheme (RES)

RES is a strategy to extend the existing State Grid through the construction of electrical distribution poles and supply lines to un-electrified areas.

Rural customers can apply for RES from their respective Resident and District offices. The Ministry of Utilities is the coordinator with Sarawak Energy providing technical support, supervising government-appointed contractors in the construction, testing and commissioning of the installations before taking over operations and maintenance.

RES projects normally take 10-18 months to complete. However, this may take longer if there are wayleave issues or challenging terrain conditions. To facilitate the implementation, dialogue sessions are held with communities to provide clarity on the project's scope of works and the necessary process and procedure to receive electricity supply.

Sarawak's vast geographical landscape includes winding rivers, dense rainforests and rugged terrain

Among the logistical challenges faced by the Rural Electrification team to light up remote communities

Strategising for Full Rural Electrification Coverage

A strategy to electrify the remaining rural households was formulated in 2015 under the Rural Power Master Plan, following which an intense and structured effort was undertaken for implementation.

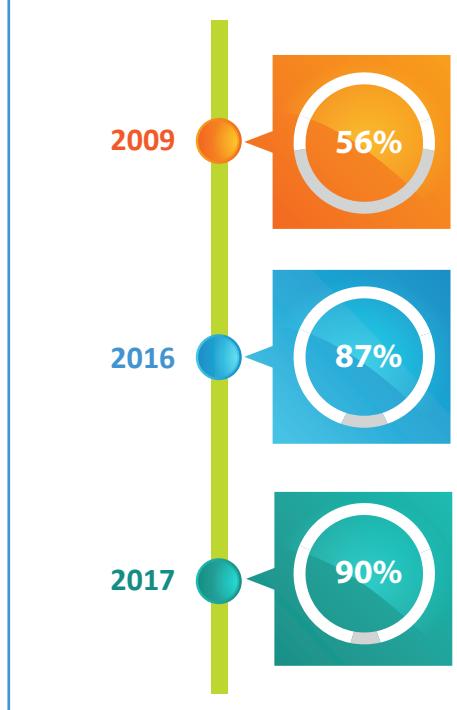
The plan aims to accelerate rural electrification through a variety of programmes with government funding. This plan will see the expansion of high voltage distribution network from the existing grid under RES; RPSS in extending Extra High Voltage (EHV) transmission network into rural areas; and Hybrids and Sarawak Alternative Rural Electrification Scheme (SARES) for standalone renewable alternative systems for the most remote inaccessible areas.

The simultaneous implementation of these programmes will speed up the government's electrification plan, catalysing rural development to close the gap between rural and urban communities, enabling the State's digital economy agenda to reach our rural communities to help realise Sarawak's vision to become a developed state by 2030.

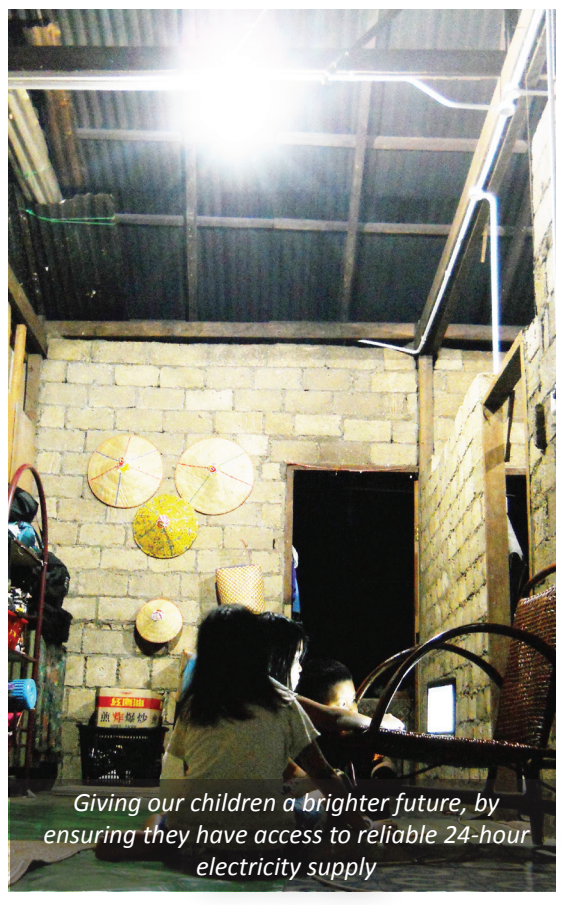
About 5,000 rural households with ready road access and/or are close to the State Grid will be connected under RES. A further 18,000 households can only be connected once there is accessibility to these villages.

Finally, for the remaining households located at remote corners of the state, the community-based SARES initiative aims to accelerate full coverage to the remotest communities in the state. This RM500mil scheme, which will electrify 8,700 households between the period 2016-2020, involves the construction of standalone alternative systems, utilising micro-hydro or solar technologies. Since launching, about 1,400 households have been electrified through this scheme.

Rural Electrification Coverage



Total Households Electrified
109,717



Giving our children a brighter future, by ensuring they have access to reliable 24-hour electricity supply

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