RESTRICTED

Harnessing Hydropower for Green Transportation

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Sarawak Energy Berhad

Power to Grow

About Us

Vertically integrated energy development company and power utility and Malaysia's largest renewable energy developer

Power generation, transmission, distribution, retail and export

Manpower ≙ 5,500

Account Holders 760,000 in 2022

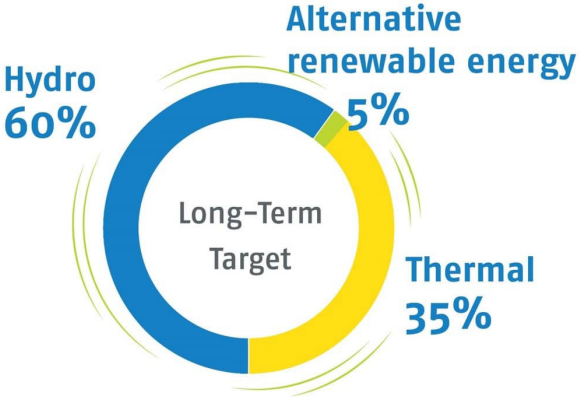
Population of Sarawak ≈ 2.5 million

100 YEARS
Power to Grow

Wholly owned by Sarawak Government
Established in 1921, a century of operations

Advancing Renewable Energy

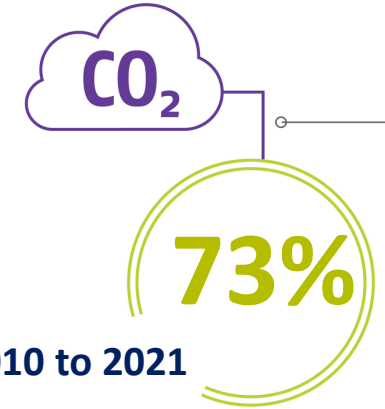
Balanced Capacity Mix



- Predominantly renewable hydropower
- Indigenous gas and coal resources for security of supply
- Advancing research into alternative renewable energy like solar

A Decarbonised Power System

Reduction of carbon emission intensity



Advancing Renewable Hydropower

Batang Ai

- 108MW Installed Capacity
- Commissioned in 1985

Bakun

- 2,400MW Installed Capacity
- Commissioned in 2011

Murum

- 944MW Installed Capacity
- Commissioned in 2014

Baleh

1,285MW Installed Capacity
Expected Commissioning Date: 2028

Our hydropower developments are guided by International Commission on Large Dams (ICOLD) guidelines and IHA Sustainability Assessment Protocol (now formally embedded in our project development process), built and operated safely and efficiently.

Towards Becoming a Renewable Energy Powerhouse in ASEAN

Borneo Grid: Proposed Interconnection in Borneo

- Brunei
- Indonesia
- Malaysia
- Philippines
- Singapore

- Existing Interconnection
- Potential Interconnection

A Commitment to Sustainability

sarawak energy

"Managing our business to minimise any negative impact of our operations and our environment, and maximise the positive impact of what we do for our people and planet."

United Nations Sustainable Development Goals (UN SDGs)

Our business practices are aligned to all UN SDGs with a focus on 8 goals

Business Ambition for 1.5°C UN Global Compact (UNGC) Network

BUSINESS AMBITION FOR 1.5°C

UNITED NATIONS PARIS CLIMATE AGREEMENT SIGNING CEREMONY 22 APRIL 2016

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

RACE TO ZERO

Post COVID-19 Development Strategy 2030

TRANSPORT

Transportation will provide connectivity to key economic centres efficiently and effectively using low emission technology and adoption of digital solutions

Key Outcomes

1. Reducing travel time by 25% and ensuring affordability of transportation cost
2. Increase the share of public transport to 20% that is reliable in terms of time and coverage
3. Reducing emission through efficiency and use of new technology

Reducing emission through efficient and use of new technology

RENEWABLE ENERGY

Sarawak aspires to become a regional powerhouse through affordable, reliable and renewable energy, contributing to sustainable growth and prosperity

600,000 tons Annual Reduction to CO_2 emissions via electrification of mobility fleet in Sarawak

Key Outcomes

1. Maintain at least 60% Renewable Energy (RE) Capacity Mix by 2030
2. 600,000 tons Annual Reduction to CO_2 emissions via electrification of mobility fleet in Sarawak
3. Achieve > 15% income from foreign markets outside of Sarawak through RE sector

Our Commitment

“Green the grid; electrifying the fleet.”

– Datuk Haji Sharbini Suhaili

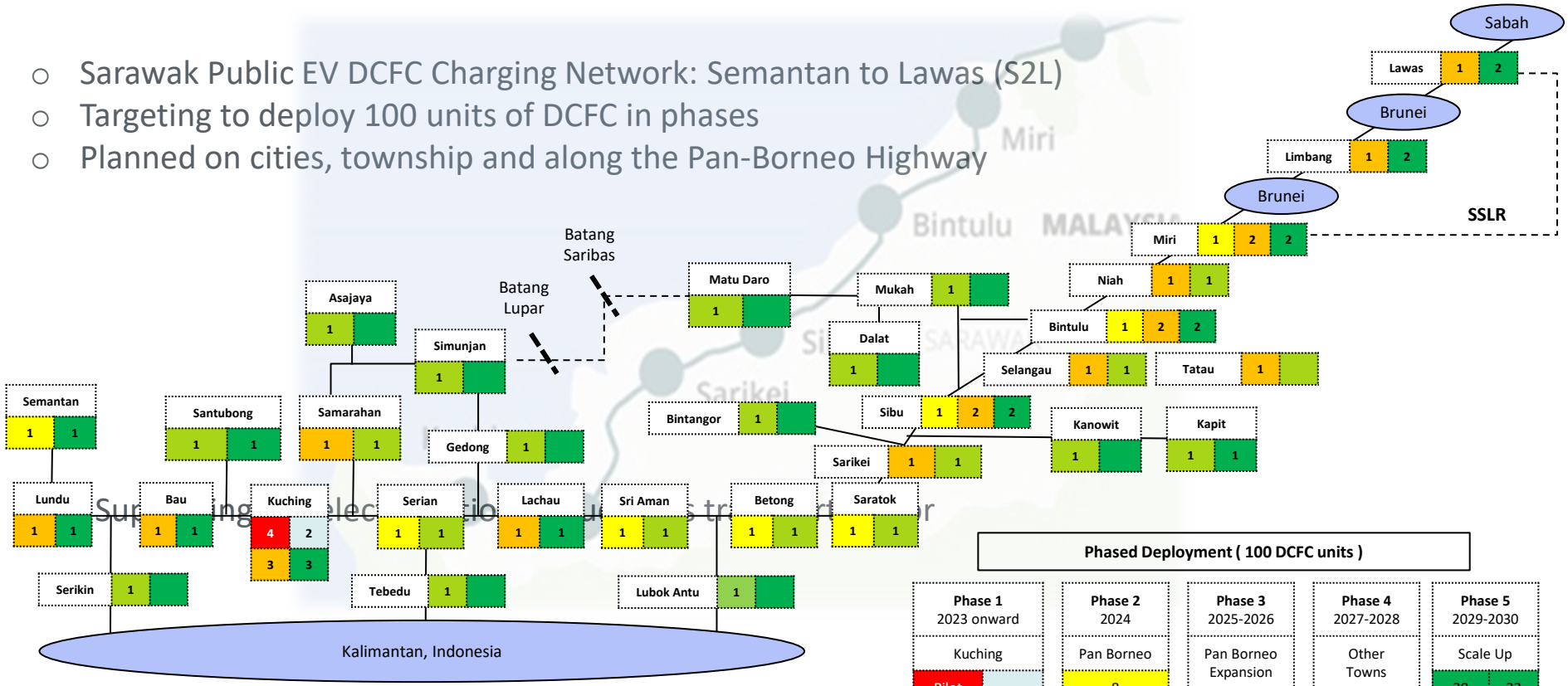
Sarawak Energy Group CEO at Energy Asia 2023

Electrifying Land Transportation

- Supporting the electrification of Kuching's transport sector
  - Sponsor of EV charging stations and running of electric buses
  - First in Sarawak to incorporate electric cars and scooters into corporate fleet
  - Fastest public charger in Borneo located at ICOM Square Kuching launched in September 2023

Charging Points Across the State – In Action

- Sarawak Public EV DCFC Charging Network: Semantan to Lawas (S2L)
- Targeting to deploy 100 units of DCFC in phases
- Planned on cities, township and along the Pan-Borneo Highway



Hydropower to Hydrogen

Supporting Green Mobility

- Built and commissioned Southeast Asia's first hydrogen production plant and refuelling station with hydrogen cars incorporated into our corporate fleet

Diversifying Green Mobility – Land and Water

R&D of Hybrid Electric and Fuel Cell Bike

R&D of Hybrid Electric and Fuel Cell *Sampan*

Reducing Carbon Emissions – Potential SAF





CHITOSE Carbon Capture Central Sarawak

Launched in May 2023

Summary


There are huge potentials to harness hydropower for green transportation via strategic plans and effective executions

Thank You

Power to Grow