

# Challenges & Opportunities: The Data Dilemma in Hydropower Project Development

## About J-POWER

As a major Japanese electric utility, J-POWER engages in power generation and transmission both domestically and overseas. We are committed to developing energy assets globally.

**Strategic Focus:** Our International Business Division focuses on renewable energy including hydropower projects in Asia, aiming to identify high-quality assets with long-term stable returns.

## Foundation: Precise Hydrological Assessment

Understanding long-term rainfall and river flow characteristics is critical, as it directly determines expected power generation and project economics.

**Business Specificity:** Hydropower is highly site-specific. Without precise hydrological data, any development lacks a scientific basis and is highly susceptible to investment risks.

## Core Pain Point: Lack of Basic Data

In many emerging markets and mountainous regions, hydrological observation data is insufficient. Gaps exist in rainfall/flow measurements and long-term records.

**Decision-making Hurdle:** During early-stage screening, the inability to compare multiple sites across a wide area seriously hinders the investment decision-making process.

# Solution:

## Empowering Early Decision-Making with Earth Observation (EO) Data



### Innovative Solution

- Joint Research by JAXA and J-POWER
- Core Technology: GSMaP Satellite Precipitation Data

### Key Research Outcomes

- Effectively identifies regional rainfall patterns and seasonal hydrological trends
- Successfully conducted runoff estimation in Indonesia and Myanmar
- Improves efficiency of preliminary assessment

### Conclusion & Value

- EO data holds significant value in the early screening phase
- A powerful tool for early-stage decision-making

