

Myanmar Platform for Dialogue on Green Growth

Investing in Renewable energy

Small Scale
Hydropower in
Myanmar: facts &
figures

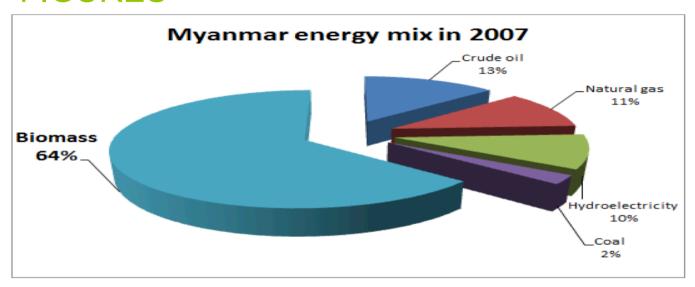


MYANMAR KEY FACTS & FIGURES

Key facts

54,584,650 ¹
676,578 km ²
Tropical monsoon; cloudy, rainy, hot, humid summers (southwest monsoon, June to September); less cloudy, scant rainfall, mild temperatures, lower humidity during winter (northeast monsoon, December to April) ¹
Central lowlands ringed by steep, rugged highlands
Rainfall up to 5,080 mm in coastal areas and average 1,500 mm in central areas ²

ENERGY IN MYANMAR: MAIN FACTS AND FIGURES



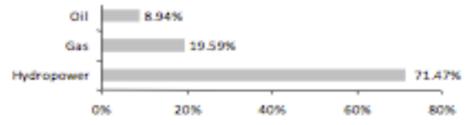


Figure 1 Electricity generation in Myanmar Source: International Energy Agency⁶

LACK OF ELECTRICITY: HYDROPOWER AS AN OPTION

- But only around 30% of population get access to electricity (ADB, 2011).
- Yet demand is growing year by year, reaching 4,4 billion KWh in 2011
- Rural and remote areas are strongly constrained by this lack of access to electricity



LACK OF ELECTRICITY: HYDROPOWER AS AN OPTION

Among other renewable energy solutions, Small scale hydropower is one of the options to consider to address those challenges in a sustainable way.

Definition of Small Scale Hydropower:

Small hydro is the development of hydroelectric power on a scale serving a small community or industrial plant. The definition of a **small hydro project varies but a generating capacity of up to 10 megawatts** (MW) is generally accepted as the upper limit of what can be termed small hydro.

Small hydro can be further subdivided into:

- mini hydro, usually defined as less than 1,000 kW, and
- **micro hydro** which is less than 100 kW. Micro hydro is usually the application of hydroelectric power sized for smaller communities, single families or small enterprise.

In contrast many hydroelectric projects are of enormous size. For instance, the TaSang Dam on the Salween River, is expected to reach 7,100 megawatts

LACK OF ELECTRICITY: HYDROPOWER AS AN OPTION

Assets of Small scale hydropower in Myanmar:

- ⇒Myanmar uses only 5% of its water resources.
- ⇒ It is estimated that the hydropower potential of just the four principal rivers is larger than 100 GW, of which only 1,781 MW are currently developed.
- ⇒ In 2010, a total of 19 hydropower projects (413.8 MW capacity) were under construction.
- ⇒ BUT: Large scale hydropower is expected to continue to be developed as a main power source.

SMALL SCALE HYDROPOWER IN MYANMAR: MAIN FACTS AND FIGURES

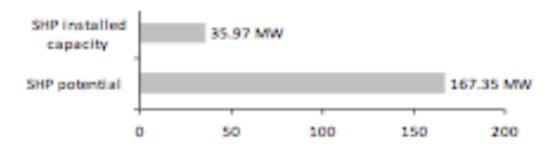


Figure 2 Small hydropower capacities in Myanmar

Main identified constraints:

- ⇒ Secured resources for financing projects
- ⇒ Not a proper legal framework for hydropower
- ⇒ Need for technical capacity
- ⇒ Bad image from large scale hydropower



