MYITSONE HYDROPOWER PROJECT

Fact and fiction about Myitsone Dam

Upstream Ayeyawady Confluence Basin Hydropower Co., Ltd.

About Myitsone

The Myitsone Hydropower Project is a major hydropower project developed by the Upstream Ayeyawady Confluence Basin Hydropower Co., Ltd. (ACHC), a joint venture between the State Power Investment Corporation (SPIC), the Myanmar Ministry of Electricity and Energy (MOEE) and the Asia World Company (AWC).

The Myitsone Hydropower Project is located in Kachin State, north of Myitkyina, at the confluence o f the Mali and N'mai rivers and is designed to provide 6,000 megawatts of clean electricity. The dam will also generate substantial financial benefits for Myanmar and its people. The country will stand to gain about USD 18 billion in tax revenue, free power and shares during the first fifty years of its commercial operations. After fifty years, the 6000MW hydropower project will be handed over to Myanmar free of charge for continuous operation.

Despite its clear benefits, the Myitsone Dam is subject to a number of popular misconceptions. This brochure cracks some common myths about the dam:

MYTH #1

Myanmar only gets 10% of the electricity while the bulk of the electricity goes to China.

FACT – The Myitsone HPP are long term cooperation on the basis of BOT/JV between SPIC and Myanmar government. According to the terms of power distribution and sales stipulated in the contract: (1)the parties to the Contract agreed to offer 8-10% free power to Myanmar government (8% for the first 14 years starting from the date of commercial operation of the first generating unit of each power station, and 10% afterwards till the expiry of the concession period). For the portion of free power which cannot be consumed in Myanmar, SPIC will assist to sell them at the same tariff for export, and the resulting sales revenue belongs to Myanmar. (2) It was agreed that Myanmar was entitled to purchase additional 20% electricity at the same tariff for the power export to meet its domestic power demand. (3) SPIC is responsible for the sales of remaining electricity. (4) If more electricity is required in Myanmar, ACHC is willing to give priority to sell them in Myanmar as agreed in the contract.

MYTH #2

The dam is unsafe and might collapse in an earthquake or flood, devastating communities in the area.

FACT – ACHC takes the safety of its hydropower projects very seriously. We adhere to the international safety codes and specifications recommended by the World Bank and apply advanced technology and equipment to ensure the safety of our dams. The Myitsone Dam adopts the highest standard for flood control. Its flood control capability is much higher than the largest flood ever recorded in history in the area.

ACHC also attaches great importance to the seismic safety of the dam, adopting the strict guidelines of the International Commission on Large Dams (ICOLD). According to seismic records, no earthquake with an intensity of seven and above has ever occurred in the Myitsone Dam area. The project adopts seismic designs to withstand earthquakes with an intensity of nine. We will also establish a seismic monitoring system consisting of 25 digital telemetering seismic stations for the area to effectively monitor the regional crustal movement.

MYTH #3

The Myitsone Dam will have a disastrous impact on the environment.

FACT – We operate under strict regulatory control, fully abiding by Chinese standards and the guidelines laid-out by the World Bank and the Asian Development Bank to ensure that the Myitsone Hydropower Project does not harm the environment.

Environmental impact assessment for Hydropower Projects in the upstream Ayeyawady river basin (the Projects) was completed by more than 100 experts from China and Myanmar.

It is shown from the conclusion of environmental impact assessment that the construction of the Myitsone HPP would inevitably have some negative impacts to the regional ecological and social environment, mainly including: (1) the changes of living environment and lifestyle of the residents to be resettled will happen, and they may not be able to adapt to these changes in short time, and the relocation of some Bhudist temples, monasteries, churches, cultural and educational facilities will be implemented; (2) the location of confluence of N'mai and Mali Rivers will be changed; (3) a certain amount of excavation spoil of project, domestic and industrial sewage, trash etc. produced during the construction period of the project should be properly treated; (4) the reservoir will inundate some vegetation and animal habitats. After corresponding environmental protection measures are taken, these negative impacts can be controlled or mitigated effectively, thus there is no restrictive environmental impact for the Myitsone Project.

On the other hand, the positive impacts of Myitsone HPP are as follows: (1) the implementation of the Myitsone Project will greatly transform the regional economic and social conditions, and remarkably promote the economic and social development of Kachin State and Myanmar at large. (2) after the cascade HPPs are completed and impounded, it will regulate the upstream water storage capacity and downstream discharging capacity, having a positive effect on flood control and downstream water supply; the sediment above Myitsone HPP can be effectively intercepted below dead storage of reservoir, protecting downstream river course from being silted up and mitigating deposition at the estuary.

(3) river health and life will be maintained through ecological regulation, and the discharge of downstream river course can be maintained in dry season; groundwater level of nearby regions can be better stabilized; and new ecological habitats can be formed around reservoir. After reservoir is built up, the species of lentic fish will be increased obviously, and the fishery in reservoir area will have better development conditions. (4) clean electric power supply can lower local consumption of diesel and firewood, and some hunters, lumberers and gold diggers can turn to engage in hydropower construction. (5) the Projects will provide plenty of green and clean electric power, and will have positive significance for improving regional atmospheric environmental quality and promoting international carbon emission reduction.

MYTH #4

Construction of the Myitsone Dam will cause the Ayeyawady River to dry up.

FACT – The Myitsone Dam does not affect the amount of water in the Ayeyawady. The total average annual flow will be the same before and after the dam's construction. Instead, we will be employing cutting-edge technology to preserve the Ayeyawady. We are working on ways to ensure that the extremes of high and low water levels from which the river currently suffers are mitigated. So, while the total annual amount of water in the river will not change, the dam will ensure that it is less prone to flooding in the wet season and also less prone to drying-up in the dry season. The dam will also help control salt water intrusion. The timing of water releases from the dam will benefit the river's flow – not harm it.

MYTH #5

The communities affected by the construction of hydropower projects are suffering.

FACT – We are committed to improving the lives of the people directly affected by the creation of the reservoirs. We have already built villages for over 400 households near the N'Mai and Mali rivers' confluence at Myitsone. All homes there are two-storey brick and timber houses, offering far more space and comfort than the residents had previously enjoyed. The communities are also given round-the-clock electricity – free of charge – and also offered televisions, constant water supply and free rice with which to cook. We have also built and supplied new roads, a 35-bed village hospital, four churches, two Buddhist monasteries, a traditional Kachin meeting hall, fire stations, a primary school and a middle school and we fund scholarships that enable outstanding local pupils to go to university. Resumption of the Myitsone dam would also allow many in the area to gain jobs working on the project and to benefit from the greater prosperity it will bring to the region.

MYTH #6

The Environmental Impact Assessment (EIA) was rushed and resettlement and construction started before the EIA was completed.

FACT – The environmental impact assessment (EIA) for the Ayeyawady River basin and the planning of hydropower development in the area was carefully designed and implemented over a period of time. The EIA began with the formulation of the Terms of Reference in October 2007 where all aspects of how the field assessment team would conduct the evaluation were defined according to guidelines from leading international organizations such as the World Bank and the Asian Development Bank. The Terms of Reference document took nine months to be finalised and vetted by experts.

A series of field assessment took place over a few years. Chinese specialists conducted independent field surveys over a two year period till 2008. Actual field assessment by both Chinese and Myanmar marine and wildlife biologists took place from January 2009 to May 2009. An assessment of the quality of water and air, as well as the level of sound and environmental pollution, was carried out by experts from the Biodiversity and Nature Conservation Association (BANCA) from May 2009 to August 2009.

The EIA was frank in its assessment and readily highlighted negative impacts that construction of the Myitsone Dam would have on the environment. Altering the water regime and creation of a reservoir could lead to changes in the aquatic environment and ecosystem. The construction of the Myitsone Dam would also affect the livelihoods of people living in the area. However, the EIA also pointed out that these negative impacts can be mitigated by taking appropriate measures. The construction of the Myitsone Dam will transform the economy and quality of life in the region for the better. Benefits from the Myitsone Dam outweigh potential negative impacts.

How the Myitsone Dam will look when built

MYTH #7

The Myitsone Hydropower project was wholly conceived by the Chinese for their own benefits.

FACT – The idea of developing hydropower along upstream Ayeyawady River was mooted as early as 1952 when the Myanmar government at that time considered constructing dams in the area. The initial plans did not materialise due to the lack of funding and technical expertise.

In 2002, the Kansai Electric Power Company (KEPCO) from Japan set up a meteorological station in Tang Hpre village near the confluence of the Mali and N'mai rivers. At the same time, the Myanmar Electric Power Enterprises and the Ministry of Agriculture and Irrigation began to plan for the construction of a multi-purpose Myitsone hydropower station.

On 31 October 2006, the Myanmar government decided to tap on Chinese funds and hydropower technology and invited CPI at the third China-ASEAN Expo (CAEXPO) to develop hydropower resources along rivers such as the Ayeyawady and the Chindwin. After careful consideration, CPI decided to accept the Myanmar government's invitation to develop hydropower along the upstream Ayeyawady river basin.

MYTH #8

The Chinese are building destructive dams in Myanmar but not in China.

FACT – China is the world's leader in developing hydropower and have been developing its domestic hydro resources for decades. China has the largest installed hydropower capacity in the world, reaching 320 GW in 2015 and is expected to double to 660 GW by 2050. By then, 80 percent of China's hydropower potential will be realised.

At present, numerous hydropower stations have been designed and constructed on the Yangtze River, Yellow River and Lancang River. China possesses world-class equipment and technology for hydropower development and Chinese hydropower enterprises have accumulated rich experiences through domestic projects. They are recognised around the world as the best developers of hydropower.

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