



## PPIAF Support to Lao PDR's Nam Theun 2 Hydropower Project

In 2004 the Lao PDR government requested PPIAF support to retain the services of legal counsel to negotiate and finalize the legal and commercial agreements needed for the financing of the Nam Theun 2 hydropower project. The support came at a critical time to ensure the timely financial close of the project. The 1,070 MW power plant will enable the country to export 995 MW of electricity to the Electricity Generating Authority of Thailand and to supply 75 MW of electricity to Electricité du Laos (Lao PDR's state-owned utility) for domestic consumption. As a result of this just-in-time assistance, Nam Theun 2 finally reached financial closure on June 15, 2005. The plant began operating in March 2010.

Lao People's Democratic Republic (PDR) is one of the least developed countries in the East Asia and the Pacific region. With a population of around six million people, Lao PDR's economy relies primarily on agriculture and mineral exports. It is also remarkably well endowed with water resources, which brought about considerable investments aimed at increasing the use of hydropower, mostly for export to its more prosperous neighbor, Thailand.

The Nam Theun 2 hydropower project is a 1,070 MW trans-basin diversion power plant on the Nam Theun River (a tributary of the Mekong River) in the central region of Lao PDR. It will enable the country to export 995 MW of electricity to the Electricity Generating Authority of Thailand and to supply 75 MW of electricity to Electricité du Laos for domestic consumption. The government of Laos is expected to earn around \$2 billion in revenues over the 25-year concession period, after which it will take over full ownership of the dam. These revenues are expected to be invested in education, health, infrastructure, and environment protection programs, contributing to poverty reduction in the country.

### PPIAF SUPPORT

Nam Theun 2 is structured as a build-own-operate-transfer project. The concession agreement between the government and Nam Theun 2 Power Company Ltd (NTPC) was executed in October 2002, and the power purchase agreement between NTPC and Electricity Generating Authority of Thailand was executed in November 2003. NTPC is composed of Electricité de France (35%), Italian-Thai Development Public Company Limited of Thailand (15%), Electricity Generating Public Company Limited of Thailand (25%), and Lao Holding State Enterprise (LHSE), a state enterprise holding the government's 25% equity in NTPC.

In 2004 prospective financiers (international and Thai banks, as well as international financial institutions) began their due diligence of the project. During this process, financing parties indicated that as a pre-condition to financing, a number of amendments to the concession agreement and other project documents were required. However, the government's funding for legal counsel (financed by the World Bank) ended around this critical time. Through the World Bank, the Lao PDR government requested PPIAF support of \$790,325 to enable it to retain the services of the legal adviser to negotiate and finalize the

legal and commercial agreements to facilitate and complete the project financing arrangements for Nam Theun 2. Legal counsel representing the Lao PDR government negotiated the deal and ensured that detailed environmental and social obligations were included.

## OUTCOMES

With the help of PPIAF's support, Nam Theun 2 finally reached financial closure on June 15, 2005 with the base project cost of \$1.25 billion funded by 28% equity and 72% debt. Debt facilities included political risk guarantees from the Asian Development Bank (ADB), the World Bank's Multilateral Investment Guarantee Agency (MIGA), export credit agency support from COFACE of France, EKN of Sweden, and GIEK of Norway, and direct loans from a number of multilateral and bilateral development agencies including the ADB, Nordic Investment Bank, Agence Française de Développement (AFD), PROPARGO, and the Export-Import Bank of Thailand. Nine international commercial banks and seven Thai commercial banks provided long-term loans to NTPC. The equity contribution of LHSE is financed by loans, grants, and other financing from donor institutions such as the AFD, ADB, European Investment Bank, and World Bank.

The financing parties indicated that the final stage of the deal would not have been accomplished without substantial costs and delays if it had not been for PPIAF's just-in-time support to the Lao PDR government. The assistance of the legal counsel, in combination with the support provided by other technical, financial, and social and environmental advisors, played a critical role for the Lao PDR government in obtaining significant benefits from the deal.

Since 1999 PPIAF, a multidonor technical assistance facility, has helped developing countries use public-private partnerships to improve their infrastructure. A key focus has been upstream technical assistance to support the development of an enabling environment for such partnerships.

This series highlights how PPIAF's support has made an impact on the ground.

## DONOR COORDINATION

The PPIAF activity complements World Bank technical assistance to the Lao PDR government to structure the Nam Theun 2 project and the equity and debt financing provided by multilateral and bilateral donors such as ADB, AFD, and the European Investment Bank.

## IMPACTS

Nam Theun 2 started commercial operations and began exporting electricity to Thailand in March 2010, and is now supplying around 20% of peak Lao PDR electricity demand. It was officially inaugurated on December 9, 2010. Over 8,000 workers were employed during the peak of construction—80% of them Lao, of which 83% from the affected local provinces of Khammoune and Bolikhamxay. As of May 2011, electricity sales from Thailand amounted to \$5.6 million in the previous financial year, and \$10 million is projected to be earned the following year. Of the earnings, approximately \$2 million has been spent on education in poor districts, \$1.7 million on rural roads, \$1 million on public health projects, and the remainder on rural electrification and environmental protection.



## RELATED PPIAF ACTIVITIES IN LAO PDR

### Activities:

- 2002: Power Sector Reform Workshop, \$72,500
- 2009: Policy Adviser for Private Sector Participation in Decentralized Energy Services, \$244,700
- 2009: Support to Lao Holding State Enterprise on Contract Preparation and Corporate Planning, \$639,520

Learn more about the project at  
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