



## CASE STUDY 33: LAOS – NAM THEUN 2 PROJECT

<b>Barriers</b>	n/a
<b>Instrument</b>	Partial risk guarantee, political risk guarantee, export credit support
<b>Application</b>	n/a
<b>Amount</b>	Total base project costs US\$1.25 billion plus US\$200 million contingency

### PROJECT BACKGROUND AND OBJECTIVES

The Nam Theun 2 Hydroelectric Project, or NT2, is an industrial and development investment owned by private shareholders and the Lao Government, backed by commercial lenders and international financial institutions. The project is jointly implemented by the Nam Theun 2 Power Company and the Government of Lao PDR and supported by financing from 27 parties including the World Bank and Asian Development Bank. A total of US\$1.45 billion equivalent (excluding bonding facilities) in US dollars and Thai Baht has been committed by the various financing partners to fund the base project cost of US\$1.25 billion, plus an additional US\$200 million for contingencies.

The NT2 includes the development, construction, and operation of

- a 1,070-megawatt trans-basin diversion power plant on the Nam Theun River
- a 450-square kilometer (km<sup>2</sup>) reservoir on the Nakai Plateau
- a 39-meter-high dam northwest of the plateau
- a powerhouse 350 meters below the plateau
- a regulating pond below the powerhouse
- a 27-kilometer (km) channel from the regulating pond to the Xe Bang Fai River Basin, also a tributary of the Mekong river.

The plant would sell most of its production to Thailand, generating a secure, long-term flow of revenue for the

Government of Lao PDR. This revenue would be an important source of funding for the Government's efforts to sustain economic development based on its National Growth and Poverty Eradication Strategy and reduce poverty in Lao PDR.

### INSTRUMENTS USED

The financing arrangements reflect the Project economics: just as NTPC will receive payment for the electricity it generates in a US dollar/Thai baht split, so its credit is arranged in a half dollar-half baht arrangement. This increases the financial stability of the arrangement.

The US\$ senior debt facilities include political risk guarantees from the Asian Development Bank (ADB), the World Bank and the 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), PROPARCO and the Export-Import Bank of Thailand.

Nine international commercial banks (ANZ, BNP Paribas, BOTM, Calyon, Fortis Bank, ING, KBC, SG and Standard Chartered) and seven Thai commercial banks (Bangkok Bank, Bank of Ayudhya, Kasikornbank, Krung Thai Bank, Siam City Bank, Siam Commercial Bank and Thai Military Bank) are providing long term loans to NTPC.

In addition to senior loans facilities, shareholders complete the Project financing by contributing equity

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pro-rata their respective participation in NTPC. The equity contribution of LHSE is financed by means of loans, grants and other financing from institutions including the AFD, ADB, European Investment Bank and the World Bank.

The World Bank Group's financial support consists of:

- a US\$42 million IDA Partial Risk Guarantee,
- a US\$20 million IDA Grant for NTSEP (Nam Theun 2 Social and Environment Project, which finances a part of the GoL's equity in the project to be used for management of environmental and social impacts and independent monitoring and evaluation of the NT2 project), and
- US\$91 million in MIGA Guarantees.

ADB supported the project through:

- a US\$20 million public sector loan to the Government of Lao PDR to help fund its purchase of equity in NTPC
- a US\$50 million private sector loan directly to NTPC
- a US\$50 million political risk guarantee to NTPC.

## INSTITUTIONAL ARRANGEMENTS

The Nam Theun 2 Power Company Limited (NTPC) will develop the project on a build-own-operate-transfer (BOOT) basis with a concession period of 31 years, of which the operating period is 25 years. The project will be transferred to the Government of Lao PDR free of charge at the end of the concession period.

NTPC is owned by a consortium comprising:

- Electricity de France International (EdFI) - 35%
- Electricity Generating Company (EGCO) of Thailand - 25%
- Italian Thai Development Company Limited (ITD) of Thailand - 15%, and
- Government of Lao PDR - 25%

## OUTCOMES

The NT2 began commercial export of electricity in March 2010, and agreed an official commercial operations date of April 30 with its main customer, the Electricity Generating Authority of Thailand. It also supplies around 20% of peak Lao demand electricity. The NT2 was officially inaugurated in December 2010.

### Further reading

Nam Theun 2 website – click [here](#)

World Bank, Nam Theun 2 Project Overview and Description – click [here](#)

ADB, Nam Theun 2 Hydroelectric Project – click [here](#)