


Hydropower in Asia: The Nam Theun 2 Project

MIGA is supporting a landmark $1.25 billion hydropower project in Lao People's Democratic Republic, the largest ever investment in the country. The project involves the development, construction, and operation of a trans-basin power plant that is expected to generate $1.9 billion in foreign exchange earnings over a 25-year period through the export of electricity to Thailand. These earnings will enable the country to increase the amount of money it can invest in health, education, and basic infrastructure for the benefit of the poor. MIGA's guarantee was very important to lowering the project's risk profile, which in turn enabled the government and developers to attract commercial financing and gave the investors the assurance needed to go ahead with the deal.

MIGA, a member of the World Bank Group, mitigates noncommercial risks by insuring investments against the risks of:

- Currency inconvertibility and transfer restrictions
- Expropriation
- War and civil disturbance
- Breach of contract

MIGA provides mediation services for guaranteed investments to prevent disputes from escalating.

MIGA also provides technical assistance to help countries attract and retain foreign direct investment, as well as providing free online information on investment opportunities.

In June 2005, MIGA provided $91 million in political risk insurance for a hydropower project in Lao People's Democratic Republic (PDR). The bulk of the guarantee, $86 million, is covering a nonshareholder loan by Fortis Bank NV of Belgium (representing itself and acting as agent for a number of commercial banks) against the risks of expropriation, breach of contract, war and civil disturbance, and transfer restriction and inconvertibility in both Lao PDR and Thailand. The rest of the coverage is protecting Electricité de France International (EDFI), one of the project's sponsors, against the risk of transfer restriction in Lao PDR. MIGA's policy complements a $50 million partial risk guarantee issued by the World Bank, as well as a $20 million grant from the International Development Association of the World Bank Group (IDA).

THE PROJECT

With a total estimated base project cost of $1.25 billion, Nam Theun 2 (NT2) is the largest investment ever made in Lao PDR and is also the world's largest private sector hydroelectric project financing. NT2 involves the development, construction, and operation of a thousand megawatt trans-basin diversion power plant on the Nam Theun river, a tributary of the Mekong, in the central region of the country, about 250 kilometers east of Vientiane. Its main features are a 48-meter high gravity dam on the Nam Theun river, a 450 sq km reservoir on the Nakai plateau, a powerhouse, and a 130 km long double-circuit 500 kV transmission line to deliver the electricity produced to the Thai power grid. A 70 km long single-circuit 115 kV transmission line will also be included to carry the small portion of total electrical output that will be dedicated to domestic uses.

The base project cost is funded 28 percent by equity and 72 percent by debt, with the additional $200 million of contingent costs financed 50-50 by equity and debt, on a pari passu basis. The $1,000 million debt financing for the project (including contingencies) is provided by a number of multilateral and bilateral agencies, export credit agencies, and a consortium of 14 international private commercial banks – nine international dollar lenders[1] and seven Thai lenders. Multilateral guarantees against political risks were a pre-requisite to secure the support of the dollar lenders. Therefore debt guarantees from IDA, the Asian Development Bank and MIGA covering about $186 million of the debt financing played an important role in making the project go forward.

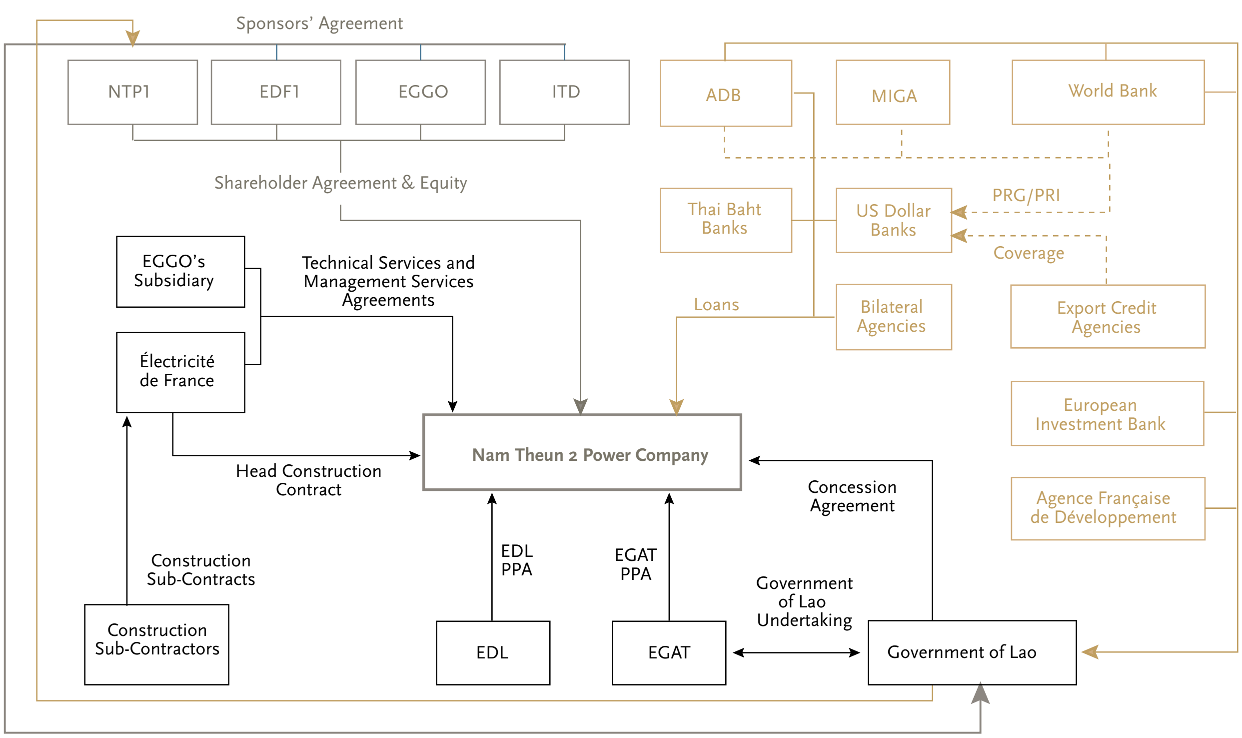
1 *The dollar denominated debt was arranged by the following lenders: Australia and New Zealand Banking Group Limited; BNP Paribas; The Bank of Tokyo-Mitsubishi, Ltd.; Fortis Bank N.V./S.A.; Crédit Agricole Indosuez; ING Bank N.V.; KBC Bank N.V.; Société Générale Asia Limited; Standard Chartered Bank.*

CONTRACTUAL STRUCTURE

The project is structured as a BOOT (Build-Own-Operate-Transfer) arrangement and it will be implemented by Nam Theun 2 Power Company Limited (NTPC), a limited liability company established in 2002 under Lao PDR law. NTPC's shareholders include EDFI, Italian-Thai Development Public Company Limited (ITD), Electricity Generating Public Company of Thailand (EGCO), and the Nam Theun 2 Power Investment Company (NTPI). NTPI (a newly created special purpose and public company) will invest into NTPC on behalf of Electricité du Lao (EDL), the country's state-owned power company, and represent it on the company's board of directors. Some of the key contractual agreements are:

- The concession agreement signed in 2002 between NTPC and the government of Laos, in which the government granted NTPC the rights to develop, own, finance, construct, and operate the hydroelectric plant and related facilities, and to transfer them at the end of the concession period. The agreement is for a period of 25 years from the Commercial Operations Date under the power purchase agreement between NTPC and the Electricity Generating Authority of Thailand (EGAT).
- The shareholder agreement signed in 2001 among the sponsors and acceded to by NTPC following its incorporation in September 2002.
- The EGAT power purchase agreement signed by NTPC and EGAT in 2003 and valid for a period of 25 years from the commercial operations date. Under this key contract, NTPC shall make available to EGAT generating capacity of up to 995 MW and electrical energy of 5,636 GWH per year to be purchased at an agreed tariff on a take-or-pay basis.
- The head construction contract between NTPC and EDF (the head contractor), a turnkey, price-capped engineering, procurement and construction contract.

NT2 Contractual Structure



RISK MITIGATION

Guarantees against political risks were essential to provide the international dollar lenders with the level of comfort that they needed to support the NT2 project. For a project of this size, the recourse to multilateral agencies offered the only practical solution. Besides being concerned about the traditional political risks of currency transfer restriction and inconvertibility, expropriation, and war and civil disturbance, the lenders were also interested in protecting their rights under the numerous project agreements with the government of Lao PDR and EGAT. With the support of the government of Lao, the World Bank and MIGA mitigated specific political risks under the project agreements in the country. In addition, MIGA also covered other political risks in both countries, Lao PDR and Thailand, through a stand-alone coverage.

Under its breach of contract coverage, MIGA covered selected contractual obligations of the government of Lao contained in the concession agreement between NTPC and the government with respect to its payment obligations to both NTPC and the lenders as a result of the termination of the agreement, as well as obligations under the direct agreement with commercial lenders, with respect to the government's recognition of the lenders' third party rights under the concession agreement, including subrogation rights in the event of default. In addition, MIGA's policy covered commercial lenders' rights in case of termination of the power purchase agreement (PPA) between EGAT and NTPC as well as EGAT's obligations under the Form of Acknowledgement and Consent and the subordination agreement.

MIGA will pay compensation to the lenders should the following events occur:

- There is a default on covered loans as a direct result of a breach by the government of Lao or EGAT of the selected contractual obligations under the project agreements;
- A final and binding arbitration award is rendered to the lenders for a breach by the government of Lao or by EGAT of their contractual obligations under the project agreements; and
- Lenders are unable to enforce the award against the relevant government within a specified waiting period.

DEVELOPMENT IMPACT

Lao PDR has an average income level of less than a dollar a day, with levels considerably lower in rural areas and few options for generating income. The project is expected to generate an estimated $1.9 billion in foreign exchange earnings over a 25-year period through the export of electricity to Thailand. The project will also produce 75 MW of power for domestic consumption. It is expected that NT2 revenues will account for between 3 and 5 percent of total revenues to Lao PDR from 2005 to 2020, equivalent to about 60 percent of domestically financed expenditures on education and health. The government and IDA have also agreed on detailed revenue management arrangements to ensure the revenues generated by NT2 will be allocated to priority expenditure programs for poverty reduction and environmental conservation.

In addition, the IDA loan supports the management of the project's environmental and social impacts on the natural habitats affected directly or indirectly by the dam, namely the Nakai Plateau, the NT2 watershed, and the downstream areas of the Nam Theun and Xe Bang Fai rivers and their tributaries. In substance, besides generating income in dividends, taxes and royalties for country, the project also provides for increased environmental protection in Lao PDR, with a biodiversity area being set aside and conserved; improved housing and higher incomes for the 6,200 villagers who are re-settling from the reservoir area; a robust and proactive mitigation and compensation program to help communities downstream prepare for changes to their livelihoods; special measures to ensure that revenues from the project are used effectively to reduce poverty; and a continued commitment by the World Bank to monitor the project and ensure that it is fully and properly implemented.

> *"The income generated by this project will provide key funding for Lao's National Growth and Poverty Eradication Strategy, enabling the country to increase the amount of money it can invest in health, education, and basic infrastructure for the benefit of the poor."*
>
> *Yukiko Omura,*
> *Executive Vice President, MIGA*

What is MIGA's Added Value for Clients?

As a member of the World Bank Group, MIGA is able to provide a unique umbrella of deterrence against political risks related to government actions that may have a negative impact on projects.

Investment Protection and Prompt Claims Payment

- **Deterring harmful actions.** MIGA's relationship with shareholder governments provides additional leverage in protecting investments.
- **Mediating disputes.** As an honest broker, MIGA intervenes at the first sign of trouble to resolve potential investment disputes before they reach claim status, helping to maintain investments and keep revenues flowing.
- **Ensuring prompt claims payment.** In the event that a dispute cannot be mediated, MIGA ensures that valid claims are paid promptly, based on a strong balance sheet and stable stream of operating income.

Improving Financial Terms and Conditions for Investors/Lenders

- **Accessing funding.** MIGA guarantees help investors obtain project finance from banks.
- **Lowering borrowing costs.** MIGA-guaranteed loans may help reduce risk-capital ratings of projects.
- **Increasing tenors.** MIGA can provide insurance coverage for up to 15 years (in some cases 20), thereby increasing the tenor of loans available to investors.

Country, Social and Environmental Expertise

- **Providing extensive country knowledge.** MIGA applies decades of experience, global reach, and knowledge of developing countries to each transaction.
- **Providing environmental and social expertise.** MIGA helps investors and lenders ensure that projects comply with what are considered to be the world's best social and environmental safeguards.

Contact

For general information

World Bank Group
Multilateral Investment
Guarantee Agency
1818 H Street, NW
Washington, DC 20433
t. 1.202.458.4798
f. 1.202.522.0316
migainquiry@worldbank.org

www.miga.org

For information on power projects

Philippe Valahu
t. 202.473.3506
pvalahu@worldbank.org

Elena Palei
t. 202.473.5022
epalei@worldbank.org

Justin Kouakou
t. 202.458.7398
jkouakou@worldbank.org

Jason Zhengrong Lu
t. 202.458.0544
zlu@worldbank.org

Wenhe Zhang
t. 202.473.7523
wzhang1@worldbank.org