

## **The Battery of ASEAN: The opportunity and lesson of India's energy security**

Suppawit Kaewkhunok

### **Abstract**

The Lao People's Democratic Republic is a member of the Association of South East Asian Nations, or ASEAN. Laos has been classified since 1971 as belonging to the group of least developed countries in the world; however, it is articulating a plan to transform itself and become the 'Battery of ASEAN' by 2020 – thus ridding itself of such low status. It is the only landlocked country in ASEAN; however, its territory is rich in natural resources – especially rivers and coal. The country is traversed by a thousand rivers. The national hydropower development plan contains 72 new large dams, 12 of which are under construction and nearly 25 at advanced planning stages. Laos plans to export its power to both Thailand and Vietnam. The hydroelectric project under preparation is supported by many neighbouring countries; in fact, cooperation between Laos and its neighbours is key to the policy in question. However, this strategy also challenges both the geopolitics and the cooperation mechanisms within ASEAN. Laos plans to establish nine dams on the lower Mekong mainstream, which will affect neighbouring countries which share said Mekong River with Laos – including Thailand, Vietnam and Cambodia. The rise of a Chinese-Lao economic relationship also shapes new geopolitical realities within ASEAN. Overall, it can be said that from an Indian point of view this new hydroelectrical policy constitutes an important opportunity for access to new energy supplies. It can also reveal itself a model for future national strategies regarding regional cooperation on the energy sector.



Avenue des Arts 19

1210 Brussels

[info@sadf.eu](mailto:info@sadf.eu)

[www.sadf.eu](http://www.sadf.eu)

## Introduction

Where is Lao People's Democratic Republic (Lao PDR)? This is an important question that must be answered before any other. Lao PDR, or Laos, is located in mainland Southeast Asia. It is a landlocked country that links with China, Myanmar, Cambodia, Vietnam, and Thailand. The national government was controlled by a single party until 1992, when elections for a National Assembly were inaugurated – its members being elected by ‘direct and universal suffrage’ for five-year terms. Laos is also a member of the Association of South East Asian Nations (ASEAN), the most important international organisation in this region.

Looking at the map of the region, we will find that Laos is not so much landlocked as land-linked. Laos’ government and neighbouring countries such as Thailand, Vietnam, China and Cambodia consistently try to connect with each other for various transportation purposes. Thailand and Laos share four bridges that permit travel by road. Laos also has various roads and railways linking it with other countries. The increase in cross-border flows of goods and capital includes not only forging new communication links but also the construction of both dams and hydroelectricity grids. For example, the World Bank-backed Nam Theun 2 Dam on the Nakai Plateau near the Vietnamese border encompassed dozens of bulldozers along with thousands of workers clearing the forest and moving the earth so as to create Laos’ largest infrastructure project – which today generates 1,075 megawatts of power, almost all for export to Thailand. Test hydropower generation began in mid-2009 and commercial operation was achieved in April 2010 (Gunn, 2008, p. 64).

Laos became an important country within ASEAN because of both its location and natural resources, such as its hydroelectric potential. Laos presents both the natural resources needed (over 1,000 rivers) and an equally crucial easiness of international transfer of the electricity generated.

The Lao power sector is under development – around two thirds of the population has access to electricity today. The hydropower sector has the potential to play a pivotal role in achieving social and economic development objectives of the nation by, on the one hand, expanding the availability of low-cost reliable electricity within the country and, on the other, earning revenue from export sales to the wider region. The government's power sector policy facilitates these objectives by encouraging optimal use of the country's natural resources, promoting efficiency in the institutions involved and creating an environment conducive to responsible infrastructure investment, both public and private (Ministry of Energy and Mines, 2014).

Laos' government decided to invest in the construction of more than 72 hydroelectric power plants as it aims to become the 'Battery of ASEAN' by 2020. The major export markets for the electricity generated are neighbouring countries with high electricity consumption, such as Thailand and Vietnam. However, this investment plan is likely to challenge the geopolitics of the Mekong region as a number of dams are built upstream on the Mekong River itself, affecting downstream areas – particularly Thailand, Vietnam, and Cambodia. Cooperation between Laos and neighbouring countries is crucial for this plan and is the main focus of this paper.

## Methodology

International institutions are important mechanisms ensuring cooperation among states. Laos participates in several international institutions, especially regional institutions such as ASEAN and the Greater Mekong Subregion (GMS). The two main regional institutions oversee member cooperation on economics, politics, and culture.

ASEAN is a regional organisation which includes the countries of Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Vietnam, Myanmar (Burma), and Laos. It contributes to regional integration and accommodates economic cooperation amongst its members. Three major pillars of a single ASEAN community were originally established: (1) the ASEAN Security Community, (2) the ASEAN Economic Community and (3) the ASEAN Socio-Cultural Community (The Association of Southeast Asian Nations, 2016). ASEAN plays a vital role in Southeast Asia. The ASEAN Economic Community (AEC) is an important pillar which was created in 2015. It aims to implement economic cooperation so as to create a single market across ASEAN nations. The AEC envisages the following key characteristics: (1) a single market and production base, (2) a highly competitive economic region, (3) a region of equitable economic development, and (4) a region that is fully integrated into the global economy (Local Government Academy, 2013, p. 1).

The other mechanism of regional cooperation which includes the country of Laos is the Greater Mekong Subregion (GMS). GMS is a natural economic area bound together by the Mekong River itself. It covers 2.6 million square kilometres and contains a combined population of around 326 million. Its member countries are Cambodia, the People's Republic of China (specifically the Yunnan Province and the Guangxi Zhuang Autonomous Region), Lao PDR, Myanmar, Thailand, and Vietnam. Increasingly, capitalism and globalisation are emerging from a process of modernisation and social change. The Mekong countries are slowly transiting from agriculturally-based to more diversified economies, including more open markets aimed at capturing foreign direct investment. There is also an emerging

trade network among the six Mekong countries, remarkably in the context of cross-border markets, investment, and labour mobility. The integrated exploration of natural resources, especially hydropower, is also starting to be developed on a sub-regional basis (The Asian Development Bank, 2016).

Another crucial concept in this paper is energy security. It means to encapsulate the association between national security and the availability of natural resources for energy consumption. Access to cheap energy has become essential to the functioning of modern economies. However, the uneven distribution of energy supplies among countries has led to significant vulnerabilities (Willrich, et al., 1978). The International Energy Agency defines energy security as the continuous availability of energy sources at an affordable cost. Energy security contains many points of view. Long-term energy security regards mainly the timely investments needed to supply energy in terms favourable to both economic growth and environmental needs. Short-term energy security concerns the potentiality of an energy system to react promptly to sudden changes in the supply-demand balance (The International Energy Agency, 2016).

Electricity holds a key role in production, which means that all countries must ensure their electricity supply. This is especially true for developing countries. There are many ways to generate electric power from other sources of primary energy, such as coal, petroleum, gas, and nuclear energy; however, not all forms of electricity production are equally sustainable. Many forms of production have negative environmental effects, not least their influence on climate change. Thus, many countries try to diversify and improve their strategies for supplying energy. Renewable sources of energy, such as hydroelectric plants, nuclear power plants, and thermal power plants, are becoming ever more important.

In the empirical analysis, the pertinent questions are: (1) How can Laos become the ‘Battery of ASEAN’? (2) Will neighbouring countries fully cooperate with Laos to achieve the vision of becoming the ‘Battery of ASEAN’? (3) How will ASEAN geopolitically react to Laos’ strategy? Answering these three questions will help anyone interested in understanding the process in question and the challenges involved. This paper will focus on international cooperation, on the fact that an internationally shared river (the Mekong River) is involved, and on the major obstacles and problems associated with the endeavour. Much is at stake, as the planned infrastructure would expand the availability of low-cost and reliable electricity within the country as well as bring in revenue from export sales throughout the region.

The assessment of the cooperation between Laos and neighbouring countries, in order to achieve the vision of ‘Battery of ASEAN’, involved collection from secondary sources as well as data analysis. Available data from relevant organisations was thoroughly collected and reviewed.

### **Laos’ policy: Becoming the ‘Battery of ASEAN’**

Geographic conditions make it so that the largest hydropower plan conceivable today in the region would be located in Laos. Hydropower is often used in conjunction with dams to generate electricity. A dam can also be used to collect water or for storage of water, which can be then (evenly) distributed between locations. Laos is a country rich in natural resources. Its thickly forested landscape consists mostly of rugged mountains, with some plains and plateaus. The most important natural resource of Laos is constituted by its rivers. The vast Lao river network contributes 35% of the Mekong River's flow.

The main rivers of Lao PDR mostly consist of both first and second tributaries of the Mekong River. There are about 39 main tributaries in the Mekong river basin. The main rivers involved, those with a catchment area of over 5,000 km<sup>2</sup> are the following: the Nam Ou river basin and the Nam Suang are located in the Northern region; the Nam Khan is located in Lang Prabang province; the Nam Ngum is located in the Northern-Central region; the Nam Nhiep is located in the Phongsavan of Xiengkhouang province; the Nam San and the Nam Theun/Kading are located in Bolikhamxay province; the Sebangfay is located in Khammouane Province; the Sebanghieng is located in the Savannakhet plain; the Sedone is located in the Southern region; and the Sekong is located in the southeast of the country (The Water Environment Partnership in Asia, 2016).

Geographic location and position are the main strength and the greatest source of opportunity for Laos to become the ‘Battery of ASEAN’. The country is located in the heart of mainland ASEAN – linked with China, Myanmar, Cambodia, Vietnam, and Thailand. It is very easy to transfer and export hydroelectricity to neighbouring countries, especially Thailand and Vietnam, and much export revenue is at stake for Laos, as these are steadily developing countries with great electricity needs.

According to the Asian Development Bank, the Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2012–2022 addresses the GMS ‘Flagship’ programmes, which focus on nine key areas: transportation (‘economic corridors’), telecommunications, energy interconnection and trade, cross-border trade and investment, private sector involvement, development of human resources, environment and natural resources management, and tourism (Pholsena, 2005, pp. 174-175). Of

particular and immediate concern among these GMS priority programmes, as far as Laos is concerned, are the transportation, energy and environment sectors.

Between August and September of 2004, the World Bank hosted an unprecedented series of public consultations over Laos' largest and most controversial hydropower project, Nam Theun 2 (NT2), which took place across five capitals (Bangkok, Tokyo, Paris, Washington and Vientiane). The dam project in question is located on the Nam Theun River in Nakai district, Khammouane province, in the centre of the country. It is expected to produce 1,070 megawatts per year.

Thus, the vision of the 'Battery of ASEAN' is entirely feasible. Of course, Laos is not the only actor envisaging such an endeavour; however, it does have many advantages on its side. Laos' government has been successful in its international cooperative endeavours, especially with Thailand; most hydroelectricity projects at stake involve contracts with the Thai government. Under these contracts, the Lao government obliged themselves to export 95% of the electricity produced to Thailand.

Laos has good chances of success because of the country's strategic location and readily available resources. In addition, the underdeveloped status of Laos has resulted in international organisations, such as the World Bank and the Asian Development Bank, supporting dam projects to diversify domestic incomes and increase employment.

### **Cooperation between Laos and neighbouring countries**

Before the end of the Cold War, ASEAN was separated into two blocks; one was pro-USA (Malaysia, Singapore, Burma/Myanmar, and Thailand), another pro-USSR (Laos and Vietnam). Laos did not sustain good relations with all its neighbours at that time; however, it did develop constructive relations with neighbouring countries such as Cambodia, Thailand, Burma /Myanmar and China after the end of the Cold War.

Thailand was the first country to develop its relationship with Laos after the end of the Cold War, Thai-Lao cultural links and diplomatic relations established in 1950 playing a role. The two countries agreed to establish a joint committee aimed at increasing international cooperation in 1991; from then on, a very positive relationship developed. In 2007, Thailand and Laos signed a memorandum of understanding on cooperation regarding hydroelectric power (MoU), in which Thailand, a developing economy whose energy demands are constantly increasing, agreed to extend power purchases from Laos (Department of East Asian Affairs of Thailand, 2016).

In fact, Thailand's investments in energy projects within Laos include: the Theun-Hinboun power plant (1998), the Houay Ho dam (1999), the Nam Theun 2 (2010), the Nam Ngum 2 (2012), the Theun-Hinboun expansion (2012), and the Hongsa mine-mouth power project (2016). Other projects are under construction; such is the case of the Nam Ngum 3 hydropower project, the Xayaburi hydroelectric power project and the Xe Pian Xe Namnoy hydroelectric power project. The entire project will export electricity to Thailand at an amount of 7,000 MW per year. Laos invited the Thai government to invest further in hydroelectricity projects as well as other forms of electricity production, such as those based on coal and wind power.

Thongloun Sisoulith, Prime Minister of Lao PDR, had a bilateral meeting with Prime Minister Gen. Prayut Chan-o-cha on the occasion of his official visit to Thailand during 9-10 October 2016 in Bangkok. Regarding the subject of energy, the Thai Prime Minister commended that 'the "Battery of Asia" policy of Laos is a policy that promotes energy security in Thailand. This policy also increases energy investment opportunities for state-owned and private enterprises in Thailand.' (Government Public Relations Department, 2016). Laos also asked Thailand to extend the amount of electricity to be acquired under the MoU from 7,000 MW per year to up to 10,000 MW per year (The Energy News Center, 2016).

Laos' good relations with Vietnam during the Cold War extend to today. The phrase 'special relations' came into general use by both parties after the establishment of Lao PDR in 1975. As regards energy cooperation, the two governments signed a cooperative agreement in 1998 aimed at supporting mutual advantages and filling up power to both countries. The Viet-Lao Power Joint Stock Company (VLPC) was set up in July 2003 so as to invest in the construction of Xekanman 3 hydropower project in Se Kong province, Laos. The project (with a 250 MW per year output) was built on the Se Kong River, a tributary of the Mekong River (Viet - Lao Power Joint Stock Company, 2014). It commenced operation in 2010.

The Lao government continued to cooperate with Vietnam on hydroelectricity projects in 2012, after the Vietnamese government opened its economy to foreign direct investment. As the consumption of energy in Vietnam has been increasing every year, Lao-Vietnamese cooperation included pipeline energy projects in the GMS for power export to Vietnam. The project consisted of the development of a transmission line and associated dams along the Sekong and its tributary, the Sekaman River. The dams in question became the Xekaman 1, Xekaman 4 and Sekong 3 hydropower projects (The

International Rivers and Mekong Watch, 2015). The Xekaman 1 became officially operational on 12 April 2016. The dam produces only 290 MW per year, but future prospects are more ambitious (Vietnam Energy, 2016). Laos has also signed an MoU to provide 3,000 MW of electricity to Vietnam from 2016 until 2020.

China is another neighbouring country which maintained good relations with Laos during the Cold War. Renegotiations between China and Laos started in 1991. The two countries established the Laotian-Chinese Joint Border Committee in that year. Normalised relations were maintained until 2008, when a growing Chinese presence and stream of investments into Laos became a matter of high concern and debate within the country. The biggest project shaping new levels of cooperation between Laos and China consisted of a new 20,000-seat stadium in Vientiane, just in time for Laos to host the Southeast Asian Games in December 2009. Starting with this project, Laos shifted its foreign relations focus from Vietnam to China.

Over the last several years, Chinese financial assistance has mainly consisted of cash grants and no-interest loans for projects agreed upon with the Lao government, plus credits for commercial ventures by Chinese companies in Laos (Stuart-Fox, 2009, pp. 145-146). These commercial credits have been invested in several ways; the most relevant include the building of hydropower stations on three rivers in northern Laos, the Hongsa lignite-fired power station in Xainyaburi province, and several power transmission and telecommunications lines. Many hydroelectric projects developed in Laos were supported by Chinese companies. Nam Lik 1-2 was the first hydroelectric project that China invested in, sponsoring 80% of the project. It became operational in 2010. The Nam Ngum 5 which provides 120 MW per year of electricity was also sponsored by China (85% of finance). Other projects are under construction, for example the Nam Ngiep 2, Nam Ou 1-7, Mang 1, Nam Beng, and Nam Tha 1. These projects are aimed at supplying electricity within the country (Department of Energy Business of Laos, 2014).

In 2016, the Joint General Scheme of Mohan-Boten Economic Cooperation Zone became the first cross-border economic cooperation zone established in Laos by China. It was mostly funded by Chinese enterprises (Huaxia, 2016). China has been encouraging its national companies and financial institutions to participate in energy development strategies within Laos so as to achieve the 'Battery of ASEAN' vision in 2020. These investments, which have been increasing yearly, have encouraged several memorandums of understanding between Laos and China on hydroelectric projects aimed at supplying Chinese companies operating in Laos.



Other neighbouring countries such as Cambodia and Myanmar also support the Lao government's strategy of becoming the 'Battery of ASEAN' by 2020. In fact, the two countries also plan to import electricity from Laos. These countries do not have the same means to invest in hydroelectric projects as other neighbours do; instead they have used ASEAN in order to support Laos on the policy.

ASEAN is the most important regional organisation encouraging Laos to become the local electricity hub. ASEAN makes it a policy to link electric supply chains among its members under the ASEAN Plan of Action for Energy Cooperation 2016-2025 (APAEC). The APAEC established a programme named 'ASEAN Power Grid' (APG) that oversees the necessary interconnecting arrangements within the region. During the period 2010-2015, ASEAN has moved forward in laying the necessary groundwork for the realisation of the APG. Six out of the 16 interconnection projects have been implemented. They connect Singapore and the Malay Peninsula, Thailand and the Malay Peninsula, and those regions via Thailand to Cambodia, Lao PDR and Vietnam – with a total of 3,489 MW per year in power exchanges and purchases achieved (ASEAN Centre for Energy, 2015, pp. 15-19). Electricity demand by ASEAN members is expected to grow by 5% to 6% per year for the period 2016-2020; these electricity-related interconnecting arrangements will decrease electricity costs among member states and thus support economic growth in the region.

The Lao government's hydroelectric plan to become the 'Battery of ASEAN' is not a stand-alone plan but is founded on large, long-term analysis. Both its neighbours and regional organisations, such as GMS and ASEAN, are fully on board and cooperating. Hydroelectric plans are favoured over other projects, because Laos is favoured in the endeavour by its geography and natural resources. Today, the Lao economy is mainly driven by its generation of hydroelectricity, most of which is being exported to Thailand. Hydroelectric projects in Laos are supported by foreign investors. The main three nations investing in Laos are China, Thailand and Vietnam.

### **The new geopolitics of ASEAN**

In geopolitical terms, it must be mentioned that Southeast Asia is a very important region as regards maritime trade. ASEAN plays an important security role by protecting the commercial benefits of member states when dealing with international competitors. ASEAN is a case study of how small countries can be successful in negotiating other countries or organisations when they organise in regional institutions. ASEAN does not contain a hegemonic country trying to control other states such

as is the case in SAARC or NAFTA. Instead, ASEAN tries to create a balance of power within Asia, specifically as regards Chinese influence.

In the face of an increasingly expansionary China, ASEAN has often seemed slow to react and unsure of what strategy to pursue. China expands its investments in many ASEAN countries and did create doubts about ASEAN's unity and shared capacity. This expansion of Chinese influence has contributed to geopolitical changes within the region. Laos has moved ever closer to China (instead of Vietnam) since 2008, as many Chinese companies started to invest in Laos and as China has shown itself to be increasingly supportive of Laos' economic and political interests. Through this influence in small countries, such as Laos, China seems to be trying to shape new geopolitical trends within ASEAN. China tries to gain power and influence over ASEAN through cooperative mechanisms; in this regard, it has been using the ASEAN+3 forums as an important panel to discuss many problems between both entities.

The main reason that the cooperation between Laos and China affects geopolitics within ASEAN is the interconnectivity between Laos and its neighbouring countries. Laos connects with its neighbours both geographically and economically; Chinese influence in this country strongly and inevitably affects the wider region. This interconnectivity in itself is the main force establishing new geopolitical trends within ASEAN. Both national territories and borders were blurred after ASEAN countries merged becoming one market (AEC) supporting easier international flows of people and goods. However, Laos still cooperates with other countries based on strictly national political and economic interests; in this respect the country seems to wish to balance its current relationship with neighbours such as Vietnam and Thailand.

The Lao 'Battery of ASEAN' policy affects both the position of Laos within ASEAN and wider geopolitics of ASEAN itself, too. A successful outcome of such policy would mean a regional dependency on Laos with regards to electric power. Neighbouring countries which import and invest heavily in hydroelectric projects in Laos become, thus, dependent on the country and its sovereign prerogatives. If the Lao government changes its export policy, this will impact other countries. As electric power is today crucial for economic growth, Laos will gain both international influence and negotiation power. The hydroelectric infrastructure planned also covers over 30% of the Mekong River; this will heavily affect those countries whose water resources are located downstream.

Finally, the Lao government's plan to become the 'Battery of ASEAN' is changing geopolitics within ASEAN. Laos is transforming from a landlocked country to a land-linked country. Moreover, Laos' geographical position, which links transportation networks from west to east mainland ASEAN, also links ASEAN with China as achieved through a variety of new projects. The 'Battery of ASEAN' policy by the Lao government is of a crucial common interest to ASEAN's members. Laos' hydroelectric potential, which is increasing day by day, encourages the country to rid itself of the status of least developed country.

### **The 'Battery of ASEAN' policy and India's energy**

India may not have geographical borders with Laos; however, in terms of international relations, the relationship between India and Laos has been sustained through many forms of multilateral cooperation. One of the key partnerships involved is the Mekong-Ganga Cooperation, in which both countries participate. It underlined four areas of cooperation: tourism, culture, education, and transportation. These four areas are to be integrated so as to form a solid foundation for future trade and investment cooperation in the region. Moreover, India has also played a role in becoming an ASEAN+6 partner. India's relationship with the ASEAN region is constantly evolving. Since Prime Minister Narendra Modi took power in India in 2014, he has issued an 'Act East policy', which has resulted in more Indian policy trends towards East Asian and Southeast Asian countries.

The increasing Indian role in ASEAN is a turning point in developing cooperation within a wide range of sectors, particularly energy. India has not officially developed a formal energy cooperation with ASEAN itself; however, it has been cooperating increasingly with Myanmar on energy. Laos is another important opportunity for India to invest in energy, because ASEAN's energy network will in the future cover the whole region. Laos is also open to Indian foreign direct investment, particularly in the energy sector. If the ASEAN Energy Network or ASEAN Power Grid covers the whole region in the future, India can connect such energy network to the north-eastern part of its own country through Myanmar. India should not neglect the increasing role of energy within ASEAN countries, which are increasingly interconnected in the energy sector through the ASEAN Power Grid Programme. This is an important chance for India to diversify its energy supply. Increasingly diversified channels for importing and accessing foreign energy sources play an important role in maintaining energy security (Willrich, et al., 1978, pp. 77-81). It counters energy dependency on only one source. India should invest and support Laos' 'Battery of ASEAN' policy as well as its ambition to become a regional energy hub. This investment will increase India's energy import channels and, thus, help strengthen the country's future prospects of energy security. Laos today presents an important opportunity for India

to connect its energy network through Myanmar. Although India does not itself have borders with Laos, increased economic cooperation between India and ASEAN could further promote the ASEAN Power Grid's linkage to India. This energy cooperation, of course, requires proactive attitudes from both sides.

Laos' policy to become the 'Battery of ASEAN' is not only an opportunity for India to diversify its energy supply and enhance its energy security. The issue is also an important lesson for India in developing a framework for energy cooperation with its neighbouring countries. India can learn lessons from what it witnesses regarding energy cooperation through regional organisations such as the ASEAN. The ASEAN power grid programme is not only a major programme; it is also successful. It goes beyond strictly national and towards regional concerns regarding energy security; individual strategies are harmonised through compromise and negotiation.

India is a country that imports a large amount of the energy it needs, especially from South Asia. South Asian countries also import a large amount of their energy from India. Although South Asian countries do have a regional organisation, the South Asian Association for Regional Cooperation (SAARC), it has not made much progress, so far, in building cooperation among member countries, especially as regards the energy sector. Energy cooperation in South Asia is bilateral rather than multilateral. The promotion of energy cooperation within SAARC is an important goal; much can be learned from ASEAN's experience. Many South Asian energy networks cover the whole region and play an important role in the development of the region. Therefore, India's energy security cannot be seen only from a national perspective; it must take into account India's neighbours. Lastly, the Lao government's policy is an important opportunity for India to lower its energy security risks. It is also an important lesson for India in building regional cooperation to strengthen domestic energy security.

## Reference list

- ASEAN Centre for Energy. (2015). ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025. (C.G. Zamora, Ed.) Jakarta: ASEAN Centre for Energy.
- Department of Energy Business of Laos. (2014). Projects Under Construction. Retrieved from Department of Energy Business, Ministry of Energy and Mines: <http://www.poweringprogress.org/new/power-projects/construction>
- Division II, Department of East Asian Affairs, Ministry of Foreign Affairs, Kingdom of Thailand. (2016, July). Overview Thai-Lao relationship. Retrieved 2016, from Royal Thai Consulate-General, Savannakhet: <http://www.thaisavannakhet.com/savannakhet/th/knowledge/relationships/>
- Government Public Relations Department. (2016, August). Thailand-Lao PDR to expand cooperation in all areas and to promote energy security. Retrieved from Government Public Relations Department: [http://www.asean thai.net/ewt\\_news.php?nid=6125&filename=index](http://www.asean thai.net/ewt_news.php?nid=6125&filename=index)
- Gunn, G.C. (2008, January/February). Laos in 2007: Regional integration and international fallout. *Asian Survey*, 48(1), 62-68.
- Huaxia. (2016, May 04). China, Laos agree on cooperation. Retrieved from Xinhua: [http://news.xinhuanet.com/english/2016-05/04/c\\_135334540.htm](http://news.xinhuanet.com/english/2016-05/04/c_135334540.htm)
- Jönsson, K. (2009). Laos in 2008: Hydropower and flooding (or business as usual). *Asian Survey*, 49(1), 200-205.
- Local Government Academy. (2013). Rising as one: The Filipino nation towards the ASEAN Economic Community. Manila: Local Government Academy.
- Ministry of Energy and Mines. (2014). Hydropower in Lao PDR. Retrieved from Ministry of Energy and Mines: <http://www.poweringprogress.org/new/2-uncategorised/3-hydropower-in-lao-pdr>
- Pholsena, V. (2005). Laos in 2004: Towards subregional integration: 10 years on. *Southeast Asian Affairs*, 173-188.
- Stuart-Fox, M. (2009). Laos: The Chinese Connection. *Southeast Asian Affairs*, 141-169.
- The Asian Development Bank. (2016). Overview of the Greater Mekong Subregion. Retrieved from Asian Development Bank: <https://www.adb.org/countries/gms/overview>
- The Association of Southeast Asian Nations. (2016). Association of Southeast Asian Nations. Retrieved from Association of Southeast Asian Nations: <http://asean.org/>
- The Energy News Center. (2016, July 06). English news: Laos seeks wind power purchase agreement from Thailand. Retrieved from Energy News Center: <http://energynewscenter.com/index.php/news/detail/252>

- The International Energy Agency. (2016). Energy security. Retrieved from International Energy Agency: <http://www.iea.org/topics/energysecurity/>
- The International rivers. (2010, September). Existing and Planned Lao Hydropower Projects – September 2010. Retrieved from international rivers: [https://www.internationalrivers.org/sites/default/files/attached-files/laohydro2010\\_sept\\_final.pdf](https://www.internationalrivers.org/sites/default/files/attached-files/laohydro2010_sept_final.pdf)
- The International Rivers and Mekong Watch. (2015, September). Time to reassess Greater Mekong Subregion energy sector investments. Retrieved from International Rivers: [https://www.internationalrivers.org/sites/default/files/attached-files/re-assessing\\_gms\\_investments\\_0.pdf](https://www.internationalrivers.org/sites/default/files/attached-files/re-assessing_gms_investments_0.pdf)
- The Water Environment Partnership in Asia. (2016). Lao PDR River Water. Retrieved from Water Environment Partnership in Asia: <http://www.wepa-db.net/policies/state/laos/river.htm>
- Viet - Lao Power Joint Stock Company. (2014). General Introduction. Retrieved from Viet - Lao Power Joint Stock Company: <https://vietlaopower.com/en/gioi-thieu/about-us/general-introduction-799.html>
- Vietnam Energy. (2016, April 15). Vietnam ready to import power from Laos. Retrieved from Vietnam Energy online: <http://nangluongvietnam.vn/news/en/electricity/vietnam-ready-to-import-power-from-laos.html>
- Willrich, M., Darmstadter, J., Hallman, R. M., Krause, L., Perry, H., & Ramazani, R. K. (1978). Energy and World Politics. New York: Free Press.