

# **Energy Communique**

November, 2014 Issue 3

## **Editorial**

Dear Reader,

The country is geared up towards the development of energy sector by signing the PTA with India, endorsement of PDA of Upper Karnali Hydropower Project and Arun III, expediting other domestic and foreign invested hydro projects, solar power initiatives by MoE and World Bank, and NEA decision in connecting micro-hydro projects into the national grid.

Meantime, the SAARC summit was held at Kathmandu on 26<sup>th</sup> and 27<sup>th</sup> November, with the main agenda being on energy development and energy trade. The city was electrified. Beautiful it was to see the look of the capital city with solar powered street lamps along the black pitched road, bloomed flowers, houses renovated, hoarding boards removed, and supply of electricity for continuous 48 hours. The outcome of the summit turned out to be fruitful as the eight nations signed The Saarc Framework Agreement on Energy Cooperation.



Itnuma Subba Executive Manager

The agreement appears challenging that includes non-discriminatory access to electricity and expansion of transmission network for trade facilitation within the region. And, darkness still prevails with chilling winter knocking the door. The question comes to every person and hits strongly with the reality that was somewhat anticipated. The unending load shedding! The energy crisis.

We cannot remain silent though, for we still have hopes because we know energy brings prosperity to our lives. So, we continue to raise our voice to be heard. Of the many issues faced by the Nepali hydro investors, the newly required commitment imposed by the MoFSC which is Payment for Environmental Services (PES) has added extra burden and discouragement.

We are conscious about the environment and have been committed in conserving the biodiversity by practicing reforestation and managing the entire area post the project completion. To this, developers have been paying royalty and other taxes to government of Nepal. And after all, the project will be handed over to the government itself in 30 years. So, this new demand of PES where it charges an extra 1% of the project profit is not acceptable. It also bears no any legal provision for implementation. And even to this non-legal enforcement, there already is a bias between the domestic and foreign developers. There is no PES charge for the recently done PDA of Upper Karnali project and the Arun III. This is absolutely unfair and provoking. Does the government want to get rid of Nepali investors imposing various taxes or it is only about the dollar commission?

Nevertheless, as saying it is that every cloud has a silver lining, we still have little ray of hope from the present forest minister who has experience in promoting domestic investment and would bring this matter upfront in the table.

EDC will file the application letter to Agriculture and Water Resources Committee of the Parliament, addressing the issues about PES, forest land compensation, and other contradicting policies, plans and the working procedure within and between relevant ministries.

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## **EDC Activities**

#### **EDC** branch office at PR China

We would proudly like to announce that we have successfully opened our first international office in Shenzhen, PR China.

The EDC office in Shenzhen will be the first point of contact for any potential companies and organizations from China looking for business opportunities in Nepal - especially in the energy sector.

Inauguration of the office will follow soon.



Beautiful View of EDC premises, Shenzhen

#### Key objectives of EDC Shenzen are:





- ♣ Facilitation of Chinese and Nepalese investment and businesses looking to invest, supply, contract and partner with each other.
- Transfer of technology between China and Nepal in the energy sector.
- Forging of beneficial partnerships between Chinese and Nepali companies involved in the energy sector to create lucrative business and investment opportunities for both parties.
- Creation of a "China-Nepal" Energy Think Tank where relevant information required by stakeholders of both countries to understand each others' energy sector better, is made available.





### Live TV Discussion on SAARC Water and Energy Issues

In order to better understand the Water and Energy Issues between the SAARC nations, Avenues Television organized a live TV discussion on these issues to complement the recently held SAARC Summit.

Chairperson of EDC Mr. Sujit Acharya was invited as a discussant to express his views on these issues.

He highlighted the fact as Water and Energy are the key natural resources of Nepal with the capability to uplift all its citizens out of poverty, Nepal must own these agendas and lobby for its beneficial proliferation towards the country.

"The vision for Nepal should be to become the Powerhouse of SAARC - and also to become the perennial Drinking Water fountain of SAARC". As Nepal has more than 300,000 MW of feasible hydropower resources along with an abundance of solar and vast geothermal potential, Nepal should form a time-bound implementable strategy to highlight these to the SAARC nations and involve them in harnessing it for its financial benefit. Similarly, with more than 10800 rivers flowing in the country (as per a research conducted by IDS Energy) that creates an abundance of drinking water supply versus the 50% shortage of drinking water in almost all the major cities of India and China, Nepali decision makers should drive this highlight to invite SAARC members harness this for mutual benefit. He also highlighted the fact that almost every SAARC nation is reeling under power shortages and Nepal needs to look at this as a key market for selling or bartering its electricity.

In order to ensure Nepal expands its energy clout within SAARC and establishes its regional importance, Mr. Acharya stressed on SAARC energy interconnectivity where the vision should be inscribed in the form of the The Saarc Framework Agreement on Energy Cooperation tabled at this SAARC Summit. But in order to ensure this vision is actually implemented, he suggested the practical method of "scalable interconnectivity" starting from an already existent triangular grid connectivity between Bhutan, India and Nepal, then scaling it up with Bangladesh and then further scaling it up with other member nations. Ultimately, Mr. Acharya stressed on the fact that the onus on pushing forward Water and Energy issues within SAARC lies with Nepal.



#### **Articles from our members**

#### Chasing the sun

by Bishal Thapa, CEO, Lotus Energy Pvt. Ltd.

Over the last few years Nepal has become increasingly enamoured by distributed renewable energy sources to tide over its growing energy deficit. These renewable energy sources include wind, micro-hydro and solar. The most prominent among them is roof-top solar, which could be placed directly on residential, commercial and industrial complexes.

This promise of distributed renewable energy sources, most notably solar, has spawned a debate involving government, donors, policymakers, academics, non-governmental organizations, financial institutions, private companies, students and even career politicians. And when career politicians. And when career politicians weigh in, you know the issue is poised for either phenomenal success or abysmal failure!

The promise of solar roof- top solutions for urban Nepal gained prominence on account of two influences.

First, a rapid worldwide drop in solar module prices and the increased availability of a wider range of associated electronics suddenly made the technology accessible. Second, Nepal's deepening energy crisis and ballooning load-shedding hours forced Nepalis to look for alternatives. It was increasingly evident that technology could not address Nepal's short-term energy shortages but would also help chart our long-term energy solutions.

A few even dared to sketch out a new vision for Nepal's energy sector: a national grid fed largely by hydro, supported by and interacting with many small and large distributed solar applications.

The energy crisis and load-shedding that kick-started the solar revolution in urban areas could also be its undoing, particularly now as solar seeks to penetrate larger industrial and commercial roof-tops. What will happen, detractors ask, in a few years when there is an abundance of hydro power and no load-shedding? This speculation is not just myopic but outright absurd.

To recognize the absurdity of the challenge, put Nepal's electricity use in context. Nepal's per-capita electricity consumption is merely 60 percent of the average of least developed countries, 18 percent of the average of South Asia and only three percent of world average. To believe that in a few years hydro power will meet all of Nepal's electricity need is to relegate Nepal to a few more decades of poverty.

In a few years, if there is an abundance of hydropower-a big if- Nepal will still need all the electricity it can produce. Distributed solar application could be a key part of Nepal's long-term energy solution if mechanisms such as net-metering,

which allow excess generation from a solar roof-top to flow into the grid, are allowed to take shape. Net-metering is widely used in other parts of the world, including in South Asian countries.

The right way to frame the potential of solar roof-tops is not by asking what will happen to all that solar in a few years when big hydro projects come in pipeline. Instead, it is to ask what can be done to tap the promise of roof-top solar to supplement hydro generation. This will be vital for improved power reliability by integrating it with the grid and ensuring that solar investments are not stranded.

Part of the angst about urban roof-top solar has to do with the sudden reorentation of Nepal's energy requirement. In its original conception some two decades ago, solar was



largely motivated by the need to improve energy access— i.e., take power to rural communities. The idea was to provide small home systems to rural household so they could at least enjoy the benefits of modern lighting.

Electricity shortages that have plagued Nepal over the last few years have added a new dimension. The need wasn't just energy access. Energy security — the ability to provide reliable electricity to those connected to the grid — became as big a concern.

The reorientation in Nepal's energy imperatives has confounded its policy direction and now threatens to stop solar dead in its tracks.

The first question is about which institution should lead the initiative to push solar into urban areas. The early success of rural solar, led by the Alternative Energy Promotion Centre (AEPC), has attracted attention. The sense is that the sector is well funded (it is) and every government agency now wants a part of the action. From municipalities to district offices to ministries, everyone appears to have a solar initiative of their own.

Such diffuse efforts should be welcome. But AEPC should remain the institutional platform to drive the initiative on urban roof-top solar. Although AEPC technically derives its authority from a policy aimed at rural areas, its is still best placed to take the agenda forward.

AEPC already has a strong team that understands the technology—both technically and financially—which will be hard to replicate elsewhere. It has stable, committed and able leadership that appears to be somewhat buffered from excessive political indulgence—a recent change of guard, for instance, occurred relatively smoothly.

Donors generally have a good working relationship with AEPC, though every once in a while they threaten to withdraw funding over some perceived weakness.

The policy challenge to the expansion of solar in urban roof-top comes from AEPC's rural focus. It has approached the possibility of urban solar with the same instruments used for rural solar—for example capital subsidy, ex-post monitoring, product testing and company pre-qualification, in part because donors are already comfortable with those mechanisms.

Efforts to push solar into urban areas must be backed by commercial mechanisms. Expansion of urban solar will be far more productive and sustainable if backed by fiscal measures such as access to low cost capital, accelerated depreciation and tax rebates that help the transition from commercial models of solar product sales to energy service sales.

What is required is well understood. The economics has been established. Pilots conducted by universities have demonstrated proof of the concept. The question now is how to move the needle forward.

One way to do so is through collaborative piloting. Many private companies have incubated solar opportunities for large industrial and commercial customers. AEPC and Nepal Electricity Authority both appear keen to support these efforts. Low-cost financing is available. With collaborative piloting, a broad consortium of private companies, financial institutions and customers could be brought together to provide a clear demonstration of a viable financial and technical model.

A new dawn is breaking on Nepal's energy sector. Whether we grasp that opportunity or spend the day talking about is entirely up to us.

( This article is derived from My Republica published on November 11, 2014.

Post availabe at: http://www.myrepublica.com/portal/index.php?action=news\_details&news\_id=86360)

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## **Announcement from Butwal Power Company Limited**

Good news! The financial closure of Kabeli-A Hydropower, a much awaited project to be developed by Butwal Power Company Limited has been ultimately made.

The government and the International Development Association of the World Bank have signed a US \$ 46 million loan and grant agreement, of which US \$ 40 million is loan that will be used for developing the 37.6 MW hydropower project and the remaining US \$ 6 million will be used for developing the institutional capacity of the Department of Energy Development and strengthening the capacity of Investment Board of Nepal.

The government will now re-lend the funds to Kabeli Energy Limited through Hydropower Infrastructre Development Company by signing a subsidiary credit agreement. This project which lies in Taplejung and Panchthar district follows public-private- partnership model. International Finance Corporation is one of the co-financers contributing US \$ 38.12 million and Kabeli Energy Limited financing US \$ 22.96 million as an equity share for the project. Therefore, total cost of the project is US \$ 102.08 million.

Read the press release: <a href="http://www.mof.gov.np/en/2014/11/24/news/november-24-the-international-development-association-ida-of-the-world-bank-group/308/">http://www.mof.gov.np/en/2014/11/24/news/november-24-the-international-development-association-ida-of-the-world-bank-group/308/</a>

## **Welcoming new EDC members**

Hydroelectricity Investment and Development Company is established with a mission to mobilize funds from domestic and international resource base to cater to the needs of investments in middle to mega hydroelectricity generation, transmission and distribution projects, offering timely and quality services to our customers and partners with integrity and professionalism, and creating value to our shareholders, HIDCL envisages to become the top hydropower investment company of the country.

**TSN Corporation** is a leading corporate house in Nepal title- holder of educational enterprises, financial institution, energy developer, media, manufacturer of PET and Polymers related products, exporter, importer and trader of diversified products and services. It has five major companies within the umbrella having a foremost market share in their proficiency.

The headquarters of the company is based on Kathmandu however, it access is all over Nepal through its direct branches and offices as well as own regional establishment at Hongkong, Shanghai, China and New Delhi.

## **List of EDC members**

S. No.	Name of the Company	Company logo
1.	Nepal Electricity Authority	
2.	Statkraft Holding Singapore Pte. Ltd	Statkraft
3.	Alternative Energy Promotion Center	
4.	Butwal Power Company Private Limited	
5.	CEDB Hydro Fund	ČII.
6.	IDS Energy Pvt Ltd	IDS PARECT
7.	Nabil Bank	Nª BIL BANK*
8.	Himalayan Infrastructure Fund	Himalayan Infrastructure fund
9.	Transweld Pvt Ltd	TIM/
10.	Clean Energy Development Bank	Clean Energy Development Bank
11.	Nepal Hydropower Association	Nepal Hydropawer Association
12.	Global IME Bank Limited	Global IME Bank

S. No.	Name of the Company	Company logo
13.	Gham Power Pvt. Ltd.	Gham
14.	Lotus Energy Pvt. Ltd.	LOTUS ENERGY Solar Energy Systems
15.	Wind Power Nepal	AIND STOREGAR
16.	Reliable Hydropower Pvt. Ltd.	Reliable
17.	Sanvi Energy Pvt. Ltd.	SANVI€√Jergy
18.	Dantakali Hydropower Pvt. Ltd.	Di dantakali managaran na usa
19.	Prime Commercial Bank Ltd.	PRIMEBANK LTD.
20.	Century Bank	(CENTURY BANK
21.	Arun Valley Hydropower Development Co. Ltd	ARUN VALLEY HYDROPOWER DEVELOPMENT CO. LTD PRIVAT SCIOS INITIANI TO REPORT TO SCIONICIONIONI  THE STATE OF TH
22.	Hydroelecticity Investment and Development Company	
23.	TSN Corporation	TSN THERMAL THE THE THE THE THE THE THE THE THE THE



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