

December 2016 Issue 26

Editorial

Dear Readers,



The country has failed to have significant progress over the decades; and it remains to have the lowest Human Development index (2011) among the countries of the South Asian Association for Regional Cooperation, aside from Afghanistan.

Nepal has a long history of foreign aids supports from various countries. The aids are aimed to support the necessary instruments and tools that are pivotal for the country's development. Since 1952, billions of dollars in foreign aidsare invested to provide support to the Nepal government in

Nepal has been able to reap the benefits of these activities. In 1966, a Norwegian engineer established Butwal Power Company to build local capacity in the hydropower. The company currently is one of the leading independent power producer of the country. However, on the flip side, often questions are raised on the output and impact of the aid program.

development activities across various sectors.

Mr. Avishekh Malla Director, Sunfarmer Nepal Pvt.ltd an EDC member organization

"Where is the Nepal Aid Money Going?", an article published in BBC (May 2015) highlights several alarming issues such as corruption, investments and implementation inefficiencies, poor enforcements, high salaries and many more. There is definitely a lot of things going wrong. One of the common reasons is to blame the Nepalese public system. One can linger on this excuse and another 6 decades will cross by or look into solutions. The prospective and fundaments of the foreign aid design needs to be revisited.

Over the last two decades, donors have supported with millions of dollars of investment to power off-grid areas with solar home systems. More than 0.5 million households received the benefits and it created a solar business of over 50 million dollars per annum. From the donor's prospective, it is seen as a successful program since the success indicator was number of households benefited. However, this single-dimensional approaches the impact did not focus on sustaining the growth of a subsidy-less market over long-term. This was proved when, in the last two years, the subsidy was dropped and the whole solar industry suffered. This is a clear indication that in 20 years, the aid support didn't teach the market how to self-sustain, rather created a market that is hungry for subsidy.

How can aid money best be utilized to propel country towards sustained rapid growth? It is probably time to rethink on the missing links towards the long-term sustainability, efficient and effective use of the foreign aid. Involvement of private sector as a key player to achieve sustained growth is one of the key ingredient to this success. Focused private sector development can catalyze economic growth and reduce poverty in developing countries. This has been proven in countries like India, China, and Brazil, which over a period of time has been successful in reducing the development aid, but has maintained a sustained rapid economy growth over long period of time. This has benefited bulk of the population, either through job creation or increase in tax revenue, enabling finance for social protection to the people.

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EDC Activities

EDC Board of Directors Meeting



EDC Board meeting was held on Sunday, 25th December, 2016 at Imago Dei, Nagpokhari, Kathmandu.

EDC Chairperson Mr. Sujit Acharya, Vice- Chairperson Mr. Bishal Thapa along with the Member Board Director Mr. Anil Rajbhandari, Mr.Baburam Bharadwaj, Mr. Mrigendra Bhurtel with Executive Manager of EDC Ms. Itnuma Subba attended the meeting. The meeting was about finalizing the upcoming Annual General Meeting and other related matters.

EDC Executive Committee Meeting



EDC Executive Committee Meeting took place on 18th December at Imago Dei, Nagpokhari.

Mr. Sujit Acharya, Mr. Bishal Thapa, Mr. Uttar Kumar Shrestha, Mr. Kushal Gurung, Mr. Anil Rajbhandari and Ms. Itnuma Subba were present in the meeting.

Mr. Rajbhandari was officially welcomed on EDC Board of Directors as representative from NEA. The committee member agreed to hold Power Summit on 2017. EDC has also decided to carry out a comprehensive agreement with China Electricity Council (CEC).

Likewise, EDC shall foster with CECC to organize a "One Belt One Road Business Dialogue"

Furthermore, the MOU done with HRC was discussed and agreed to materialize the cooperation effectively. An interaction program related to hydropower sector was agreed to be organized at the end of February, 2017.

EDC Delegation Meets with Mr.Kulman Ghising, MD, NEA



EDC delegation meets Mr. Kul Man Ghising, MD of NEA on 2nd of January, 2017. Mr. Acharya, Chairperson of EDC expressed Council's appreciation and support to his outstanding contribution in the progress of Nepal's Energy Sector.

Mr. Mrigendra Bhurtel, Board Director of EDC and Ms. Itnuma Subba, Executive Manager of EDC also accompanied the meeting.

Chairperson expressed EDC's concern with MD of NEA stating that Power developers should all be treated with the same terms and conditions by NEA in all of its contracts. He specifically stated that the PPA should ensure all companies, (whether foreign or domestic) should receive equal compensation for non-availability of transmission lines by the abolishment of the availability declaration clause in the PPA and ensuring all PPA's are on the equal take or pay format. NEA Managing Director stated that all these issue will be immediately addressed.

Chairperson discussed national energy related issues with NEA Managing Director expressing that NEA should start a public drive to install electric induction stoves to replace imported cooking gas and in fuel increase national electricity generation ultimately increasing NEA's revenue. He also stated NEA to install prepaid energy meters in two phases beginning with all institutional customers and then in the residential customers. Chairperson also urged NEA Managing Director to focus on more domestic energy generation and transmission while boosting domestic consumption by supporting such activities like electric vehicle charging stations.

NEA Managing Director expressed to Chairperson of EDC that all the above suggestions will be implemented within two years as it is in the national interest and in NEA's interest to do such.

Interview with Mr. Purna Bahadur Pariyar, CEO, Source and Solution Pvt. Ltd

1) Please tell us about your organization?

Source & Solutions (S&S) Private Limited is an organization dedicated to promote renewable energy exploring all available sources reducing dependency on fossil fuels. Initially, we started from solar power as large power plants could be built in a short time frame but it could not happen because of several factors such as lack of proper homework on energy mix concept, technical know-how, poor infrastructure, international exposures and so on.

2) Can you elaborate on the key current activities or projects that your company is executing?

S&S worked hard on fetching FDI on the following:

- 1. Larger Solar Power Plant up to 500 MW
- 2.Improve, upgrade or invest in Grid if necessary
- 3.Nepal China grid interconnect if necessary

4.Grid tied system on or above 25KW roof-top system installed on commercial buildings, hospitals, hotels, schools and government offices.

Our efforts went in vain. We have a challenging 1MW project to execute as an EPC subcontractor which will be disclosed in a couple of weeks.

3) What are the major challenges you have been facing during execution of your project?

We could never reach close to our dream project as large scale solar power plants do no seem to be priority of the nation. AEPC, a government body monitoring and regulating solar power is not under the ministry of energy.

4) How do you propose such issues can be resolved?

AEPC should be the part of the Ministry of Energy and NEA making wide room for solar power experts. The solar experts in AEPC have to prove that solar power plays a vital role on national energy mix as the electricity of solar power is becoming cheaper than coal-fired power generation in recent days.

5) Can you also suggest the key changes you think will help take the energy sector forward?

Production of energy should not be limited to lighting bulbs on households. Comparing us with least developed countries, our production is negligible. Climate change and global warming are major concerns of modern era. In next few years, we need power for HVAC system, green (electric cars and buses) transportation, mono and metro trains, replacement of LPG gases on so on. Ministry of Energy should closely work with NEA (Nepal Electricity Authority), AEPC (Alternative Energy Promotion Center), NOC (Nepal Oil Corporation) as a consortium in order to make a sustainable solution. When we talk about energy, we just mention electricity. Energy comprises of electricity and petroleum products such as fuels, LPG, CNG, LNG, hydrogen fuels cells etc.



Energy Development Council

Energy Communique

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Food is to living beings as energy is to nation. The world history shows that lack of energy and excessive reservation of energy both can be harmful for poor countries and we are one of them because of poor management but not by resources. We are rich in renewable energy resources and should workout on energy mix for a sustainable development.

Media Coverage

Loss reduction and improvement activities for NEA

- Roshan Silwal

Energy efficiency deserves to be persuaded as a cheap source of generation

Happiness is what everyone seeks in their life. Our happiness has increased since we celebrated Dashain and Tihar; both the festivals having been celebrated with no load shedding, thanks to the new MD and the entire team of NEA.

As per NEA, this has been possible due to control of leakages, demand side management, 300 MW energy bought from India and 25 MW from Upper Marshyangdi (which has the total capacity of 50 MW) being added to the national grid. The distribution system of the Kathmandu valley has improved and work in progress would make it even better. Whatever Demand side

management (DSM) measures were taken up by NEA, they have been helpful in providing general public relief from load shedding.

In order to serve the increasing capacity and Energy demand, NEA can initiate following loss reduction and improvement activities:

• Consumer indexing, codification, metering upgrades and consumption and revenue data management, so that distribution transformers are better planned and outages, losses are minimized. Keeping pace with the advances in metering technology, replacement of conventional electromechanical meters with high accuracy static meters could be welcome to avoid pilferages, under billing.

- High Voltage Distribution system adoption for loss reduction and metering at distribution transformers towards better accounting.
- Incorporation of power factor capacitors in distribution system for loss reduction.
- Upgrading, strengthening and improvement of the transmission and distribution system for efficient and reliable power network.
- Replacing the entire sodium/mercury vapor lights with efficient LED lights with automatic control system.
- Provide efficient solar lighting system for new installation wherever feasible.
- Conduct of regular substation, Feeder, distribution transformer detail Energy audits to enable loss reduction for better accounting and revenue management.
- Introducing kVAh based consumer billing in place of kWh billing for better reactive power management.
- Review of technical specifications of various procurement guidelines of NEA in present context of energy efficiency.
- Venturing into a comprehensive renovation and modernization program of existing assets so that plant load factor of the present assets is maximized before huge investments for new plants are considered.
- Prioritize renewable energy for clean and sustainable source of generation.



Energy efficiency deserves to be pursued as a cheap source of generation, and no less, but a lot needs to be done in this regard.

Let us all wish for more power to NEA in their endeavors, and hope that load shedding become thing of past.

(The article is available at the link : <u>http://edcnepal.org/wp-content/uploads/2017/01/page-6-jan-1-</u> 2017.pdf published on January 1, 2016.)

Economist Sachs stresses hydropower development

Harvard University most famous professor and advisor to UN secretary general also repeats the same things EDC has been talking about for our economic development and liberation from India via domestic energy security:

Delivering his public lecture titled 'Sustainable Development in an Uncertain World' among state actors, development partners, diplomats, private sector representatives and academicians in Kathmandu that was organised by National Planning Commission (NPC) today, Sachs laid emphasis on harnessing hydroelectricity citing that hydroelectric power is a strategic asset which has the most potential to be sold across the region as a clean source of energy.

"I would like to recommend Nepal to speed up works to harness hydroelectricity. A strategy to develop 10 to 20 gigawatt hydropower through good contracts and low cost financing needs to come soon into the national budget," said Sachs, adding, "Nepal has potential of 40 gigawatt of power and at least 10 gigawatt of the potential needs to be harnessed in the next one-and-a-half decades. This will not only replace the import of petroleum products, expand industrial base, increase agriculture output, give quality life to the people through proper electrification in households but also supply clean energy to India, Bangladesh and other countries of the region."



Harnessing hydroelectricity is critical from the perspective of energy security and also to improve the quality of air because air is highly polluted due to excessive use of fossil fuels, according to Sachs. "Nepal also can convert to an all-electric transport system in the next 15 to 20 years by utilising the electricity generated over the period because the world is moving forward towards electric vehicles."

(The full article is available at : <u>http://www.myrepublica.com/news/10468</u> published on December 5, 2016.

\$20m ADB grant to encourage investment in solar projects

KATHMANDU, Dec 9: The Asian Development Bank (ADB) on Thursday announced a \$20-million grant aimed at triggering increased private sector interest and investment in utility-scale solar projects in Nepal.

The funds are expected to support the deployment of no less than 25 MW of solar power generation cap acity by 2018 and provide a business model that can be replicated and scaled up elsewhere in the energy-strapped South Asian nation, ADB said, issuing a statement.

Though Nepal relies heavily on hydropower plants, solar power is seen as a perfect complement, especially in the lowwater season. "Unlike micro- and minigrid solar power, large solar projects of



4 MW and above have received little attention from private sector investors," ADB said in the statement.

The grant will go to finance the difference between the cost of producing solar power and the price theNepal Electricity Authority (NEA) is ready to pay for each kWh. The ADB noted that this is the first time thatNepalhaseverusedviabilitygapfunding.

"Providing some financial security to the private sector should draw more private investment into this critical sector in Nepal and, in doing so, reduce pressure on government finances," Aiming Zhou, senior energy specialist at ADB's South Asia Regional Department, is quoted in the statement.

Companies in Nepal will soon be able to compete for solar projects in an international tender process, with
the power purchase agreements (PPAs) going to those who offered the best power sale prices. Bidding is
expected to start in the first quarter of 2017.

The funding under the ADB grant will be payable on the first day of operation of a solar system up to end-June2022,accordingtothestatement.

The grant is being financed by the Scaling Up Renewable Energy in Low Income Countries Program (SREP) of the Climate Investment Funds (CIF) administered by the ADB.

The article is available at the link : <u>http://www.myrepublica.com/news/10731</u> published on December 8, 2016.

Guest Corner

2016: coal costs more than solar and we have 700,000 new EVs

Sohail Hasnie (Asian Development Bank, Principal Energy Specialist)

Many interesting and unexpected things happened in 2016; we all will be auditing them as the year ends. While we all expect NASA to soon announce this year to be one of the hottest on record, I came across this interesting self-evaluation of Bloomberg New Energy Finance's (BNEF) forecast for 2016 and thought of sharing my main takeaways.

- 1. "Series of astonishingly low tariffs for solar projects in developing countries".
- \$64 per MWh in Rajasthan, India-January
- \$47.98 per MWh (for 415 GWh in Peru), February
- \$35-\$67 per MWh (Av. 50.7 per MWh for 1,860 MW) in Mexico in April
- \$24.2 per MWh in United Arab Emirates (350 MW to 1 GW) in September
- \$29.10 per MWh in Chile

Clean Tech Media has an excellent summary of these unprecedented results:

2. With battery prices to fall farther, BNEF concludes "renewable energy will beat any other technology in



Solar Surprise: Prices Fall Below Wind

A turning point for renewables in lower-income countries

Disclosed capex for onshore wind and PV projects in 58 non-OECD countries Source: Bloomberg

most of the world without subsidies"

4. PV beat Wind in 2016, and by the end of the year, average solar module price is about \$0.48 per Watt.

- Solar (70,000 MW in 2016 from 56,000 MW in 2015)
- Wind (59,000 MW in 2016, 56,000 in 2015)

3. The Electric Vehicles sales forecast was 35-50% of new car sales globally by 2040—this position is now reinforced with more major manufacturers' EV announcements in 2016. The updated view is: "Surely by 2040 more than half of new cars will be electric." I will wait for the new EV market forecast for 2017. BNEF predicted global EV sales of 550,000 units in 2016. During the year, the Tesla S and Tesla X had strong demand, and the relatively affordable Chevy Bolt and the Chinese models (BAIC D50 and the BYD e6) pushed the EV sales for 2016 to about 700,000.

4. BNEF predicted a 10-15% percent fall in lithium-ion battery prices, but prices may have dropped by about 22% because of increasing competition.

5. Global battery storage doubled to about 750 MW but clean energy investment did not reach the expected new record in 2016. I wonder, the volumes (22 GW of solar in first six months) must have been still higher as unit prices were lower in 2016.

(This article is available at the link : https://www.linkedin.com/pulse/2016-coal-costs-double-solar-wehave-700000-new-evs-sohail-hasnie published on December 28, 2016.

World Energy Hits a Turning Point: Solar That's Cheaper Than Wind

Emerging markets are leapfrogging the developed world thanks to cheap panels.

Tom Randall

2010

2011

A transformation is happening in global energy markets that's worth noting as 2016 comes to an end: Solar power, for the first time, is becoming the cheapest form of new electricity.

This has happened in isolated projects in the past: an especially competitive auction in the Middle East, for example, resulting in record-cheap solar costs. But now unsubsidized solar is beginning to outcompete coal and natural gas on a larger scale, and notably, new solar projects in emerging markets are costing less to build than wind projects, according to fresh data from Bloomberg New Energy Finance.

The chart below shows the average cost of new wind and solar from 58 emerging-market economies, including China, India, and Brazil. While solar was bound to fall below wind eventually, given its steeper price declines, few predicted it would happen this soon.

Solar Surprise: Prices Fall Below Wind

A turning point for renewables in lower-income countries



2014

2013

Disclosed capex for onshore wind and PV projects in 58 non-OECD countries

"Solar investment has gone from nothing—literally nothing—like five years ago to quite a lot," said Ethan Zindler, head of U.S. policy analysis at BNEF. "A huge part of this story is China, which has been rapidly deploying solar" and helping other countries finance their own projects.

Half the Price of Coal

This year has seen a remarkable run for solar power. Auctions, where private companies compete for massive contracts to provide electricity, established record after record for cheap solar power. It started with a contract in January to produce electricity for \$64 per megawatt-hour in India; then a deal in August pegging \$29.10 per megawatt hour in Chile. That's record-cheap electricity—roughly half the price of competing coal power.

"Renewables are robustly entering the era of undercutting" fossil fuel prices, BNEF chairman Michael Liebreich said in a note to clients this week.

Those are new contracts, but plenty of projects are reaching completion this year, too. When all the 2016 completions are tallied in coming months, it's likely that the total amount of solar photovoltaics added globally will exceed that of wind for the first time. The latest BNEF projections call for 70 gigawatts of newly installed solar in 2016 compared with 59 gigawatts of wind.

The overall shift to clean energy can be more expensive in wealthier nations, where electricity demand is flat or falling and new solar must compete with existing billion-dollar coal and gas plants. But in countries that are adding new electricity capacity as quickly as possible, "renewable energy will beat any other technology in most of the world without subsidies," said Liebreich.

Turning Points

The world recently passed a turning point and is adding more capacity for clean energy each year than for coal and natural gas combined. Peak fossil-fuel use for electricity may be reached within the next decade. Thursday's BNEF report, called Climatescope, ranks and profiles emerging markets for their ability to attract capital for low-carbon energy projects. The top-scoring markets were China, Chile, Brazil, Uruguay, South Africa, and India.

When it comes to renewable energy investment, emerging markets have taken the lead over the 35 member nations of the Organization for Economic Cooperation & Development(OECD), spending \$154.1 billion in 2015 compared with \$153.7 billion by those wealthier countries, BNEF said. The growth rates of clean-energy deployment are higher in these emerging-market states, so they are likely to remain the clean energy leaders indefinitely, especially now that three-quarters have established clean-energy targets.

Still, the buildup of wind and solar takes time, and fossil fuels remain the cheapest option for when the wind doesn't blow and the sun doesn't shine. Coal and natural gas will continue to play a key role in the alleviation of energy poverty for millions of people in the years to come.

But for populations still relying on expensive kerosene generators, or who have no electricity at all, and for those living in the dangerous smog of thickly populated cities, the shift to renewables and increasingly to solar can't come soon enough.

The article is available at the link : <u>https://www.bloomberg.com/news/articles/2016-12-15/world-</u> <u>energy-hits-a-turning-point-solar-that-s-cheaper-than-wind_published</u> on December14, 2016

<u>CHINA</u>

Millions of dollars and 'nothing to lose': How Chinese start-ups are disrupting the electric supercar market

By John McIlroy, CNN

(CNN)It's not often that a start-up can claim to be a world-beater from the off. But that's precisely what's happening in the auto industry, where Chinese unknown NextEV has launched what it claims is the world's fastest electric car.

Pure-electric cars have been around for decades but only in the past five years or so have the mainstream manufacturers really started to take them seriously -- prompted by tightening rules over when and where conventionally powered vehicles can be driven, and battery technology that has made them more usable in the real world.

As such, there have already been a few upstarts, most notably Elon Musk's Tesla, which confounded the giant car brands by launching precisely the vehicle they said was impossible at the time: a luxury executive saloon with a range of more than 200 miles.

Truth be told, Tesla's offering will still out-accelerate NextEV's NIO EP9 up to a point. But the NIO EP9's pace has been judged over more than just a quarter-mile drag race; this one-megawatt (1,341bhp) creation has, in fact, proven its mettle around the famed Nurburgring in Germany, a 12.9-mile monster of a race circuit known simply as 'The Green Hell.'

Breaking records

The 195mph NIO EP9 has lapped the track, NextEV claims, in just 7m 05.12sec, or around 17 seconds faster than the previous electric car record. Indeed, to put it in context, the EP9's time is only beaten in the all-time list by four road-legal cars, two of them thinly disguised racers, and the other two supercars from Porsche and Lamborghini.

And yet the EP9 can be recharged from flat in as little as 45 minutes, to offer a range of more than 265 miles. There is no guarantee that it



NextEV's NIO EP9

will deliver this in production, but if it does, it has the potential to rewrite the rules of the hypercar market.

NextEV has committed so far to six examples, all reserved for the company's initial investors. But, even with each EP9 costing around \$1.2 million to build, the firm may consider an additional small production run, if only to raise its global profile further.

China is a hotbed of EV activity because crippling pollution in many cities has persuaded Beijing to open up that side of the business to 'non-automotive' companies. Some, like NextEV and telecoms giant-turned EV developer LeEco, appear to have enough backing to not only deliver a car, but to reach global customers.

China's growing electric vehicle market

They are not alone in sharing that ambition. Earlier this year, the state-owned Beijing Auto International Corporation launched an EV sub-brand called ArcFox with a creation called the ArcFox-7. It has a 603bhp electric motor, is made mostly out of carbon fiber and can reach 60mph in less than three seconds -- though its top speed is more modest than the EP9's, at 155mph. Its range is more limited too, at 186 miles.

Another brand, TechRules, has been testing an innovative hybrid supercar around the UK's F1 GP venue, Silverstone.

The car carries the unusual moniker TREV, which actually stands for Turbine-Recharging Electric Vehicle, and it mixes plenty of cutting-edge tech -- including carbon fiber construction, a small lithium-ion battery pack and four-wheel drive -- to deliver a theoretical top speed of more than 217mph, while potentially running for more than 1,242 miles between fill-ups.

Even the choice of fuel is open to interpretation; one version of the car, called AT96, can run on aviation fuel, diesel or petrol, while the other, called GT96, is powered by natural gas.

Qiantu Motor's K50, another 2016 debutant, sits just below supercar territory, but even so, its mix of aluminum and carbon fiber construction, and four-wheel drive through a pair of electric motors, brings performance that will match many European creations -- a top speed of 125mph and, more importantly, 0-60mph in less than five seconds.

Luxury car manufactures enter market

Still, the Chinese are not likely to have the 'electric hypercar' space to themselves for very long. Desperate not to be beaten to the punch, the established car brands are now clamoring to get their own all-electric offerings to market.

The giant VW Group is fast-tracking development of electric components and already showcased one of the first cars that will use them -- the Porsche Mission E. It's a four-door electric saloon, but its performance will rival that of many sports cars and it should introduce new standards for fast-charging, too.

Even the supercar elite who normally exist above the general industry are not immune to the demand for greater environmental credentials in their cars.



The Porsche Mission E

The fastest vehicles recently offered by Ferrari and McLaren have both featured electrification, and the British company has already admitted it is working on an all-electric supercar.

Interestingly, though, these are names with history, so they have a reputation to protect -- whereas NextEV and its like have hundreds of millions of dollars of investment and, at the same time, nothing to lose.

Winning over customers is about more than numbers, though. And this, in fact, may ultimately prove a bigger test for NextEV, TechRules and ArcFox than the technical challenge of getting around the Nurburgring (or, for that matter, actually bringing their cars to market at all).

In the past, buyers with the wherewithal to spend more than a million dollars on a car have been more drawn towards those brands with heritage. The Chinese brands must hope that the same does not apply to those who want not just an exclusive supercar, but also one that they can plug into the wall every evening.

The article is derived from the link: <u>http://www.edition.cnn.com/2016/12/01/autos/nextev-nio-china-</u> <u>fastest-supercar/index.html</u> published on December 02, 2016.

Las Vegas' City Government Is Now Powered Entirely by Renewable Energy

-By Avery Thomson

Las Vegas is now the largest city in the country to run entirely on renewable energy.



Getty + Saul Loeb

Just last week, Las Vegas announced it has reached its goal ofpowering the city governement entirely with renewable energy, meeting a goal the city has been working toward for nearly a decade. The goal was reached with the launch of Boulder Solar 1, a 100-megawatt solar plant located just outside the city.

Las Vegas began its renewable energy project in 2008, reducing elec-tricity usage through sustainability programs and installing solar panels on city buildings. Las Vegas will also receive power from Hoover Dam for the first time in its history, starting at the end of 2017.

The city has reduced its electricity usage by more than 30 percent due to these initiatives. Estimates place the city's yearly energy savings at approximately \$5 million.

Las Vegas is now the largest U.S. city to be powered entirely by renewa-ble energy. The second largest city, Burlington, Vermont, achieved this status in 2014.

The article is available at the link : <u>http://www.popularmechanics.com/science/energy/a24372/las-</u> vegas-renewable-energy/ published on December 19, 2016.

Welcoming our new member

Everest Equity

Everest Equity Pvt. Ltd. (EE) is an exclusive investment management company and a sponsor fund for Private Equity and Infrastructural Funds in Nepal. The board of directors, founding partners and management team of the company are locally and globally experienced energy sector entrepreneurs, hydropower engineers and banking and finance experts with a strong energy sector focus. It also has an advisory board, an investment committee and a panel of tax & corporate lawyers, chartered accountants, environmentalists, socioeconomic impact analysts and other consultants.



SM Everest

SM Everest was established on 2010 A.D registered on Company registrar's Office, Kathmandu. The company is engaged in the procurement of transmission line, subsidiary transformer and have an experience on working with NEA. In future, it forsees to carry out its activities in solar also.



List of EDC members

S. No.	Name of the Organization	Organization logo
1.	Nepal Electricity Authority	
2.	Alternative Energy Promotion Center	
3.	Chilime Hydropower Company Ltd.	
4.	Madhya BhotekoshiJalvidyut Company Ltd.	MBK JCL
5.	Rasuwagadhi Hydropower Company Ltd.	RASUWAGADHI HYDROPOWER CO. LTD. regund: programs of Str.
6.	SanjenJalavidhyut Co. Ltd.	A CONTRACT OF A

S. No.	Name of the Organization	Organization logo
7.	Butwal Power Company Ltd.	
8.	Hydroelecticity Investment and Development Company Ltd.	Y
9.	IDS Energy Pvt. Ltd.	IDS OF
10.	Arun Valley Hydropower Development Co. Ltd	ARUN VALLEY
11.	Dantakali Hydropower Pvt. Ltd.	dantakali
12.	Reliable Hydropower Pvt. Ltd.	Reliable
13.	Himalayan Infrastructure Fund	Himalayan
14.	Sanvi Energy Pvt. Ltd.	SANVI€ √Jergy
15.	Dibyashwari Hydropower Ltd.	
16.	Shiva Shree Hydropower Co. Ltd	
17.	Chhyandi Hydropower Ltd	
18.	SaralUrja Nepal	Simple Energy
19.	Rara Hydropower Development Co. P. Ltd	RARA HYDROPOWER DEVELOPMENT COMPANY

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S. No	Name of the Organization	Organization logo
20.	Wind Power Nepal	WIND
21.	Gham Power Pvt. Ltd.	Gham Power
22.	Lotus Energy Pvt. Ltd.	Solar Energy Systems
23.	Sun Farmer Nepal Pvt. Ltd	SUNFARMER

S. No	Name of the Organization	Organization logo
24.	CEDB Hydro Fund	<u></u>
25.	Nabil Bank Limited	NABIL BANK*
26.	NMB Bank Limited	NMB
27.	Global IME Bank Limited	Global IME Bar
28.	Prime Commercial Bank Ltd.	PRIMEBANK LTD.
29.	Century Bank Limited	CENTURY BANK

S.No		Name of the organization		Organization logo	
30.		Transweld Pvt. Ltd.			
31.		TSN Energy Pvt. Ltd.		TISN	
	32.	WaibaInfratech Pvt. Lto	d.	WAIBA	
	33.	North Hydro & Engineering Ltd	g Pvt.	A DE CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE	
	34.	Nepal Hydro & Electric L	td.	ne ne	
	35.	Nepal Hydropower Associa	ation	NHA Nepal Hydropower Association	
S	.No.	Name of the Organization	Or	ganization logo	
3	6.	National Association of Community Electricity Us- ers Nepal			
37.		Dudhkoshi Power Pvt. Co. Ltd	The second secon		
3	8.	ICTC Energy Pvt. Ltd	Cenergy		
39.		High Himalayan Hydro Construction Pvt. Ltd	3 Unite and and a second		
40.		Himalayan Bank	HBL OHimalayan Bank Ltd.		
41.		Ankhukhola Hydropower Pvt Ltd	HICHICALL VICEONIS		
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4	6.	SM Everest Pvt. ltd			
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Energy Development Council Main Office

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