

# ippan

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INDEPENDENT POWER PRODUCERS' ASSOCIATION NEPAL



## IPPAN's Third Annual General Meeting (AGM)

IPPAN's Third Annual General Meeting (AGM) was held on 17 December 2003 at the Hotel Soaltee Crowne Plaza in Kathmandu. IPPAN at present has 14 members and all of the members were present during the AGM. Dr Sandip Shah, President of IPPAN, presented the Annual Report of IPPAN, in which he highlighted its activities of the last year and the program for the coming years. IPPAN has formulated a Strategic Plan of activities for the next two years. Dr. Shah also presented an update of the activities of the Strategic Plan, and exhorted the members to participate whole-heartedly in the activities of the Plan as well as in overall growth and development of IPPAN.

Amarjibi Ghimire from Himal Power Limited and Suman Basnet from Butwal Power Company have been nominated as the new members of the Executive Committee of IPPAN in place of K.B. Bisht and M.P. Sharma from the respective organizations. IPPAN would like to thank Mr. Bisht and Mr. Sharma for their valuable contribution in supporting IPPAN in the past and expect similar cooperation in the future as well. ■

## IPPAN'S VISION, MISSION, GOAL & PURPOSE

To contribute to the development of Nepal's vast untapped hydropower potential, in line with Nepalese aspirations.

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To help to mobilize private capability, both national and international, to overcome the constraints confronting hydropower development.

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To make optimal use of Nepal's water resources endowments, to serve long-term national and regional needs in the context of future fresh water and energy scarcity.

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To disseminate information on hydropower development, in Nepal and elsewhere. ■

## Rural Electrification in South Asia Region (RESAR)

IPPAN has undertaken a project 'Rural Electrification in South Asia Region 'RESAR' in partnership with Confederation of Indian Industries (CII). The objective of the project is to identify and highlight basic strengths of some of the most successful rural electrification programs in the South Asia region. The project also intends to identify some of the major barriers for rural electrification in the region and recommend strategies/measures/tools, by which these barriers can be overcome. It is also envisaged to find out ways and means for ensuring greater private sector participation in the rural electrification process of the region.

The project is funded under SARI/Energy's Small Grants Program of USAID, and is implemented by Winrock International. This is a 1-year Project and is expected to be complete by the end of 2004. IPPAN and CII are planning to conduct more studies on regional energy issues. ■

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## Nepal India Cooperation on Hydropower (NICOH)

IPPAN, in joint venture with CII, has also been awarded another Project “**Nepal India Cooperation on Hydropower (NICOH)**” under SARI/Energy’s Small Grants Program. The objective of the project is to explore the areas of cooperation between India and Nepal for hydropower development in Nepal in order that both countries can benefit from energy trade utilizing the complementarities of the generation systems of both countries. The study will look in to the historical background, current situation, examine existing national plans and priorities, identify impediments and make recommendations for prospects for energy trade between the two countries and for hydropower development in Nepal. The principal objective is to determine the barriers to energy trade between the two countries and come up with recommendations for the model(s) that need to be undertaken to create an enabling environment for energy trade between the two countries utilizing the hydropower resources of Nepal. ■

## Editorial

We apologize for a long gap since the last issue of IPPAN’s Newsletter.

IPPAN is an organization where independent power producers’ and other similar interest organizations are members. Currently, IPPAN has 14 members. IPPAN, itself is a member of FNCCI, SAREC and ICH. We continue our efforts to increase the linkages with similar interest national and international organizations for mutual benefit.

IPPAN has formulated a Strategic Plan in which it has set its goals and activities for a two-year time frame. Recently an internal

seminar was organized to review on acts, policies and regulations related to hydropower to bring out the constraints and inconsistencies in the laws and practices in hydropower development in Nepal. Detailed review on the issues found is underway and a national seminar is planned later this year to discuss on the findings of the review.

We try to include news on hydropower, energy sector, private sector and innovations in the newsletter. We promise our commitment to make the newsletter regular, resourceful and always appreciate readers’ comments. ■

## CDM Workshop in Delhi

A three days workshop on ‘South Asia Forum on the Clean Development Mechanism’ was organized in New Delhi in February 2004. The topics of discussion were on recent developments in climate change policy, their impact on market mechanisms and the GHG market and the overall contribution they can make in the drive for sustainable development in the region. Mr. Prakash Kaini from IPPAN attended the program. ■

## Nepal’s Water Resources Strategy

His Majesty’s Government of Nepal supports the development of a long-term water resources strategy, capable of guiding water sector activities towards sustainability of the resource, while providing for hazard mitigation, environmental protection, economic growth and constructive methods of resolving water use conflicts.

The role of the Water Resources Strategy is to determine a path involving medium and long-term action programs for achieving water-related development objectives. HMGN through its Water and Energy Commission Secretariat (WECS) has embarked upon the task of preparing the first comprehensive Water Resources Strategy of Nepal.

In the strategy, national goal has been defined to improve the living conditions of Nepali people significantly in a sustainable manner. The strategy outputs will contribute to this goal though the achievement of short, medium and long-term purposes. The strategy indicators in hydropower development are followings:

- By 2007, 820MW hydropower capacity developed to meet projected demand including 72MW for export.
- By 2007, 25 percent of households supplied with electricity.
- By 2017, 2230MW, hydropower developed to meet projected demand of 2230MW, including 400MW for export.
- By 2017, 38 percent of households supplied with electricity.
- By 2027, 60 percent households have access to electricity.
- By 2027, Nepal is exporting substantial amounts of electricity to earn national revenue.

Over the next five years, the Strategy emphasizes the creation of enabling environment that will allow the hydropower sector to meet domestic needs as demanded. In the following ten years substantial benefits will be realized by maximizing hydropower development for different kinds of demands, including energy-intensive industries and power exports. By the end of 25 years the hydropower potential of the country would be optimally developed. ■

## IPPAN’s Strategic Plan

IPPAN has formulated a Strategic Plan of activities for the period of 2003-2005. The plan includes:

- Secretariat strengthening;
- Partnering and lobbying with concerned Ministries, Departments and Agencies to review and develop policies, legislation and plan priorities for private sector involvement in power sector;
- Development of power market and promotion of power consumption and utilization;
- Project finance: Training and Development on Project Finance and Project financing promotion and advocacy;
- Partnering with similar interest organizations.

NORAD has provided financial support to IPPAN for the implementation of the Strategic Plan. ■

## SUNKOSHI HYDRO PROJECT TOWARDS COMMISSIONING

Sanima Hydropower (P) Ltd. is developing a 2.6 MW Sunkoshi Small Hydropower Project at Sunkoshi bazaar in Sindhupalchowk district, North West of Kathmandu. The Project is now under construction and is expected to be completed within few months. The water will be diverted with 1.5 m high diversion weir with boulder lining on top. A side intake on the right bank has 4 orifices. Power house will be equipped with two Turgo turbines with automatic digital control system, 'SCADA'. ■



Location of Sun Koshi Hydroelectric Project (2.6 MW)

### IPPAN Secretariat:

IPPAN secretariat has been strengthened with respect to resources and manpower. Mr. Prakash Kaini, graduate on hydropower, is leading the secretariat since November 2003. Input from the executive committee members and other members to the secretariat is significant.

The secretariat has been made more resourceful and activities have been increased apart from the strategic plan. IPPAN in partnership with CII India is working on various projects on regional energy issues. This year IPPAN has been granted the membership of International Center for Hydropower (ICH) in Norway and in the process of extending cooperation with other similar interest national and international organizations.

IPPAN has launched its website, [www.ippan.org.np](http://www.ippan.org.np).

## Khudi Hydro Project to go ahead

Butwal Power Company Limited has joined Khudi Hydropower Limited as majority shareholder and is now partnering with Lamjung Electricity Development Company (LEDCO) and SCP Canada for the implementation of the Khudi Hydropower Project. It has been possible to move ahead for the construction of the project after signing the shareholder agreement of Khudi Hydropower Limited (KHL) among the three parties recently. LEDCO identified and carried out the preliminary study, while the feasibility was carried out jointly by LEDCO and SCP Canada. BPC has joined as the major partner of KHL for the construction of the project.

The planned installed capacity of the project is 3.8 MW with annual average energy generation of 24 GWh for the cost of 500 million Rupees. The bulk energy will be sold to the Nepal Electricity Authority (NEA), for which power purchase agreement has already been done. The project site is located 12 km north of Beshisahar, headquarter of Lamjung District.

LEDCO, a community based company, has developed and is operating 183 kW Syange mini hydro project in the same district. LEDCO plans to develop 20 MW Nyadi Hydro project in the same area in the near future of which the detailed feasibility study has already been completed. ■

## UBKHEP Completes Three Years of Commercial Operation

The Upper Bhote Koshi Hydroelectric Project (UBKHEP) is a run-of-the-river scheme constructed on the Bhote Koshi River, a tributary of the Sun Koshi River, in Sindhupalchowk District of central Nepal. Located approximately 110 kilometers northeast of Kathmandu near the Sino-Nepal border, the Project has a headworks with a side intake approximately 500 meters downstream of the confluence of the Bhote Koshi River and the Jung Khola near Tatopani. Water diverted from the side intake is conveyed to a surface powerhouse through a headrace conveyance system comprising a surface desanding basin located adjacent to the weir, a 3.3-kilometer-long headrace tunnel, a restricted-orifice type surge tank and a 450-meter-long, 2.8-meter diameter steel penstock. The Project has an installed capacity of 45 MW, with 2 turbine/generator units. The powerhouse is constructed at Jhirpu Village located



approximately 3.7 kilometers downstream of the diversion dam. The entire Project is accessible from the Arniko Highway, which connects Kathmandu with the Sino-Nepal border at Kodari.

Bhote Koshi Power Company Pvt. Ltd. (BKPC) has undertaken development of UBKHEP. The power generated from the Project is transmitted to the Integrated Nepal Power System (INPS), and Nepal Electricity Authority (NEA) purchases the generated power.

On January 24th 2004, BKPC has completed three years of commercial operation. Salient generation figures for the third year of Commercial Operation are as follows: ■

■ Total Generation	224.970 GWh	■ 85.2% of Deemed Maximum Generation
■ BKPC Outages	5.639 GWh (97.7% Availability)	■ 91.5% of Estimated Average Annual Generation
■ NEA Outages	11.046 GWh (95.4% Availability)	
■ Total BKPC & NEA Outages	16.685 GWh (93.1% Availability)	

## IPPAN in the Steering Committee of Power Sector Reforms in Nepal

Ministry of Water Resources, His Majesty's Government of Nepal, has nominated IPPAN as member of the high level Steering Committee on Power Sector Reforms in Nepal. Secretary of Ministry of Water Resources is the chairperson of this committee. This committee will provide guidance to the project team and review their works at appropriate times. It is expected that this project will benefit from substantial work already carried out and still underway by multilateral and bilateral donors.

## JREDP Bringing Light to the Life of Local People

**J**hankre Rural Electrification and Development Project, Phase II (JREDP II) was started in year 2001 with a 5 years plan to electrify 4,000 households and conduct various community development works to help the local people to build the necessary infrastructures to make their livelihood easier. The total project cost is USD 2.649 million out of which 80% is contributed by Norwegian Agency for Development Cooperation (NORAD) whereas the rest 20% by Himal Power Limited (HPL). The responsibility of overall management and execution of the project lies under HPL. The project covers 10 VDCs in Dolakha and

Ramechhap districts out of which 4 VDCs in Ramechhap district partially, as a pocket area.

So far, 2,300 households have been electrified by the end of the fiscal year 2059/60 and the work is in progress to connect 1,300 households to the grid by the end of this fiscal year 2060/61. The nos. of households to be electrified by the end of the project is estimated to be 5,000.

As per the agreement with NORAD, the entire rural electrification system including the 500 KW Jhankre Minihydro Power Plant (Shall

be upgraded to 630 KW) shall be handed over to the user of the electricity through formation of a rural electric cooperative envisioned as Khimti Rural Electric Cooperatives (KREC). All the preparatory works for formation of the cooperative has been completed and the formal registration is supposed to be completed by this fiscal year. Formation of rural electric cooperative is being done in close coordination with Department of Cooperatives with a long-term engagement till full establishment of the cooperative and final handover of all the assets and liabilities created under the project.

## IPPAN Members

IPPAN has 14 members, out of which 10 are power producers.

SN	Company	Project	Capacity (MW)	Location	Year Commissioned/Planned
1	Bhotekoshi Power Company (BKPC)	Upper Bhotekoshi Hydroelectric Project	45	Sindhupalchowk	2001
2	BP Power Company				
3	Butwal Power Company (BPC)	Andhikhola Hydro Project Jhimruk Hydropower Project	5.1 12	Shyanjha Pyuthan	1991 1994
4	Himal Power Limited (HPL)	Khimti-I Hydropower Project	60	Dolakha/Ramchap	2000
5	Himtal Hydropower Company	Upper Marshyangdi	85	Manang/Lamjung	n/a
6	Lamjung Electricity Development Company (LEDCO)	Syange Hydropower Project Nyadi Hydropower Project	0.2 20	Lamjung Lamjung	2001 n/a
7	Molnia Power P. Ltd.	Mailung Khola	5	Rashuwa	2006
8	National hydropower Company Ltd.	Indrabati-3 Lower Indrabati	7.5 4.5	Sindhupalchowk Sindhupalchowk	2002 2007
9	Sanima Hydropower Company Ltd.	Sunkoshi Hydropower Project	2.6	Barhabishe	2004
10	Swet Bhairab Power Supply P. Ltd.	Jomshom Small hydro Wind Power Project	0.24 0.45	Mustang Mustang	Leased n/a

## Other IPPAN Members are:

1. Himal International Power Corporation (P) Ltd.
2. International Resource Group (IRG)
3. NORPLAN
4. Sangrila Energy

IPPAN would like to invite other independent power producers and similar interest organizations to join the Association.

## Executive Committee Members:

Dr. Sandip Shah, President  
Mr. PP Adhikari, Secretary General  
Mr. Nima Bhutia, Treasurer  
Mr. Suman Basnet, Member  
Mr. Amar Jibi Ghimire, Member  
Mr. Dikendra Kandel, Member  
Mr. Kalyan Dev Bhattacharai, Member  
Mr. Vijaya Nath Uprety, Member  
Mr. Brindaban Man Pradhan, Member

## IPPAN Internal Seminar

Independent Power Producers' Association Nepal (IPPAN) organized an internal seminar on 20 February 2004 at Summit Hotel, Kathmandu to present the findings of the members from the review of acts, policies and regulations related to hydropower in Nepal. The reviews were done by the IPPAN members and papers were presented in the seminar. The seminar was organized as part of the IPPAN's Strategic Plan to review and develop policies, legislation and plan priorities for private sector involvement in power sector. The outcome of the internal seminar is expected to help further in the detailed review on each acts, policies and regulations.



**PRESENTATION ON**  
Hydropower Policies  
Water Resources Act  
Self Governance Act  
Environmental Protection Act and Regulations  
Foreign Technology Transfer Act and Company Act  
Income Tax Act, Financial Act  
Project Finance  
Electricity Acts and Electricity Regulations

**BY**  
Dr Sandip Shah  
KD Bhattacharai  
VN Uprety  
  
Tor B. Midtgarden  
  
Egil Hagen/M Shrestha  
AJ Ghimire  
PP Adhikari  
  
K B Bisht