

About Peak Power.

Peak Power (PP) Pvt. Ltd. is a diverse team of architects, engineers, consultants, and support professionals who help our customers transform their lives and businesses through renewable energy, innovative technology and community engagement. Our objective is to help people to access energy services, manage them sustainably, and use them to contribute to their long-term livelihood. We are a responsive and practical resource for individuals, communities, government agencies, service providers and the business sector.

Our staff include engineers, community engagement specialists, renewable energy specialists, environmental scientists, anthropologists and graphic designers. We offer a wide range of skills and experience, including:

- Community engagement;
- Renewable energy system design and maintenance;
- Energy efficiency audits and training, and
- Program design and delivery.

Peak Power has tremendous breadth and depth in the products, services, and technology it offers, and our people are uniquely positioned to bring them all together.

Expertise.

We specialize in off-grid renewable microgrid engineering, procurement and construction. Peak Power is the only company in Nepal who is qualified and authorized to develop, integrate and commission SMA hybrid power systems using multi-cluster technology, and the PP team is the only group in Nepal to have completed a 36Kw SMA multi-cluster system for a community micro-grid.

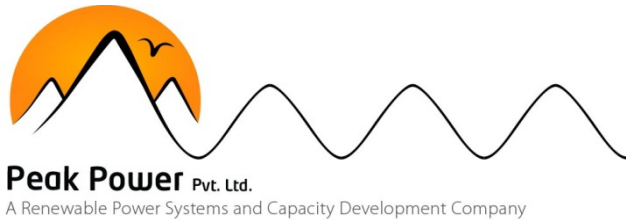
Peak Power also the only company to introduce many new innovative and scalable micro-grid technologies into the Nepalese market. We are proud to offer our deep experience and skills in offering the world's best micro-grid technology to Nepal.

Peak Power focuses our efforts in three market sectors where renewable power generation is currently cost competitive without subsidy:



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Rural Communities

Rural areas are another example where the entrenched macrogrid systems have failed to provide power. Peak Power has the experience and skills to empower these communities to become self-sustaining clean energy producers. Working closely with local government and tradesmen, we retrofit existing diesel based microgrids or provide new electrification. The majority of new electrification in the coming years will come from India and China; and a large portion of this will utilize microgrid infrastructure because it is more cost effective and reliable to produce power locally than to extend the national grid.

Mining

The mining sector is heavily dependent on power, which significantly impacts the economics of an active mine. Peak Powers technology enables us to design a mining power system that optimizes the diesel fuel usage of a mine's generator sets. By tying directly into the diesel microgrid, and appropriately sizing a wind, solar, or micro-hydro generator, we optimize the mine's energy consumption while hedging against fuel price increases.

Telecom

Base transmission stations (BTS) throughout the developing world have proliferated to keep up with skyrocketing demand for cell phones throughout Africa and Asia. The majority of the rural telecom towers run on diesel generator sets with high operating costs and diesel fuel which is susceptible to theft. By integrating solar energy and batteries into a BTS Peak Power Microgrid provides operators with cost savings and reliable power.

Simplifying off-grid power system development.

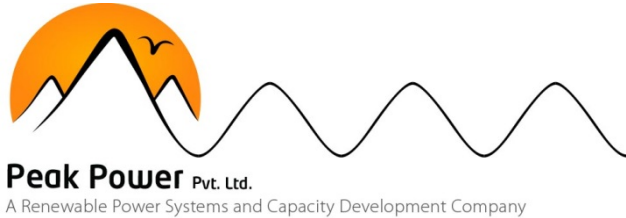
Maintaining our reputation means everything to us, and guides every decision we make.

Off-grid renewable energy system design and project management is an incredibly complicated endeavor that requires significant attention to detail. Improper design decisions or inadequate due diligence can lead to poor system reliability and economic performance. For this reason, we've developed a four phase system development strategy that sets ourselves apart from the competition and guarantees project success:



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Phase I: Feasibility Study

During the initial feasibility study our engineers work with the client to determine key economic, meteorological resource, and logistical variables to model the economics of a system and estimate its return on investment.

Phase II: Design & Financing

Working with our financiers, we determine a project budget and the optimal mix of debt and equity financing to suit our client's needs.

Phase III: Procurement & Construction

Upon commencement of construction, the PP team works with experienced local partners to deliver the project under budget and on time. Our top priority is worker safety and we always comply with International OSHA standards in every country that we work. Our construction management is trained in IEC standards and works with local permitting agencies to comply with local electrical and building standards as well.

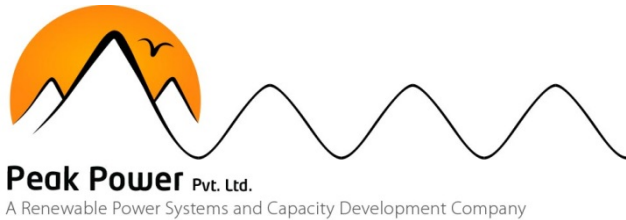
Phase IV: Training, Maintenance & Monitoring

Commissioning of the system signifies only the first step in our relationship with a client. When we develop a system we do so for the long haul- a minimum of 10 years. Post commissioning we work with our client to ensure the proper maintenance and operation strategy is in place and that any local maintenance partners are properly trained to perform scheduled services. All of our systems are remotely monitored by the PP team, so we can correct any system faults prior to any failures of the system occurring.



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Executive Team.

Rakesh Shrestha – Rakesh, CEO has 14 years field and management experience working in project development, energy capacity building and renewable energy in commercial, government and INGO sectors. In his responsibility, he has to lead a technical business, project development, research and product development, finance and technical marketing.

Rakesh has experience working with UK based INGO – Practical Action in Nepal, University of Flensburg - Germany and NORAD funded RenewableNepal research programme at Kathmandu University as a technical lead. His national and international education and professional experience equip with deep hands-on knowledge and experience on design and development of community based off-grid renewable microgrid system, research and integration of small scale wind power and research on bio-mass energy systems.

Rakesh earned his Bachelor of Engineering (Electrical and Electronics) at Kathmandu University, Nepal, a Master of Engineering in Energy & Environmental Management – Specialization Developing Countries from the university of Flensburg Germany in 2011 and returned to Nepal to undertake professional work for private and academic organizations. In the period, he fulfilled his role as a technical manager and programme manager as well as initiated his own business of renewable energy consulting in Nepal.

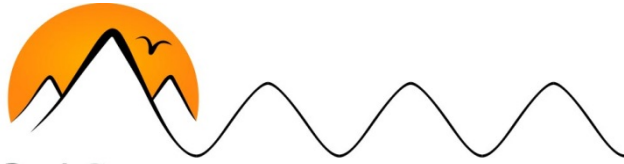
Joel Basham – Joel, Chief Architect and Consulting Lead. In this role, he is responsible for design and project delivery, architecture, standards and compliance, and integration of research and technology activities supporting Peak Power’s solutions in the marketplace. With over 10 years of experience implementing large-scale IT systems and custom software applications for Microsoft Consulting in Australia, Joel has led technical aspects of major systems implementations along the full product life-cycle for Microsoft and many large government and private sector organizations in Australia and the Pacific, USA and UK.

Joel also holds a lead role with the Drukpa Humanitarian organization in India and Nepal which oversees a number of large projects in this region. Joel carries out many different roles include project management, technical design and delivery of services related to heritage preservation, medical services, environmental sustainability and human resources development. Joel has over 9 years’ experience working with remote and rural communities in Nepal and India, in particular monastic communities in the Himalaya’s. Joel has led many programs within this organization to establish and improve core infrastructure service such as renewable energy, clean water, medical facilities, IT and communication facilities as well as technical training programs to empower the community to maintain and operate their equipment.



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Joel earned his Bachelor of Arts (Anthropology) at University of Southern Queensland, Masters and PhD programs in Archeology and History were completed at the Australian National University, Canberra, Australia.

Prativa Shrestha, - Architect, Sustainable Building and Engineering. In her role, she has to design and drawings delivery of renewable energy systems, teach drawings and follow up to manufactures, green building concept drawing and architecture.

She has professional experience in Nepal working with 'Uni-Techno Consortium' and 'The Comfort Housing' at Kathmandu. In the period of 2010-11, her travel to Germany and exposure in German green buildings added valuable concept in sustainable buildings and engineering. She has very good expertise in planning and designing residential, commercial and community buildings in Nepal.

Prativa did her graduation from Pokhara University at Nepal Engineering Collage, Nepal with a degree in 'Architecture'.

Bharat Pradhan – Engineer, Service and Consulting. His responsibility in the organization is to design, integrate, service and research on renewable energy solutions and innovations.

Bharat has eight years of his professional experiences in renewable energy systems. His work on the sector amplified his confidence on research, design and integration capabilities to work independently as well as in team. His main areas of interest are design and development of rural off-grid renewable microgrid electrification projects and development of clean energy systems.

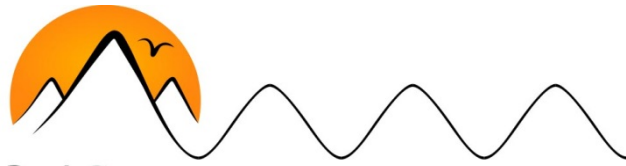
As a Programme Engineer, he has worked with SNV Nepal supported Renewable Energy Technology Promotion Programme (RETPP) at Panchthar Nepal and Alternative Energy Promotion Center (AEPC) Nepal. As a solar monitoring officer he has also worked with Renewable Energy Project (REP) under AEPC and The European Community. He was also engaged as consultant working with Practical Action Nepal and worked with few Nepalese Solar PV Companies in design and sales of solar photovoltaic systems.

He has accomplished bachelor in Electrical & Electronics from Kathmandu University, Nepal, master degree in Electrical Power System from Kathmandu University (combined course at NTNU, Norway and KU, Nepal). He wrote his master thesis in Development of Photovoltaic-Micro Hydro Power Hybrid Power System Model for Isolated Load Using MATLAB/SIMULINK.



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Key Projects.



Druk White Lotus School, Ladakh India.

The Druk White Lotus School is a small Buddhist school founded by His Holiness the 12th Gyalwang Drukpa in 1992 in Ladakh. The Druk primary and secondary school sits high in the Indian Himalaya, enrolling about 500 local children. The school provides a modern education with Ladakhi language, culture, and tradition. It is situated on a campus of buildings made with local materials and labor, photovoltaic for power, waterless, composting toilets, passive design and other sustainable features. Joel Basham contributed to the design, project management and technical delivery of this SMA based micro-grid.

Total Project Value: \$120,000 USD.



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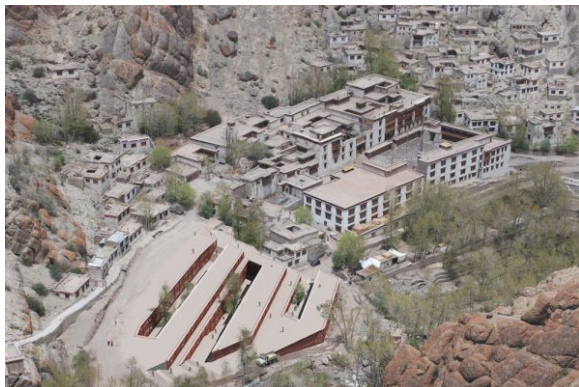
Druk Amitabha Mountain, Kathmandu, Nepal.

Druk Amitabha Mountain is one of the largest monastic colleges in Nepal enrolling around 500 nuns from the Himalayan region including Nepal, Bhutan, Tibet, India, China and Taiwan. It is situated just outside of the Kathmandu valley and incorporates a large campus of buildings, including a fully equipped hospital, auditorium with stage and theatre, temple, residences, shops and café, school and animal rehabilitation clinic.

Peak Power continues to work closely with the Druk Amitabha Mountain to implement micro-grid connected PV systems with battery backup as they raise funds and bring more of the sites facilities online. Peak Power has designed and installed 60kw's of PV systems connected to a centralized campus grid with decentralized PV generation and battery storage, centralized monitoring and management. This micro-grid is the only one of its type in existence and Nepal. Peak Power is the only company to have design and installed a hybrid 3 phase SMA multi-cluster system in Nepal.

Total projects value to date: 380,000 USD.

Projects in the pipeline: 1,800,000 USD.



Hemis Monastery Monastic School, Ladakh, India.

This 300 years old Tibetan Buddhist monastery is a UNESCO World Heritage Monument. It is situated in the Himalayas at an altitude of 3,700m, the district combines the condition of both arctic and desert climate. As part of a modernization plan, one of the main developments is a new school for 500 monks in the Hemis monastery. The spiritual leader, His Holiness the 12th Gyalwang Drukpa, intends to introduce western education system to existing traditional religious study. While the main temple continues to provide spiritual education to the monks, this proposed school will facilitate a structured



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and modern curriculum varying from languages to arts and craft and I.T. The school aims to be responsive to Ladakh's harsh climate and while proposing a school type that progressive but yet sensitive to the character of its surroundings.

Peak Power designed and is in the process of jointly implementing a 62Kw hybrid micro-grid which combines micro-hydro turbines, PV generation as well as diesel generation into a centrally managed power solution which will be maintained and operated by the community of Hemis. This project required extensive community engagement as well as local government backing to bring the project into the execution phase.

Peak Power will train and develop technical capacities through the Hemis Monastery to support and operate the energy system with in-house personnel. Qualified support persons will be able to provide invaluable support to other monasteries, schools and communities who need technical expertise to maintain and operate their power infrastructure, this will provide a revenue stream to help support the monastery and the education programs.

Total projects value to date: 280,000 USD.

Projects in the pipeline: 225,000 USD.



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