

# Renewable Energy

## 2020

Contributing editor  
**Eric Pogue**  
*Hunton Andrews Kurth LLP*



# Leaders in Renewable Energy and Clean Power



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**Publisher**

Tom Barnes

tom.barnes@lbresearch.com

**Subscriptions**

Claire Bagnall

claire.bagnall@lbresearch.com

**Senior business development managers**

Adam Sargent

adam.sargent@gettingthedealthrough.com

Dan White

dan.white@gettingthedealthrough.com

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Meridian House, 34-35 Farringdon Street

London, EC4A 4HL, UK

Tel: +44 20 3780 4147

Fax: +44 20 7229 6910

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Lexology Getting The Deal Through is delighted to publish the third edition of *Renewable Energy*, which is available in print and online at [www.lexology.com/gtdt](http://www.lexology.com/gtdt).

Lexology Getting The Deal Through provides international expert analysis in key areas of law, practice and regulation for corporate counsel, cross-border legal practitioners, and company directors and officers.

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Every effort has been made to cover all matters of concern to readers. However, specific legal advice should always be sought from experienced local advisers.

Lexology Getting The Deal Through gratefully acknowledges the efforts of all the contributors to this volume, who were chosen for their recognised expertise. We also extend special thanks to the contributing editor, Eric Pogue of Hunton Andrews Kurth LLP, for his continued assistance with this volume.

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For further information please contact [editorial@gettingthedealthrough.com](mailto:editorial@gettingthedealthrough.com)

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# Nepal

Mahesh Kumar Thapa Sinha Verma Law Concern

Ryan T Ketchum Hunton Andrews Kurth LLP

## MARKET FRAMEWORK

### Government electricity participants

- 1 Who are the principal government participants in the electricity sector? What roles do they perform in relation to renewable energy?

The Ministry of Energy (MoE) is responsible for establishing and implementing policies related to the development of Nepal's energy resources, the regulation of the energy sector, and the conservation and use of energy. The Department of the Electricity Authority (DoED) is a division within the Ministry of Energy that issues the licences and approvals that are required in connection with the generation, transmission and distribution of electricity in Nepal. Note, however, that the Investment Board of Nepal has jurisdiction over the issuance of licences and approvals in relation to hydroelectric projects with a capacity in excess of 500MW.

The rates paid by end users are established by the Electricity Tariff Fixation Committee (ETFC), which is an independent regulatory body established by statute.

The Nepal Electricity Authority (NEA) is a vertically integrated utility that generates, transmits, distributes and supplies electricity. It owns and operates the national transmission system and the distribution systems that are connected to and supplied by the transmission system. Private sector participants also generate electricity, which they sell to the NEA under power purchase agreements.

Two pension funds – the Employees Provident Fund and the Civil Investment Fund – are active in funding the development of power projects through their debt and equity investments.

The government recently enacted legislation to constitute an Electricity Regulatory Commission. The Commission will be an economic and technical regulator that will, among other things, be responsible for approving the prices for capacity and energy that are payable under power purchase agreements and for setting the tariffs that are paid by end users. The government is in process of forming the Commission. The Commission will replace the ETFC.

### Private electricity participants

- 2 Who are the principal private participants in the electricity sector? What roles do they serve in relation to renewable energy?

The principal private sector participants are independent power projects (IPPs), the developers that develop them, and the banks and other lenders that provide construction loans to fund the development and construction of IPPs.

Several cooperatives organised by communities that are not served by the NEA have been formed to develop, operate and maintain

micro-hydro projects and microgrids that have been funded by various development grants.

In terms of lenders, Nepalese banks and financial institutions have made a considerable number of loans to hydropower projects. Nepal Rastra Bank (NRB), which is the central bank of Nepal, has issued directives requiring all banks and financial institutions that operate in Nepal to lend a designated percentage of their newly originated loans to hydropower projects in Nepal. These obligations are enforced with penalties levied on financial institutions that fail to comply with these directives.

### Definition of 'renewable energy'

- 3 Is there any legal definition of what constitutes 'renewable energy' or 'clean power' (or their equivalents) in your jurisdiction?

Hydro, solar and wind power are considered to be renewable or clean energy. However, there is no specific legal definition for renewable energy.

### Framework

- 4 What is the legal and regulatory framework applicable to developing, financing, operating and selling power and 'environmental attributes' from renewable energy projects?

The MoE issues survey licences, which grant the holder thereof the exclusive right to conduct feasibility studies and environmental impact assessments for renewable energy projects in a designated licence area. Survey licences may have a term of one year or two years depending on the size of the project. They may be extended for a maximum term of up to five years at the discretion of the MoE.

The MoE also issues generation licences, which grant a concession to the holder thereof to construct, operate and maintain a generation facility on a build, own, operate, transfer model. Generation licences may have a term of up to 30 years.

If the construction of a transmission line to connect a generation facility to the NEA's transmission system is necessary, then the project company will need to apply for and obtain a transmission licence. Licences for these types of connecting transmission lines are co-terminus with the corresponding generation licence.

A concession agreement can be signed with the government if required by the developers or international lenders. Locally sourced financing does not require a concession agreement, but local debt markets do not have the depth to provide the quantity of financing or the tenors that are required to finance large IPPs.

Upon completion of the concession period, the project will be transferred to the government at no additional cost to the government. In most cases, however, the power purchase agreements entered into by the NEA have a term of only 25 years from and after the commercial

operations date. No private project has completed the initial period of 25 years.

### **Stripping attributes**

- 5 | Can environmental attributes be stripped and sold separately?

There is no market in Nepal for the sale of environmental attributes.

### **Government incentives**

- 6 | Does the government offer incentives to promote the development of renewable energy projects? In addition, has the government established policies that also promote renewable energy?

The government has offered income tax exemptions (tax holiday) for a period of 10 years from and after the commercial operations date and a 50 per cent exemption thereafter for five years, provided that a developer achieves commercial operations on or before 12 April 2024. The government has also offered a VAT refund of 5 million Nepalese rupees per megawatt for those who achieve commercial operations by that date.

### **Establishing policies and incentives**

- 7 | Are renewable energy policies and incentives generally established at the national level, or are they established by states or other political subdivisions?

All energy policies, including those that relate to renewable energy, are established at the national level.

### **Purchasing mechanisms**

- 8 | What mechanisms are available to facilitate the purchase of renewable power by private companies?

There is no legal impediment to the development of on-site generation projects other than obtaining a generation licence and building and similar permits.

### **Legislative proposals**

- 9 | Describe any notable pending or anticipated legislative proposals regarding renewable energy in your jurisdiction.

An electricity bill that would replace the electricity act that is currently in force has been before Parliament for some time with little progress. The main objective of the bill is to establish clearer procedures for the licensing of generation projects.

### **Drivers of change**

- 10 | What are the biggest drivers of change in the renewable energy markets in your jurisdiction?

The two biggest drivers of change are the continuing development of microgrids that are powered by micro-hydro projects or small-scale solar arrays, and the continuing extension of the NEA's transmission and distribution systems to areas that are now underserved.

### **Disputes framework**

- 11 | Describe the legal framework applicable to disputes between renewable power market participants, related to pricing or otherwise.

The power purchase agreements the NEA enters into typically contain arbitration provisions. Nepal is a contracting party to both the New York Convention and the Washington Convention.

## UTILITY-SCALE RENEWABLE PROJECTS

### **Project types and sizes**

- 12 | Describe the primary types and sizes of existing and planned utility-scale renewable energy projects in your jurisdiction.

Almost all the generation capacity in Nepal is available from hydroelectric projects. Most of these projects are run-of-river (RoR) projects with little or no capacity to store water in a reservoir. The government has, however, realised that there is tremendous potential for the development of large-scale hydroelectric projects with sizeable reservoirs that can be used to store water to reduce seasonal variations in the availability of generation capacity.

Although developers have shown an interest in developing wind and solar projects, they do not yet seem to be cost-competitive given the abundant hydro resources with which Nepal is blessed. We expect the continuing fall in the price of photovoltaic solar to result in rapid change.

### **Development issues**

- 13 | What types of issues restrain the development of utility-scale renewable energy projects?

The biggest challenges for renewable energy projects in Nepal are:

- the lack of transmission infrastructure and the inability of the NEA to fund the development of the transmission lines that are necessary to connect new projects; and
- the lack of depth in local lending markets combined with the unwillingness of the NEA to enter into power purchase agreements with tariffs denominated in hard currencies and the swift and uneven depreciation of the Nepalese rupee against hard currencies.

The government has attempted to address currency-related issued by encouraging the NEA to pay for electricity in hard currency for the first 10 years from and after the date on which a project achieves commercial operations. The implementation of this policy would, however, effectively limit the tenor of loans denominated in foreign currencies to 10 years. As a result of this and other challenges, this policy has not yet resulted in the development of a project benefiting from a power purchase agreement with a tariff denominated in a foreign currency. The government intends to establish a fund that would have the ability to enter into currency hedges with governmental authorities (such as the NEA) and government-owned and government-controlled companies with significant payment obligations that are denominated in foreign currency. The NEA has indicated its intention to limit its exposure to power purchase agreements with capacity, energy and other payment obligations that are denominated in foreign currencies to those payment obligations that are hedged by the fund.

## HYDROPOWER

### Primary types of project

14 | Describe the primary types of hydropower projects that are prevalent.

Most hydropower projects that are currently in operation are RoR projects. A few of them do have storage reservoirs. Earlier all power projects were owned by the NEA. However, in recent years, a considerable number of private developers are also engaged in developing small hydropower projects. The projects owned by the NEA are wholly owned by the NEA. However, in the private projects, 30 per cent of the shares in the project company are floated to the general public, including project-affected people and employees of the developer.

### Legal considerations

15 | What legal considerations are relevant for hydroelectric generation in your jurisdiction?

Approvals and clearances are the big challenges for developers. Approvals from multiple government authorities are required to complete feasibility studies and environmental impact assessments and begin construction. A lack of coordination between the authorities has been identified by developers as a constraint on the development of projects.

## DISTRIBUTED GENERATION

### Prevalence

16 | Describe the prevalence of on-site, distributed generation projects.

Net metering is not practised in Nepal. The NEA has a programme in place to buy excess power from sugar plantations, but this programme has not been put into practice.

### Types

17 | Describe the primary types of distributed generation projects that are common in your jurisdiction.

Not applicable.

### Regulation

18 | Have any legislative or regulatory efforts been undertaken to promote the development of microgrids? What are the most significant legal obstacles to the development of microgrids?

Unfortunately, no incentives have been made available to date.

### Other considerations

19 | What additional legal considerations are relevant for distributed generation?

None.

## ENERGY STORAGE

### Framework

20 | What storage technologies are used and what legal framework is generally applicable to them?

There are no energy storage projects in Nepal.

## Development

21 | Are there any significant hurdles to the development of energy storage projects?

The legal framework that would be necessary to support these types of projects has not been developed.

## FOREIGN INVESTMENT

### Ownership restrictions

22 | May foreign investors invest in renewable energy projects? Are there restrictions on foreign ownership relevant to renewable energy projects?

Yes, foreign investors can invest in renewable energy projects in Nepal, and investment in renewable energy projects by foreign investors has increased significantly in recent years. There is no restriction on foreign investment in renewable energy projects.

### Equipment restrictions

23 | What restrictions are in place with respect to the import of foreign manufactured equipment?

No specific restrictions are in place.

## PROJECTS

### General government authorisation

24 | What government authorisations must investors or owners obtain prior to constructing or directly or indirectly transferring or acquiring a renewable energy project?

Project licences (survey licence for generation of power, survey licence for transmission of power), generation licences or construction licences for the transmission of power are the main authorisations required for investors.

### Oftake arrangements

25 | What type of offtake arrangements are available and typically used for utility-scale renewables projects?

The NEA is currently the only utility-scale offtaker in Nepal.

### Procurement of offtaker agreements

26 | How are long-term power purchase agreements procured by the offtakers in your jurisdiction? Are they the subject of feed-in tariffs, the subject of multi-project competitive tenders, or are they typically developed through the submission of unsolicited tenders?

The tariff that is payable by the NEA under power purchase agreements is established as a feed-in tariff for all projects with a capacity of less than 100MW. For projects over 100MW, the NEA procures power purchase agreements through direct negotiations. The NEA has determined that it will not pay rates that will result in a projected equity internal rate of return in excess of 17 per cent.

### Operational authorisation

27 | What government authorisations are required to operate a renewable energy project and sell electricity from renewable energy projects?

The obtaining of the aforementioned licences is all that is required.

**Decommissioning**

- 28 | Are there legal requirements for the decommissioning of renewable energy projects? Must these requirements be funded by a sinking fund or through other credit enhancements during the operational phase of a renewable energy project?

There is no provision for the decommissioning of projects. This is an outgrowth of the extremely long expected lifetime for hydroelectric projects.

**TRANSACTION STRUCTURES****Construction financing**

- 29 | What are the primary structures for financing the construction of renewable energy projects in your jurisdiction?

Bank loans.

**Operational financing**

- 30 | What are the primary structures for financing operating renewable energy projects in your jurisdiction?

Bank loans.

# Sinha Verma Law Concern

**Mahesh Kumar Thapa**

[mahesh@svlclaw.com](mailto:mahesh@svlclaw.com)

63 Gaurav Marga  
Maitighar  
Babarmahal  
Kathmandu  
Nepal  
Tel: +977 1 4222107 / +977 9851039139  
Fax: +977 1 225194  
[www.svlclaw.com](http://www.svlclaw.com)

# HUNTON ANDREWS KURTH

**Ryan T Ketchum**

[rketchum@HuntonAK.com](mailto:rketchum@HuntonAK.com)

30 St Mary Axe  
London  
EC3A 8EP  
United Kingdom  
Tel: +44 20 7220 5700  
Fax: +44 20 7220 5772  
[www.HuntonAK.com](http://www.HuntonAK.com)

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