



Corporate legality in Global Energy Demand: Solar Energy in focus



Introduction

In an era of rapid technological advancement and heightened environmental concerns, renewable energy law and international cooperation are more important than ever. The global transition from fossil fuels to renewable energy is more than a change in resource use; it represents a fundamental rethinking of how countries approach energy security, economic stability, and environmental sustainability. Historically, energy policy has been driven by national interests focused on maintaining control over natural resources. However, the accelerating impacts of climate change are pushing countries toward a more cooperative approach and necessitating a shift in the global energy framework.

Solar energy boasts the fastest-growing electricity source in the world's history, providing around ten times more electricity now than in 2015, when it provided just 1% of global generation. In 2024, solar made up 6.9% of global generation, rising further to 8.8% in the first half of 2025 and in many countries, its share of the electricity mix is considerably higher.

Renewable energy, as defined by the International Energy Agency (IEA), is energy derived from natural processes that are replenished continuously. It takes various forms, directly or indirectly originating from the sun or from heat generated deep within the earth. This includes energy generated from solar, wind, biofuels, geothermal, hydropower, ocean resources, as well as biofuels and hydrogen derived from renewable sources.

Although energy sector plays a crucial role in the global economy in providing the necessary power for industries, transportation, and household, it also has a significant impact on the environment, thereby, making sustainability and compliance with regulations vital considerations for corporations operating in this sector. As a result, the integration of renewable energy projects into existing infrastructures poses additional challenges where companies must often coordinate with various stakeholders, including local governments, environmental organizations, and indigenous communities, to address concerns and foster collaboration. This multifaceted approach is increasingly recognized as a critical factor for the long-term success of renewable energy initiatives. As the landscape evolves, staying informed about regulatory changes and community sentiments will be essential for companies aiming to thrive in this dynamic sector.

This article explores the legal considerations that corporations need to take into account when it comes to energy sector compliance. Understanding and adhering to these legal obligations are essential for corporations to operate responsibly and sustainably in the energy sector within and outside Nigeria.

Legality in Global Energy Demand

A major turning point in international energy governance was the creation of the International Energy Agency (IEA) in 1974 to promote cooperation among oil-producing countries and ensure energy security. Since then, agreements such as the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement have played a key role in addressing climate change. Beyond environmental concerns, they also position energy policy as a fundamental component of international law.

Since the signing of the Paris Agreement in 2016, solar energy has been on track to dominate global power generation. The world is on track to achieve 5.5 terawatts (TW) in capacity by 2030. As the world electrifies, solar energy is set to lead the charge in powering transport, industry, and buildings.

Emerging economies like Brazil and China are leading the way, meeting rising electricity demand with largely renewable sources, while India's solar has driven fossil generation into decline. For low-income countries and small island states, solar means access, stability and independence. Pakistan's solar boom of the last 24 months is unprecedented in scale and pace, and in Africa too there is the first evidence of a take-off in solar.

The Paris Agreement has become a focal point of change in the global energy market where member nations are under obligation to meet various thresholds of compliance with environmental laws and significantly reduce emissions amongst others. One of the first major cases in this area was *State of the Netherlands v. Urgenda Foundation*, which was raised against the Netherlands' government after it had reduced its planned emissions reductions goal for 2030 prior to the Paris Agreement. After an initial ruling against the government in 2015 that required it to maintain its planned reduction, the decision was upheld on appeals through the Supreme Court of the Netherlands in 2019, ruling that the Dutch government failed to uphold human rights under Dutch law and the European Convention on Human Rights by lowering its emission targets.

In May 2021, the district court of The Hague ruled against oil company Royal Dutch Shell in *Milieudefensie et al VS. Royal Dutch Shell*. The court ruled that it must cut its global emissions levels by 45% from 2019 by 2030, as it was in violation of human rights. This lawsuit was considered the first major application of the Paris Agreement towards a corporation.

Accordingly, various countries across the globe have been somewhat compelled to seek alternative energy production means in order to achieve this feat. For instance, Nigeria is committed to reducing greenhouse gas emissions by 20% unconditionally and 45% conditionally by 2030.

As the global energy sector pivots toward solar energy use, legal considerations around permitting and compliance have become more complex. Countries are adopting new laws alongside the existing international treaties to facilitate renewable energy development, but these often come with stringent requirements that companies must navigate carefully. The global legal framework geared towards the promotion of solar energy, amongst other renewable energy sources are vividly depicted in the table below:

Instrument Type	Legal/Policy Mechanism	Purpose and Economic Impact	Illustrative Examples (Emerging Markets)
Investment Protection Laws	Bilateral Investment Treaties (BITs), domestic investment codes	Safeguard foreign and local investors from expropriation and unfair treatment; build investor confidence; catalyze capital inflows	India’s renewable energy sector covered by BITs; South Africa’s investment protection act reforms
Renewable Portfolio Standards (RPS) and Quotas	Statutory obligations requiring utilities to source a set percentage of energy from renewables	Guarantee demand for renewable energy; stimulate local markets; encourage technological advancement	Brazil’s electricity auctions with renewable quotas; China’s renewable energy consumption obligation
Feed-in Tariffs (FiTs) and Premium Tariffs	Legislated fixed prices for renewable power fed into the grid	Provide revenue certainty for developers; attract long-term financing; accelerate deployment	Kenya’s FiT policy for wind, solar, and small hydro; Thailand’s “adder tariff” scheme
Subsidy and Fiscal Incentive Frameworks	Tax credits, accelerated depreciation, customs duty exemptions	Reduce upfront project costs; make renewables cost-competitive; encourage local manufacturing	Nigeria’s import duty waivers on solar panels; Malaysia’s tax incentives for green technology
Green Finance and Market Instruments	Green bonds, carbon credits, renewable energy certificates	Mobilize private capital; align market incentives with sustainability; create secondary markets	India’s green bond issuances for solar and wind projects; Mexico’s renewable energy certificates (CELs)
Local Content Requirements (LCRs)	Local Content Requirements (LCRs)	Stimulate local industries; foster technology transfer; create jobs and skills development	South Africa’s REIPPPP requiring minimum local content; Brazil’s wind sector manufacturing mandates

Instrument Type	Legal/Policy Mechanism	Purpose and Economic Impact	Illustrative Examples (Emerging Markets)
Public-Private Partnership (PPP) Legal Frameworks	Concession laws, PPP contracts for renewable infrastructure	Share risks and resources between state and private actors; expand renewable infrastructure at scale	Philippines' BOT law enabling renewable concessions; Morocco's PPPs in solar mega-projects
Community Participation and Benefit-Sharing Provisions	Statutory obligations for consultation, profit-sharing, or community ownership	Build social license; reduce conflicts; ensure equitable distribution of benefits	Uganda's hydropower projects with community development agreements; Chile's indigenous consultation laws
Trade Law Instruments	Preferential tariff regimes, WTO-compliant subsidies, regional trade agreements	Lower cost of renewable technologies; facilitate cross-border technology transfer; expand export markets	ASEAN Free Trade Area renewable equipment tariff reduction; MERCOSUR renewable technology exchanges
Technology Transfer and IP Flexibilities	Compulsory licensing, patent pools, joint ventures	Enable access to renewable technologies; foster domestic R&D; reduce dependency	India's solar PV manufacturing policies; China's joint ventures with foreign wind turbine firms

In light of the above, energy lawyers or firms are required to advise on the entire lifecycle of energy projects, ranging from planning, to operation and maintenance. Their role is vital in structuring financial agreements, obtaining necessary licenses and permits, and negotiating with suppliers, contractors or key environmental players operating within the concerned jurisdictions.

Corporate Legality in Nigeria

In Nigeria, the Electricity Act, 2023 takes center stage in advocating for the incorporation of renewable energy technologies and utilisation of sustainable green energy to alleviate these issues and promote a clean environmental electricity generation within Nigeria and beyond. However, this discourse shall lay particular emphasis on solar energy.

In Nigeria, renewable energy resources have been statutorily defined by the Electricity Act 2023, as 'natural resources such as sunlight, rainfall, winds, and geothermal heat, which are renewable and naturally replenished'.

Given Nigeria's tropical climate, the substantial potential for renewable energy sources, particularly solar energy revolves around the necessity of a robust regulatory framework of which will drive the adoption of sustainable energy in Nigeria using the emerging global energy market as our reference.

The Key regulatory bodies for Solar energy projects in Nigeria include:

- **Nigerian Electricity Regulatory Commission (NERC)** – Established by the repealed Electric Power Sector Reform Act of 2005, NERC regulates tariffs, licensing, and compliance within the electricity sector. However, please note that under the Electricity Act 2023, states in Nigeria now have the power to regulate electricity within the state.
- **Rural Electrification Agency (REA)** – focuses on expanding energy access in rural areas through: managing projects advocating for supportive solar policies; and providing technical support to solar developers.
- **Federal Ministry of Power** – developing policies to promote renewable energy, including solar; supporting infrastructure development to integrate solar power into the grid.
- **Federal Ministry of Environment** – ensures solar projects comply with environmental regulations by mandating Environmental Impact Assessments (EIAs) for major projects;
- **Nigerian Independent System Operator (NISO)** – established on 30 April 2024, to manage grid operations and market functions (previously handled by TCN).

The regulatory environment governing Solar projects in Nigeria is shaped by several key legislative and regulatory instruments such as:

- **Constitution of the Federal Republic of Nigeria (1999, as amended)** – This sets out the powers of federal and state governments in overseeing electricity generation and distribution, forming the backbone of energy regulation in Nigeria.
- **Electricity Act, 2023** – This Act boosts the role of renewable energy by giving NERC clear mandates to support the development and use of renewable energy, and also increase the contribution of renewable energy to Nigeria's energy mix.
- **Environmental Impact Assessment (EIA) Act** – This Act ensures that any significant energy project, which includes solar projects undergoes an environmental impact assessment to address potential environmental and social effects, helping to maintain sustainability.

- **National Renewable Energy and Energy Efficiency Policy (NREEEP)** – Launched in 2015, this policy aims to increase the share of solar energy in Nigeria’s energy mix (targeting three per cent by 2020 and six per cent by 2030) and supports the use of solar systems in rural areas.
- **NERC Regulations** – The various NERC’s rules cover different aspects of power generation and distribution, including specific regulations for renewable energy like feed-in tariffs and requirements for connecting to the grid, ie, NERC’s Mini Grid Regulations 2023, Multi-Year Tariff Order (MYTO), etc.
- **Feed-in Tariff (FIT) Regulation 2015** – This regulation sets out the terms for buying electricity from renewable sources, including how tariffs are determined and the conditions for contracts.
- **State-level policies** – Different states have policies and regulations to encourage and guide the development of solar projects, providing additional support tailored to local needs.
- **Grid Connection Regulations:** NERC has established guidelines for connecting solar energy systems to the national grid, ensuring that solar producers can sell excess energy back to the grid.

By operation of the above laws, policies, guidelines and regulations in Nigeria, companies who seek to venture into the solar energy business must ensure strict compliance with the following requirements:

1. Obtaining an Import and Export License since many solar energy components such as solar panels, inverters, batteries, and charge controllers are not manufactured locally and must be imported.
2. Registering on the Nigerian Trade Hub Portal.
3. Obtain Certification of Solar Products by the Standards Organisation of Nigeria (SON) to ensure compliance with Nigerian Industrial Standards (NIS).
4. Mandatory Conformity Assessment to obtain certification.
5. Standards Organisation of Nigeria Conformity Assessment for imported products.
6. Apply for Nigerian Electricity Regulatory Commission licensing to operate in the Nigerian electricity supply industry.
7. Obtain the necessary environmental compliance certifications (e.g., NESREA certification)

Critical note must be made with regard to foreign establishments or individuals seeking to establish a solar business in Nigeria. They are mandated to fulfil additional regulatory requirements as the case may be. These include:

- Registration with the Nigerian Investment Promotion Commission (NIPC)
- Obtaining a Business Permit from the Ministry of Interior
- Securing an Expatriate Quota for foreign staff
- Obtaining Resident Permits

In conclusion, corporate legality in the energy sector extends beyond simply obtaining permits, but includes adherence to environmental standards, labor laws, international and local community engagement protocols. This process often involves public consultations, where community feedback can significantly influence project approval timelines and requirements. Failure to meet these obligations can lead to legal disputes, reputational damage, and project shutdowns.

To this end, the expertise of energy lawyers is vital to ensure projects comply with all applicable environmental and regulatory standards, including reviewing health and environmental impact studies and implementing mitigation measures. Their knowledge of administrative law, contracts, and environmental law is essential for this type of advisory to navigate disputes from various causes, such as contractual disputes, regulatory non-compliance, environmental issues, tariffs, environmental compliance, or resource property rights.

Related Links and Articles

1. https://www.researchgate.net/publication/395328539_Legal_frameworks_governing_renewable_energy_integration_environmental_compliance_and_sustainable_economic_growth_in_emerging_global_markets
2. <https://ead.gov.ng/wp-content/uploads/2017/04/EIA-Guideline-for-Renewable-Energy.pdf>
3. <https://www.mondaq.com/nigeria/renewables/1647090/setting-up-a-solar-business-in-nigeria-a-complete-guide-to-registration-certification-and-compliance>
4. Global Energy Policy: A Legal Perspective on Renewable Energy Initiatives by Yasin Çağlar Kaya and Hasret Kaya
5. <https://solarfinanced.africa/countries/solar-energy-in-nigeria/solar-energy-policies-and-regulations-in-nigeria>

For legal consultations or inquiries, please contact Moroom Africa Legal Consults.
For additional information, please contact us on info@moroomafrica.com.

Contacts



Dayo Adu
Managing Partner
+234 806 280 1020
Dayo.adu@moroomafrica.com



Joshua Adedokun
Executive Associate
+234 813 950 3922
Joshua.adedokun@moroomafrica.com