

INFOCARD ELANBiz Renewable Energy¹

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**The purpose of this infocard is to provide information on
renewable energies in Peru**

Introduction: the Renewable Energy Sector in Peru

Peru is committed to the **Sustainable Development Goals** (SDGs) of the United Nations 2030 Agenda for Sustainable Development, in particular to Goal 7 that encourages States to “ensure access to affordable, reliable, sustainable and modern energy for all”. One of this goal’s targets is “to increase substantially the share of renewable energy in the global energy mix by 2030”².

At the 2020 Climate Ambition Summit, President Sagasti announced that Peru will increase its ambition to “reduce carbon emissions from 30% to 40% by 2030, with the firm prospect of becoming a carbon neutral country by 2050”³. With this objective in mind, the Government is betting on renewable energy and plans to increase its use. For this, Peru seeks to strengthen the four priorities of its plan to achieve carbon neutrality by 2050: (i) the transformation of the energy matrix towards renewable energy, (ii) the electrification of the economy through less polluting transport and electromobility, (iii) promoting the circular economy (giving new value to waste) and (iv) solutions based on the responsible (sustainable) use of natural resources.⁴

Similarly, the Vice Minister of Strategic Development of Natural Resources of the Ministry of the Environment (MINAM), claimed that Peru is preparing for a future of carbon neutrality by the year 2050. This will imply an increase of 80% in the use of renewable energy, which would represent an economic benefit of almost USD 17.2 billion and in turn would provide a diversified and more efficient energy matrix.⁵

The main objective of the Peruvian energy policy is to promote a replacement of the use of oil derivatives (mainly Diesel 2), which represents 20% of the installed generation capacity, with clean or

¹ The information contained in this infocard is only general. For more detailed information and commercial promotion events, as well as possible business contacts, please contact the Commercial Offices of the Member States and the bilateral Chambers in Lima.

² Sustainable development goals and indicators, MINAM [ODS.compressed.pdf \(minam.gob.pe\)](#)

³ [Perú incrementa su ambición climática para reducir en 40 % sus emisiones de carbono hacia el año 2030 | Gobierno del Perú \(www.gob.pe\)](#)

⁴ <https://www.gob.pe/institucion/minam/noticias/303816-peru-se-pone-a-la-vanguardia-en-la-accion-climatica-con-su-registro-nacional-de-medidas-de-mitigacion-de-gases-de-efecto-invernadero>

⁵ <https://andina.pe/agencia/noticia-peru-apuesta-energias-renovables-representara-un-beneficio-17200-millones-813156.aspx>



renewable energy.⁶ This policy is aligned with Peru's commitments to **promote sustainability in energy matters** within the framework of the [Paris Agreement](#), of which Peru is a signatory.

It is true that, in recent years, the attractiveness of the country in terms of renewable energy has decreased compared to previous years: in 2014, Peru ranked 26th in the Renewable Energy Country Attractiveness Index (RECAI), published by EY, but by 2020 it was no longer among the top 40⁷. However, **in the current context of the covid-19 pandemic and economic reactivation, the authorities consider that there is an opportunity to deepen the transformations that were already occurring in the expansion of renewable energy, taking advantage of the country's enormous potential in power generation.**⁸

Sources of non-conventional renewable energy (NCRE) in Peru are: **biomass (for example: energy generated from agro-industrial waste)**⁹, wind, solar, geothermal, tidal energy, as well as hydraulic energy which does not exceed 20MW of installed capacity.¹⁰ A recently proposed bill¹¹ that seeks to reinvigorate renewable energy includes the so-called "green hydrogen" technology.

The proposed bill indicates that the Ministry of Energy and Mining is promoting the installation of green hydrogen production plants, and approves the National Green Hydrogen Development Plan, which will promote measures to develop this technology, such as establishing long-term goals and policies, promoting research and development, harmonizing standards and eliminating bureaucratic barriers, as well as stimulating commercial demand and helping to mitigate risks in the value chain and in security.

It should be noted that Peruvian regulations, in line with main legislations around the world, **do not consider large hydroelectric plants as NCRE, despite being a renewable source, due to the environmental impact derived from the magnitude of the alterations to water courses.**

Although the Peruvian electricity matrix has always had a high component of generation with renewable sources (hydroelectricity¹²), it wasn't until 2008, with the enacting of [Legislative Decree N°](#)

⁶ It is important to bear in mind that power generation fed by oil derivatives (Diesel and Residual), as well as coal, are mainly reserve power sources which most of the time does not produce electricity. The goal is for these to continue to act as a backup and not actually enter production.

⁷ https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/power-and-utilities/ey-renewable-energy-country-attractiveness-index-56.pdf

⁸ [Perú: apuesta por energías renovables representará un beneficio de US\\$ 17,200 millones | Noticias | Agencia Peruana de Noticias Andina](#)

⁹ All organic matter that can be used as an energy source is considered to be biomass. Source: <https://www.fundacionendesasa.org/es/centrales-renovables/a201908-central-de-biomasa>

Also see: <https://www.osinergmin.gob.pe/empresas/energias-renovables/biomasa/que-es-la-biomasa>

¹⁰ According to [Legislative Decree N° 1002](#), Law of Renewable Energies.

¹¹ https://leyes.congreso.gob.pe/Documentos/2016_2021/Proyectos_de_Ley_y_de_Resoluciones_Legislativas/PL06953-20200118.pdf

¹² For example, before gas from the Camisea field (the largest in Peru) began to be used for electricity generation, the national electricity grid was dominated by hydroelectric plants, which in 2005 represented more than 60% of national installed

1002 – Law of Renewable Energies¹³, that NCREs were given a specific legal framework which regulates their **large-scale incorporation** into the Peruvian electricity system.

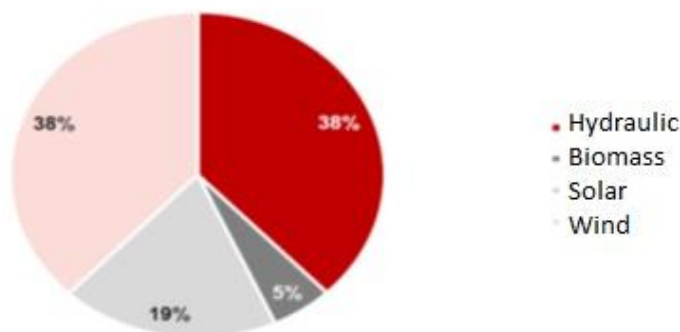
The main mechanism for promoting NCRE has been **auctions**, which consist of a competitive mechanism through which the Peruvian government assigns successful bidders a **long-term contract with a guaranteed price for the purchase of the energy generated by its NCRE plant**. To date, four auctions for the supply to the national electricity grid have been successfully carried out¹⁴, and one for the development of isolated facilities (off-grid), aimed at rural areas of the country, for example through home photovoltaic systems or for locations such as schools or medical posts.¹⁵

To date, **NCREs** make up a **dynamic and expanding industry** with expectations of increased growth, given the possibility of expanding their use in the Peruvian electricity system. This market may be of particular interest to **early-stage developers** –those who develop the first stages of NCRE projects, such as planning and obtaining permits for its subsequent transfer to a larger constructor or operator– as well as to providers of equipment, financial services, legal and consulting services, and to utilities in charge of the commercial operation of such projects.

Share of NCRE in Peru’s Energy Matrix

In 2018, the main share of NCRE production came from hydraulic and wind sources, as shown in the following graph:¹⁶

Graph 35. Share of RER production in 2018 (%)



Fuente: Ministerio de Energía y Minas. (2018). *Anuario Estadístico de Electricidad*.

capacity, according to the Economic Operation Committee of the National Interconnected Electric System (COES). In 2019, the hydroelectric capacity (not NCRE) was almost 40% of total installed capacity.

¹³ [Decreto Legislativo N° 1002- Decreto Legislativo de promoción de la inversión para la generación de electricidad con el uso de energías renovables. Reglamentado por el Decreto Supremo N° 012-2011-EM.](#)

¹⁴ <https://www.coes.org.pe/Portal/Operacion/CaractSEIN/MapaSEIN>

¹⁵ <https://www.osinergmin.gob.pe/empresas/energias-renovables/subastas>

¹⁶ <http://www.minem.gob.pe/publicacion.php?idSector=6&idPublicacion=614>



Notwithstanding the RER (renewable energy resources/sources) already present and in constant development, it is foreseen Peru could become an important exporter of Green Hydrogen in the future. According to Engie Peru, the country has the capacity to produce it at a low cost¹⁷, even though there is still much to advance in terms of hydrogen regulation¹⁸. This new source of renewable energy is attracting interest in countries such as Chile, which has already presented its National Green Hydrogen Strategy, through which it aims to become one of the main exporters by 2040¹⁹.

According to the latest official information available from the operator of the Peruvian electricity system (Economic Operation Committee of the National Interconnected Electric System - COES), in 2019, energy production with NCRE represented 8.52% of the energy produced in the country, in which **European companies** such as Enel, Engie and Statkraft participate (see table below). Compared to 2018, it represented an increase of 1.29% in NCRE production. This increase was consistent with the trends observed in 2017 (5.06% of total energy produced) and 2016 (4.73% of energy produced).²⁰

¹⁷ <https://peruenergia.com.pe/engie-peru-puede-ser-un-gran-exportador-de-hidrogeno-verde/>

¹⁸ <https://www.ppulegal.com/insights/prensa/desafios-regulatorios-desarrollo-hidrogeno-verde/>

¹⁹ <https://dialogochino.net/es/clima-y-energia-es/38779-chile-planea-ser-uno-de-los-principales-exportadores-mundiales-de-hidrogeno-verde/>

²⁰ Data obtained from the Osinergmin book "Renewable Energies: experience and perspectives on Peru's path towards the energy transition" Osinergmin, 2019.
https://www.osinergmin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinergmin-Energias-Renovables-Experiencia-Perspectivas.pdf

Energy Production from Renewable Energy Sources (RER) - 2018

Companies	GW.h	Share (%)
AGROALPORA (*)	4.2	0.12
AGUA AZUL	98.1	2.67
AIPDAA	89.6	2.44
ANDEAN POWER (10)	13.5	0.37
EGECSAC	32.5	0.89
EGEJUNIN	239.9	6.53
ELECTRO ZAÑA (11)	0.0	0.00
ENEL GREEN (1) (4)	896.2	24.39
ENELG (6)	1.7	0.05
ENERGÍA EÓLICA	407.6	11.09
ENGIE (3)	87.3	2.37
GEPSA (7) (8) (9)	133.2	3.62
HIDROCAÑETE	25.2	0.69
HUALA	135.7	3.69
MAJA ENERGÍA	22.0	0.60
MAJES SOLAR	44.5	1.21
MOQUEGUA FV	47.7	1.30
ORAZUL ENERGY	100.9	2.75
PANAMERICANA SOLAR	52.0	1.41
PE MARCONA	148.4	4.04
PE TRES HERMANAS	465.7	12.67
PETRAMAS (2)	50.6	1.38
REPARTICIÓN SOLAR	41.3	1.12
RIO DOBLE	103.6	2.82
SANTA ANA (2)	133.8	3.64
SANTA CRUZ	176.9	4.81
SANTA ROSA	2.4	0.07
SINERSA	46.3	1.26
TACNA SOLAR	48.2	1.31
YANAPAMPA	25.1	0.68
Total RER	3 674.1	100.00
Total	50 816.8	
Participación RER	7.23%	

Energy Production with RER - 2019

Companies	GW.h	Share %
ENEL GREEN POWER PERU	1,007.23	22.38
TRES HERMANAS	451.17	10.24
ENERGÍA EÓLICA	443.88	9.85
GEPSA	313.38	6.98
EGEJUNIN (1)	282.29	6.27
SANTA ANA	181.38	3.58
MARCONA	157.11	3.49
SINERSA	143.35	3.18
HUALA POWER	138.71	3.08
AGUA AZUL	118.32	2.58
ANDEAN POWER	112.49	2.50
ORAZUL ENERGY PERU	106.52	2.36
ENGIE	105.88	2.35
RIO DOBLE	105.16	2.33
SANTA CRUZ (1)	102.56	2.28
AIPSA	97.25	2.18
ELECTRO ZAÑA	75.83	1.68
RIO BANOS	87.74	1.50
PETRAMAS	65.62	1.45
PANAMERICANA	51.30	1.14
MOQUEGUA FV	47.31	1.05
TACNA SOLAR	45.74	1.04
GTS MAJES	44.28	0.98
GTS REPARTICIÓN	43.39	0.95
SAN JACINTO	42.88	0.95
EGECSAC	30.31	0.67
AGROALPORA	28.42	0.63
HIDROCAÑETE	27.85	0.62
ELECTRICA YANAPAMPA	23.28	0.52
BIOENERGIA DEL CHIRA	17.68	0.40
GENERACIÓN ANDINA	16.20	0.36
MAJA ENERGÍA	15.28	0.34
ENEL GENERACIÓN PERU	4.38	0.10
ATRIA ENERGÍA (2)	1.51	0.03
ELECTRICA SANTA ROSA (2)	0.78	0.02
TOTAL RER	4,504.94	100.00
TOTAL	52,883.14	
PARTICIPACIÓN RER	8.52%	

On the other hand, the Ministry of Energy and Mining (MINEM) recently announced that in 2020 –and despite the pandemic– 49 renewable energy projects were executed with an investment amount of USD 2,138.5 million. These consisted of 30 hydroelectric plants (373 MW), 7 solar farms (280 MW), 7 wind farms (394 MW) and 5 biomass plants (33 MW), which together represented 1080 additional megawatts (MW) to the national electricity grid²¹.

Since the enactment of the Law of Renewable Energies, the evolution of the NCRE market has shown an exponential growth, reflected in the **increasing supply of new companies joining the sector** and, in the need, to make use of this type of cleaner and more sustainable energy.

Through the aforementioned law, the following incentives were established for the promotion and development of NCRE projects:²²

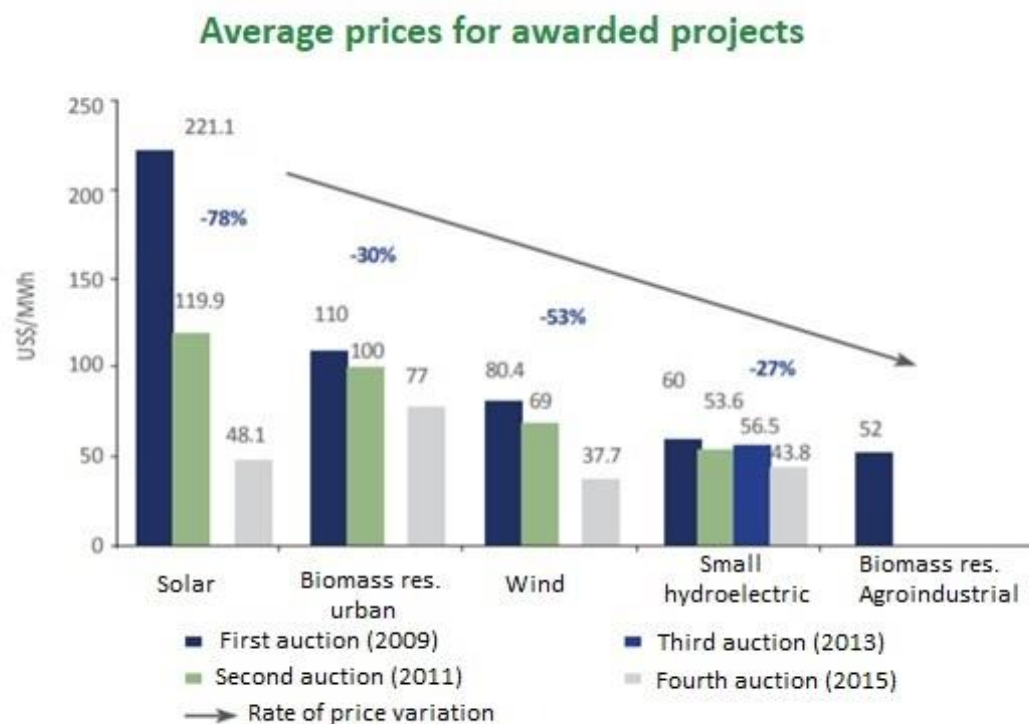
²¹ <https://gestion.pe/economia/se-ejecutaron-proyectos-de-energias-renovables-por-us-21385-millones-en-el-2020-nndc-noticia/?ref=gesr>

²² Information obtained from Osinermin's book: "The renewable energy industry in Peru: 10 years of contributions to climate change mitigation", Osinermin, 2017. https://www.osinermin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinermin-Energia-Renovable-Peru-10años.pdf

- Purchase of energy produced by NCRE generators (subject to award at auction).
- Priority for daily dispatch in the electrical grid.
- Priority to connect to the electrical transmission and distribution networks of the national interconnected grid.
- Long-term stable rates (up to 20 years) established through auctions.

As mentioned, **auctions are the most widely used instrument in Latin America and Peru for the promotion of renewable energies**, and have allowed the development of this market.

Regarding the evolution of prices, the installation costs of these technologies (fixed costs) have been drastically decreasing year after year, and, consequently, the generation costs bid in the auctions have been drastically reduced as well²³²⁴. The following chart shows the average prices of the projects awarded in the four auctions organized to date for the promotion of renewable energy resources, divided by technology.



Source: OSINERGMIN –The renewable energy industry in Peru: 10 years of contributions to climate change mitigation
Available at: https://www.osinermin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinermin-Energia-Renovable-Peru-10años.pdf

²³ Let us keep in mind that fixed costs are the main cost factor in these technologies, while their variable generation costs are close to 0.

²⁴ For example, as in the integrated circuit industry the so-called “Moore’s Law” predicts that the number of components of an integrated circuit will double every two years (see: <https://www.technologyreview.com/2020/02/24/905789/were-not-prepared-for-the-end-of-moores-law/>), the solar industry has “Swanson’s Law”, which indicates that every time the total volume of solar panels produced doubles, their costs fall by 20%. (See: <https://www.ft.com/content/d9f9f1b4-a3f0-11e5-873f-68411a84f346>).

Growth Opportunities for Renewable Energy Investment in the Peruvian Electricity Market

There are numerous opportunities for the NCRE sector. The market is very dynamic, with many business opportunities for **project development companies (early-stage developers)** in anticipation of the introduction of measures to promote a greater use of NCRE in Peru. In this context, companies in the fields of **technical services (measurement of wind quality, solar radiation, etc.), environmental services, archaeological studies, and property planning, among others**, will be required in the initial development stages of such undertakings, creating great opportunities for providers of such services.

Likewise, as recently announced by the [Ministry of Energy and Mining](#)²⁵, Peru has a portfolio of projects in the electricity sector for USD **6.025 billion**. In the generation subsector, these projects represent an amount of USD 3.183 billion (53%) and **include the development of projects with NCRE such as hydroelectric plants, solar farms and wind farms**. As previously indicated, there is also a proposed bill to boost generation with NCRE.

At the same time, the executive established an Electricity Subsector Reform Commission, which, in turn, received a series of recommendations and opinions, including comments from the Spanish company Acciona²⁶. This corporation recommended the preparation of a new National Energy Plan focused on the years 2030, 2040 and 2050 (since the current one could become obsolete). This plan should have clear objectives about the entry and promotion of renewable energies that, in turn, are aligned with the NDCs undertaken by the country in the COP 21 and with Priority Objective N° 9 of the National Competitiveness and Productivity Plan approved by Supreme Decree 237-2019-EF²⁷.

The Commission presented several proposals for promoting NCRE in Peru, including a report for the promotion of NCRE in **isolated electricity systems** (not connected to the national grid)²⁸, as well as for separating the purchases for the supply of energy and power (capacity); this latter concept remunerates the ability to supply with certain security in the hours of maximum demand of the system.²⁹

Regarding NCRE auctions, although more than five years have passed since the last NCRE auction for the interconnected system, no new auction is expected to be held in the short term. In this sense, the change of government in 2021 is a relevant factor in determining the political decision needed to give greater impulse to the sector, including the expected holding of a fifth auction. In this context, the Peruvian government has been working on concrete measures for the introduction of NCRE in private PPA transactions (electricity supply contracts with users with higher demand, who, according to Peruvian legislation, can negotiate directly and freely determine the prices in their contracts with the

²⁵ <https://elperuano.pe/noticia/113784-planes-del-sector-electrico-suman-us-6025-mlns>

²⁶ http://www.minem.gob.pe/minem/archivos/A-Acciona%2020_09_19.pdf

²⁷ <https://www.gob.pe/institucion/cultura/normas-legales/286520-ds-n-237-2019-ef>

²⁸ http://www.minem.gob.pe/minem/archivos/2_200727-informe%20aislados.pdf

²⁹ http://www.minem.gob.pe/minem/archivos/5_200727-Informe-Separacion-P-E.pdf

generating companies).

Another area of growth for NCRE is their participation in the rural electrification process, which is developed by the [General Directorate of Rural Electrification \(DGER\) of the Ministry of Energy and Mining](#). Currently, the DGER is already executing a large number of projects in rural areas, isolated localities and border areas of our country, and an expansion to new projects and plans related to NCRE is imminent.³⁰

Finally, in 2020, the "White Book" of the electricity sector was published³¹, which aims to achieve the modernization of the Peruvian electricity system in a harmonious and comprehensive manner, with economic signals that allow for an orderly migration from the traditional electricity system to a more modern one through the use of disruptive technologies such as smart grids and the greater incorporation of NCRE.

Characteristics of Companies Operating in Peru

The following table shows the main generation companies in Peru, regardless of the generation source (NCRE or non NCRE), classified by their share in energy production:

Share of Electric Energy Generation in 2018 (%)	
COMPANY	MARKET SHARE
Enel	15%
Kallpa	15%
Electroperu	13%
Engie	10%
Fenix power	7%
Huallaga	5%
Statkraft	5%
Orazul	4%
Termochilca	4%
Machupicchu	2%
Chinango	2%
El Platanal	2%
Arequipa	2%
San Gabán	2%
Inland energy	1%
Others	11% ³²

Among the companies listed in the table above, the European utilities Enel (Italy), Engie (France) and Statkraft (Norway), as well as Kallpa and Orazul (both controlled by the US private equity firm ISquared)

³⁰ Data from the National Rural Electrification Plan: http://dger.minem.gob.pe/ArchivosDger/PNER_2016-2025/F1-PNER-2016-25.pdf

³¹ <http://www.minem.gob.pe/detalle.php?idSector=6&idTitular=9891&idMenu=sub9329&idCateg=1900>

³² Source: Ministry of Energy and Mining (2018). Electricity Statistical Yearbook.

are the **most active in the development of NCRE projects in Peru**, and currently have projects with these technologies. Other companies operating or developing NCRE projects in Peru include the following:

- Ignis (Spain)
- Acciona Energía (Spain)
- Contour Global (United States)
- T-Solar (Spain)
- Fenix Power – Colbún (Chile)
- Canadian Solar (Canada – China)

There is also a very dynamic market of early-stage developers who, through contractual relationships (purchase options, service contracts, etc.) or later through mergers and acquisitions, place their projects on the market with larger-scale operators or builders, once a certain value milestone has been reached in the project. This group includes, among others, companies such as Verano Capital (United States), Lader Energy (Chile), GCZ (Peru), Novum Solar (Peru), Dessau S&Z (Peru - Canada).

Regarding the financing of such NCRE projects, both Peruvian and foreign commercial banks, such as Interbank, Banco de Crédito del Peru, and BBVA³³, have been actively present. Likewise, COFIDE ³⁴ (Peru's development bank) has participated in most of the transactions related to the financing of such projects, hand in hand with leading international banks such as Goldman Sachs, Deutsche Bank, and Crédit Agricole, among others.

Institutional and Regulatory Framework

The **electricity industry in Peru** is **partially deregulated**. There is competition in electricity generation, where the main companies are privately owned, with the exception of the state-owned Electroperú. The two main products/services traded are electricity (energy flow) and power (capacity).

There are essentially three markets in which generation companies trade these products:

- The **spot** market, which is short term;
- The market of **bilateral contracts with free customers** (private PPAs) such as industrial companies or retailers, which can directly negotiate their electricity supplies with the generation companies at a market price, where the generation companies compete with the

³³ <https://lexlatin.com/noticias/empresa-electrica-agua-azul-recibe-prestamo-de-interbank-y-cofide>

³⁴ <https://lexlatin.com/noticias/ergon-peru-prepaga-linea-de-credito-con-recursos-obtenidos-en-colocacion-privada-de-bonos>

distribution companies acting in a marketing role, and

- The **regulated customers** market, which consists of the market of residential customers, served exclusively by the distribution companies in their concession area, and which is mainly organized around auctions organized by the distribution companies to meet their regulated demand (residential consumers). These auctions are organized within the framework of Law N° 28832.

NCRE participate in the Peruvian market through specific auctions organized by the energy regulator (OSINERGMIN) within the framework of Legislative Decree N° 1002 and its regulations, where they obtain a contract backed by the State, which guarantees them a premium that compensates for the difference between the price awarded at auction and the spot market price. The auctions are for energy only.

In Peru, until 2019, the attribute of power (capacity) was not recognized for wind and solar NCRE, so they could not trade in the private PPA market, nor in the auctions organized by distribution companies under Law N° 28832. Since 2019 there is a partial recognition of power for wind NCRE. There are concrete proposals for the recognition of greater power to these technologies, as well as for distribution companies to be able to purchase the production of these sources by hourly blocks. **If these proposals are implemented, the Peruvian NCRE electricity market would be further strengthened.**

Regarding energy policy, the National Energy Policy 2010-2040 was approved by Supreme Decree N° 064-2010-EM. Goal 1 of the Policy Guidelines determines the need to have a diversified energy matrix, with an emphasis on renewable sources and energy efficiency. This implies, among others, promoting an intensive and efficient use of conventional and non-conventional renewable energy sources, as well as distributed generation. In turn, Goal 6³⁵ seeks to reduce as much as possible the environmental impact of the country's different energy projects –so that the companies that develop these projects pay special attention to their environmental sustainability– and at the same time, promotes a more active and precise State intervention in environmental oversight.

The **regulatory framework** for NCRE can be summarized in the following regulations:

RER REGULATORY FRAMEWORK	
General Regulations	<ul style="list-style-type: none"> - Law Decree N° 25844 – Electric Concessions Law and its Regulations. - Law N° 28832 – Law to ensure the efficient development in the generation of electricity. - Supreme Decree N° 064-2010-EM – Peruvian National Energy Policy. - Supreme Decree N° 014-2019-EM, which passes the Regulation for Environmental Protection in Electrical Activities.

³⁵ “6. To develop an energy sector with minimum environmental impact and low carbon emissions within a framework of sustainable development.”

<p>RER Regulatory Framework</p>	<ul style="list-style-type: none"> - Legislative Decree N° 1002 - Law for the Promotion of Investment for the Generation of Electricity with the Use of Renewable Energies. - Supreme Decree N° 012-2011-EM - Regulation for the Generation of Electricity with Renewable Energies. - Supreme Decree No. 020-2013-EM - Regulation for the Promotion of Electricity Investment in Areas Not Connected to the Grid. - Ministry Resolution N° 203-2013-MEM/DM - Universal Energy Access Plan.
<p>Regulatory Procedures – Osinergmin</p>	<ul style="list-style-type: none"> - Resolution N° 200-2009-OS/CD - Procedure on hybridization of RER generation facilities. - Resolution N° 001-2010-OS/CD - Procedure for calculating the premium for RER generation. - Resolution N° 289-2010-OS/CD - Procedure on calculation of energy not injected due to causes beyond the control of the RER generator. - COES Technical Procedure N° 20 - Procedure on the entry, modification and withdrawal of facilities in the SEIN - COES.

In addition, the institutional framework is led by the following institutions, whose main functions with respect to NCRE are summarized as follows:

Institutional Framework of the NCRE	
Entity	Functions
<p>Ministry of Energy and Mining</p>	<ul style="list-style-type: none"> - Promote projects that use RER. - Prepare the National Renewable Energy Plan. - Define the energy requirements for the auctions. - Prepare and approve the terms of the auctions and sign the contracts resulting from the auctions. - Grants electricity rights (concessions, easements, etc.).
<p>Osinergmin</p>	<ul style="list-style-type: none"> - Conduct the auction. - Set maximum prices. - Supervise the contracts resulting from the auction.
<p>COES</p>	<ul style="list-style-type: none"> - Coordinate the operation of the SEIN at the minimum cost, preserves the safety of the system, coordinates the best use of energy resources, and manages the short-term market.

Recommendations for European Companies

- Taking into account that large European utilities (such as Enel, Engie and Statkraft) already operate in Peru, and that they are also actively developing NCRE projects, there are numerous opportunities for **medium-sized European companies** to establish contact with these utilities and provide them with goods and services for their projects in Peru.

- There are also **opportunities for certification companies**:
 - **For renewable energy** (companies that certify that the origin of the energy consumed by a given client is NCRE), a service that is being demanded by large retail and mass consumption companies concerned about their corporate image in terms of energy sustainability.
 - **Management systems**, such as the ISO international standards, to help renewable energy companies achieve improved quality and efficiency in their operations.
- There are also opportunities for **energy service** companies, such as traders, aggregators or managers of private PPA contracts to work as intermediaries in the negotiation of supply contracts with NCRE sources and European companies operating in Peru, such as H&M, LVMH, Volkswagen, among others.
- Finally, there is also a market for **the provision of equipment and technical services** in the development of NCRE projects, such as the construction, engineering and maintenance of energy parks, solar panels, wind turbines, and the equipment of solar farms, electrical systems (laying of networks), and electrical substations, among others.

Useful Links

Main Sector Events

The following are some of the main events and congresses related to NCRE:

- Renewable Energy Congress and Exhibition Peru, organized by Perueventos <https://energiasrenovables.perueventos.org/> (Once a year)
- Peru Energy <https://peruenergia.com.pe/> (Once a year)
- Infoenergetica <https://www.infoenergetica.com/eventos>

Main Sector Associations

[Peruvian Society of Renewable Energies \(SPR\)](#)

Main guild of the sector. It is made up of companies and organizations that are committed to the development of non-conventional renewable energies.

[Center for Energy and Environmental Conservation \(CENERGIA\)](#)

A non-profit association that seeks to integrate the efforts of public and private sector companies and institutions interested in promoting energy efficiency in the country. In 1994, its objectives were expanded to promote environmental conservation and the development of new and renewable energies.

[Peruvian Association of Solar Energy \(APES\)](#)

Non-profit institution with the purpose of promoting, spreading, fostering and encouraging training, research, development and applications of renewable energies, the rational use of energy, and respect for the environment.

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