



Electricity Auto-Generation, Direct Sales, and Wheeling Policy

17 September 2024

The Ministry of Energy and Minerals, in its capacity as the government body with legal jurisdiction to prepare, propose, and submit general policies in the energy and minerals sector to the Council of Ministers for approval - including electricity and renewable energy activities - seeks to develop and issue a general policy that incentivizes and encourages the exploitation of renewable and clean energy to serve as the basis of future proposed regulatory frameworks. This initiative is particularly important given that Oman Vision 2040 and other relevant government renewable energy policies emphasize the need to encourage and stimulate electricity generation projects from renewable sources, recognizing their positive impact on attracting investments, reducing electricity costs, lowering production expenses for industrial and commercial projects, and achieving net-zero carbon emissions. Accordingly, and by virtue of the power granted to the Ministry of Energy and Minerals under clauses (1) and (2) of Annex (1) of Royal Decree No. 96/2020, concerning the Ministry's mandate to propose policies and plans regarding the energy and minerals sectors and implementing the policies and plans related thereto, this general policy for electricity auto-generation, direct sale, and wheeling is hereby formulated.

Policy Objectives:

1

Encourage a transition towards renewable energy to achieve the net-zero target, and attract foreign investment by providing stable and reliable clean energy.

2

Create a comprehensive regulatory framework that enables the implementation of renewable energy projects through self-generation and direct sales, and meets the requirements of a stable and consistent investment environment for investors and licensees engaged in electricity sales, generation, transmission, and distribution activities.

3

Enable and encourage investments in renewable energy projects with the goal of increasing the contribution of renewable energy to the total energy mix in the Sultanate of Oman.

4

Balance the rights and interests of investors and licensees authorized to undertake electricity activities, as well as consumers.



Key Terms Used



Renewable Energy:

Energy generated from natural, non-depletable sources, including solar, wind, bioenergy, geothermal, and hydropower.



Auto-Generation:

Electricity generation for self-supply purposes.



Self-Supply:

The Supply by a Person of electricity to himself, his employees or commercial business, other than via a Transmission System or a Distribution System of a Licensee.



Direct Sale:

A system enabling eligible consumers to purchase electricity directly from eligible generating companies, independent of the Oman Power and Water Procurement Company, and in compliance with applicable electricity wheeling framework.



Electricity Grid:

The transmission network or the distribution network, or both, as applicable.



Electricity Wheeling:

The generation of electrical energy from generating equipment owned by eligible generating companies for direct sale, and its delivery (export) from the connection point of the generating equipment – via the transmission network or distribution network, or both – to the connection point at the consumption facilities of eligible consumers located at another site.



Electricity Storage:

The conversion of electrical energy into another form of energy for storage in storage equipment such as batteries for a limited period of time, and thereafter reconverting it into electrical energy for direct consumption by the Autogenerator or delivery to the grid or direct sale and wheeling through the network.



Eliqible Consumers:

Consumers who meet the eligibility requirements in accordance with the regulatory frameworks issued by the Public Services Regulatory Authority.



Eligible Generating Companies:

Electricity generating companies that meet the eligibility requirements in accordance with the regulatory frameworks issued by the Public Services Regulatory Authority.

Proposed Policies

In the absence of appropriate controls, expanding the activities of auto-generation, direct sales and wheeling by enabling renewable energy projects will lead to the following:

- Increased electricity costs, resulting in increased government subsidies.
- 2 An additional burden on consumers who do not rely on self-supply and direct sales due to increased electricity costs.
- Increased investment burdens and costs associated with ancillary services to ensure grid security and stability.
- 4 Impact on cost recovery plans for fixed capacity charges of current and future contractual capacities of Nama Power and Water Procurement Company due to the non-utilization of those capacities as a result of major consumers relying on Auto-generation and direct sales.
- An increase in the percentage of curtailed power generation from contracted renewable energy plants due to the absence of a clear production and purchase plan by major consumers and the lack of alignment of plans with Nama Power and Water Procurement Company's plans, as well as the current absence of energy storage technologies due to their high costs.

Given these considerations, and in light of developments within the Omani electricity market—including the Council of Ministers' approval of the first and second phases of direct sales, the establishment of the electricity spot market, and the government's stated objective to expand renewable energy use for electricity generation and attract foreign investment—It is concluded that the adoption of clear policies enabling Autogeneration from renewable energy sources, direct sales, and electricity wheeling are now of paramount importance.



Auto-Generation Policy

The generation of electricity from renewable energy resources for self-supply purposes is permitted, subject to the following restrictions:

- The Auto-generator must obtain a generation license or an exemption from licensing from the Public Services Regulatory Authority (the "Authority"), which will issue the license or exemption in coordination with the Ministry of Energy and Minerals (the "Ministry"). The Authority is exempt from the coordination requirement with the Ministry if the generation capacity of the Auto-generation unit does not exceed 25 megawatts.
- Before the end of each December, the Authority, in coordination with the Ministry, licensee of electricity procurement, transmission, distribution and supply, and other relevant stakeholders as deemed appropriate, shall establish the annual quota (%) for Auto-generation from the average actual consumption of renewable energy Autogeneration projects. This quota must align with the Sultanate of Oman's renewable energy goals, vision, and plans.
- Consumers wishing to fully or partially transition to Auto-generation or purchase through direct sales via wheeling must notify the electricity supply company of the transition timeline in accordance with the timeframe determined by the Public Services Regulatory Authority from time to time.
- The licensed power and water procurement company, in coordination with the Public Services Regulatory Authority, shall determine the timeframe between application submission and commercial operation of the Auto-generation plant to allow sufficient time to align the application with the company's approved plans.
- The Public Services Regulatory Authority shall calculate the tariff in detail, and the tariff shall be distributed based on the impact the consumer will have on the cost, security, and stability of the national grid.
- Auto-generators shall be permitted to establish, own, and operate electricity storage
 equipment (storage batteries) whenever the economic feasibility of the storage
 technology allows it as a sub-class of generation in accordance with the terms
 and requirements set by the Public Services Regulatory Authority.
- The Auto-generator must own a majority share in the self-generation unit.
- The Public Services Regulatory Authority shall issue the regulatory framework for Auto-generation within a period not exceeding six months from the date of issuance of this policy.



Direct Sale Policy (Phase 3)

The direct sale of electricity generated from renewable energy resources and its wheeling to eligible consumers is permitted, subject to the following regulations:

- Eligible consumers are permitted to purchase electricity directly from eligible generating companies in accordance with the requirements of the regulatory framework to be issued by the Public Services Regulatory Authority.
- Eligible generating companies must obtain a generation license or an exemption from licensing from the Public Services Regulatory Authority (the "Authority"), which will issue the license or exemption in coordination with the Ministry of Energy and Minerals (the "Ministry"). The Authority is exempt from the coordination requirement with the Ministry if the generation capacity of the self-generation unit does not exceed 25 megawatts
- Before the end of December of each year, the Authority, in coordination with the Ministry, licensees of electricity procurement, transmission, distribution, and supply, and other relevant stakeholders as deemed appropriate by the authority, shall establish the annual quota (%) permitted for the eligible electricity capacities for direct sale projects using renewable energy. This quota must align with the Sultanate of Oman's renewable energy expansion goals, vision, and plans.
- The licensed power and water procurement company, in coordination with the Authority, shall determine the timeframe between application submission and commercial operation of the plant to allow sufficient time to align the application with Nama Power and Water Procurement Company's approved plans and the plans of those licensed for transmission and distribution.
- The eligible consumer connected to the grid and benefiting from renewable energy through direct sales must commit to paying the electricity transmission and wheeling tariff determined by the Authority based on their grid usage, in accordance with the regulations approved by the Authority.
- Eligible generating companies are permitted to establish, own, and operate electricity storage equipment (storage batteries) whenever the economic feasibility of the storage technology allows it as a sub-class of generation in accordance with the terms and requirements set by the Public Services Regulatory Authority.
- The Public Services Regulatory Authority shall undertake the tasks of updating the regulatory framework for direct sales within a period not exceeding 6 months from the date of issuance of this policy.

Electricity Wheeling Policy for Direct Sale Purposes

Electricity generated for direct sale purposes must be wheeled through the national grid owned by licensed transmission and distribution companies in accordance with the following regulations:

- The electrical energy produced from renewable energy sources for direct sale purposes must comply with the percentages specified annually by the Public Services Regulatory Authority.
- The Oman Electricity Transmission Company (OETC) shall determine the technically and economically appropriate timeframe for commencing the electricity wheeling process.
- Eligible consumers are obligated to cover all costs associated with electricity wheeling in accordance with the wheeling tariff determined by the Public Services Regulatory Authority.
- The Public Services Regulatory Authority shall issue a regulations for electricity wheeling within a period not exceeding 6 months from the date of issuance of this policy. This regulations shall include, among other things, eligibility requirements for electricity wheeling.

Committed to Sustainable Development