



هيئة تنظيم الخدمات العامة  
Authority for Public Services Regulation

# Transportation of Natural Gas & Electricity Sector

Presentation to ERRA EMER-GF Joint Committee Meeting

7 May 2025



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## **Electricity**

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# Transportation of Natural Gas



# Background RAB Implementation

- OQ Gas Networks was established in 2000 by a Royal Decree.
- 27 years Concession Agreement with the Government to build and operate the Gas transmission network.
- Cost plus model : where full Opex and Capex were reimbursed to the company along with a fixed return on share capital.

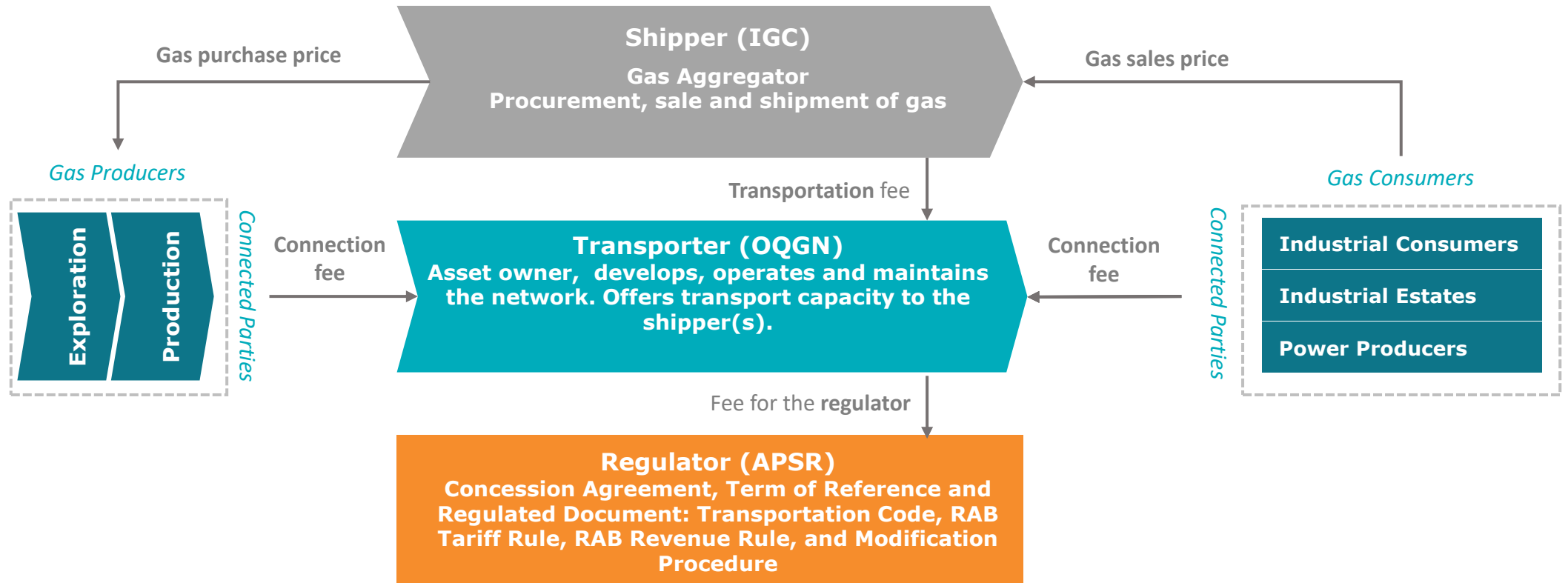
## **OQGN before implementation of RAB Framework**

- All projects were funded through Government (Ministry of Energy & Minerals (previously MOG). Asset Ownership remained with Government/ MEM hence not possible for OQGN to raise financing for projects and to be financially independent.
- Real Transportation cost/tariff not determinable
- No explicit capacity expansion and capacity management process in place.
- No proper identification of roles and responsibilities of relevant stakeholders.

## **Challenges in the Old Model (Pre-RAB)**



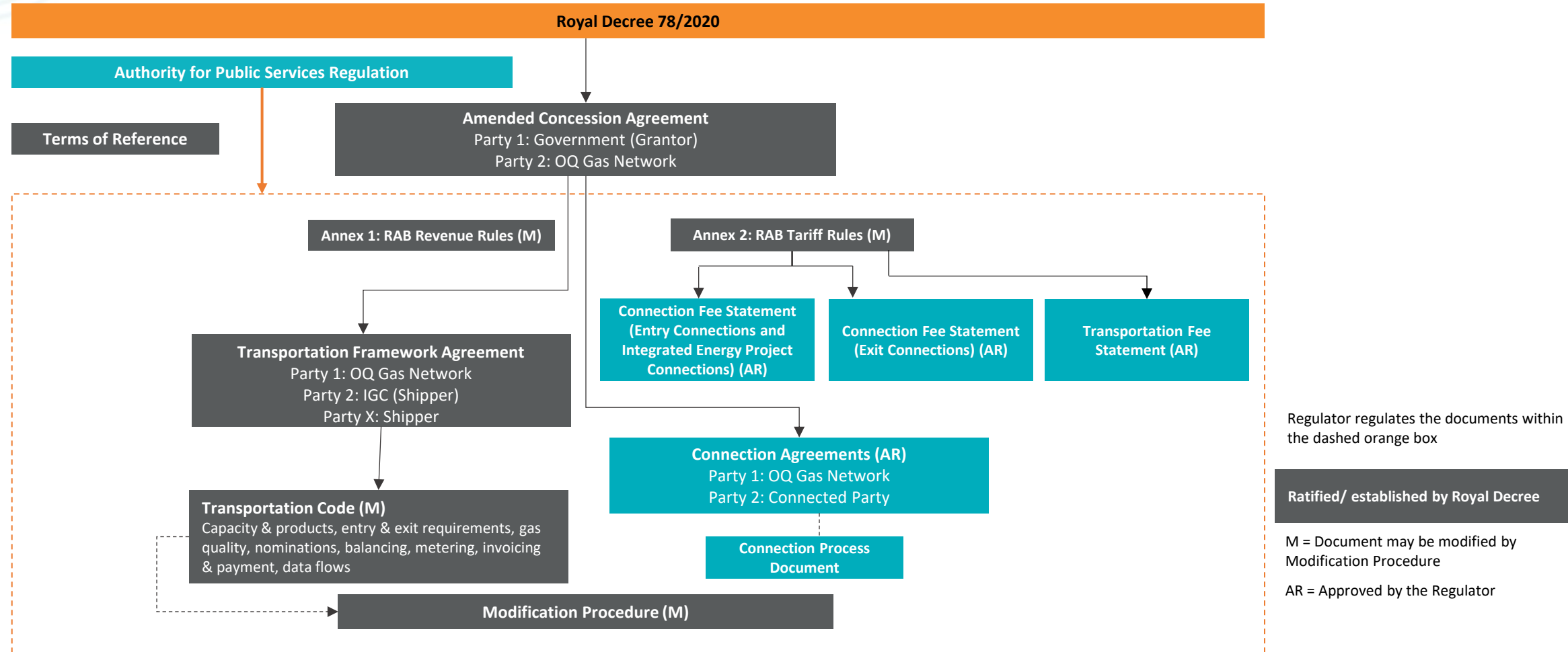
# Gas Market Structure





# RAB Legal Structure

- Legal structure underpinned by Royal Decree





# Regulation through Price Control Review

## PRICE CAP REGULATION

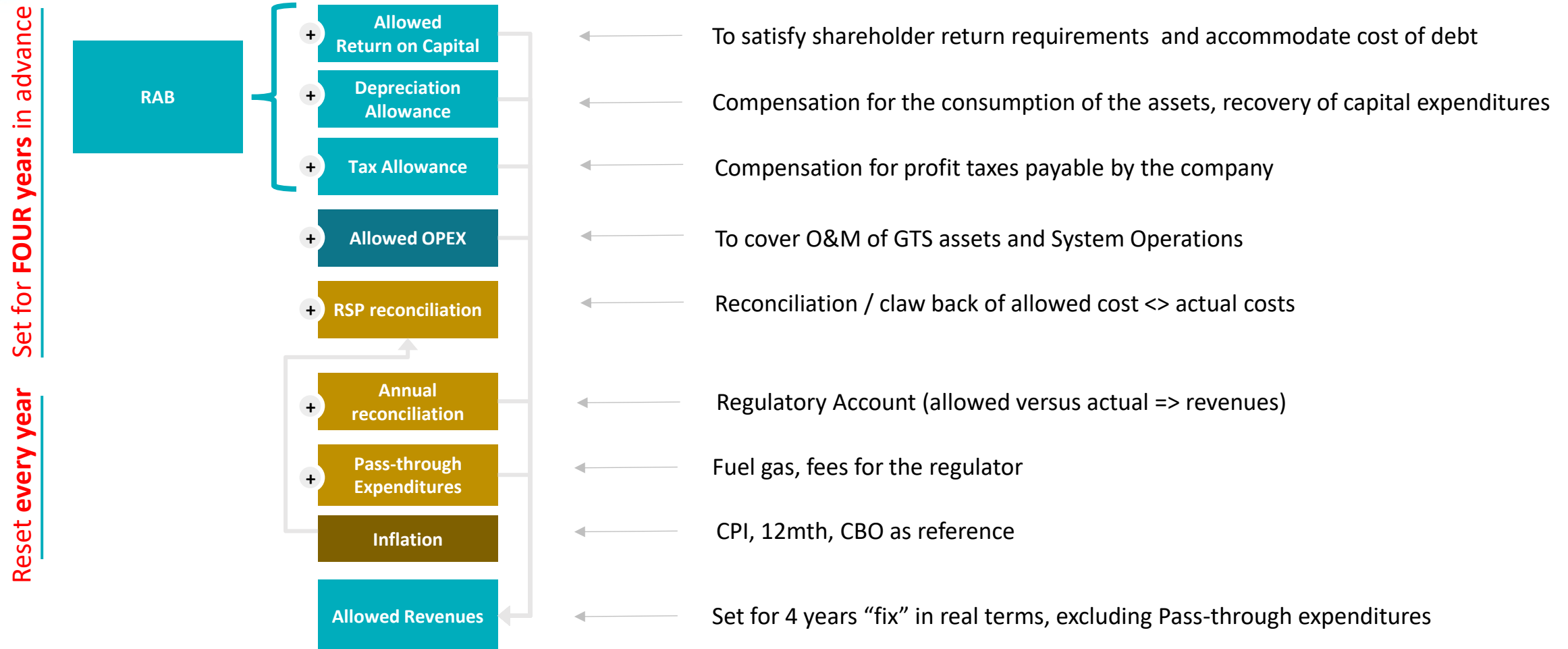
- Through RPI-X regulation
- Efficiency factor of 0.5%
- Amendments of RAB Revenue Rules & RAB Tariff Rules

## ALLOWED RAB RETURN

- Earn return on the RAB and Capital Work in Progress (CWIP)

# RAB Building Blocks

Several building blocks are considered for the computation of the **Allowed Revenues**







# Updates on Transportation of Natural Gas



## OQGN Privatization

- The Authority facilitated the successful privatization of OQGN through an Initial Public Offering (IPO)



## Price Control Review

- New Price Control Review came into affect in January 2024
- 4-year price control period
- Approved nominal vanilla WACC of 7.79%



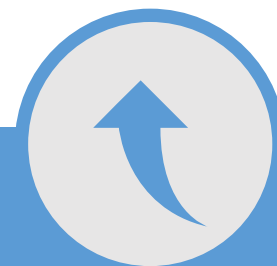
## Natural Gas Transportation Security Standard (GTSS)

- In 2024, the Authority developed the GTSS to ensure safe, secure efficient operation of the gas transportation network



## Uncertain Capex

The Authority included provisions for uncertain and/or unpredictable capital expenditure (capex) in the formula to accommodate capex allowances that were not granted during the price control review.



## Performance Incentive

The Authority introduced performance incentives in the current price control (PC), although they are only being monitored during this period. The performance incentives cover:

- Network utilization
- Customer satisfaction
- Network losses



# Electricity

# Oman Electricity Regulatory Regime Timeline



## 1970 - 2004: Ministry of Housing Housing Electricity & Water

Ministry of Housing Electricity & Water was in charge before the establishment of the regulatory framework.

## Recent Institutional Changes

**2020:** Royal Decree 78 rebranded AER to the Authority for Public Services Services Regulation (APSR), symbolizing a broader regulatory mandate which includes regulate the the activity of natural gas transportation. transportation.

1

2

## Establishment of Regulatory Framework

**2004:** Royal Decree 78 marked the the initiation of the electricity sector sector structure and led to establishing the Authority for Electricity Regulation (AER).

3

## Sector Developments

4

**2022:** Start of the restructuring of the Distribution and Supply companies in the the Main Interconnected System

**2023:** A direct 400 kV interconnect from Oman Oman to UAE boarder with KSA and linking to linking to GCCIA has been evaluated and is in and is in the planning project

**2027:** North – South Interconnector; Phase 1 was successfully completed in Q4 2023, and Phase 2 is scheduled for completion by Q2 2027

# Market Structure

Authority for Public  
Services Regulation

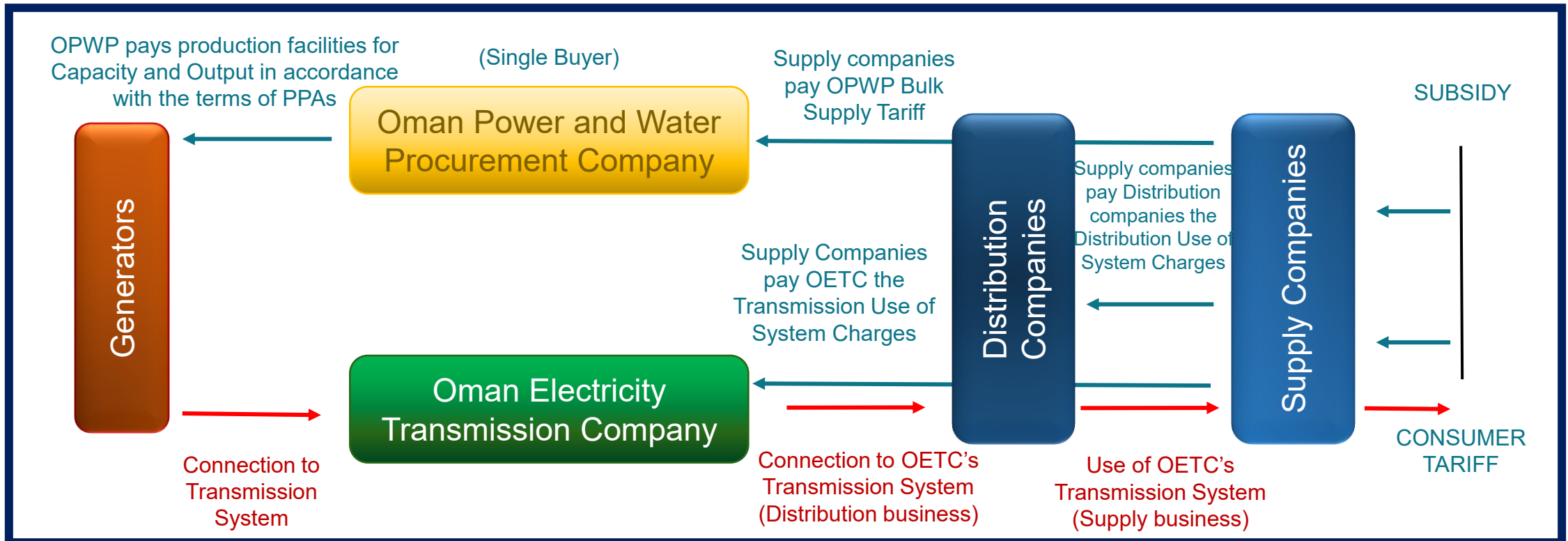
(Regulatory Body)

Nama Holding

(Holding Government shares in  
operating entities)

Ministry of Energy &  
Minerals

(Policy Making Body)





# Electricity Sector Developments

2022

- Start of restructuring of the Distribution and Supply companies.
- Created two entities, excluding Nama DhoFar Services.

2023

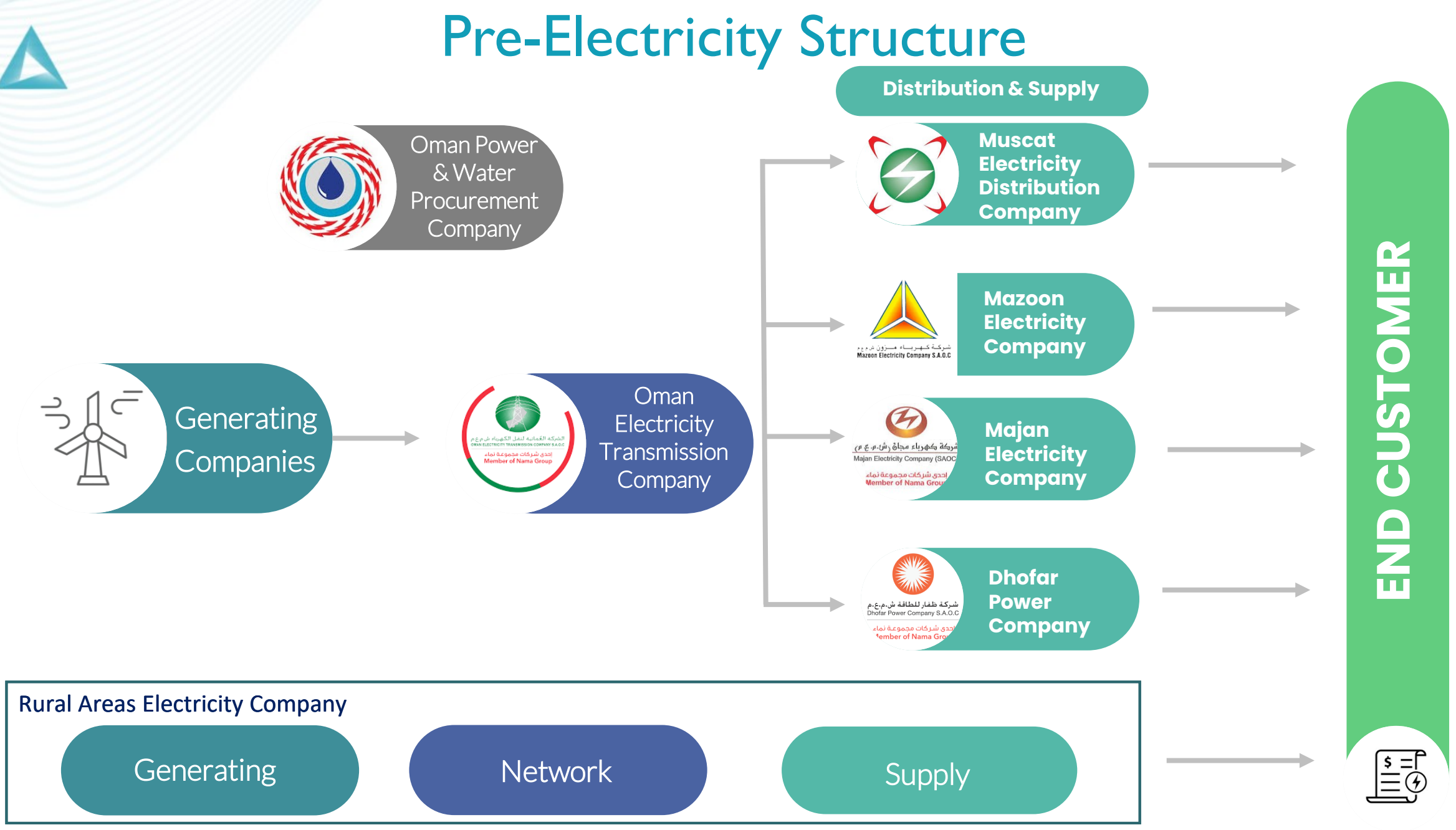
- The restructuring was completed in 2023.
- A new framework was set for the new companies.

## Key Changes:

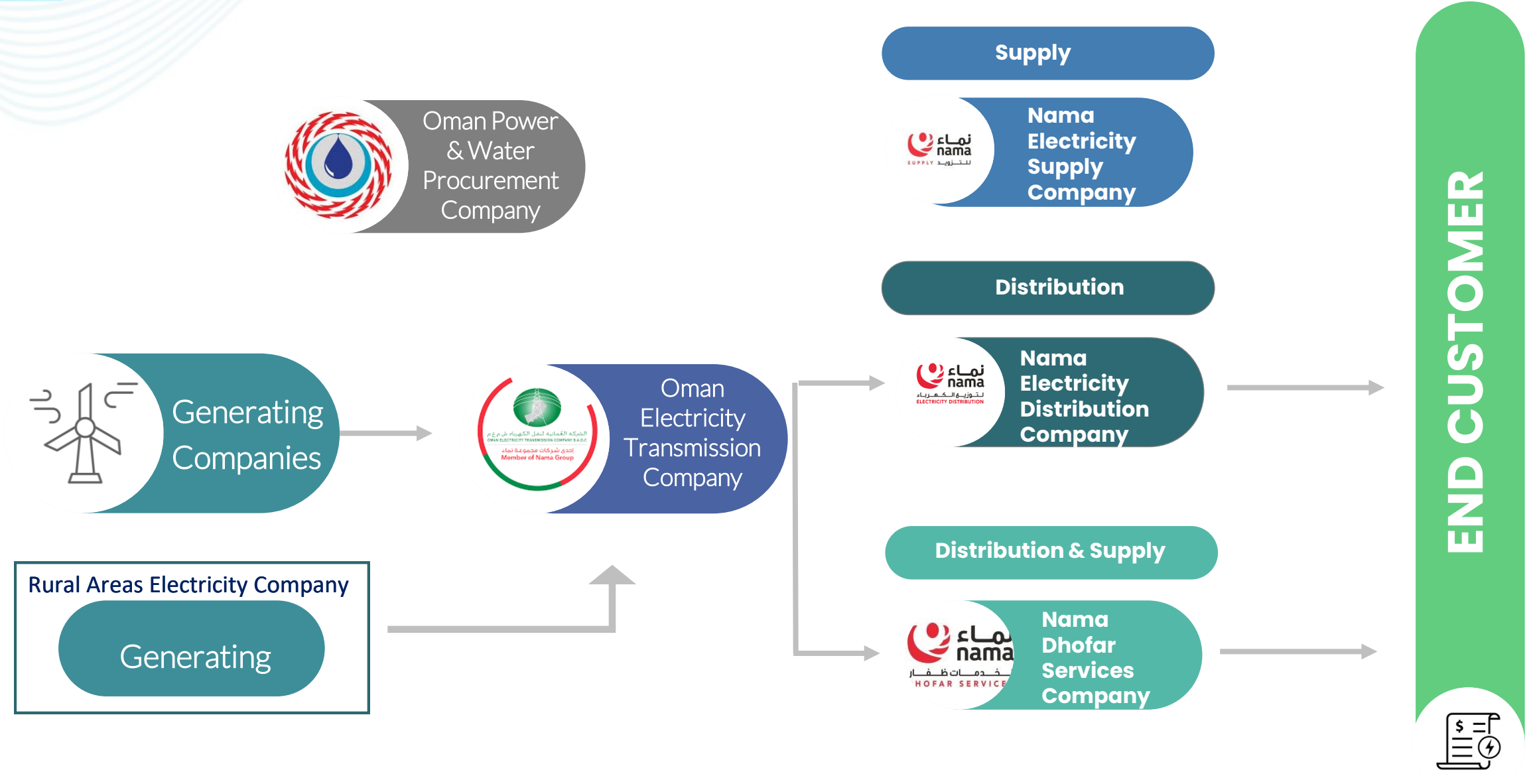
The operational entities within the Main Interconnected System were consolidated from four companies into two:

- Nama Electricity Distribution Company: Focuses on the distribution network and electricity delivery to customers.
- Nama Electricity Supply Company: Handles billing and collection operations

# Pre-Electricity Structure



# Electricity Restructure







# Summary of Restructuring

## The Merger Project of Electricity Distribution and Supply Companies







# Transitioning Towards Renewable Energy and Market Liberalization



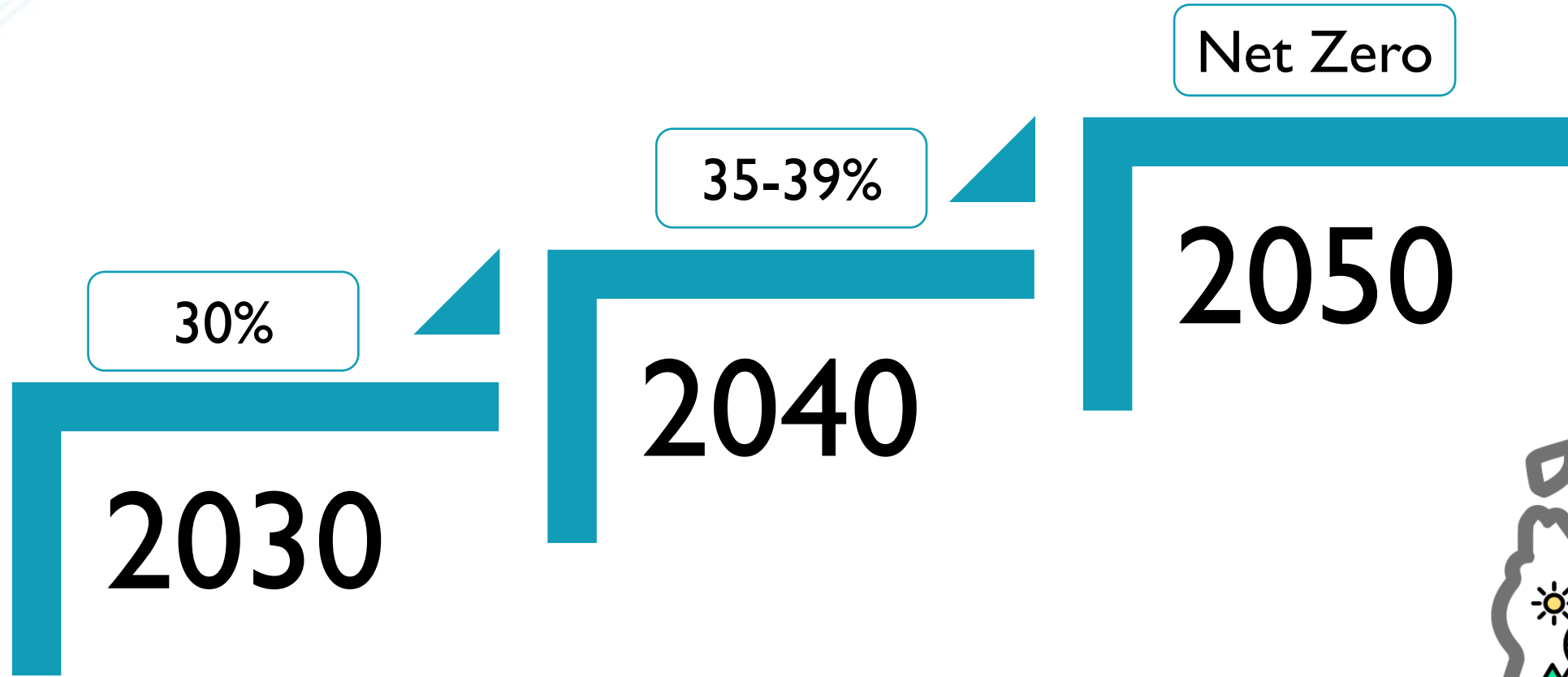
The Sultanate of Oman's Journey Towards Oman Vision  
2040



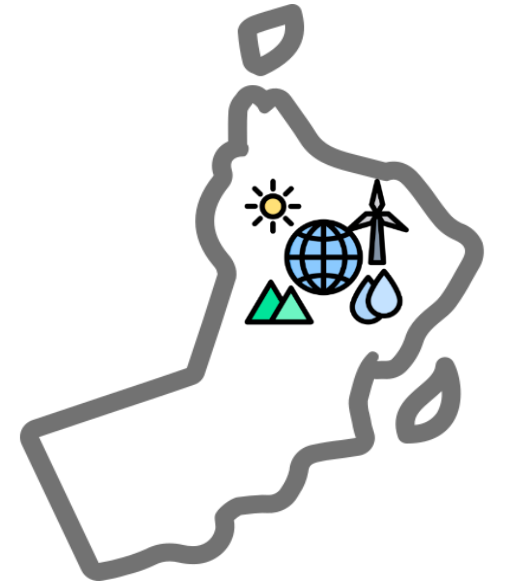
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  - 5.2 Key Aspects of the Policy*
6. Oman Electricity Market ( Spot Market)
7. Market Reform Study

# Renewable Energy Target – Oman Vision 2040

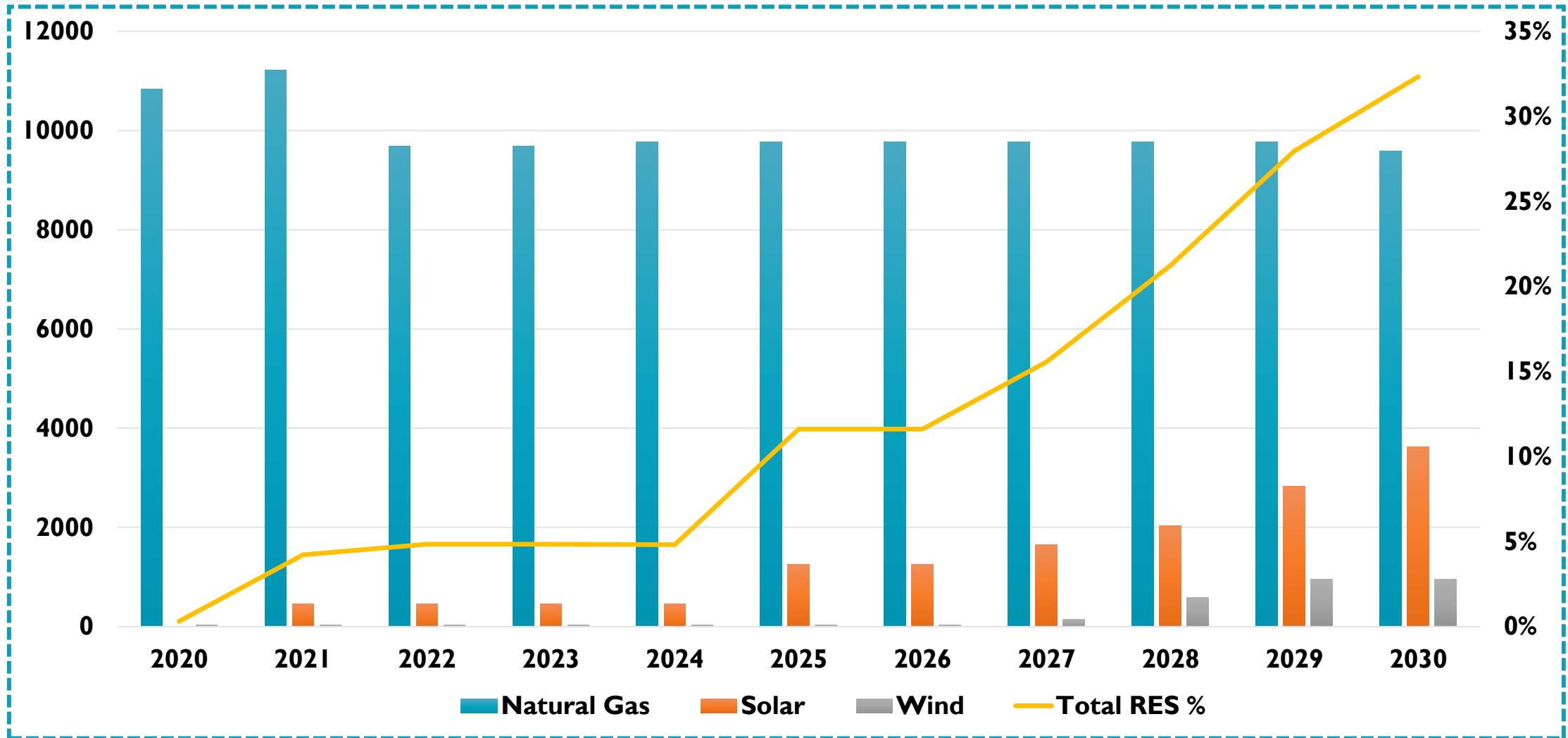


The Actual Contribution of RE in 2025 is around 9%





# Renewable Energy Target – Oman Vision 2040





# Vision 2040 Directions

**De-carbonization  
and Net Zero  
Targets**

Review of  
Generation  
Mix

**Affordability and  
reduction of  
Electricity Prices**

Review of  
System Cost  
Reflectiveness

**Ensuring Security  
of Supply**

Review of  
System Balancing  
Requirements

*Do the Market Structure and Regulations Need a Review?*

# Reform drivers

## REFORM DRIVERS



### **Increase in industrial loads**

Major industrial loads: green hydrogen production & PDO



### **Distribution energy resources**

Distributed Energy Resources (DERs) are becoming increasingly economic



### **Renewable energy development**

The increase development of RE (solar PV and wind generation from PWP and market participants)



### **North-south interconnection**

The Main Interconnected System is being interconnected with the Dhofar Power system

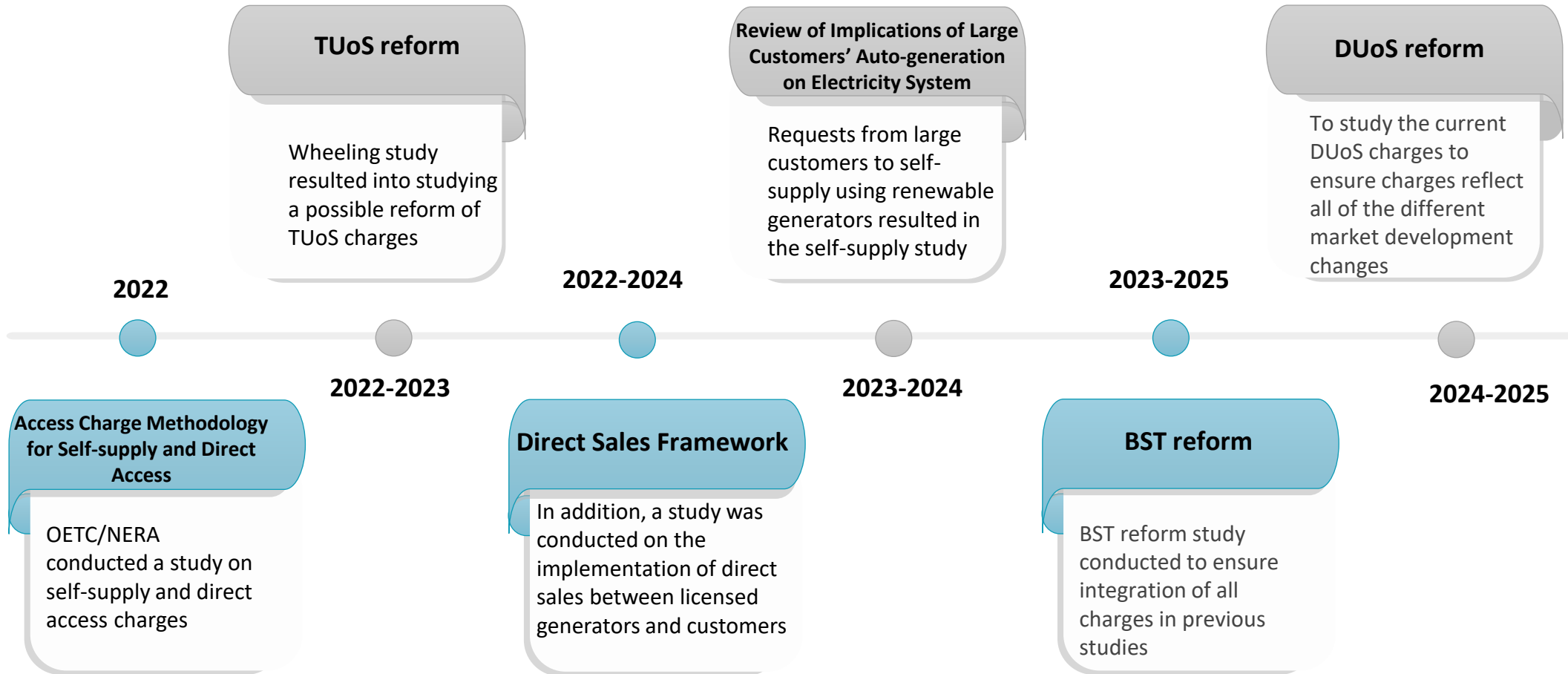


### **Captive generation**

Increase of request for captive generation



# Market Development Studies



Direct Sales Phase 1: Oct 2022

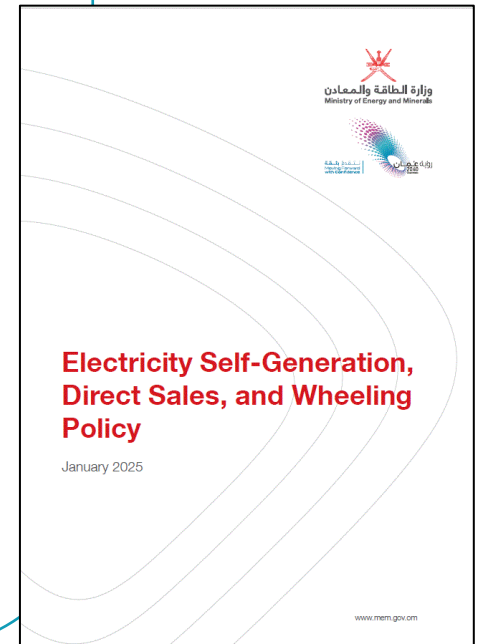


Direct Sales Phase 2: Feb 2024



# Electricity Self-Generation, Direct Sales, and Wheeling Policy

- ❑ In January 2025, Ministry of Energy and Minerals has issued the electricity self-generation, Direct Sales and Wheeling Policy. The Objectives of the policy are the following;
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,.
  3. Enable and encourage investment 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, electricity licensees, and consumers.

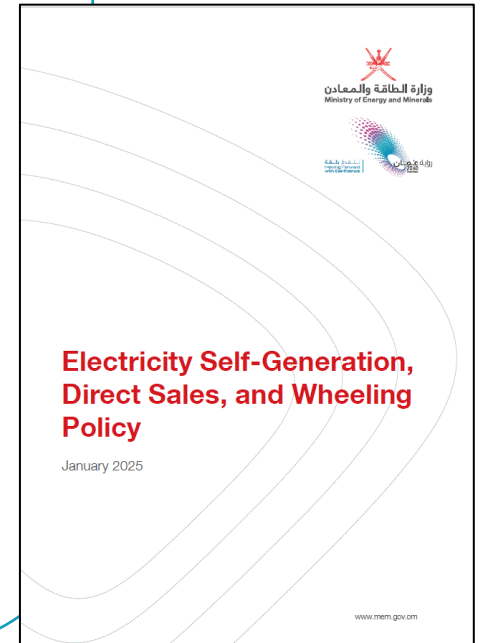




# Potential Consequences

The Policy has highlighted that Expanding the framework for direct sales and self-generation by enabling renewable energy generation projects and allowing electricity wheeling on transmission and distribution networks **without appropriate controls will lead to the following consequences;**

1. Increased electricity costs leading to higher government subsidies;
2. Non fairness of increased tariff to customers who don't use self supply;
3. Increased operational complexities to the system operator;
4. Impact on fixed cost recovery plans for the single power procurer;
5. Increased curtailment of renewable energy production to balance the system

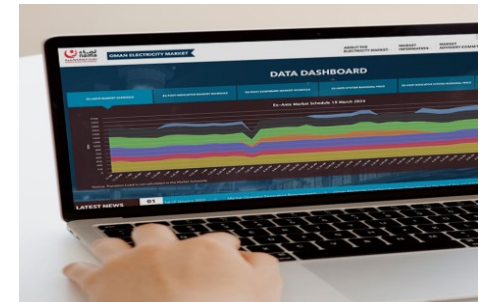


# Key Aspects of the Policy

	Self-supply	Direct Sales	Wheeling
Exemption requirement	Exemption and generation licenses will be issued by the Authority in coordination with MEM	Exemption and generation licenses will be issued by the Authority in coordination with MEM	Exemption and generation licenses will be issued by the Authority in coordination with MEM
Eligible customers	The Authority, in coordination with MEM, PWP,OETC and Discos specify the allowable threshold of the self generation.	The Authority, in coordination with MEM, PWP,OETC and Discos specify the allowable threshold of the Direct Sales.	The Authority, in coordination with MEM, PWP,OETC and Discos specify the allowable threshold of the Direct Sales.
Charges	Should be aligned with all applicable charges (TUoS, BST and DUoS)	Charges are applicable to the grid-connected customers	Should be aligned with all applicable charges (TUoS, BST and DUoS)
Storage	Storage is allowed as part of sub-class of generation based on conditions and requirements determined by the Authority	Storage is allowed as part of sub-class of generation based on conditions and requirements determined by the Authority	Storage is allowed as part of sub-class of generation based on conditions and requirements determined by the Authority
Regulation	Regulation to be issued within 6 months of policy approval	Regulation to be issued within 6 months of policy approval	Regulation to be issued within 6 months of policy approval

# Oman Electricity Market ( Spot Market)

- ❖ Market launch was 1 January 2022.
- ❖ Spot Market was introduced to provide another mechanism for plants with expired Power Purchasing Agreements (PPA) to sell their production, encourage generators to add further capacity and to increase transparency in the price of electricity and provide Additional flexibility to OPWP's electricity procurement
- ❖ The plan has been to have Spot Market operating alongside OPWP's existing Power Purchasing Agreement (PPA) framework.
- ❖ Currently, Market Operator is finalizing the registration of a new entry who will be 1<sup>st</sup> participant settled under the Market.



The Ministry of Energy and Minerals (MEM) [Policy Maker] has requested consultancy services to undertake a comprehensive review of Oman's Electricity Market Design, Structure, and Generation Capacity Planning Process.

The study will be carried out in three key phases:

- **Phase I:** Review of the Current Wholesale Electricity Market Design
  - **Phase II:** Review of the Current Electricity Market Structure
  - **Phase III:** Review of the Current Generation Capacity Planning Process
- 
- The Contract of this Consultancy Services is now at the final Stage of Awarding.





Thank You