



ENERGY REGULATORS  
REGIONAL ASSOCIATION

## **ET Committee**

Presentation of the survey for the 2025 Report  
and next steps

# ET 2025 Report

---

- The ET Committee has chosen in the November 2024 meeting (in Istanbul) this topic for its 2025 Report

## **Energy Transition In Emerging Economies With Coal-fired Electricity Sectors: Financing And Regulation**

- **Description**

This report explores the challenges and opportunities of energy transition in both coal fired electricity dependent and emerging economies, focusing on financing infrastructure projects and regulatory frameworks. It investigates the role of the State in driving this transition, including obligations placed on countries to develop renewable energy sources. By examining financing mechanisms and regulatory strategies, the report aims to provide insights into how governments and regulatory authorities can effectively navigate the transition towards sustainable energy systems while meeting international obligations. Through case studies and analysis, it offers recommendations for policymakers and stakeholders to facilitate a smooth and successful energy transition. Additionally, a survey was executed among the ERRA member countries for their status on fossil fueled generation. The outputs of the data show how the transition is handled in ERRA countries.

- **Deadline: April 2025**

# Questionnaire

1. Does your country generate electricity from coal? Please note that timed reopenings made in the latest energy crisis does not count if not persisting.

- If yes, please specify the planned phase-out year.

2. Does your country have a specific national energy plan with reduction or exit targets for coal in the overall electricity generation mix?(MT Y/N- if Y open txt)

- If yes, please provide details about the reduction or exit targets.

3. How would you rank the importance of the following transition technologies? (Rank from 1 = most important to 5 = least important) (choose rank a-c-d-b-e or give numbers next to the options.)

- Coal gasification
- Co-firing technologies (e.g., biocoal, hydrogen, ammonia)
- Renewable-coal hybrid installations
- Coal-renewable-battery hybrid installations
- Other (please specify): \_\_\_\_\_

4. Does your country provide any of the following subsidies or support mechanisms for coal-related energy? (Select all that apply) (simple clickbox)

- Investment incentives for coal mining
- Government R&D expenditures
- Tax rebates
- Exploration subsidies(e.g new coal mines)
- Rehabilitation aid for coal-fired power plants
- Capacity mechanisms
- Feed-in tariffs for coal-fired generation
- Feed-in premiums for coal-fired generation
- Other (please specify): \_\_\_\_\_

5. Does your country provide any of the following subsidies or support mechanisms for renewable energy? (Select all that apply) (simple clickbox)

- Investment incentives for local renewable contents
- Government R&D expenditures
- Tax rebates
- Exploration subsidies(e.g geothermal)
- Rehabilitation aid for renewable power plants(e.g old hydros)
- Capacity mechanisms

6. What percentage of your total electricity generation comes from coal for the previous 5 years (combining all types of coal)? (open 5 cells for data input only percentage writing allowed)

- Please provide the yearly percentage for years 2019 to 2024.

7. What percentage of your total electricity generation comes from renewable for the previous 5 years (combining all types of renewables )? (open 5 cells for data input only percentage writing allowed)

- Please provide the percentage for 2019 to 2024.

8. What percentage of your total energy generation comes from renewable (combining all types of renewables )? (open 1 cells for data input only percentage writing allowed)

- Please provide the percentage for 2024.

9. From your country perspective what is the utmost key challenge with the energy transition in emerging economies with coal-fired power? (multiple choice clickbox)

- Economic Dependency
- Social Consideration
- Financial Constraints
- Regulatory Gaps.
- Energy Security
- Other (.....)

10. What is the Financing Mechanisms that is followed by your country to promote the energy transition? (multiple choice clickbox)

- International Climate Funds
- Public and private partnership Finance
- Debt Swaps
- Carbon Markets
- Others (.....)

11. What are the main challenges in accessing financing for energy transition projects? (multiple choice clickbox)

- Limited public funds
- High cost of renewable energy projects
- Insufficient private sector participation
- Regulatory or policy uncertainty
- Lack of technical expertise
- Other (please specify): \_\_\_\_\_

# Questionnaire

---

12. From your country perspective what is the implemented Regulatory approaches in your country towards energy transition? (multiple choice [clickbox](#))

- Carbon Pricing
  - Subsidy Reforms
  - Mandatory Renewable Targets
- 

- Retiring coal plants early
- Others (please specify)

13. What regulatory challenges has your country faced in the energy transition if any? (multiple choice [clickbox](#))

- Resistance from industry stakeholders
- Inconsistent policies
- Lack of enforcement capacity
- Limited political support
- Other (please specify): \_\_\_\_\_

14. What measures has your country implemented to support communities and workers impacted by the transition away from coal? (multiple choice [clickbox](#))

- Job retraining programs
- Economic diversification in coal-reliant regions
- Social safety nets (e.g., unemployment benefits)
- Other (please specify): \_\_\_\_\_

15. What are the main social challenges faced in the energy transition? (multiple choice [clickbox](#))

- Resistance from affected communities
- Lack of alternative employment opportunities
- Rising energy costs for consumers
- Other (please specify):

16. Does your country have a system for tracking progress in the energy transition? (If yes open textbox)

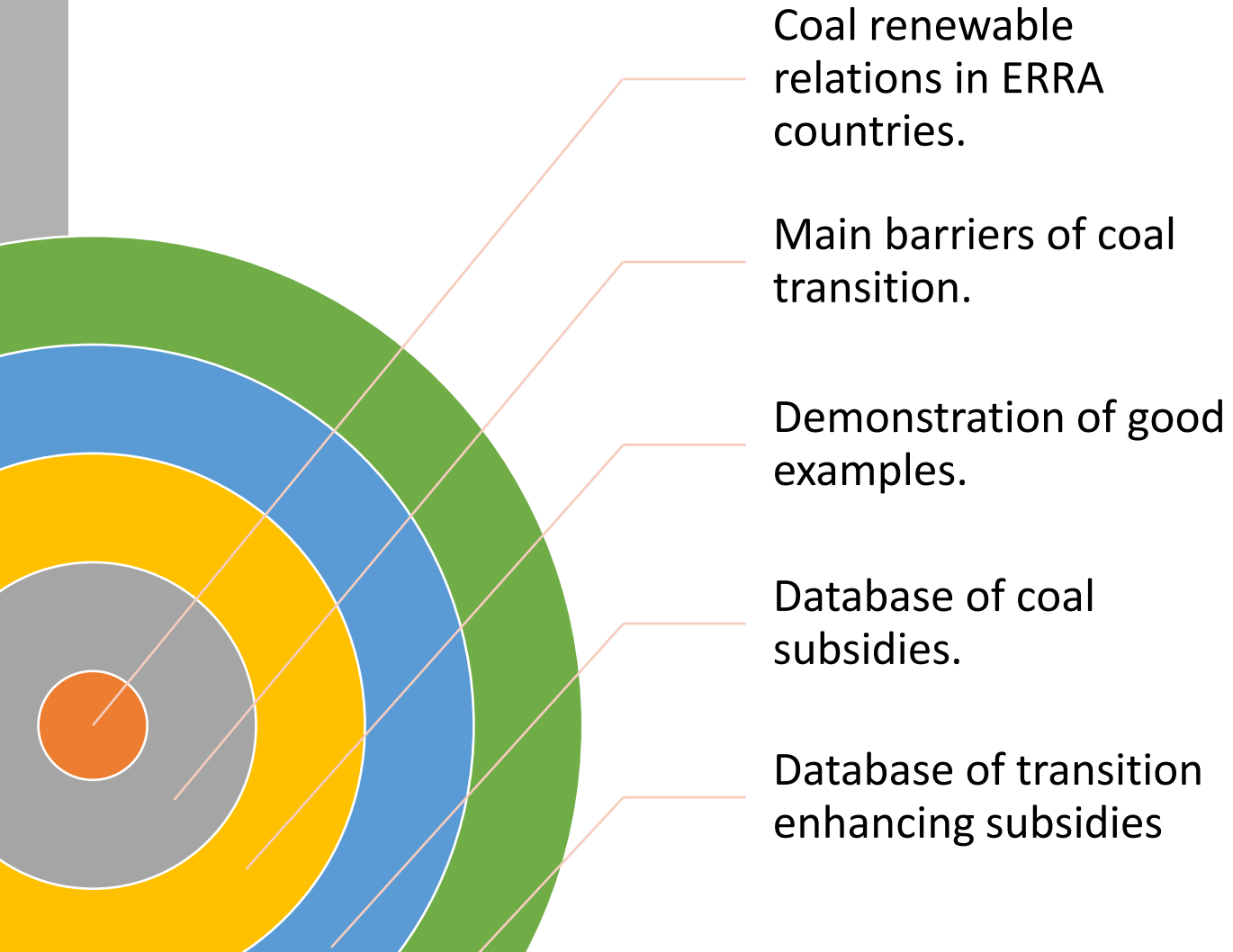
- Yes (please describe):
- No

17. What key performance indicators (KPIs) are used to measure progress on energy transition? (multiple choice [clickbox](#))

- Reduction in coal-based electricity generation (%)
- Increase in renewable energy capacity (MW or %)
- Reduction in greenhouse gas emissions (tonnes CO2e)
- Other (please specify): \_\_\_\_\_

# Questionnaire: Focus areas

---



# Questionnaire structure grading

---

- **GPT-4o: Final Score: 8.5/10**

The survey is well-structured and covers all key aspects of coal transition.

Minor clarity issues should be addressed for better interpretation.

A few additional questions on gas, fossil fuels, and energy efficiency could provide a more complete picture.

- **DeepSeekR1: Grade: B+ (85/100)**

Strengths:

**Comprehensive Coverage:** The questionnaire thoroughly addresses critical aspects of energy transition (coal phase-out, renewables, financing, regulatory challenges, etc.), making it highly relevant to its purpose.

**Balanced Question Types:** Effective mix of closed-ended, multiple-choice, ranking, and open-ended questions.

**Strong Relevance:** All questions align with the research objectives, avoiding unnecessary tangents.

**Ethical Neutrality:** No overtly biased or leading questions.

Clarity Issues:

Question 1: Confusing phrasing ("timed reopenings... not persisting").

Question 3: Ranking scale (1 = most important, 5 = least) is counterintuitive. Reverse the scale for better clarity.

Structural Flow:

Grouping: Questions 6–8 (electricity generation percentages) and regulatory questions (12–13) should be grouped together.

# How to proceed (next steps)



# Possible structure of the final report *(subject to change)*

---

## **Executive Summary**

### **Introduction**

#### **1. Current State of Energy Dependency and Infrastructure Needs**

- 1.1 The turmoil on energy dependency: Overview of fossil fuel dependency in selected economies
- 1.2 Energy infrastructure and grid resilience requirements
- 1.3 Key drivers for renewable energy adoption and infrastructure development

#### **2. Challenges and Opportunities in Financing Energy Transition**

- 2.1 Analysis of financing challenges in emerging and fossil fuel-dependent economies
- 2.2 Available financial mechanisms: domestic vs. international funding, public-private partnerships

#### **3. Case studies of regulatory frameworks and Policy Approaches in Energy Transition**

- 3.1 Government obligations and commitments to international goals
- 3.2 Role of state-owned enterprises and public institutions
- 3.3 Balancing economic growth, energy security, and sustainability
- 3.4 Key lessons and insights from successful and challenging transitions

#### **4. Recommendations for Financing and Regulatory Reforms**

- 4.1 Strategic financing approaches for governments and private investors
- 4.2 Key regulatory reforms for creating an enabling environment for renewable energy
- 4.3 Suggested pathways for harmonizing regulatory standards across borders

#### **5. ERRA Survey among members.**

#### **6. Conclusion**





ENERGY REGULATORS  
REGIONAL ASSOCIATION

---

**THANK YOU FOR  
YOUR ATTENTION!**

---