Cost of Capital Observatory Survey

Introduction

We are conducting a survey to understand how energy industry stakeholders estimate the cost of capital for renewable energy (power) and fossil-fuel projects in emerging market and developing economies. This aims to enhance data visibility and boost investor confidence by improving the accuracy of financing costs in the energy sector.

Please note that your answers will be anonymized, and no respondents will be identified. Your email address will be used to collect your responses and is protected consistent with the IEA Data Protection Rules. The online survey tool (Alchemer) will not store personal information. Your email address will only be used if we need to contact you for follow-up questions. Your responses will be disassociated from your organization's name and anonymized.

The survey has 16 questions and will approximately take 25 minutes to fill out.

We would be grateful if you could take the time to complete this survey. We would be happy to give you a first look at the aggregated results once we've received and analysed the responses.

Furthermore, you can explore how the data is presented and utilized by visiting the Cost of Capital Observatory dashboard: https://www.iea.org/reports/cost-of-capital-observatory/dashboard-2.

The survey

In this survey, we are considering five project types, and would like your responses on those projects that apply to you. *Similar sized project can be included* each with a 20-year tenure (8-10 years for battery).

- Project 1: 50 MW *or above* solar PV power plant
- Project 2: 250 MW gas-fired power plant
- Project 3: 150 MW hydroelectric power plant
- Project 4: 100 MW *or above* offshore wind plant
- Project 5: 40 MW battery (3 hours/ 120 MWh)

Please base your answers on the countries listed below in which these hypothetical projects are based. Even if you are not currently investing in these countries, we encourage you to make estimates based on your perception of the market.

- Brazil
- Colombia

- Egypt
- India
- Indonesia
- Kenya
- Malaysia
- Mexico
- Morocco
- Philippines
- Senegal
- Singapore
- South Africa
- Thailand
- Viet Nam
- ……. (Please indicate country name if you have information from other emerging or developing economies)

Questions

1. Please indicate the name of company/organization?

2. Please indicate which option best describes your organization?

- Project Developer
- Institutional Investor
- Private Equity/Infrastructure Fund Managers
- Development Financial Institution
- Utility
- Commercial bank
- Advisor/analyst/consultant
- Other (please state):

3. What is total market value of your investments (assets owned/managed by your organization) as of 31 December 2024?
   ……..

4. How many projects has your organization developed/financed? (Assets Under Management as of 31 December 2024).

	Number of projects
Solar PV projects	
Gas Fired projects	
Hydroelectric projects	
Offshore wind projects	
Utility-scale battery projects	

5. Based on the list below, please select a contractual structure for each project and input your choices into the table:

- Merchant (i.e. selling generation on wholesale markets)
- PPA (Power Purchase Agreement) with a utility/governmental counter party
- PPA with a private corporation
- FiT (Feed-in-Tariff)
- CfD (Contract for Difference)
- Other

If you selected "Other", please specify:

Project	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
50 MW or above Solar PV Project						
250 MW Gas Fired Project						
100 MW or above Offshore Wind Project						
40 MW battery (3 hours / 120 MWh)						

6. Please provide an estimate of the overall (weighted average) cost of capital (in %) you would apply to each project (provide estimates for each country). If you are not comfortable providing a point estimate, then please indicate a range

	Year(s) of Investment Decision					
50 MW or above Solar PV	2019	2021	2022	2023	2024	Other:
Brazil						
India						
Indonesia						
South Africa						
Mexico						
Other (…)						

	Year(s) of Investment Decision					
250 MW Gas Fired	2019	2021	2022	2023	2024	Other:
Brazil						
India						
Indonesia						
South Africa						
Mexico						
Other (…)						

	Year(s) of Investment Decision					
100 MW or above Offshore Wind	2019	2021	2022	2023	2024	Other:
Brazil						
India						
Indonesia						
South Africa						
Mexico						
Other (…)						

	Year(s) of Investment Decision					
150 MW hydropower project	2019	2021	2022	2023	2024	Other:
Brazil						
India						
Indonesia						
South Africa						
Mexico						
Other (…)						

	Year(s) of Investment Decision					
40 MW battery (3 hours/ 120 MWh)	2019	2021	2022	2023	2024	Other:
Brazil						
India						
Indonesia						
South Africa						
Mexico						
Other (…)						

7. Are your answer(s) to question 6 reported in real or nominal terms?

8. Is your cost of capital in local or foreign currency? In case of both please indicate the share of local currency (both debt and equity). Please enter currency (eg. USD, EUR, INR etc.)?

9. Dos your answer(s) to question 6 incorporate taxes? If yes please specify.

10. If possible, please break down the estimate provided in question 6 into the following components:

50 MW or above Solar PV Project						
Metric	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
Share of debt (i.e. leverage), %						
Minimum Equity IRR, %						
All-in cost of debt, %						
Debt tenor, years						

250 MW Gas Fired Project						
Metric	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
Share of debt (i.e. leverage), %						
Minimum Equity IRR, %						
All-in cost of debt, %						
Debt tenor, years						

100 MW or above Offshore Wind Project						
Metric	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
Share of debt (i.e. leverage), %						
Minimum Equity IRR, %						
All-in cost of debt, %						
Debt tenor, years						

150 MW Hydropower Project						
Metric	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
Share of debt (i.e. leverage), %						
Minimum Equity IRR, %						
All-in cost of debt, %						
Debt tenor, years						

40 MW battery (3 hours/ 120MWh)						
Metric	Brazil	India	Indonesia	South Africa	Mexico	Other (…)
Year						
Share of debt (i.e. leverage), %						
Minimum Equity IRR, %						
All-in cost of debt, %						
Debt tenor, years						

11. For all the debt financing to be raised for each project, what would the maximum tenor be on any given debt instrument?

12. What benchmark rate would you use to estimate the all-in cost of debt?

1. Please see “Main risks associated with renewable energy power projects” from https://www.iea.org/reports/cost-of-capital-observatory/tools-and-analysis

13. Which top 3 risks[1] should be addressed first to achieve the highest reduction in cost of capital?

Select country	Select risk	Rank
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.
Choose an item._____	Choose an item._____	Choose an item.

14. How do you expect capital costs to move in 2025 compared to the year(s) reported in Question 6?
    ☐Decrease between 2-3%
    ☐ Decrease between 1-2%
    ☐ No change
    ☐ Increase between 1-2%
    ☐ Increase between 2-3%

15. Please check this box if you wish to complete the survey with us or participate in a follow-up call (max 1 hour) to discuss these issues further. ☐

16. If you have any additional comments or remarks, please do not hesitate to share them with us below:

    Click or tap here to enter text.