Trends and evolution of the Costs of Capital in RE Financing

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Agenda

1. Weighted Average Cost of Capital

2. Main results: 2019 & over time development

3. Conclusions
Main highlights

Strong decrease of the Costs of Capital (WACC), Cost of Debt, and Cost of Equity

Main drivers of change:
- country risks & new business cases
- monetary policy (interest rates)
- Spill-over effects

Lower Costs of Capital are a positive sign for a further RE development and to reach energy and climate goals
Introduction

Existing data from DiaCore and Re-Frame

Collection of new data AURES II

Validation with experts + Analysis

Data for 2014 & 2016

Dec 2019 – Apr 2020 100 interviews

Feedback from national experts

Some caveats:

• Constant changes of RES market conditions
• Different level of transparency of market actors
• Lack of current, significant projects in some EU markets, made sometimes model estimations necessary
Introduction

What is “Weighted Average Cost of Capital”?

![Diagram showing WACC (Weighted Average Cost of Capital) as a combination of the cost of debt and the cost of equity.](Diagram)
Introduction

Why should we care about it?

Costs of producing electricity are affected by WACC.

Wind power is the cheapest and most cost-effective power source for a low WACC.

Source: Hirth & Steckel (2016)
Results show there is still a gap between Member States
Closer look: WACC Spread

Different business models and market players could be drivers behind the spread.
WACC Development 2014-2019

Dramatic WACC decrease in most countries and the gap is narrowing
Many countries with an average CoD lower than 2%
Strong decrease of the Cost of Debt in all the EU
CoD Development 2014-2019

Correlation between CoD and Interest Rates in the Eurozone €

Spain

2014 2016 2019
9.5% 2.7% 1.9% 1.5%
Spain CoD Spain IR

Greece

2014 2016 2019
10.5% 5.6% 4.7% 3.6%
Greece CoD Greece IR

Wind Onshore
CoD Development 2014-2019

International flow of capital
Cost of Equity 2019

65% of countries with a CoE lower than 10%

Riskier countries = higher CoE
CoE Development 2014-2019

New market players interested in *greening* their portfolios

![Graph showing the cost of equity from 2014 to 2019 for different regions including EU, Spain, and Finland. The graph indicates a decrease in the cost of equity over the years.]
Debt to Equity ratio 2019

Wide gap between countries

Riskier countries = reduced debt leverage capacity
Conclusions

- Dramatic decrease of the WACC, CoD, and CoE

- CoD: huge role of interest rates and international capital spill-overs

- CoE: emergence of new investors with different interests and business models

- Lower Costs of Capital are a positive sign for a further RE development and to reach energy and climate goals
Thank you!
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Correlation between Interest Rates and Cost of Debt
# Methodology

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## Results

- Aggregation and visualization of meta data
- Presentation of results and **feedback from national experts**
- Preparation of deliverables: project presentation & database
WACC Spread 2019
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