

RENEWABLE
ELECTRICITY

Hydro

Geothermal

Water

H₂

H₂

Hydrogen

H₂O

BIO

DAC

Chemical industry

Chemicals

Cosmetics

Aviation
and Shipping

International PtX Hub

ICAO LTAG Stocktaking

Getting a project financed

Christoph Michel

International
PtX Hub

Supported by:
Federal Ministry
for Economic Affairs
and Climate Action

on the basis of a decision
by the German Bundestag

IKI
INTERNATIONAL
CLIMATE INITIATIVE

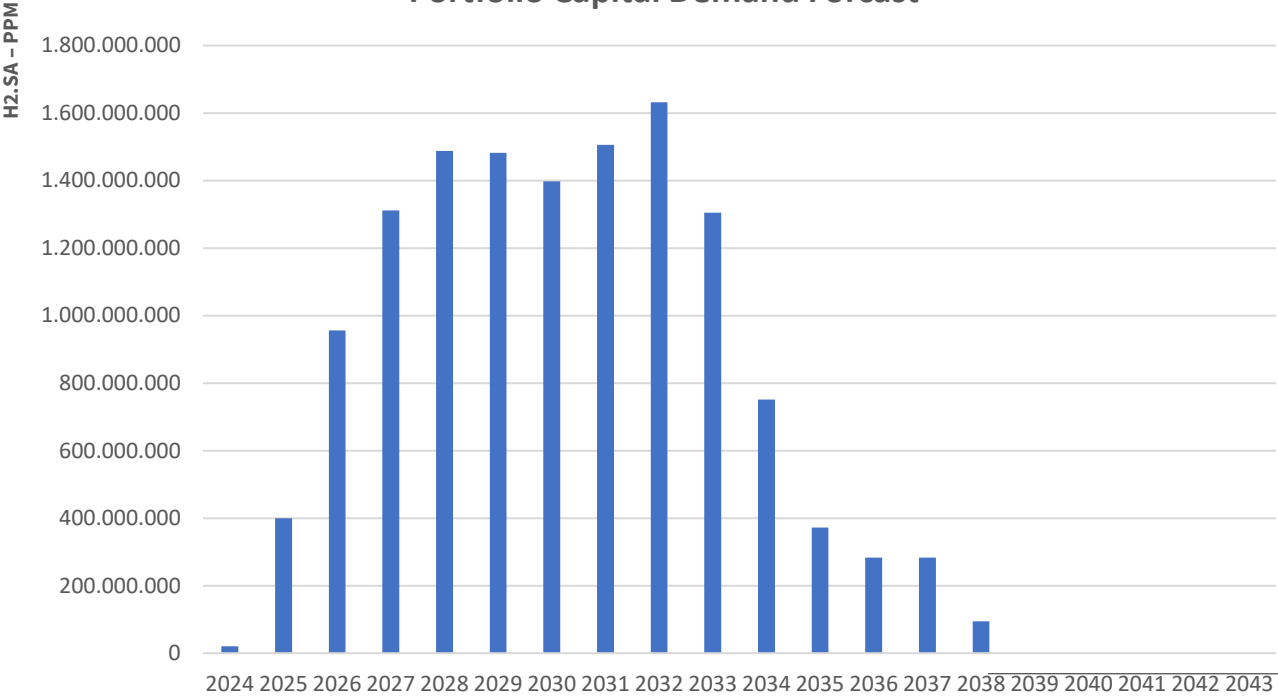
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Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Project Portfolio Modelling (PPM) Measurement

- OECD (2024): 2 trillion USD needed until 2030 to scale up green hydrogen globally
- If we want to manage the money needed, we should measure it in relevant detail

Project Portfolio Modelling (PPM) Time line details

Portfolio Capital Demand Forecast



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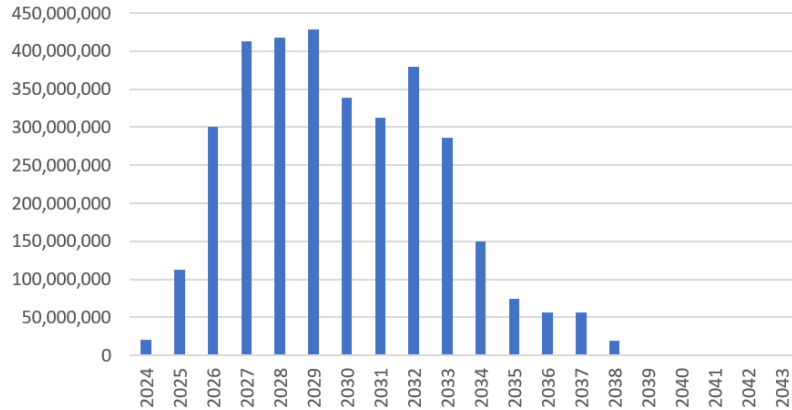
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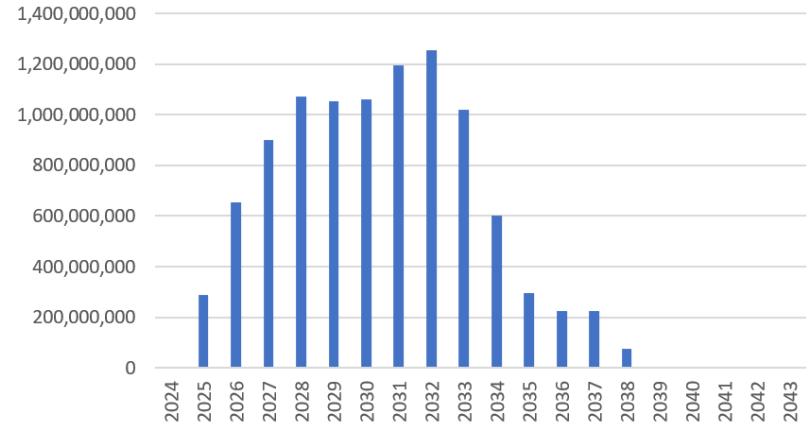
4 Project Portfolio Modelling (PPM)

Time line details DFI Lens vs Institutional Investors Lens

DFI Overall Capital Demand Forecast



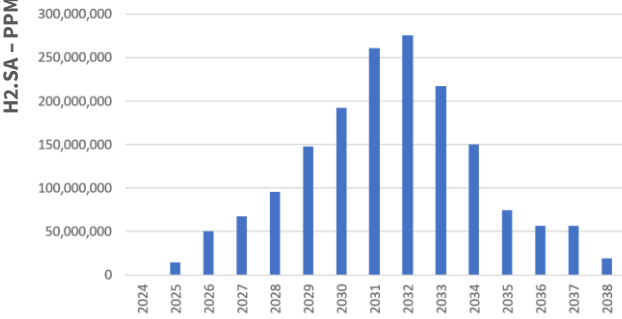
Private Overall Capital Demand Forecast



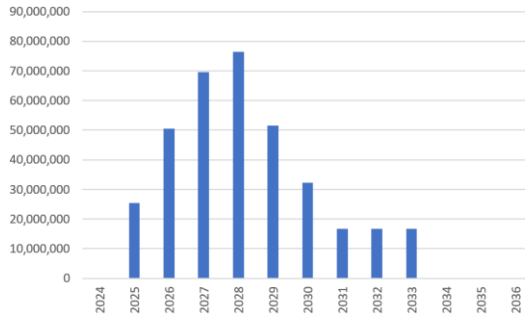
Project Portfolio Modelling (PPM)

Time line details DFI Lens drill down

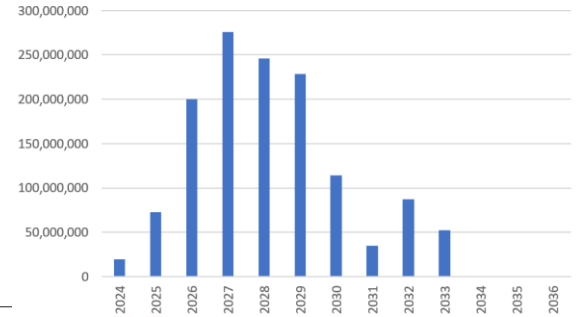
DFI Concesstional Loans Forecast



DFI Equity Demand Forecast



DFI Grands Demand Forecast

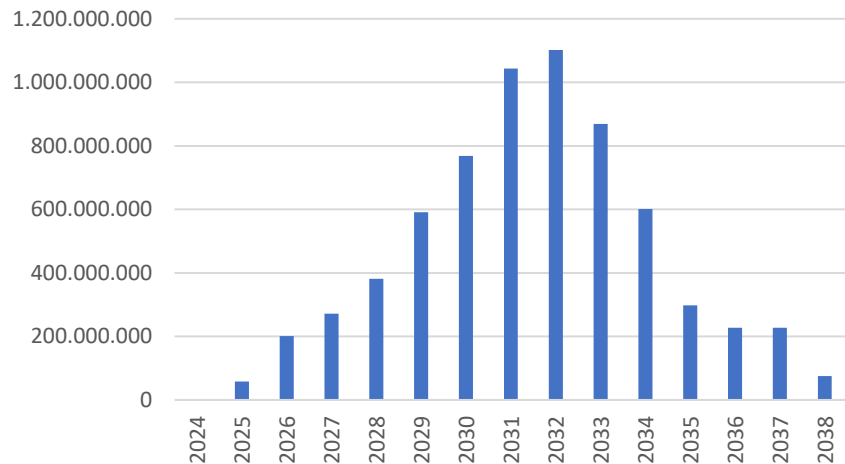


on the basis of a decision by the German Bundestag

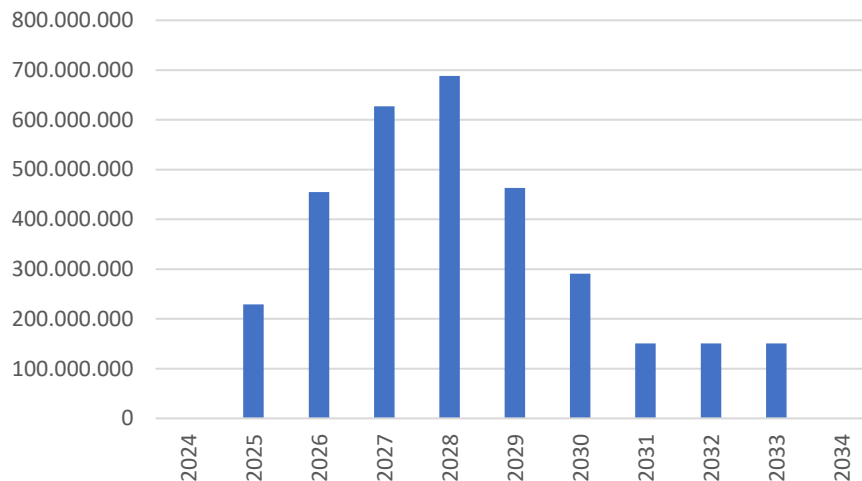
Project Portfolio Modelling (PPM)

Time line details Institutional Investors Lens drill down

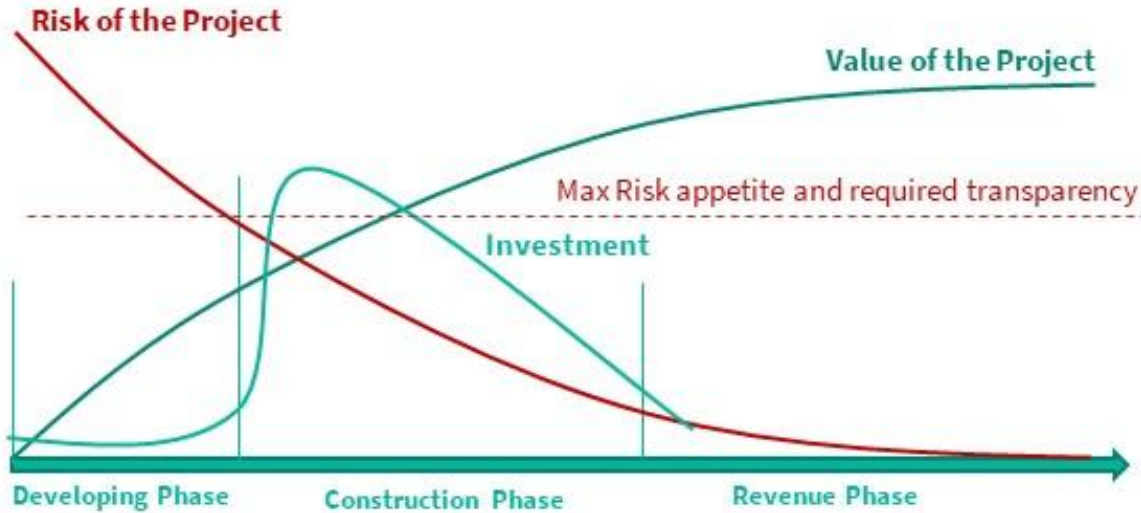
Institutional Loans Demand Forecast



Private Equity Demand Forecast

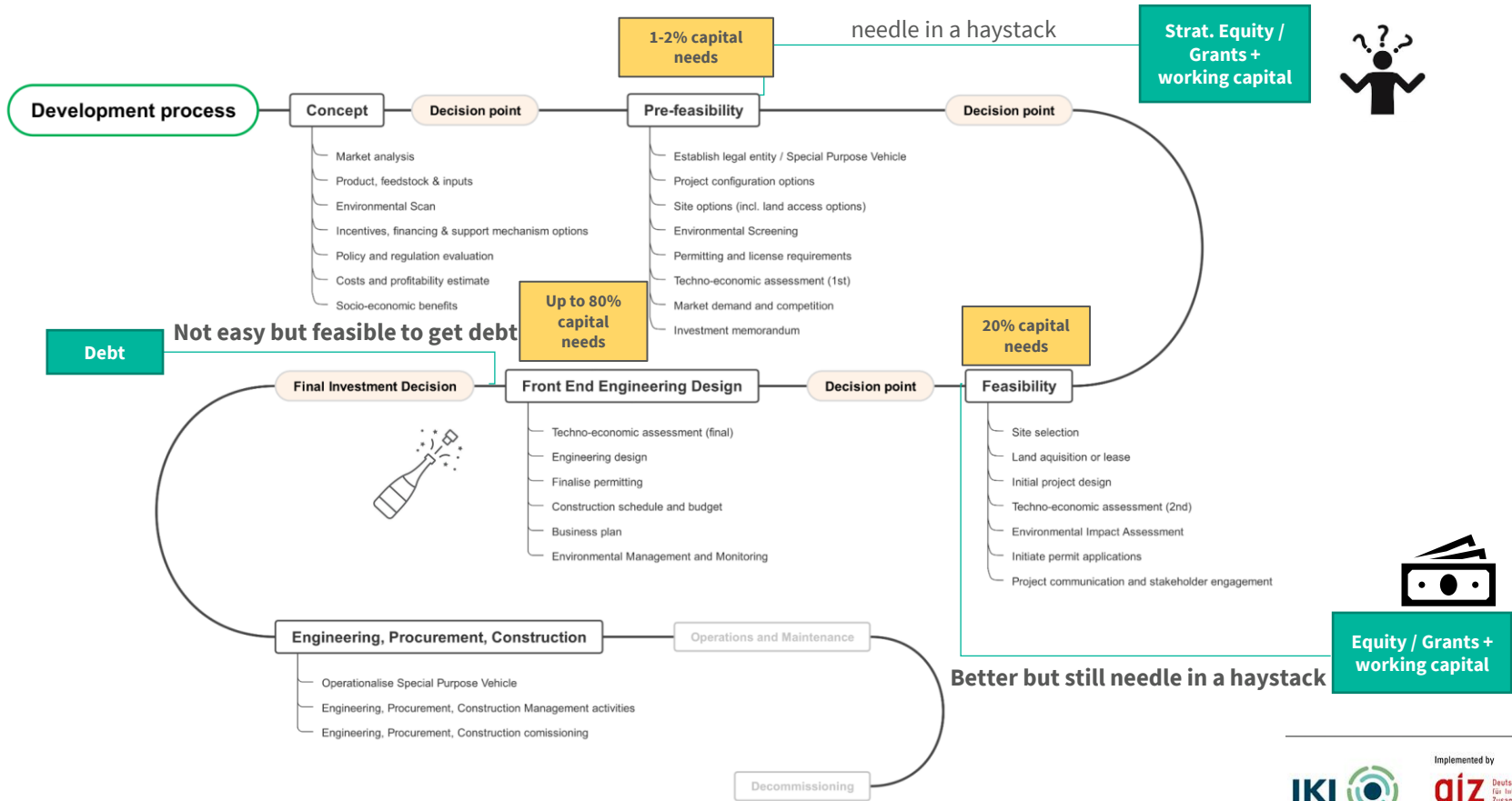


Money is out there



Does the money come with the right risk appetite ?

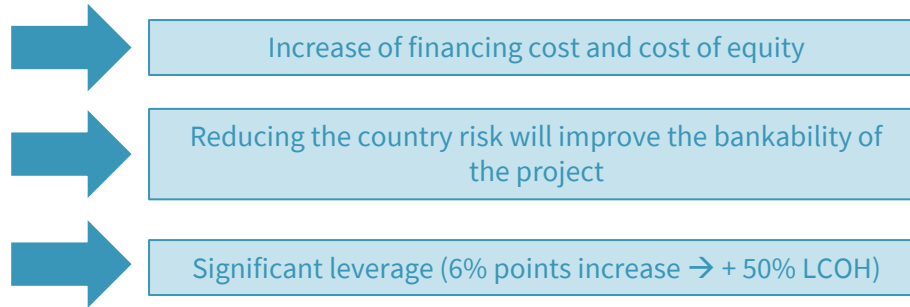
8 Money needs in project development



Cost of Capital focus developing countries

Country	Rating (S&P, 08/23)	Credit Spread Gov vs Germany in bp*
Kenya	B-	1398*
Nigeria	B-	1180*
South Africa	BB-	772*
Brazil	BB-	870*
India	BBB-	457*

Rating S&P and CDS as of August 2023



*: the numbers are changed daily, due to the daily trade of the bonds

Development Banks

Diverse landscape and focus

Many but small pockets of money available

Medium risk appetite

Strong collaboration and aggregation needed

Focus on de-risking e. g. feasibility risk, equity, working capital

Innovative financial instruments with efficient use of guarantees helpful

Institutional Investors

SAF projects are in competition with other green and non green projects

Globally the number of institutional investors having track record in SAF project finance is very limited (HEFA is an exception)

In depth understanding of the inherent risks of technology is essential to value the credit risk

Capital relief for SAF projects could be accelerator

Experience from SAF Project support in developing countries (funding)

Applying an ORCHESTRATING Methodology

Ongoing formulating the story line and business case for the project along the project development state

Financial modelling, scenario analysis, iteration and fine tuning of tech. pathway

Align Road Map to results from scenario analysis

Phase in of financiers: Inform and educate at each financing point with convincing story line. ... etc.

ORCHESTRATING methodology is currently under development and will be rolled out to accelerate SAF implementation

Thank You



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