



From ambition to bankability: Unlocking final investment decision for green hydrogen in Egypt and Morocco

*A mapping of unresolved risks, financing sequencing
and coordination challenges*

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Disclaimer

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1. Executive Summary

Egypt and Morocco have emerged as two of the most prominent potential hubs for large-scale green hydrogen and green ammonia production in the Mediterranean. Both countries have adopted national hydrogen strategies, introduced incentive frameworks, and attracted strong interest from international developers and investors. Project pipelines have expanded rapidly in recent years, reflecting the strategic opportunity to combine abundant renewable energy resources with proximity to European demand centres. Despite this momentum, no project in either country have yet progressed to final investment decision (FID). This report examines why. Rather than focusing on individual projects, it analyses how financing, risk allocation, and institutional coordination interact across the project lifecycle, and how these dynamics influence the ability of projects to reach bankability.

The analysis is based on stakeholder interviews with developers, development finance institutions, commercial banks, public institutions, and other actors involved in green hydrogen development in Egypt and Morocco. These interviews inform three analytical visuals that structure the report: a risk accumulation and bankability bottleneck schematic, a project-cycle financing stack diagram, and a stakeholder influence map.

Across interviews, a consistent picture emerges:

- Offtake and revenue certainty remain the dominant barriers to progress towards FID.
- Cost of capital is often not yet meaningfully testable, rather than demonstrably prohibitive.
- Financing instruments exist, but are generally deployed once projects approach bankability, not at the earlier stage where developers face the greatest exposure.
- Developers face a significant gap in support for costly pre-FID studies, structuring work, and risk preparation.
- Infrastructure matters, but usually as an amplifying constraint rather than the primary reason projects do not progress.
- Many stakeholders do not perceive coordination itself as the main problem, but interview evidence still points to misalignment in timing, risk allocation, and first-mover expectations.

In both countries, the interviews consistently indicate that projects are not primarily constrained by a lack of capital, as financial institutions express strong interest in financing projects once they reach bankability. Instead, the central constraint lies earlier in the project lifecycle, where developers must secure credible revenue pathways before financing can be mobilised at scale. Indeed, although concessional finance, guarantees and blended finance mechanisms can reduce financing costs once projects approach bankability, they rarely address the earlier phase where developers must finance costly feasibility studies, project structuring, and risk preparation without certainty that projects will proceed to FID. Hence, financing is available, but it tends to enter too late as no actor is willing or mandated to take the first risk.

In practice, this means that the absence of sufficiently firm offtake commitments and demand visibility remains the single most important barrier to reaching FID. Without credible long-term demand signals, lenders cannot assess revenue stability, and project finance structures cannot be assembled. In this sense, cost of capital is often not yet meaningfully testable, because projects have not progressed far enough for financing terms to become the decisive constraint.

This challenge is particularly evident in export-oriented projects, which depend heavily on external demand frameworks. Many projects in both countries target European markets for green hydrogen derivatives such as ammonia, e-fuels, or green steel inputs. As a result, revenue certainty depends not only on domestic policy frameworks, but also on evolving demand-side instruments in importing markets, including carbon pricing, product mandates, and subsidy mechanisms. Until these signals become sufficiently clear and stable, developers face difficulty translating technical feasibility into bankable business cases.

Several stakeholders, notably MDBs, also emphasised that concessional finance is inherently limited in scale and therefore unlikely to be most effective if deployed during the earliest stages of project development. Early-stage support is still needed, but this is more likely to take the form of grants, technical assistance, and project preparation funding than large-scale concessional finance. As noted by multiple DFIs, concessional resources are typically more impactful when used to reduce the cost of capital once projects reach a sufficiently mature and bankable stage. At earlier stages, where project viability and revenue structures remain uncertain, concessional instruments are difficult to deploy effectively and are often constrained by the need for development finance institutions to allocate limited resources within annual financing commitments. As a result, the transition between project development and financial close remains particularly fragile, with developers facing significant exposure during this phase.

Infrastructure also emerges as an important factor, although interview evidence suggests that it is not the primary cause of delays. Green hydrogen projects require large-scale renewable generation, transmission capacity, desalination, storage, and export infrastructure. Where responsibility for these assets remains unclear, or where their timing is uncertain relative to project development, financing risks increase. However, stakeholders generally emphasise that infrastructure challenges become decisive only once projects approach the point where demand and revenue certainty are sufficiently anchored.

The analysis reveals meaningful differences between the two case-study countries. In Morocco, most stakeholders consider it premature to conclude that projects are stalled, as they are broadly progressing through the structured process established under the Moroccan Hydrogen Offer. The country's strategy has been to develop projects through a selective pipeline managed by the Moroccan Agency for Sustainable Energy (MASEN), with the objective of ensuring that only credible investors advance to detailed project development. For export-oriented projects, progress will however ultimately depend on the evolution of external markets. Noteworthy, OCP's green ammonia project, by looking to decarbonise domestic fertiliser production, presents another model that aims to reach bankability through integrated industrial demand. It illustrates how vertically integrated demand can reduce revenue uncertainty relative to export-oriented models.

In Egypt, interview evidence more frequently points to projects slowing between development and FID. While the country has signed a large number of memoranda of understanding (MoUs) with developers and has actively promoted green hydrogen through the Suez Canal Economic Zone, several stakeholders note that most announced projects remain at early feasibility stages. The main reasons cited include difficulties securing offtake agreements, uncertainty around transmission infrastructure and wheeling arrangements, and the challenge of financing large-scale infrastructure in parallel with project development. Projects linked to existing industrial facilities, supported by strong public convening, or off-grid appear more likely to progress.

Taken together, the findings suggest that the principal barrier to scaling green hydrogen investment in Egypt and Morocco is not the absence of capital or institutional engagement, but the difficulty of converting early-stage projects into bankable investments. This conversion requires clearer demand signals, more effective sequencing of financial instruments across the project lifecycle, and earlier support for project preparation. The three analytical visuals presented in this report illustrate how these factors interact. The cost-of-capital bottleneck highlights how unresolved risks in demand, infrastructure, and project structuring ultimately translate into higher financing costs. The project-cycle visual shows where financing gaps emerge as projects move from early development to financial close. The stakeholder influence map identifies which actors have the greatest influence over bankability outcomes, distinguishing between formal authority and effective leverage over key project risks.

These insights therefore demonstrate that improving financing coordination should not focus solely on mobilising additional capital, but also on ensuring that existing financial instruments, institutions, and demand-side policies are aligned with the stages of project development where they can have the greatest impact. Hence, anchoring revenue through demand-side instruments and early offtake structures, and establishing project-level financing and risk-sharing mechanisms could reduce overall risk and help green hydrogen projects reach bankability. Developing a shared infrastructure delivery model and aligning regulatory frameworks and international demand signals would also reduce uncertainty and support projects in progressing towards FID.

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2. Introduction: From cost-of-capital analysis to country-level application

Recent analytical work by the OECD, the World Bank's Hydrogen for Development Partnership (H4D), and associated partners has established cost of capital as a critical constraint to the competitiveness and scalability of green hydrogen projects in emerging and developing economies (Lee & Saygin, 2023; World Bank, 2024). These analyses show that in addition to high technology costs, elevated weighted average cost of capital (WACC) driven by actual and perceived risks is an important factor preventing projects from reaching bankability and financial close.

The OECD and World Bank survey and case-study evidence consistently identifies a narrow set of risk drivers that disproportionately raise financing costs. These include uncertain market demand, the absence of credible long-term offtakers, price volatility in nascent hydrogen markets, political and regulatory risk, and gaps in enabling and shared infrastructure. Importantly, these risks are interconnected and therefore amplify one another while pushing projects into risk categories that neither commercial lenders nor public financiers are willing or mandated to absorb.

At the same time, emerging project experience demonstrates that when specific risks, particularly revenue and offtake risk, are credibly mitigated, green hydrogen projects can progress towards final investment decision even in higher-risk jurisdictions. Recent OECD analysis highlights the importance of demand-side certainty and contractual structures in reducing financing risk, while transactions supported under mechanisms such as H2Global, including Fertigllobe's green ammonia supply agreement linked to Egypt Green Hydrogen, illustrate how long-term offtake arrangements and price support mechanisms can strengthen bankability. These examples suggest that targeted demand-side instruments, contractual certainty, and clearer allocation of responsibilities can materially reduce perceived risk and unlock financing without eliminating all underlying uncertainties.

This report applies the OECD and H4D analytical framework to project pipelines in Egypt and Morocco and examines why despite having published hydrogen strategies, attracted major developers, and mobilised significant international support, green hydrogen projects in both countries tend to remain in pre-FID phases. Importantly, interview evidence, particularly from Morocco, suggests that for many projects it is still too early to meaningfully test cost of capital, as projects have not advanced far enough for financing terms to be priced. In some cases, stakeholders also noted that access to debt is not currently perceived as prohibitively expensive, including due to local currency dynamics and Morocco's relatively favourable credit rating. This research therefore investigates why cost of capital often cannot yet be tested, and how unresolved risks at earlier stages of the project lifecycle prevent projects from reaching the point where financing conditions become decisive. Anchored around three analytical visuals, the report shows that delayed investment outcomes result from actors waiting for others to move first before committing finance or resolving key risks, and from misalignment in first-mover expectations. Hence, although capital and financing instruments are available, they tend to enter too late in the project development cycle which creates a financing gap pre-FID. This misalignment persists despite active stakeholder engagement as actors with the most formal authority do not necessarily have the most leverage over bankability outcomes.

The availability of capital and financing instruments therefore does not seem to be the primary constraint to projects progressing towards FID. Rather, projects struggle to reach bankability because key risks, particularly related to revenue certainty and early-stage risk allocation, remain unresolved. These findings align closely with OECD and World Bank conclusions and are strongly reinforced by interview insights, where stakeholders consistently identified revenue certainty and demand as the first-order condition for bankability.

3. Overview of the green hydrogen sectors in Egypt and Morocco

Egypt and Morocco are often cited as front-runners for green hydrogen production in North Africa. Both countries' national strategies have attracted significant developer interest and international engagement, although they widely differ in their approaches to advance their green hydrogen sectors.

3.1. Egypt

Green hydrogen development in Egypt is structured around two main dynamics. The first is the government's strategy to position the country as a regional hub for green hydrogen and derivatives, leveraging its renewable energy potential, industrial base, and strategic location along global shipping routes. The second is the emergence of project clusters in key industrial and logistics zones, particularly the Suez Canal Economic Zone (SCZONE), where developers are exploring production of green hydrogen, ammonia, and other derivatives for both export markets and domestic industrial use.

Egypt formalised its hydrogen ambitions through the National Low-Carbon Hydrogen Strategy, published in 2024, alongside the Green Hydrogen Incentive Law, which provides fiscal incentives and regulatory support for hydrogen and derivative projects. These initiatives build on earlier efforts launched around COP27, including the Nexus of Water, Food and Energy (NWFE) platform, which aims to mobilise international finance for large-scale energy transition investments.

The country has attracted significant interest from developers in green hydrogen and derivative projects. Since 2022, more than twenty memoranda of understanding (MoUs) have been signed with companies exploring hydrogen and ammonia production, particularly within the Suez Canal Economic Zone, which the government has positioned as a central hub for hydrogen-related investments. Many of these initiatives involve partnerships between international developers and Egyptian public or private actors, reflecting the government's strategy to anchor projects within industrial clusters linked to export infrastructure. These include initiatives led by developers such as Scatec, ACWA Power, EDF Renewables, and Infinity Power.

Despite strong political support and growing developer interest, most projects remain at early development stages. While feasibility studies, permitting processes, and early project structuring are ongoing, only a small number of initiatives have indeed progressed meaningfully towards final investment decision, which remains contingent on resolving key issues related to revenue certainty, infrastructure coordination, and financing structure (GH2 interviews, 2026). Additionally, long-term capital intensity of green hydrogen projects and reliance on foreign investment increase Egypt's vulnerability to currency volatility. Foreign exchange risks therefore undermines green hydrogen projects' bankability, which is particularly critical given limited access to long-term local capital (OECD, 2025).

Egypt's approach is therefore characterised by strong central state involvement, strategic use of brownfield industrial assets, and an explicit focus on positioning the country as a future exporter of green fuels and derivatives. This makes Egypt a relevant case study for examining the barriers that arise between early project announcements and the point at which projects become bankable investments.

3.2. Morocco



The Moroccan Ministry of Energy Transition and Sustainable Development set out a roadmap on green hydrogen in 2021 under the National Hydrogen Commission, created in 2019. The country has a large potential for green hydrogen generation and estimates that it can meet over 4% of global demand by 2030 ([Masen, 2026](#)). The Morocco Green Hydrogen Offer, announced in March 2024 and championed by His Majesty King Mohammed VI, provides a structured framework for development and encompasses the green hydrogen value chain, leveraging the country's natural resources, strategic location, and infrastructure. It establishes Masen as the focal point of the Morocco Offer for a simplified investor pathway and accompanies developers until FID.

Morocco received 47 project applications under the Moroccan Offer, and Masen selected 7 projects with 6 investors. The project developed by TotalEnergies is currently the most advanced at pre-FID stage, moving towards FID. The other 6 projects, led by Acwa Power, Nareva, UEG and China Three Gorges, the TAQA and Cepsaconsortium, and the Onrx consortium, have signed land agreements with the government in February 2026 and are realising feasibility studies under the Moroccan Offer. Projects are expected to take about two years before reaching FID (GH2 interviews, 2026). One criterion to be selected by Masen is for green hydrogen developers to have identified preliminary offtakers, which therefore strengthens the business case for their green hydrogen projects.

Additionally, independently from the Moroccan Offer, the OCP group is advancing its Jorf Hydrogen Platform, which development started before the Moroccan Offer was established. This green ammonia initiative, which is to support OCP's production of sustainable fertilisers, received €30 million from the German PtX Development Fund in February 2025 and aims to supply 100,000 tons of green ammonia annually by the end of 2026 ([FCW, 2025](#)).

Morocco's model is therefore more selective and structured by Masen, and built around a clear role delineation and early alignment with export frameworks. Its lower perceived country risk and stronger macroeconomic stability support relatively favourable financing conditions, and its proximity to the EU and SouthH2 corridor make EU-Morocco coordination particularly important to project development. OCP's decarbonisation plans also create domestic demand for green hydrogen in the fertiliser industry.

Table 1: Summary of key differences in Egypt’s and Morocco’s green hydrogen sectors

 EGYPT	 MOROCCO
<p>Centralised public coordination can facilitate project progression, particularly for strategically prioritised projects.</p>	<p>Lower perceived country risk and stronger macroeconomic stability support relatively favourable financing conditions.</p>
<p>Brownfield and derivative pathways (e.g. fertilisers, ammonia) can reduce capital intensity and enable earlier proof-of-concept projects.</p>	<p>Proximity to the EU and SouthH2 corridor make EU-Morocco coordination particularly important to project development.</p>
<p>Demand-side proof of demand, particularly through industrial use cases, can unlock momentum towards FID.</p>	<p>Domestic demand potential exists, particularly in fertilisers.</p>
<p>Ministerial sign-off and decisions around grid access and transmission infrastructure are decisive points of influence in project progression.</p>	<p>Shared infrastructure frameworks under the Offre Maroc provide greater clarity on enabling assets, but do not substitute for revenue certainty at the pre-FID stage.</p>

4. Survey results

This section summarises the interview base underpinning the analysis and highlights patterns emerging from stakeholder responses. Detailed charts are presented to provide transparency on how insights were derived. GH2 conducted a total of 23 interviews with financial stakeholders in both Egypt and Morocco. 14 interviews were focused on Morocco while 9 were focused on Egypt. The interviewees were senior executives and officials from a range of organisations, including commercial banks, development banks, project developers, public institutions, non-governmental organisations (NGOs) and development organisations. The discussion was led by GH2's senior management in both French and English to accommodate interviewees and ensure a fluid conversation. Questions were standardised across interviews to allow for comparison between answers. It is important to note that interviews reflect the personal views, perceptions and opinions of individuals. Consequently, these insights might be subject to biases. Additionally, because of time limitations, not all questions were answered in full by all interviewees, which results in a smaller data sample for some areas of the analysis.

Box 1. Key insights from stakeholder interviews

Stakeholder interviews conducted for this report reveal several consistent patterns across Egypt and Morocco:

1. Lack of offtake and revenue certainty remains the dominant barrier preventing projects from progressing towards final investment decision. Without credible demand signals, lenders are generally unwilling to engage, meaning that financing terms and cost of capital cannot yet be meaningfully tested.
2. Stakeholders emphasised that green hydrogen development is constrained less by the availability of capital than by the lack of bankable projects. Many developers are reluctant to commit significant resources to costly feasibility and structuring work without clearer signals on downstream financing and demand.
3. Interviewees repeatedly highlighted a sequencing gap in the deployment of financing instruments. Concessional finance, guarantees, and blended finance mechanisms exist, but are typically deployed once projects approach bankability rather than earlier in the development cycle when risks are most difficult for developers to absorb.
4. Shared infrastructure and regulatory clarity remain important enabling conditions. In Egypt, uncertainties related to grid access, transmission infrastructure and wheeling charges were frequently mentioned. In Morocco, infrastructure availability was less often perceived as a binding constraint, partly due to its integration into the Moroccan Hydrogen Offer.
5. Several stakeholders stressed that the scale of investment required for green hydrogen development increasingly exceeds the logic of individual project finance. Instead, projects are beginning to be framed within broader industrial value chains linking renewable power generation, hydrogen production, industrial demand, and export infrastructure.

4.1. Interview insights

Perceived barriers to project development

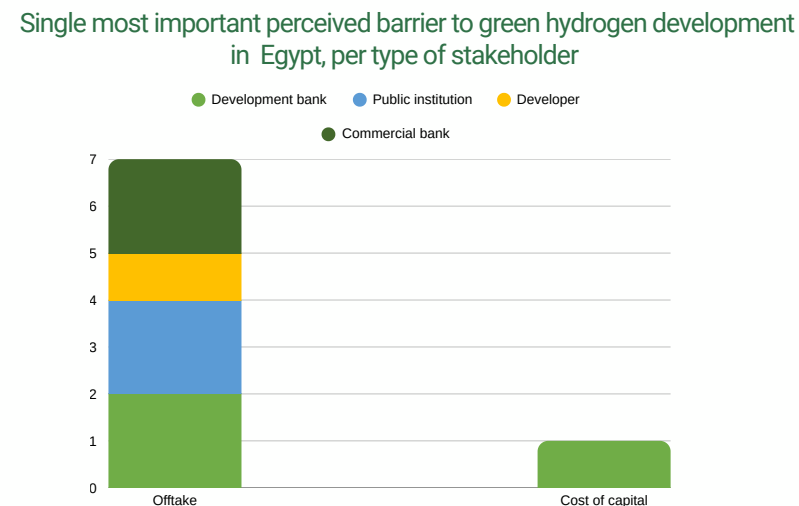
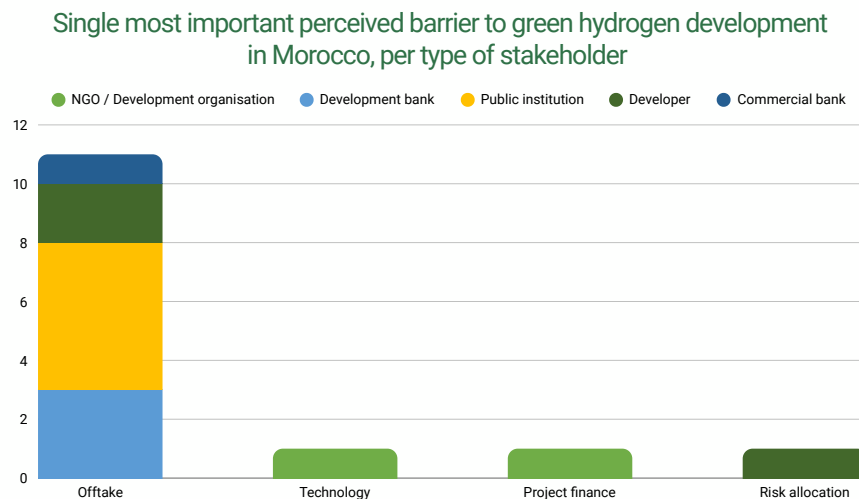
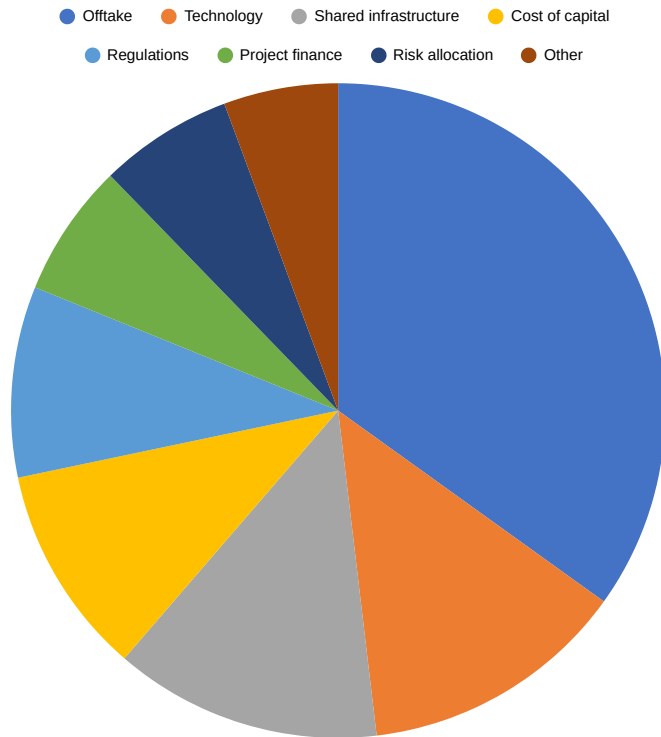


Figure 1. Single most important perceived barrier to green hydrogen development in Morocco and Egypt, per type of stakeholder (GH2 interviews, 2026)

Based on the interviews conducted by GH2, the **lack of offtake** remains for a majority of interviewees the **single most important barrier** to the development of green hydrogen projects, both in Morocco and Egypt. This barrier is identified across different types of stakeholders, including development banks, developers, public institutions and commercial banks. **Technology uncertainty** regarding electrolysers, inadequate risk allocation between public and private actors, and a lack of experience in **project financing** have also been mentioned by three interviewees as the single most important barriers to green hydrogen project development in Morocco. Additionally, in Egypt, **high cost of capital** has been identified as critical.

Perceived barriers to green hydrogen project development in Morocco



Perceived barriers to green hydrogen project development in Egypt

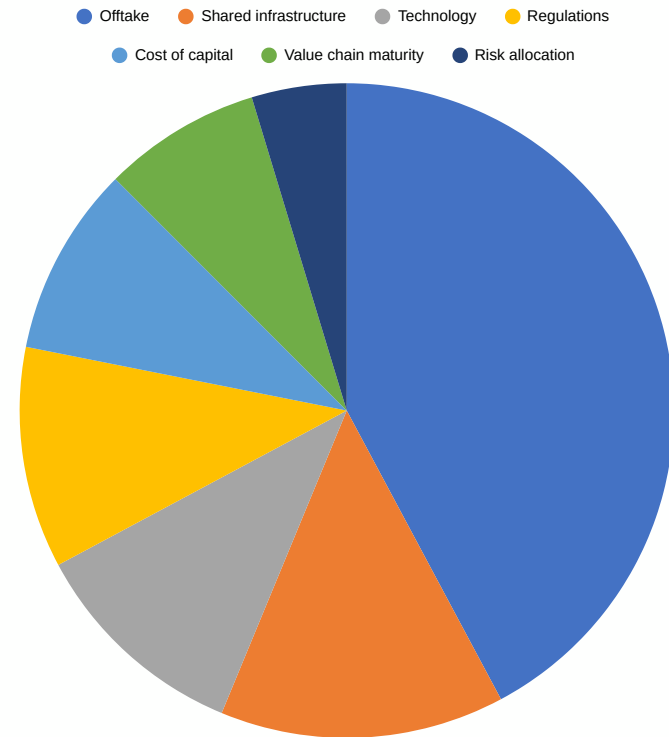


Figure 2. Perceived barriers to green hydrogen project development in Morocco and Egypt (GH2 interviews, 2026)

Across interviews, **lack of offtake**, followed by **technology risks**, **lack of shared infrastructure**, **high cost of capital** and **unclear or overly stringent regulations** (including in the EU) are perceived to be the main barriers hindering green hydrogen project development in both Egypt and Morocco, although in different orders of importance. Other identified barriers include lack of experience in project financing, inadequate risk allocation, lack of value chain maturity and lack of trained workforce.

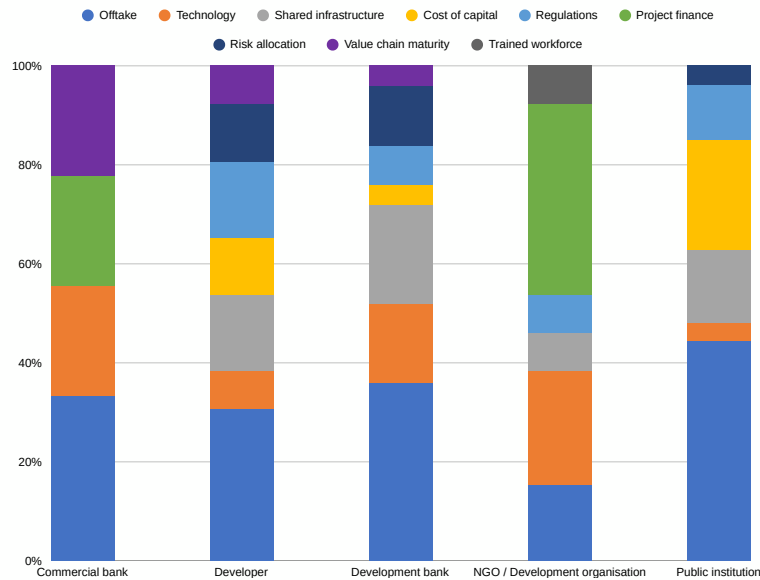


Figure 3. Perceived barriers to FID in Morocco, per type of stakeholder (GH2 interviews, 2026)

The above chart shows what barriers to the development of green hydrogen projects are predominantly identified by what type of stakeholder in Morocco. **Lack of offtake and technology risks are prevalent across all stakeholders.** The lack of infrastructure was most important to development banks, developers and public institutions, while the high cost of capital and unclear regulations in the EU were relatively more of a concern for public institutions and developers.

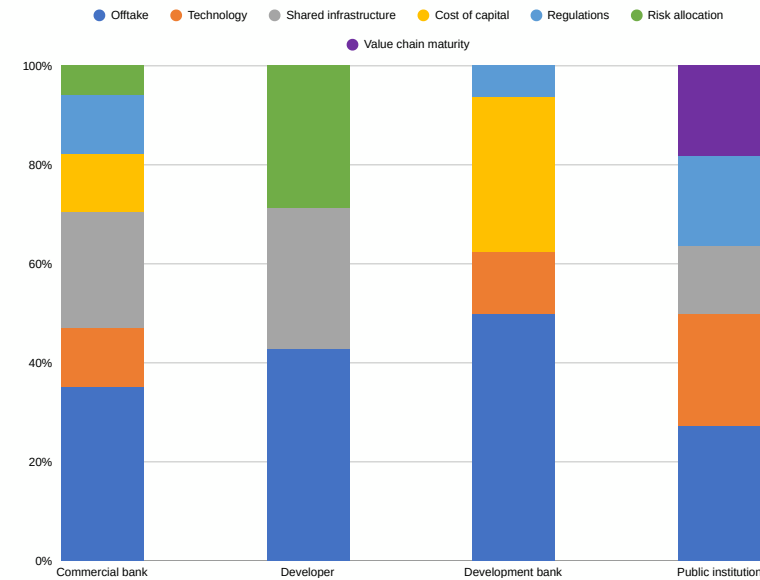


Figure 4. Perceived barriers to FID in Egypt, per type of stakeholder (GH2 interviews, 2026)

In Egypt, lack of offtake was also mentioned across stakeholders, while technology risk was highlighted only by banks and public institutions. The **lack of infrastructure** seemed relatively more important for commercial banks, developers and public institutions in Egypt compared to Morocco. Grid capacity, the lack of transmission lines and the opacity around wheeling charges were among the key concerns regarding infrastructures in Egypt. The **high cost of capital** was also perceived as a major issue for development banks (and to a lesser extent for commercial banks) in Egypt, while it seemed to be less of a concern in Morocco. Egypt's credit rating is indeed less favourable than Morocco's.

Projects are converging pre-FID

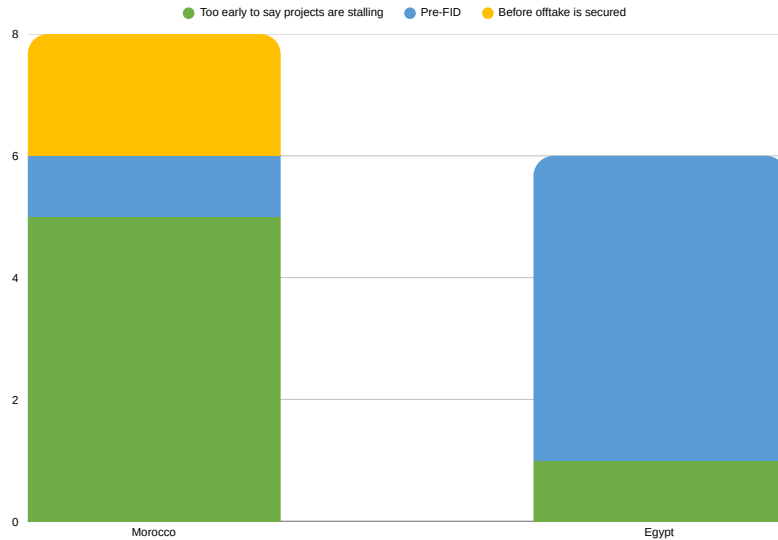


Figure 5. Whether green hydrogen projects are perceived to be stalling, and at what stage (GH2 interviews, 2026)

To the question “At which stage are green hydrogen projects commonly stalling?”, about one quarter of interviewees, mostly from Morocco, answered that it is still too early to say that projects are stalling. Most of the Moroccan stakeholders indeed considered that projects are broadly on track in their development, following the process set out by the Moroccan Offer and having recently signed land agreements with the Moroccan government. The rest of the interviewees, the majority of which from Egypt, replied that projects are stalling pre-FID and before offtake is secured. In both countries, **whether green hydrogen is seen as stalling or not, projects are converging at a critical pre-FID stage.**

Mixed views on coordination as an issue

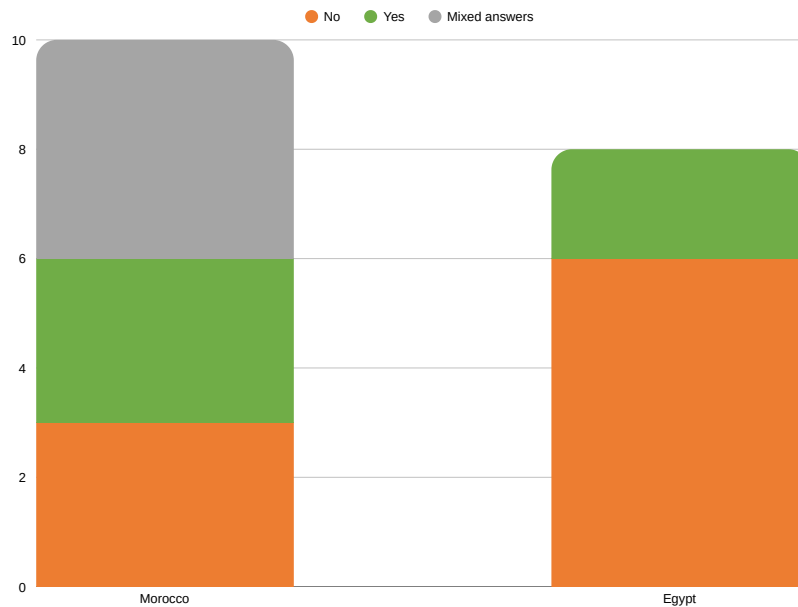


Figure 6. Whether a lack of coordination is perceived as an issue for green hydrogen development (GH2 interviews, 2026)

When asked whether there is a lack of coordination among stakeholders and whether this could be hindering the development of green hydrogen projects, interviewees gave mixed answers. Two third of Egyptian stakeholders did not consider coordination to be an issue, while views were more mixed among Moroccan stakeholders. Responses also varied within organisations, depending on the interviewee’s role. There was therefore **no consensus on whether better coordination might help** the development of green hydrogen projects, which in itself **seems to highlight the fragmentation and lack of alignment among stakeholders.**

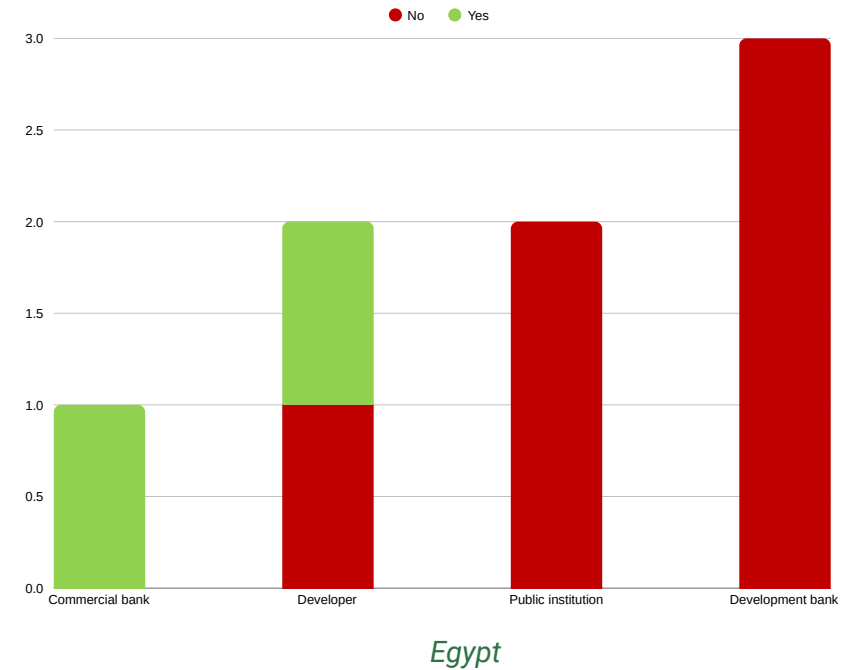
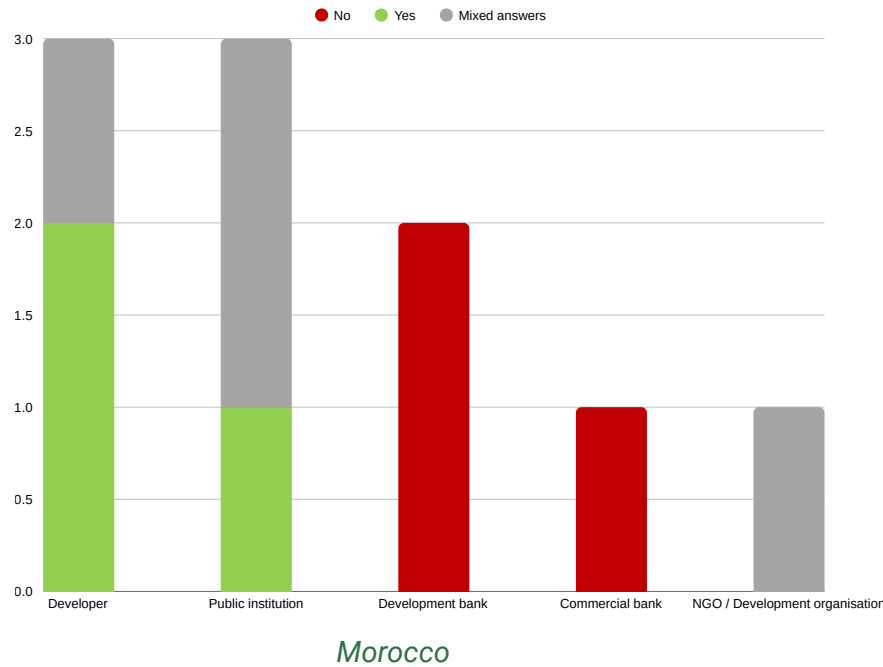


Figure 7. Whether coordination is perceived to be an issue in Morocco and Egypt, per type of stakeholder (GH2 interview, 2026)

The disaggregation of answers by type of stakeholder reveals that development and commercial banks tend not to perceive coordination to be an issue in Morocco, as opposed to developers and public institutions, who tend to think that coordination could be improved or gave mixed answers. In Egypt, development banks and public institution also overall believed coordination to be effective, while commercial banks and developers' **answers are more ambiguous**. Interestingly, answers tend to be homogenous within **stakeholder categories, which might indicate that stakeholders work in silos and could benefit from bridging the conversation.**

4.2. Implications for the analysis

From the above results, lack of offtake remains the main barrier to projects reaching FID in both Egypt and Morocco. Technology risks, lack of shared infrastructure, high cost of capital and regulatory uncertainty, including from the EU, are also identified as hurdles, with high cost of capital and lack of infrastructure overall being perceived as more of a concern in Egypt than Morocco. High cost of capital is therefore a major perceived concern, particularly in Egypt, but interview evidence suggests it often becomes decisive only once projects have progressed far enough for financing terms to be meaningfully tested.

Different types of stakeholders have different views on the main barriers to projects reaching FID: lack of offtake is perceived to be an issue for all stakeholders in both countries, while high cost of capital is especially important for development banks in Egypt. Technology risk and regulatory uncertainty were more systematically highlighted as concerns for Moroccan stakeholders.

More than half of the Moroccan interviewees asked consider that it is too early to say that green hydrogen projects are stalling in Morocco, while the rest perceived project to be stuck before offtake is secured, at the pre-FID stage. In contrast, almost all Egyptian stakeholders asked consider projects to be stalling before FID. Green hydrogen projects in Egypt and Morocco therefore seem to be converging at a critical pre-FID stage, regardless of whether they are perceived to be stuck or not.

Finally, there are mixed views on whether there is a lack of coordination among stakeholders, and whether this is slowing down green hydrogen development in Egypt and Morocco, which in itself points to the fragmentation and lack of alignment between stakeholders. About a quarter of Egyptian stakeholders perceived coordination to be an issue, and answers were quite mixed in Morocco. Disaggregation per type of stakeholder reveals that answers tend to be homogeneous among stakeholder categories, with coordination being considered to be an issue mostly by developers and public institutions in Morocco, and developers and commercial banks in Egypt. This could indicate that stakeholders tend to work in silos.

Importantly, interview evidence suggests that while developers often cite financing costs as a concern, cost of capital is rarely the first constraint encountered by projects. Instead, unresolved risks related to offtake, demand visibility, infrastructure sequencing, and project structuring prevent projects from reaching the stage where financing conditions can be meaningfully tested. In this sense, higher financing costs appear largely as a downstream effect of unresolved project risks.

Additionally, many stakeholders emphasised that the most fragile stage occurs between early development and financial close, when developers must finance feasibility studies, engineering work, and commercial structuring without certainty that projects will ultimately reach FID. Existing concessional finance is typically deployed later in the lifecycle, leaving a gap in the transition from project preparation to bankability.

Finally, while governments and public institutions play a key role in setting policy frameworks and facilitating project development, stakeholders consistently highlighted that offtakers and demand-side actors ultimately exert the greatest influence over whether projects reach FID. Development finance institutions and export credit agencies are also critical in enabling projects to move forward once risks are sufficiently clarified and projects approach bankability. Overall, the interview insights therefore reinforce the idea that green hydrogen projects are delayed less by a lack of capital than by the difficulty of aligning demand signals, risk allocation, and financing instruments across the project lifecycle.

5. Analytical visuals

The analysis has highlighted that (1) unresolved offtake and revenue uncertainty at pre-FID, (2) sequencing failures in financing engagement and (3) misalignment between authority and influence are critical constraints to green hydrogen project development in both Egypt and Morocco. Drawing on interview evidence and recent analysis from the World Bank and the OECD, this report is anchored around three analytical visuals that, together, answer the following questions:

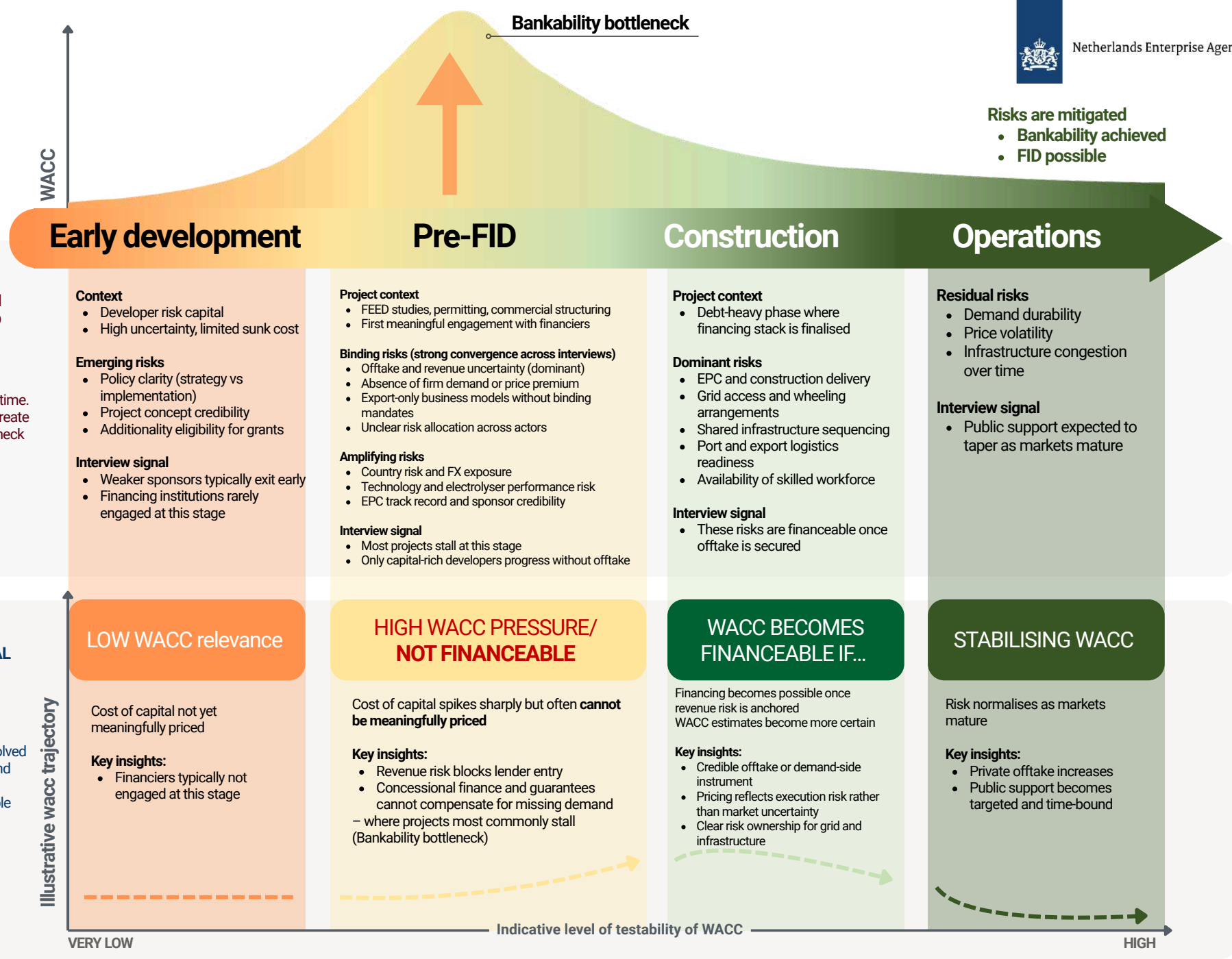
1. Where do risks accumulate, and which risks must be resolved first for projects to progress beyond pre-FID?
2. At which stage of the project cycle is there a financing gap, and why does it persist despite active stakeholder engagement?
3. Which actors have effective leverage over bankability outcomes, regardless of formal authority?

5.1. Risk accumulation and bankability bottleneck schematic

As mentioned above, cost of capital has been shown to be a major determinant of cost competitiveness for green hydrogen projects in emerging and developing economies (OECD, 2023; World Bank, 2024). The WACC for green hydrogen projects can vary widely depending on perceived risks related to offtake, pricing, regulation, country context, and infrastructure availability. However, the literature typically stops short of showing how these risks interact dynamically along the project cycle, and why existing de-risking tools frequently fail to unlock final investment decisions. The a risk accumulation and bankability bottleneck schematic addresses that gap by explaining why downstream de-risking instruments often fail to unlock final investment decision. It illustrates how unresolved risks across the project lifecycle translate into higher financing costs, delayed financial close, and stalled projects. Its purpose is to make explicit the relationship between risk concentration and bankability outcomes.

Across both Egypt and Morocco, interview evidence consistently indicated that the primary constraint facing green hydrogen projects is not the availability of capital, but the difficulty of establishing bankable revenue structures. In Morocco, several stakeholders indicated that financing conditions are generally viewed as relatively favourable, reflecting the country's stronger credit rating and macroeconomic stability. In Egypt, by contrast, financing costs as well as foreign exchange risks were more frequently identified as a concern. In both countries, financial institutions frequently noted that although capital is available once projects reach maturity, most projects have not yet progressed far enough for financing terms to be meaningfully tested.

Several interviewees also emphasised that concessional finance is unlikely to compensate for the absence of demand. As noted by stakeholders from development finance institutions, concessional resources are relatively small compared to the scale of hydrogen investments and are therefore most effective when used to reduce the cost of capital once projects approach bankability. During early development phases, when project viability and revenue structures remain uncertain, large-scale concessional finance instruments are difficult to deploy in practice. Early-stage support is still needed, but this typically takes the form of grants, technical assistance, and project preparation funding rather than traditional concessional financing.



Visual A. Risk accumulation and bankability bottleneck schematic (draft, evidence-based, derived from interviews and literature)

This schematic illustrates how risks evolve across the green hydrogen project lifecycle and explains why projects frequently stall at the pre-FID stage. Interview evidence from Egypt and Morocco shows that unresolved offtake and revenue uncertainty prevents projects from reaching FID. Cost of capital can therefore not be meaningfully tested, and WACC remains uncertain.

What the visual shows

The risk accumulation and bankability bottleneck schematic traces the green hydrogen project lifecycle from early development through pre-FID structuring, construction, and operations, showing how different categories of risk are present across the project lifecycle and how they are progressively reduced, reallocated, or clarified over time. These include sovereign and policy risk, foreign exchange exposure, construction and EPC risk, offtake and revenue uncertainty, and reliance on shared infrastructure. Rather than treating these risks as independent, the visual highlights where risks compound, amplifying their effect on financing outcomes. In practice indeed, projects rarely fail due to a single unresolved issue. Instead, moderate uncertainty across multiple dimensions accumulates into a risk profile that pushes projects beyond acceptable thresholds for financiers.

It is important to note that the visual does not suggest that offtake is the only risk affecting cost of capital. Rather, it shows that without credible revenue certainty, cost of capital cannot be meaningfully tested or financed at all. Once demand or an equivalent revenue anchor is secured, other risks, including construction, infrastructure delivery, and technology performance, become financeable and are reflected in pricing rather than blocking lender entry. In this sense, offtake functions are a critical enabling condition for bankability, rather than the sole determinant of financing cost.

The visual also clarifies why existing public finance instruments frequently underperform in practice. Many tools are applied too late in the project lifecycle, target risks that are not binding at that stage, or operate at a scale insufficient to counteract cumulative uncertainty. As a result, financiers defer engagement, developers delay further capital commitment, and projects become trapped in extended development. Hence, despite strong national strategies and large announced project pipelines, most projects have not yet translated into final investment decisions due to unresolved risk across the project cycle.

In this report, cost of capital is therefore understood as the pricing of debt and equity, but also as a major determinant of whether financing is available. It shows that country risk, infrastructure, or technology risks become decisive only once revenue certainty allows projects to progress beyond pre-FID. As interview evidence from Egypt and Morocco shows, unresolved offtake and revenue uncertainty prevents projects from reaching FID. Hence, although cost of capital is frequently cited by developers as a major concern, interviews suggest that in many cases, projects do not reach a stage where financing conditions can be meaningfully tested with lenders, and WACC remains uncertain. In practice, developers and financiers may therefore work with indicative assumptions, but lenders require credible revenue visibility before engaging in structured project finance discussions.

While the underlying risk categories are broadly similar across Egypt and Morocco, risk intensity, sequencing, and institutional contexts vary across countries. In Morocco, developers selected under the *Offre Maroc* are required to identify a potential offtaker as part of the project proposal. This means that projects do not enter the development pipeline without at least a preliminary demand pathway. However, this does not necessarily translate into revenue certainty at the pre-FID stage. Developers consistently highlighted the high cost and risk of pre-FID feasibility and preparatory studies, undertaken before financing or pricing can be secured. Several stakeholders also noted that delays in Morocco are sometimes linked to administrative processes rather than developer readiness. In Egypt, by contrast, projects appear more likely to slow down between development and FID due to unresolved infrastructure arrangements, grid access questions, and uncertainty around the sequencing of large-scale renewable generation and hydrogen production facilities. Despite these differences, both countries face a common challenge: projects accumulate multiple layers of risk at the pre-FID stage before revenue structures, infrastructure sequencing, and risk allocation are sufficiently anchored to unlock financing.

5.2. Project-cycle financing stack diagram – Who finances what, and when

While risk accumulation and bankability bottleneck schematic shows that unresolved risks accumulate along the project cycle and undermine projects' bankability, it does not explain why risks remain unresolved nor at which stage different actors are able to engage across the project lifecycle. Interviews conducted for this report consistently indicate that financing does not fail because capital is absent in aggregate, but because no single actor is clearly mandated or able to lead at critical stages of project development. The project-cycle financing stack diagram therefore explains how financing is sequenced across the green hydrogen project lifecycle and why gaps in capital availability prevent projects from reaching final investment decision. Its purpose is to show when different sources of capital are able to engage, where financing is least available in practice, and why projects stall before FID.

Interview evidence indicates a circular dynamic that keeps projects trapped in extended pre-FID phases despite strong project pipelines. Developers wait for financiers, financiers wait for clearer demand signals or government intervention, and public institutions wait for projects to mature further before committing resources. This reflects a sequencing failure driven by misaligned timing and first-mover expectations.

Additionally, interviewees have suggested that both public and private financiers are willing to engage once projects approach bankability. However, projects struggle to reach that point without credible offtake and clearer risk allocation. Capital therefore becomes available only once key risks are resolved, leaving a critical gap during early project development.

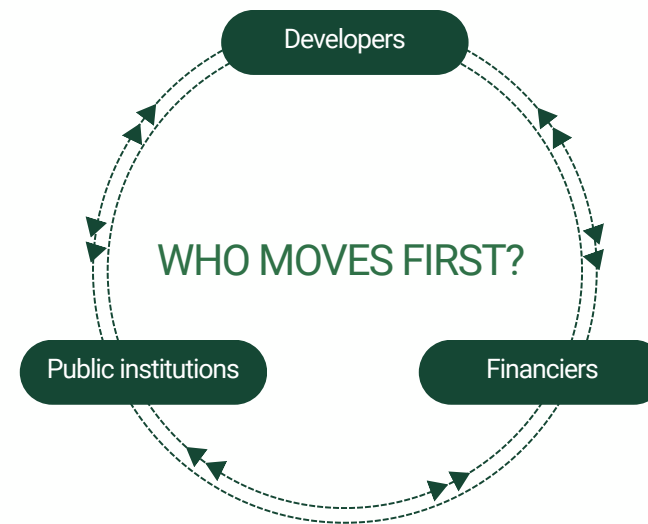


Figure 8: Financing roles and sequencing across the green hydrogen project lifecycle

What the visual reveals

In this report, the financing stack is understood not only as a question of capital availability, but as a sequencing problem, where the timing, mandate, and risk appetite of different actors must align for projects to progress. Crucially, the visual highlights a persistent gap at the pre-FID stage. Developers carry disproportionate risk but lack sufficient revenue visibility to attract financing, while public financiers typically wait for projects to approach bankability thresholds, and commercial lenders remain absent until revenue certainty is established. Hence, green hydrogen projects tend to stall not because capital is absent in aggregate, but because financing is not available at the stage where it is most needed.

In a typical project finance model, developers advance early-stage development using their own balance sheets, often alongside equity partners. For green hydrogen, this model is more difficult to sustain. High upfront costs, combined with the absence of credible offtake and revenue visibility, make it increasingly challenging for developers to justify continued exposure at the pre-FID stage. In this context, there is an implicit expectation that development finance institutions could help bridge early-stage risk. In practice, however, DFIs tend to engage once projects approach bankability, reflecting their risk appetite and mandate constraints.

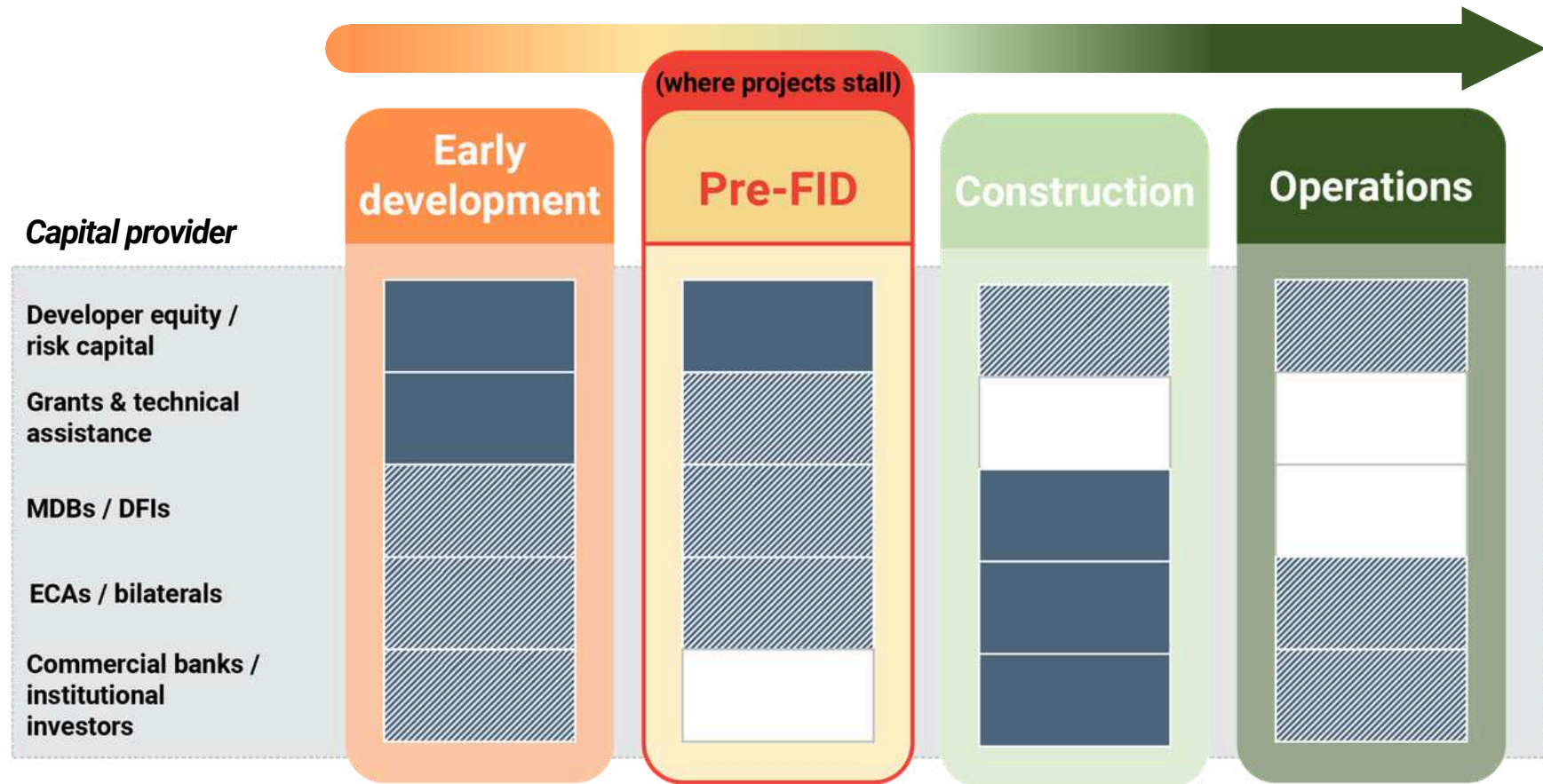
As a result, developers are expected to advance projects to bankability, but cannot credibly do so without demand-side certainty or clearer risk-sharing arrangements. Public financiers and development banks express willingness to participate, but typically engage once projects approach bankability thresholds. Commercial lenders and institutional investors, in turn, require contracted revenues and construction-ready projects before entering. This results in a structural gap at the pre-FID stage: developers face the highest risk exposure during feasibility, structuring, and risk preparation, while most financing instruments are not yet accessible. The underlying challenge is therefore not the absence of capital, but the timing of when different actors are able to engage, which in turn prolongs development timelines and leads many projects to stall before reaching FID. As a result, risk remains concentrated on developers at the stage where it is hardest to carry and most difficult to transfer.

Several stakeholders highlighted that earlier public support for project preparation could help reduce this exposure. However, this does not necessarily imply large-scale concessional finance at early stages. Instead, targeted support in the form of grants, technical assistance, and project preparation funding is more appropriate, while concessional finance plays a more effective role later in the cycle by reducing the cost of capital once projects are sufficiently mature.

At the same time, stakeholders emphasised that even stronger financial support cannot substitute for demand. Without credible offtake and revenue visibility, financiers are unable to engage, regardless of available instruments. This reinforces the central role of demand-side mechanisms in unlocking investment. Finally, financing at construction and operations stages is largely conditional on projects reaching FID. Once revenue structures are secured, capital becomes available at scale and financing roles align more closely with standard project finance structures.

The sequencing challenge is structurally similar in both countries, although its expression differs. In Egypt, strong state convening capacity can help accelerate decision-making and clarify institutional roles, enabling some projects to move forward despite underlying constraints. By contrast, in Morocco, lower perceived country risk and structured project pipelines support guide project development. Export-oriented projects in both countries remain exposed to external demand uncertainty, which continues to delay progress towards FID. In both countries, projects therefore struggle to move from development to bankability due to unresolved demand and revenue risks.

Visual B. Financing roles across the project lifecycle: where capital is available, and where the pre-FID gap remains



Legend:

- = capital is active and deployable
- = interest exists, but conditional
- = actors waiting or absent

Limited capital availability at this stage reflects unresolved revenue and bankability risks.

Financing at construction and operations stages is contingent on projects reaching FID, at which point capital becomes available at scale.

5.3. Stakeholder influence map – Who actually shapes bankability outcomes?

Taken together, the risk accumulation and bankability bottleneck schematic and the project-cycle financing stack diagram show that unresolved risks and demand uncertainty accumulate in the early stages of project development. Hence, although capital and financing instruments are available, they tend to enter too late in the project development cycle as no financial actor is mandated nor has the risk appetite to move first, and this misalignment creates a financing gap pre-FID.

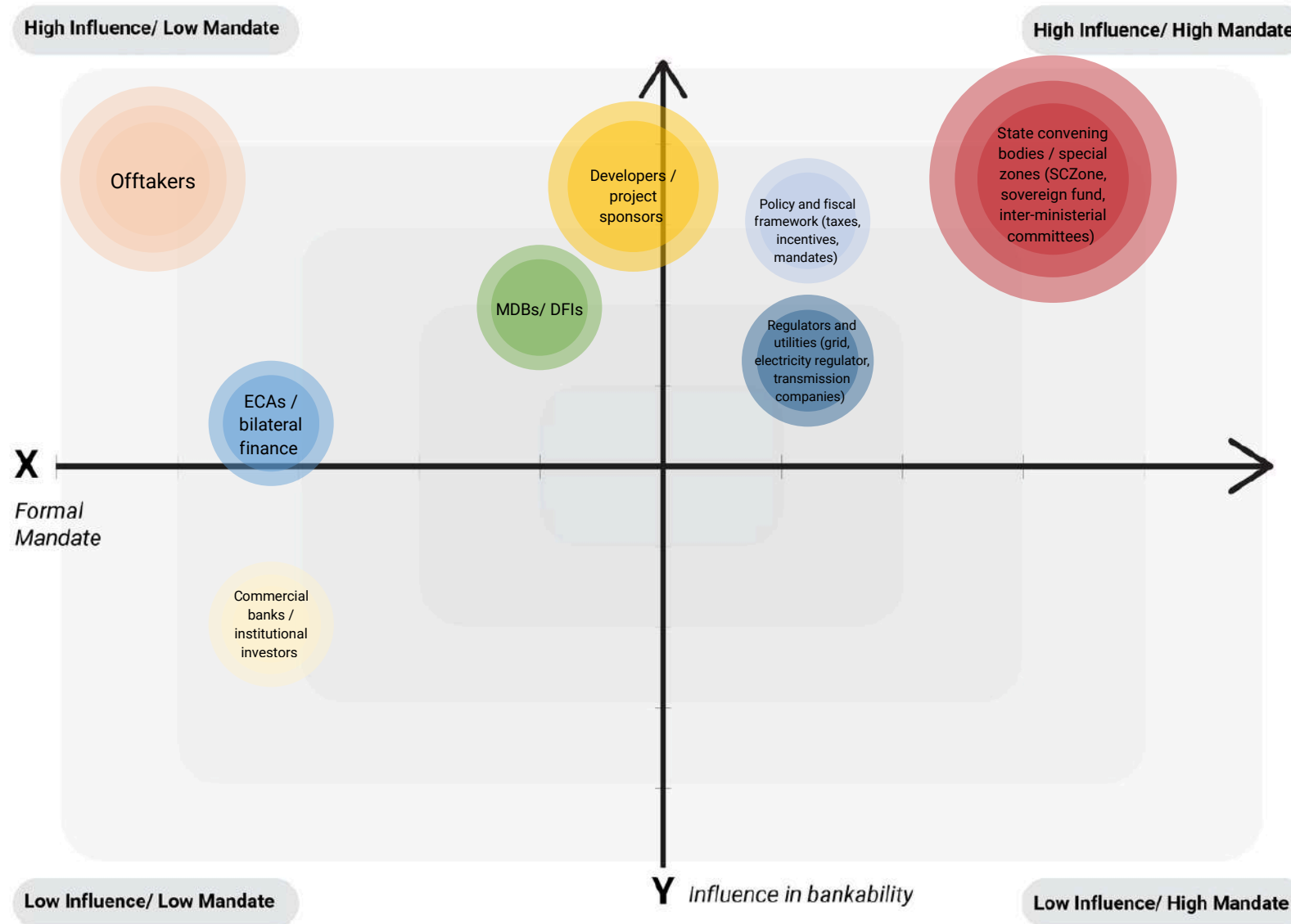
Drawing on interviews conducted for this report, the next visual examines why this misalignment persists, despite stakeholders being actively engaged. Interview evidence indeed suggests that coordination failures are rarely due to missing stakeholders. Instead, they seem to stem from a mismatch between where authority is formally located and where leverage over risk allocation and project outcomes sits. Across both Egypt and Morocco, interviews indicate that offtakers play a decisive role in determining bankability, despite holding limited formal authority. Their ability to establish credible revenue structures ultimately determines whether projects can progress beyond pre-FID. Additionally, interviews indicated that governments have strong formal mandates and high influence over the risks that determine project bankability, being involved in demand creation, infrastructure sequencing, and project-level approvals.

The following stakeholder influence map plots key stakeholder groups along two dimensions:

- Formal authority over policy, regulation, or approvals
- Effective influence over bankability outcomes in practice, referring to direct leverage over revenue certainty, financing readiness, and risk allocation at pre-FID

It is worth noting that financiers' influence is highly stage dependent. While their influence is limited in early development stages, their leverage increases significantly once projects approach bankability thresholds, reinforcing the sequencing dynamics illustrated in the project-cycle financing stack diagram.

visual C. Stakeholder influence map on bankability



Note: For policy and fiscal framework, influence is indirect and operates through framework-setting rather than project-level decision-making.

What the visual shows

The stakeholder influence map visualises who influences bankability outcomes, as distinct from who holds formal authority or statutory mandates. It distinguishes between formal decision-making power and effective leverage over the risks that determine whether green hydrogen projects reach FID. It aims to explain why misalignment persists even when all relevant actors are present and engaged.

In practice, decisions that determine bankability, such as whether credible offtake will materialise, which risks developers must retain, and how shared infrastructure will be delivered are often shaped by a relatively small subset of actors. When these actors are not centrally engaged in coordination processes, progress toward FID can stall despite the presence of multiple institutions and financing instruments. The stakeholder influence map therefore shows why multi-stakeholder processes can produce consensus without outcomes: when actors with high formal authority but limited influence dominate discussions, key risks remain unresolved and responsibility for action remains diffuse.

By distinguishing formal authority from effective influence, the stakeholder influence map highlights where alignment is needed between public actors and market participants to unlock bankability and shows that demand signals, risk allocation, and financing instruments must be better aligned with the actors that ultimately determine project viability. This points to the importance of demand-side mechanisms and early-stage risk-sharing frameworks. The stakeholder influence map also provides a basis for identifying which actors must be engaged differently, earlier, or more directly if coordination efforts are to translate into reduced cost of capital and accelerated investment.

While the overall pattern of influence is broadly similar across Egypt and Morocco, the map shows important differences in institutional dynamics. In Egypt, strong state convening capacity means that certain public actors exert greater practical influence over project timelines, particularly where cross-ministerial coordination or discretionary approvals are required. This can accelerate progress when priorities align but may also concentrate decision-making power at specific institutional nodes. By contrast, in Morocco, institutional roles are more clearly delineated and domestic coordination around green hydrogen development is relatively advanced, particularly through MASEN and the Offre Maroc framework. Effective influence is therefore less concentrated within individual public actors and more distributed across the value chain.

Taken together, the three visuals therefore demonstrate that the financing of green hydrogen projects in Egypt and Morocco is constrained by misaligned authority, influence, and sequencing around the risks that matter most for FID. These insights directly inform the coordination actions discussed in Section 7.

6. Country mapping

This section draws on interview evidence and insights from recent OECD, World Bank, and H2Global analysis to explain how national contexts shape the risk accumulation, financing sequencing failures, and stakeholder dynamics visualised in Section 4. This section aims to explain why similar bottlenecks persist across different institutional settings, and how country-specific conditions affect the likelihood of resolving them. Across both countries, the interviews suggest that project pipelines are real, investor interest exists, and institutions are engaged. The central challenge lies in converting that interest into bankable projects with credible revenue pathways and sufficiently mature financing structures.

6.1. Policy and institutional context

Recent OECD and World Bank analysis converge on a clear finding: for green hydrogen projects in emerging and developing economies, cost of capital can become a major determinant of competitiveness, but is itself driven by unresolved revenue, offtake, and policy risks. The interviews conducted for this report broadly support that framing, while also showing that in many cases projects have not yet advanced far enough for cost of capital to be meaningfully tested.

Both Egypt and Morocco have adopted national hydrogen strategies and investment frameworks that reduce early-stage uncertainty and attract developer interest. However, these frameworks remain largely supply-side instruments, focused on land allocation, permitting, coordination, and incentives, rather than on demand creation or revenue certainty. In both countries, this helps explain why project origination has been strong while progression towards FID remains limited.

In both Egypt and Morocco, policy frameworks have helped reduce early-stage uncertainty and attract developer interest, but have not yet fully resolved the pre-FID revenue bottleneck. In Egypt, interviewees highlighted the role of state convening and cross-ministerial coordination in facilitating project-specific problem solving, particularly for strategically prioritised projects. In Morocco, stakeholders generally viewed the Moroccan Hydrogen Offer and MASEN's coordinating role as providing greater structure and predictability during early project development. However, in both countries, policy clarity and institutional coordination alone remain insufficient to unlock bankability without stronger revenue certainty and demand-side signals.

In both contexts, the institutional environment therefore explains why early development has progressed relatively quickly, but also why projects converge at the same pre-FID bottleneck (Visual A). Formal authority is present, but does not always translate into bankability because the actors with the greatest leverage over revenue certainty, demand, and risk allocation are not necessarily the actors with the strongest statutory mandates (Visual C).

Additionally, interviewees pointed to regulatory uncertainty in the European Union as an important external factor affecting project development in both Egypt and Morocco. Indeed, recent policy discussions at European level increasingly frame green hydrogen development in the Mediterranean as part of a broader EU–MENA energy and industrial value chain cooperation effort, as initiatives under discussion within the European Commission, including the Pact for the Mediterranean and emerging T-MED investment initiatives, seek to align energy generation, clean fuels production, and energy-intensive industry development across the region. While this broader value-chain perspective may help mobilise larger pools of capital and catalyse green hydrogen investment, it however introduces additional coordination complexity across jurisdictions, financial institutions, and regulatory frameworks. Hence, because many projects in Egypt and Morocco target export markets, uncertainty regarding hydrogen certification rules, demand mandates, and the future size of the EU hydrogen market contributes to extended pre-FID phases. Several stakeholders also noted that many innovative financing mechanisms developed in Europe currently apply primarily to projects located within the EU. Greater clarity on how projects in neighbouring regions could access or benefit from these mechanisms could therefore help strengthen the business case for export-oriented projects.

6.2. Project pipeline snapshot

Egypt and Morocco both host large announced green hydrogen and derivative pipelines spanning ammonia, fuels, and industrial use. These pipelines reflect strong political signalling, early project preparation, and significant developer interest. However, interview evidence confirms that only a small subset of projects has progressed beyond early development.

In Egypt, projects that integrate with existing industrial assets or brownfield infrastructure have progressed further, benefiting from reduced capital intensity, existing conversion facilities, and clearer operational pathways. The Scatec-Fertiglobe project is the most frequently cited example: it benefits from an existing ammonia platform, industrial integration, and proof of demand through H2Global-related momentum (see box 4). By contrast, greenfield projects that rely on new infrastructure and distant renewable generation face significantly greater challenges in reaching FID.

Interview evidence also highlights the importance of infrastructure availability in shaping project development. In Egypt, developers and banks frequently emphasised uncertainties related to grid capacity, transmission infrastructure, and wheeling charges, particularly where renewable power generation and hydrogen production are not co-located. These uncertainties can create a “chicken-and-egg” dynamic: infrastructure development depends on credible project pipelines, while developers require confidence that infrastructure will be available before committing large amounts of capital. At the same time, several financiers stressed that infrastructure is not the main bottleneck in itself, but rather becomes decisive once revenue structures begin to stabilise.

In Morocco, infrastructure availability was generally perceived as less of a binding constraint than in Egypt. Under the Moroccan Hydrogen Offer, infrastructure planning has been integrated into the development framework, and port investments at sites such as Nador West Med and Dakhla Atlantique are expected to come online before large-scale hydrogen exports begin. Stakeholders nevertheless pointed to uncertainty around the timing and financing of shared assets, particularly where they depend on multiple projects progressing in parallel. This suggests that infrastructure may be less contested than in Egypt, but still remains relevant to bankability in the medium term.

Box 2. OCP's green ammonia strategy: A domestic anchor for green hydrogen production

Morocco's green hydrogen strategy is closely linked to the decarbonisation plans of the OCP Group, one of the world's largest producers of phosphate fertilisers. Through its Hydrojeel initiative, OCP aims to progressively replace fossil-based ammonia with green ammonia produced from renewable hydrogen. This is significant, as Morocco controls around 70% of the world's phosphate reserves, but ranks among the world's largest importers of ammonia. Developing domestic green ammonia production could therefore promote Morocco's green industrialisation by supporting domestic value chains for green fertilisers, reduce the country's import dependency, and lower its exposure to price volatility.

OCP Group is a state-owned fertiliser giant and a central source of existing demand for ammonia in fertiliser production. Under its USD 13 billion green investment programme, OCP aims to produce 1 million tonnes of green ammonia annually by 2027, rising to 3 million tonnes by 2032. This will ensure Morocco's ammonia self-sufficiency and enable production of green hydrogen for other applications such as iron and steel.

As part of OCP's portfolio, the Tarfaya project seems to be the largest with an estimated cost of USD 7 billion. In 2025, Tarfaya received RFNBO pre-certification from Certify funded by EU Mediterranean Green Electrons and Molecules (MED.GEN) Network. Through its subsidiary, Hydrojeel, OCP also received EUR 30 million in funding from Germany Federal Ministry for Economic Cooperation and Development to develop the Jorf Lasfar demonstrator facility that aims to produce 100,000 t/y of renewable ammonia by 2026.

Unlike export-oriented projects, OCP benefits from an integrated demand model in which the same industrial group can act as developer, buyer and end user of green ammonia. This aligns with interview evidence suggesting that projects are more likely to reach FID when anchored in local demand, as this provides investors with a clearer route to revenue rather than relying on international offtake to materialise.

Some stakeholders suggested that highly integrated projects combining renewable generation, hydrogen production, and industrial demand could also help reduce infrastructure coordination challenges. However, such vertically integrated models require significantly larger capital commitments and are therefore likely to be feasible only for large industrial actors or consortia.

Export-oriented projects in both Egypt and Morocco remain strongly exposed to external demand signals because revenue certainty depends on the emergence of binding mandates, price support mechanisms, certification clarity, and stable demand-side instruments in importing markets, particularly Europe. As a result, even where projects advance technically, revenue terms often remain contingent on external developments, extending the pre-FID phase given the uncertainty of export markets.

Box 3. Case study – Scatec’s Egypt green hydrogen project: Building the case for FID

The Egypt Green Hydrogen project is one of the most advanced green ammonia projects in the region and could reach FID in 2026, with the potential to scale production up to 70,000 t/y in 2027. Implemented by Norway’s Scatec, in partnership with the Sovereign Fund of Egypt, the Egyptian Electricity Transmission Company, Orascom Construction, and Fertiglobe, the project will primarily target European markets. The 100 MW electrolyser facility is located in Ain Sokha, Suez Canal Economic Zone alongside Fertiglobe’s existing ammonia plant. The output will be transported through a 7 km pipeline to Ein El-Sukhna Port, from where it will be delivered to the Port of Rotterdam by Fertiglobe International Trading.

The financing structure combines private and public investment, with committed capital from international development institutions and multilateral banks. Among the investors are the European Bank for Reconstruction and Development (EBRD), with an USD 80 million equity investment, KfW, the European Investment Bank (EIB) and British International Investment (BII).

Notably, Fertiglobe was the sole winner of the inaugural H2Global auction to supply 397,000 tonnes of green ammonia between 2027 and 2033 at a price of EUR 1,000/t including shipping and import costs. Following the winning bid, Fertiglobe signed a long-term offtake agreement with Egypt Green Hydrogen, strengthening the case for financial close. Under H2Global’s double-auction scheme, its intermediary, HintCo, buys green hydrogen or its derivatives from international producers through 10-year purchase agreements before selling them to European customers at the highest possible price via separate tenders. The difference in hydrogen unit price between the purchase and sales agreements will be met by HintCo itself, drawing on the EUR 900m grant from the German government. The mechanism is designed to bridge the cost gap for early green hydrogen imports and create market certainty for producers and offtakers.

The Scatec case study illustrates how green hydrogen projects in Egypt progress only once the pre-FID revenue and finance sequencing bottleneck is credibly addressed. Projects that have advanced furthest indeed share three characteristics visible across the visuals in Section 4: (1) they are anchored in existing industrial or brownfield infrastructure, reducing capital intensity and execution risk; (2) they benefit from credible offtake pathways, either through integrated industrial demand or demand-side support mechanisms, (3) they operate within a policy environment where state convening can resolve cross-institutional frictions pragmatically, even if solutions remain project-specific.

Additionally, the H2Global mechanism demonstrates how demand-side instruments can convert policy ambition into bankable revenue, altering project trajectories where supply and delivery pathways already exist. By providing credible, long-term offtake commitments, it has the potential to resolve the revenue uncertainty that dominates the pre-FID bottleneck (Visual A) and allow projects to move from conditional interest to committed financing (Visual B). Such demand-side support is however effective only where projects are sufficiently mature, infrastructure pathways are credible, and delivery risks are manageable. It cannot compensate for unresolved early-stage coordination failures, nor substitute for missing project preparation, infrastructure planning, or risk allocation. Hence, mapped against the Egypt and Morocco project lifecycles, H2Global intervenes most effectively between pre-FID and construction. In Egypt, where some projects are closer to this threshold, such instruments can unlock FID directly. In Morocco, where projects are earlier-stage, demand-side instruments must be paired with earlier sequencing support to be effective.

6.3. Financing instruments in practice

A wide range of concessional finance and blended finance instruments exist in principle to support hydrogen projects in Egypt and Morocco. Both countries indeed benefit from engagement by public finance institutions, bilateral partners, and development banks, while European public finance actors have played a particularly visible role in early green hydrogen discussions in the region, including through technical assistance, guarantees, concessional windows, and project preparation facilities. Interviews and stakeholder discussions also consistently highlighted the importance of these institutions and finance instruments in enabling early projects to advance and in signalling credibility to other financiers.

However, in practice, access to these instruments is often conditional. Interviews and World Bank analysis indeed suggest that these instruments are usually deployed only once projects approach bankability, limiting their impact during the earlier development stages where risks remain highest. H2Global analysis similarly suggests that demand-side and price-support mechanisms are most effective once projects have sufficiently mature supply, infrastructure, and delivery pathways in place. In particular, recent H2Global Foundation analysis on pathways to FID and demand-building instruments highlights that price support mechanisms can reduce revenue uncertainty and improve bankability, but cannot substitute for unresolved project preparation, infrastructure sequencing, or delivery risks. Where such pathways are absent, concessional finance risks being too small, too late, or misaligned with the actual risks preventing FID. Several DFIs made a similar point: concessional finance is often inherently limited in scale relative to hydrogen project capital needs and is therefore most effective when used to reduce the cost of capital once projects approach financial close, rather than as a substitute for early bankability. In practice, financing instruments therefore respond to project maturity, which creates a vicious cycle: projects must be bankable to access the instruments intended to make them bankable.

Development finance institutions also noted that concessional finance is typically easier to justify where projects demonstrate local demand, development additionality, or policy relevance beyond export earnings. As a result, the volume of concessional finance that can be mobilised for green hydrogen projects remains limited, particularly where much of the current pipeline is export-oriented. Hence, despite the apparent availability of public and private finance instruments, sequencing gaps persist in Egypt and Morocco.

Moreover, interviewees noted that commercial banks in the region often have limited experience structuring the financing of green hydrogen projects. Banks indeed remain cautious because green hydrogen projects combine multiple technologies, uncertain offtake structures, and novel value-chain risks. Development finance institutions are therefore widely viewed as playing a critical role not only in providing capital, but also in structuring and de-risking projects in ways that allow commercial banks to participate later. Several commercial banks indicated that they would be willing to engage earlier if risks were better allocated and project structures clearer.

Several stakeholders finally pointed to the limitations of approaching green hydrogen investment on a purely project-by-project basis. Large-scale energy transition initiatives increasingly require coordinated investment frameworks that can aggregate multiple projects and infrastructure components. Initiatives such as Egypt's NWFE platform illustrate how such frameworks can accelerate financing by aligning government commitments, development finance institutions, and private investors around a portfolio of assets rather than isolated transactions. Interviewees suggested that similar portfolio-based approaches or platform structures could potentially support green hydrogen development elsewhere in the Mediterranean. Some developers also highlighted that many innovative financing instruments originate within the European Union and are designed primarily for EU-based projects. Greater coordination with European institutions, clearer guidance on eligibility, and more practical support in navigating these tools could help unlock additional investment for Egyptian and Moroccan projects targeting EU markets.

7. Recommendations: From mapping to coordination

The three visuals presented in this report point consistently to sequencing failures and misalignment in timing and risk allocation, rather than capital scarcity, as the main constraints preventing green hydrogen projects in Egypt and Morocco from reaching final investment decision.

The risk accumulation and bankability bottleneck schematic shows that projects stall at the pre-FID stage because unresolved offtake and revenue risk prevent cost of capital from being meaningfully tested or reduced. The project-cycle financing stack diagram demonstrates why these risks remain unresolved, revealing a sequencing deadlock in which developers, public institutions, and financiers each wait for others to move first. The stakeholder influence map shows why coordination efforts struggle to break this deadlock, demonstrating that actors with formal authority are not always those with effective leverage over bankability outcomes. Taken together, the visuals therefore indicate that adding new instruments or new pools of capital is unlikely to unlock progress unless existing tools are better sequenced, deployed where timely and relevant, and directed toward actors and risks that actually determine project bankability. To help green hydrogen projects move beyond the pre-FID bottleneck in Egypt and Morocco, the six following actions are recommended:

1 Anchor revenue through demand-side instruments and early offtake structures

Interview evidence consistently identifies revenue uncertainty and lack of credible demand as the principal barriers preventing projects from reaching FID. Coordinated demand-side mechanisms, including advance purchase agreements, contracts-for-difference, aggregated offtake platforms, and public-backed demand mandates, could help establish bankable revenue pathways and unlock financing. Particular priority should be given to sectors capable of acting as early demand anchors, including fertilisers, shipping fuels, and integrated industrial clusters.

2 Establish a project-level financing and risk-sharing mechanism to unlock pre-FID

Green hydrogen projects are not primarily constrained by the absence of capital, but by the lack of aligned financing and risk-sharing during the transition from feasibility to bankability. A dedicated project-level mechanism could help align development finance institutions, commercial banks, export credit agencies, and institutional investors around specific projects or industrial clusters. This should include targeted support for project preparation, commercial structuring, and early-stage risk-sharing instruments to help bridge the current pre-FID financing gap.

3 Develop a shared infrastructure financing and delivery model

Infrastructure becomes a critical enabling condition once revenue uncertainty begins to stabilise. Clearer ownership and financing models for transmission, desalination, storage, and export infrastructure could reduce systemic risk and improve project bankability. Cluster-based infrastructure planning, public-private partnerships, and coordinated delivery models would help address the current “chicken-and-egg” dynamic between projects and enabling infrastructure.

4 Prioritise bankable project archetypes to demonstrate early success

Projects progressing most credibly toward FID tend to combine identified offtakers, industrial integration, coordinated infrastructure, and lower execution complexity. Governments and stakeholders could therefore prioritise a limited number of lighthouse projects linked to existing industrial assets, integrated demand models, or industrial clusters. Demonstrating successful bankable projects would help build investor confidence and establish replicable models for future development.

5 Establish the Cairo Centre as a permanent implementation and coordination platform

Existing coordination efforts have strengthened dialogue across stakeholders but have not yet consistently translated into project-level progression toward FID. The Cairo Centre could therefore serve as a regional platform focused on implementation, financing alignment, and project execution in Egypt and Morocco. This could include convening governments, financiers, and developers; supporting project preparation and transaction facilitation; monitoring project progression and financing bottlenecks; and establishing a joint finance taskforce focused on accelerating bankability and delivery.

6 Align regulatory frameworks and international demand signals to unlock export markets

Many projects in Egypt and Morocco remain highly dependent on export markets, particularly Europe. Regulatory uncertainty regarding certification frameworks, market access, demand trajectories, infrastructure readiness, and eligibility for support mechanisms continues to constrain investment decisions and delay project progression toward FID.

Strengthening coordination between producing and importing markets, improving clarity around certification and financing frameworks, and facilitating access to international demand-side mechanisms could help reduce uncertainty and strengthen the bankability of export-oriented projects.

A dedicated platform bringing together exporting country governments, project developers, financiers, certification actors, and European stakeholders could further support structured engagement around evolving EU regulatory frameworks, including the review of the RFNBO Delegated Act. Such a platform could help coordinate exporter perspectives, improve regulatory alignment, facilitate technical guidance, and strengthen long-term demand visibility for projects in Egypt and Morocco.

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