

An isometric illustration of a hydrogen valley ecosystem. It features wind turbines, solar panels, industrial buildings, a ship, a train, and a residential area. A large white cloud is in the top left. A colorful dotted arc is in the top right. The text 'Clean Hydrogen Partnership' is in the top right. The title 'Webinar 2: Key steps in bringing Hydrogen Valley projects to Final Investment Decision (FID)' is in the center. The subtitle 'H2V Facility Webinar series: Advancing Hydrogen Valleys to FID' is below the title. The date 'September 18th 2026' is at the bottom left. The logo 'Roland Berger' is at the bottom right. A sign with 'www.h2v.eu' is near the residential area.

Clean Hydrogen
Partnership

Webinar 2: Key steps in bringing Hydrogen Valley projects to Final Investment Decision (FID)

H2V Facility Webinar series: Advancing Hydrogen Valleys to FID

September 18th 2026

Roland
Berger

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An isometric illustration of a clean hydrogen ecosystem. The scene is set against a dark blue background. In the upper left, a white cloud contains a stylized 'H2' logo. The landscape features a network of roads and pipes. Wind turbines are scattered across the terrain, some connected to solar panels. A large ship is docked at a pier. In the center, a building with an 'H2' logo is being constructed or maintained. To the right, a large industrial facility with a tall chimney and a crane is shown. In the foreground, a residential area with houses and a bus is depicted. A sign with the website 'www.h2v.eu' is visible. The overall theme is sustainable energy and infrastructure.

A. Opening & Welcome

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In this call today

Clean Hydrogen Partnership



**Renata
Kadric**
Synergies
Officer

H2V Facility Service Consultants



**Christopher
Schmitt**
Partner



**Christian
Geiger**
Project
Manager

Webinar expert



**Konstantinos
Chatzifotis**
EU Affairs
Manager

The H2V Facility addresses support needs in the market with the aspiration of achieving 50 Hydrogen Valleys operational/under construction in the EU by 2030

The Hydrogen Valleys Facility at a glance

State as of 2026

83

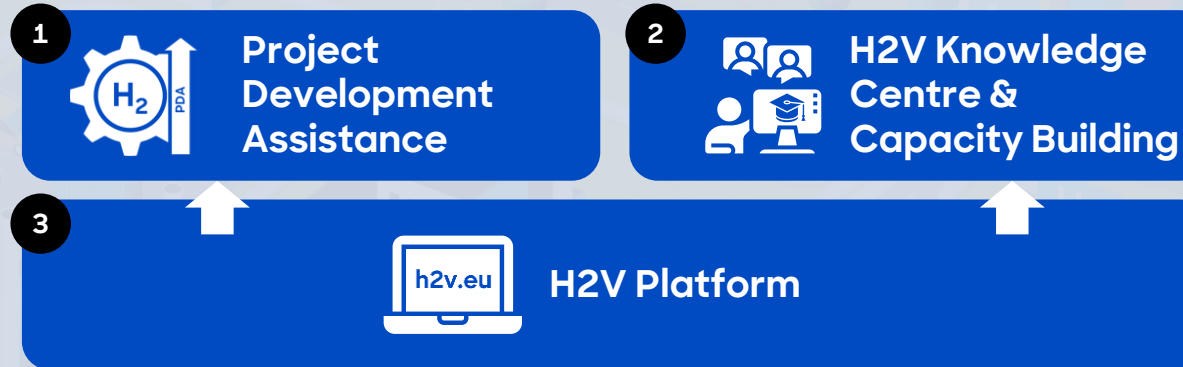
EU Hydrogen Valleys on the H2V Platform

24

EU Hydrogen Valleys on the H2V Platform Operational or under construction

Dedicated support via the Hydrogen Valleys Facility

by



Delivery partners

Roland Berger



worley

Inycom

As per the 2024 European Commission Roadmap for Hydrogen Valleys

Aspirational target
2030

50

Hydrogen Valleys operational/under construction

within the EU

Today marks the second webinar of our webinar series "Advancing H2 Projects to FID"

Upcoming webinars and self-service material



2026 webinars on "Advancing H2 Projects to FID"



Self-service material

Key facts:

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- **Registration:** www.h2v.eu/h2v-knowledge-centre
- **Material:** Consolidation of findings and key slides to be uploaded to www.h2v.eu
- **Follow-up:** Persons with interest in follow-up activities can reach out to h2v@clean-hydrogen.europa.eu

Webinars:

Webinar 1

H₂ market and offtake

Date: 14.07.2026

Time: 9:30 am – 11:00 am

Webinar 2

Key steps in bringing Hydrogen Valley projects to FID

Date: 18.09.2026

Time: 9:30 am – 11:00 am

Today's session

Webinar 3

Regulatory insights on RFNBO vs. LCH

Date: 17.11.2026

Time: 9:30 am – 11:00 am

Save the date



- Status of the Hydrogen Market
- Offtake strategy and guardrails
- Contracting & procurement strategy
- Hydrogen value chain assessment
- Evaluation of technical suppliers
- Conducting a socio-economic assessment
- Setting up Hydrogen Valley project organisations
- Milestone planning towards FID
-

An isometric illustration of a hydrogen valley ecosystem. It features a network of blue pipes representing hydrogen distribution. Key elements include: wind turbines in the background; a large solar panel array; industrial buildings with smokestacks; a residential area with houses; a commercial area with a shopping center and a bus; a port with a ship and a crane; and various vehicles like trucks and cars. Several buildings and pipes are labeled with 'H₂'. A sign in the bottom right corner displays the website 'www.h2v.eu'.

B. From concept to FID: Building an investible Hydrogen Valley

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An isometric illustration of a hydrogen valley ecosystem. It features a network of blue pipes connecting various industrial and residential buildings. Wind turbines are scattered across the landscape, and a large solar panel array is visible. A ship is docked at a port, and a train is shown on a track. Several buildings are labeled with 'H2', indicating hydrogen production or storage. A sign in the bottom right corner displays the website 'www.h2v.eu'.

B.1 Why Hydrogen Valleys stall before FID—and what successful projects do differently

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Hydrogen Valleys fail before FID when timelines, regulation and demand are not de-risked early

Key barriers and mitigation measures for Hydrogen Valleys

Key barriers for green H₂ projects



Long development and coordination timelines –

Multiple assets, partners and approvals must progress in a coordinated sequence



Gaps in regulatory environment for H₂ –

Valleys require permits and compliance across production, infrastructure, storage and end-use assets



H₂ demand uncertainties –

Investors typically seek high demand-certainty for H₂; missing offtake agreements raise commercial risks



Delivery and interface risks –

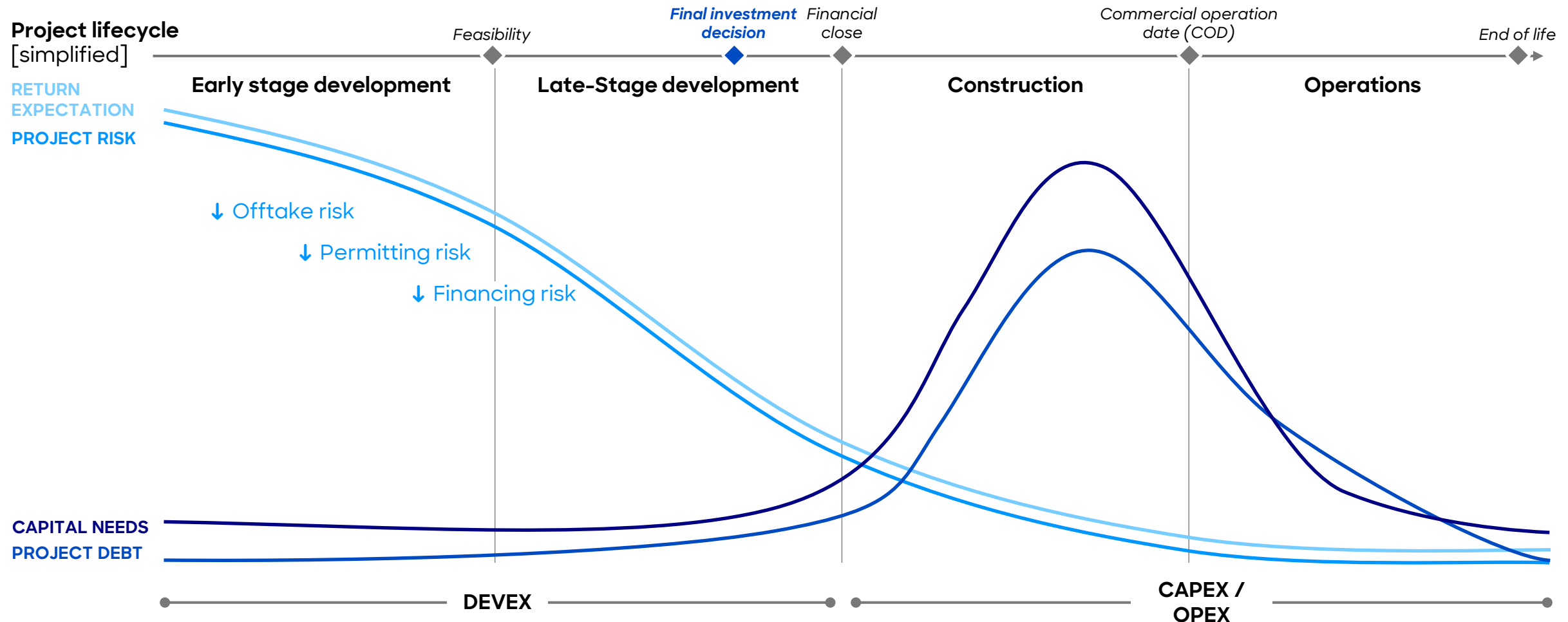
Delays or changes in one sub-project can affect infrastructure and other Valley participants

Exemplary mitigation measures

- MW-scale H₂ projects average c. 2–3 years lead time, rising to c. 5+ years for GW-scale; thus, **timely planning is needed**
- For COD this decade, **large projects must reach FID by 2026/2027**
- **Lobbying & implementing key reg. enablers, from developer perspective:**
 - **Production:** CAPEX subsidies, permitting
 - **Offtake/consumption:** CCfDs, quotas, mandates for H₂-ready infra.
 - **Competition:** Carbon pricing, carbon accounting for blue H₂
- **Business development activities** focused on offtakers with **highest willingness-to-pay** (sectors with reg. targets, limited alt. decarb. options)
- Mitigation strategies exist (e.g., **offtake** agreements, **feed-in tariffs**), but **policy support** is needed (e.g., CO₂ pricing) **to bridge the pricing gap**
- **Timely start of pre-planning** and conceptualization processes
- **Consideration of buffers** for unexpected delays in project planning
- Conduct of **in-depth pre-FEED and FEED studies** to mitigate risk of failures

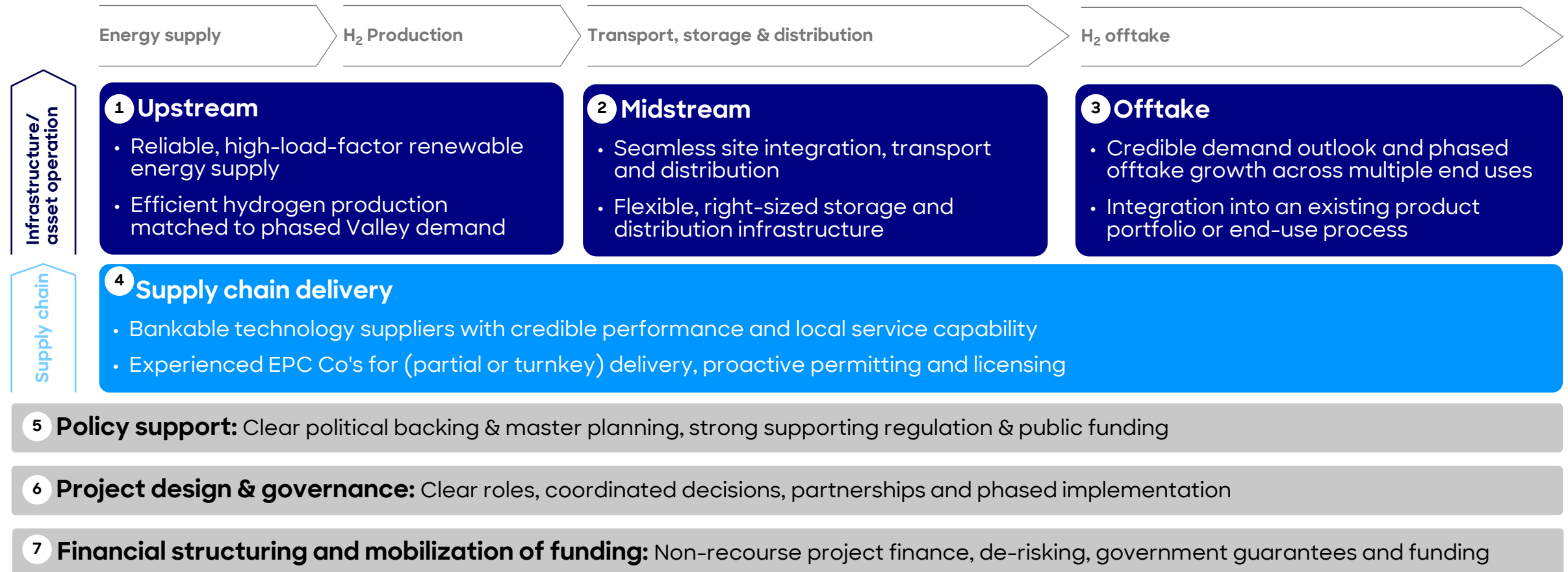
The highest risks arise before FID – Early and systematic de-risking is key to reach FID

Typical project's lifecycle



Seven success factors systematically reduce the risks that stand between a concept and FID

Success factors of H2 Valley projects



An isometric illustration of a clean hydrogen ecosystem. It features a network of blue pipes connecting various industrial and residential buildings. Wind turbines are scattered across the landscape, and a large cargo ship is docked at a port. A solar panel array is visible in the center. Several buildings are labeled with 'H₂', indicating hydrogen production or storage. A sign in the bottom right corner displays the website 'www.h2v.eu'.

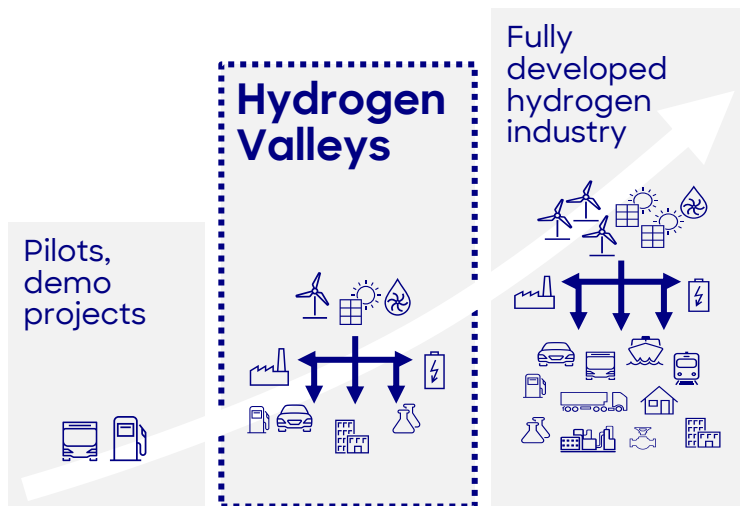
B.2 From individual FIDs to Valley orchestration: managing an interconnected project portfolio

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A Hydrogen Valley combines clean hydrogen production, shared infrastructure and multiple end uses within a defined geography

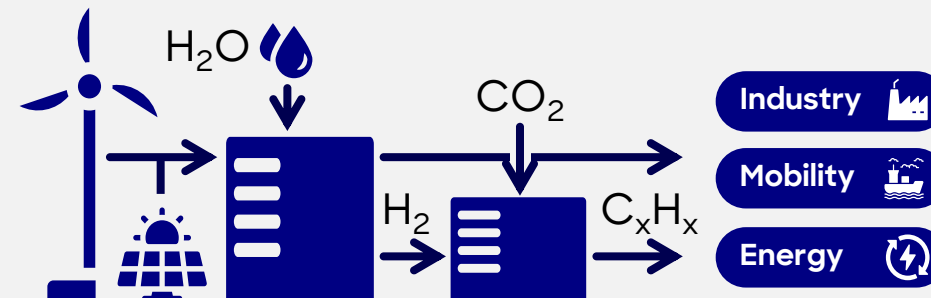
Hydrogen Valleys ...

- Next-generation H₂ market development
- Integrated (and larger-scale) projects covering more and more of the value chain – "mini hydrogen economies"



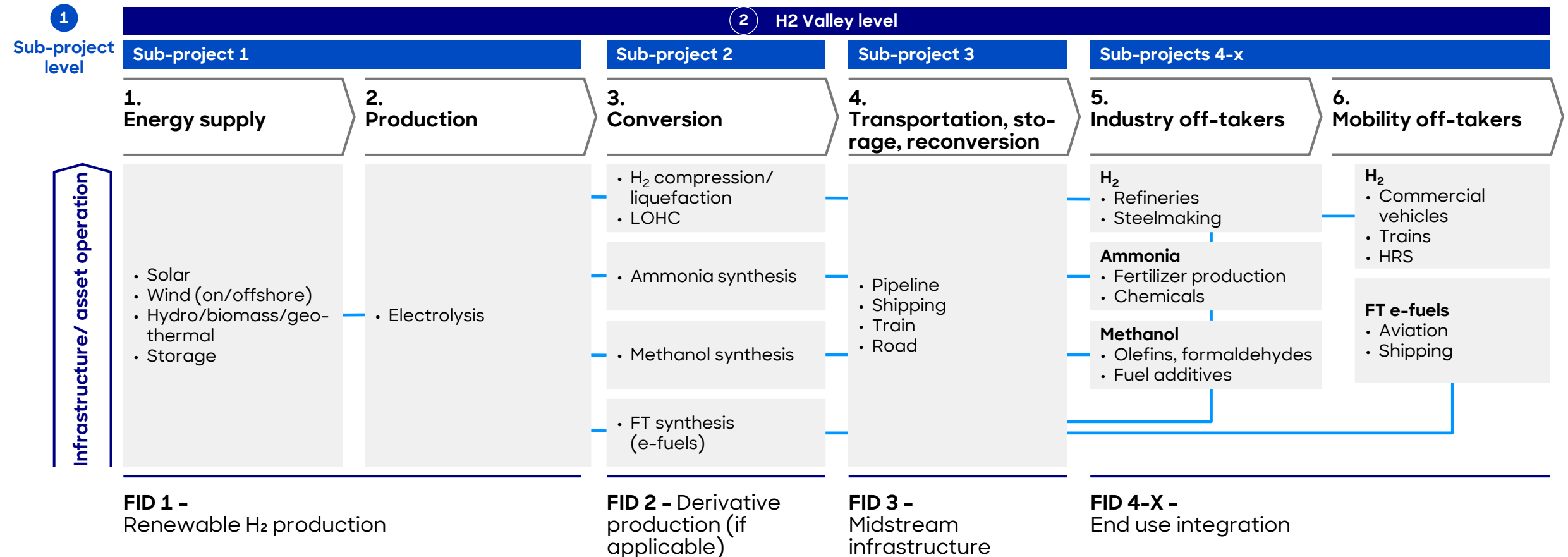
... and what they're made of

- **Large-scale joint investment** (> EUR 10 m and up to multi-bn EUR)
- **Full hydrogen value chain coverage**
 - Centralized clean hydrogen production (*de facto* mostly green H₂)
 - Shared infrastructure (e.g., pipelines, refueling stations)
 - Multiple end-uses (e.g., steel industry, fuel cell trucks)
- **Clear regional scope** (e.g., around a major port)
- increasingly underpinned by **long-term commercial arrangements**



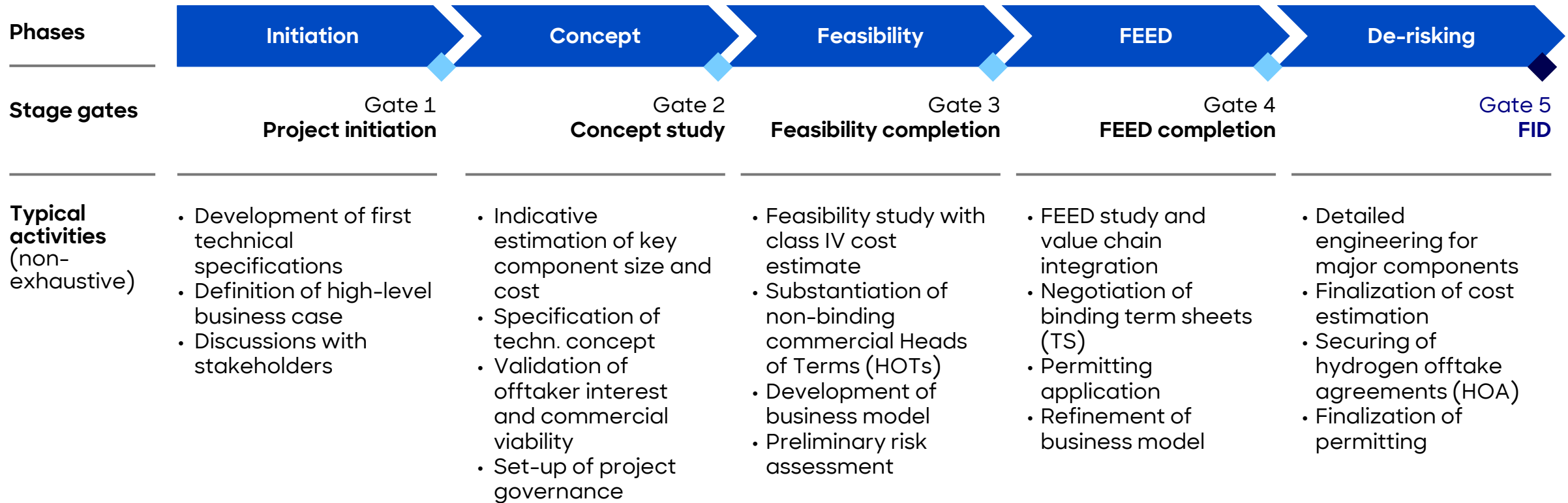
Individual FID's happen on sub-project-level – But interdependencies and de-risking require close coordination on Valley level

Archetypical H₂ valley



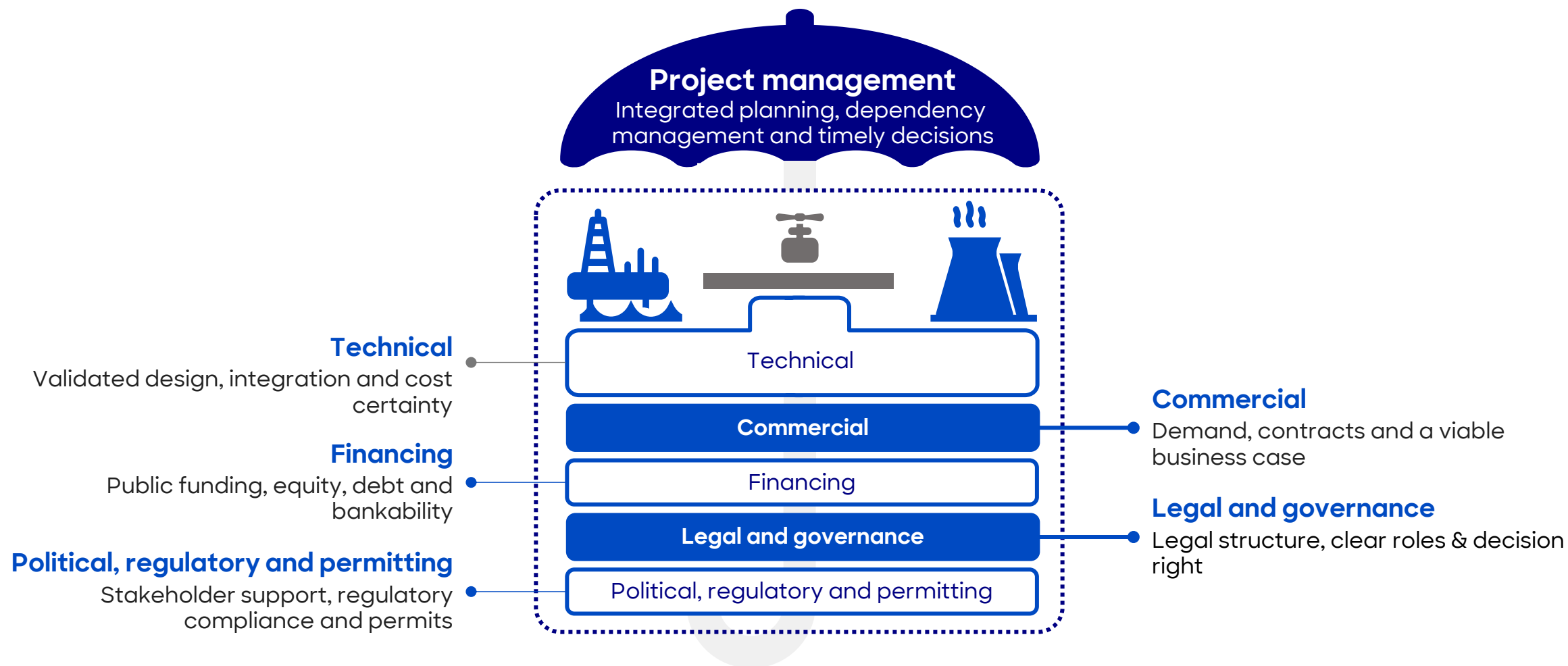
For individual projects, reaching FID requires progressing through six phases, each anchored by a clear stage gate

Typical project phases and activities



FID is only possible when five interdependent workstreams mature in parallel

What it takes to bring Hydrogen Valley projects to Final Investment Decision



Each of the five workstreams must meet clearly defined conditions before FID can be taken

Typical conditions for FID

Workstream	Typical milestones to FID	Description
1 Commercial	Offtake agreements signed	Fully termed and binding (long-term) offtake agreements with offtakers signed
	Other relevant agreements along the value chain signed	Agreements with any other players along the hydrogen value chain, such as infrastructure access agreements or transportation agreements signed
	Business case approved	Feasible business case and with plausible underlying assumptions incl. final cost estimate with acceptance typically by all shareholders
2 Technical	FEED results validated	Completed and validated FEED study, incl. final cost estimates for CAPEX and OPEX
	Construction tender(s) advanced	Supplier screening done, tender documents for construction prepared and potentially issued
	Surveys conducted	All necessary surveys have been conducted
3 Permitting	Major permits advanced or already received	Permitting strategy in place with application for major construction permits ongoing or ideally permits already received
4 Financing	Financing plan approved	Financing plan based on public funding, equity and debt financing approved by all shareholders
	Bankability validated	Financial advisors confirmed bankability of the project
5 Project mgmt., legal and governance	Consortium partners onboarded	Consortium partners along the hydrogen value chain onboarded, incl. – if relevant – signature of letters of commitment or other formal agreements
	Post-FID execution plan in place	Detailed post-FID execution plan for detailed engineering, construction and commissioning in place
	Legal structure established	"Investible" legal structure established, e.g., a Special Project Vehicle

Required capabilities vary by project scope – building the right team early is critical to reaching FID

Required capabilities to reach FID

Capabilities strongly depend on specific scope of Hydrogen Valley!



Typical milestones to FID

Commercial

- Offtake agreements signed
- Other relevant agreements along the value chain signed
- Business case approved

Technical

- FEED results validated
- Construction tender(s) advanced
- Surveys conducted

Polit., reg. & permitting

- Major permits advanced or already received

Finance

- Financing plan approved
- Bankability validated

Project management

- Consortium partners onboarded
- Post-FID execution plan in place
- Legal structure established

Required capabilities



- Deep understanding of gas and H₂ market dynamics
- **Market analysis** expertise
- Experience in designing **business models**
- **Relationship building** competence
- Commercial **negotiation experience**
- **Financial modelling** skills
- **Cross-functional capabilities** for close collaboration w/ technical

- **Technical project management** experience
- **Contractor management** experience (e.g., for FEED study)
- Various **engineering disciplines** incl. process, mechanical, electrical, civil, safety and environmental
- **Scheduling** expertise to prepare construction
- **Procurement** expertise to tender and award engineering, EPC, services

- Deep **regulatory understanding**
- Preferably an existing **network to key stakeholders**
- **Relationship building** competence
- **Communication skills** with public authorities
- **Permitting** expertise

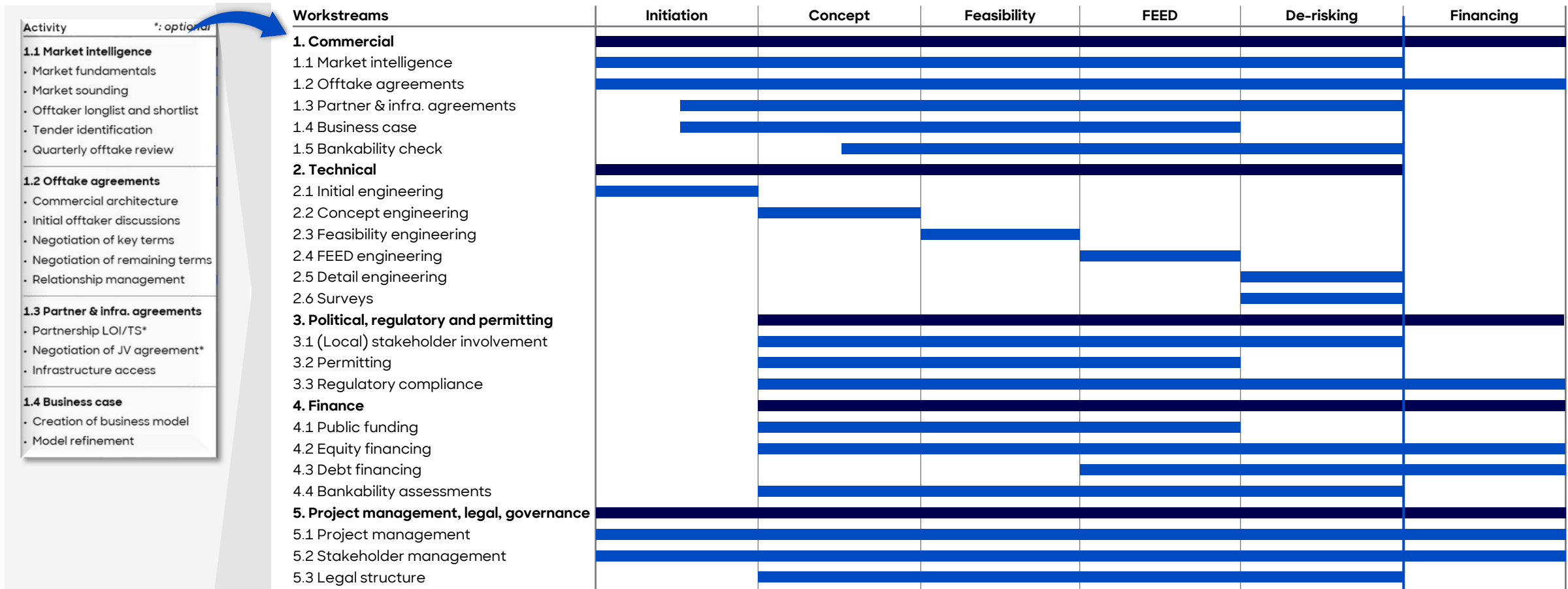
- Strong **financial understanding**
- **Public funding** expertise
- Deep understanding of **equity and debt financing** structures
- Experience in **investor identification, discussion, and JV creation**
- **Project finance** experience

- **Project management** excellence
- Track record of **project development**
- Outstanding **leadership** capabilities
- **Strategic thinking**
- **Stakeholder management** experience
- **Relationship building** capabilities
- Solid **cross-functional understanding** of all other workstream disciplines

One integrated roadmap makes dependencies and FID-critical activities visible early

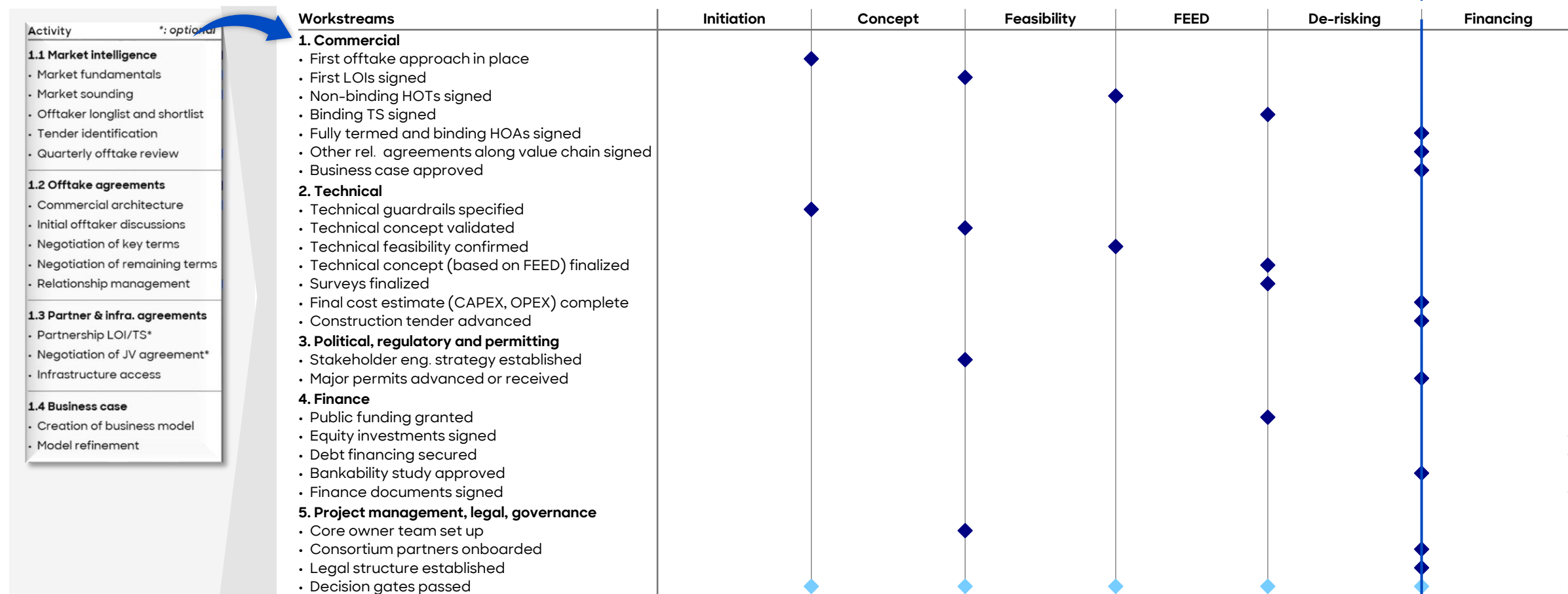
Holistic roadmap towards FID

Final Investment
Decision



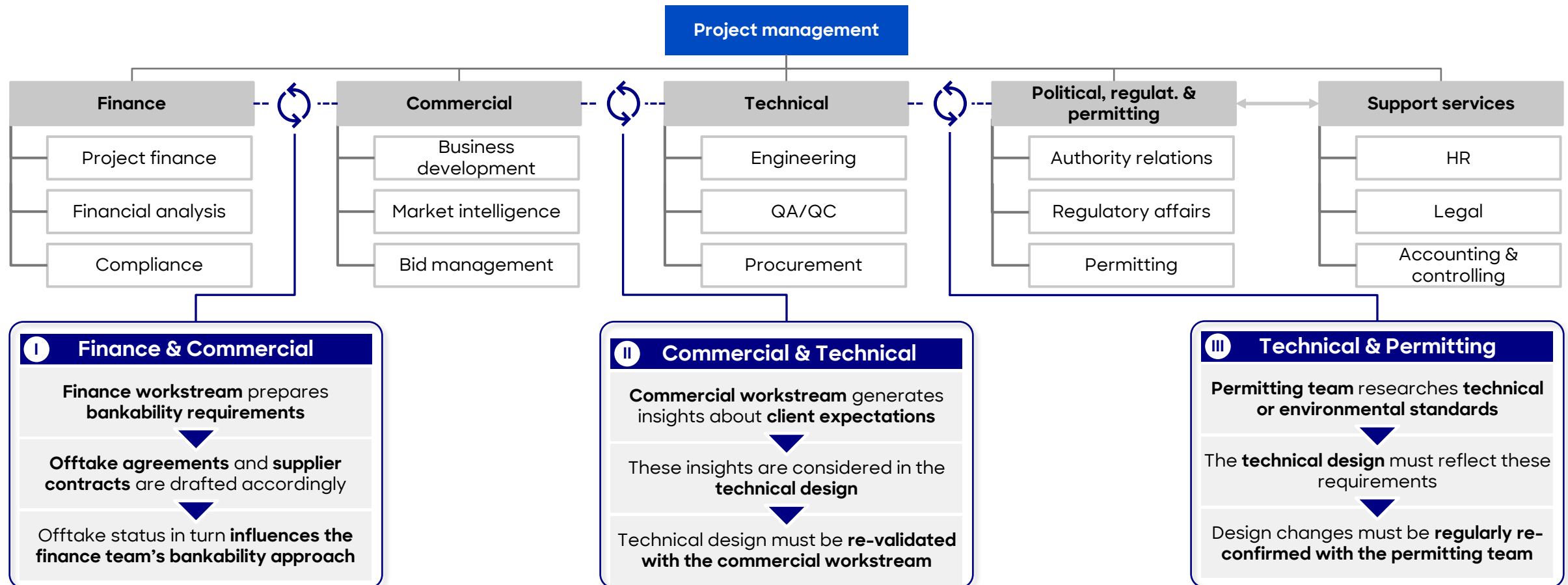
Clear milestones per workstream and phase create the decision points that keep the FID timeline on track

Milestones towards FID



Project progress is not just driven by individual workstream initiatives – iterative cooperation between teams is critical

Cooperation requirements between project workstreams (Exemplary)



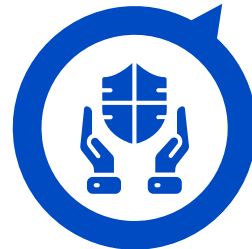
Robust individual projects form the basis of a thriving valley – de-risking and strong organizational structures are key success factors

Sub-project-specific success factors

In-house/captive offtake
where possible – reduces external counterparty and market risk



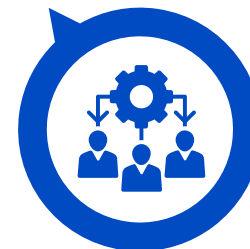
Full commercial de-risking via B2B contract architecture – Use long-term agreements to allocate supply, infrastructure and offtake risks clearly



Business ownership & governance – Embed delivery in the accountable business line, with clear P&L responsibility, decision rights and dedicated resources.



Technical maturity & cost certainty – Validated technical design, credible CAPEX/OPEX estimates and well-managed interfaces reduce execution risk before FID



Experienced project/procurement team – Build an experienced project and procurement team to manage EPC contractors, technology suppliers and critical interfaces

Valley success depends on orchestrating interdependent projects – not only de-risking each sub-project

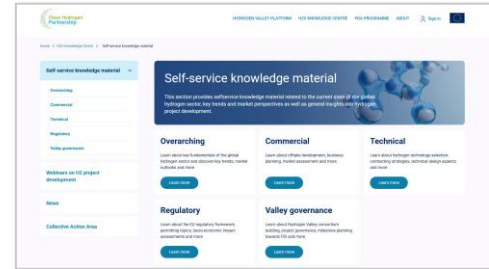
Valley-specific success factors



Visit the H2V Knowledge Centre for detailed roadmaps, tools and self-service material supporting each workflow towards FID

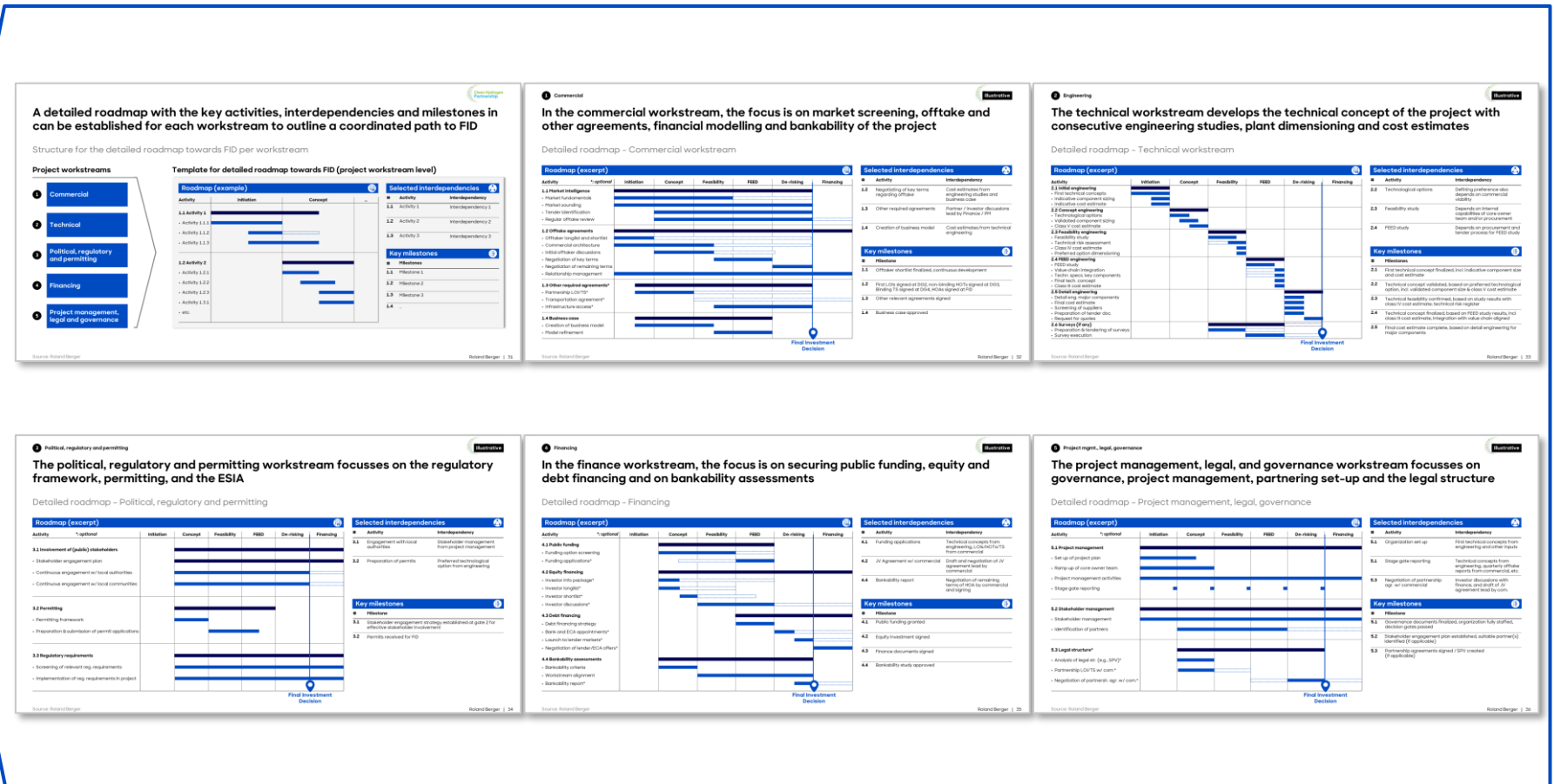
H2V self-service knowledge material

H2V self-service knowledge material



h2v.eu

Detailed roadmaps for every workflow can be downloaded from the self-service knowledge material section of the H2V Platform's website



An isometric illustration of a clean hydrogen ecosystem. It features a central hydrogen production facility with a large blue building labeled 'H2' and a solar panel array. A network of blue pipes distributes hydrogen to various locations: a residential area with houses, a commercial area with a shopping center and parking lot, an industrial area with factories and storage tanks, and a transportation hub with a train and trucks. Renewable energy sources include wind turbines and a large ship. A sign in the bottom right corner reads 'www.h2v.eu'.

C. Q&A and closing reflections

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Continue the journey: webinars and self-service tools support each step towards FID

Upcoming webinars and self-service material



2026 webinars on "Advancing H2 Projects to FID"



Self-service material

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An isometric illustration of a clean hydrogen ecosystem. The scene is set against a dark blue background. In the upper left, there are industrial buildings and a truck. A road with a car and a bus runs through the middle. To the right, a large ship is docked at a pier. In the center, there are solar panels and a wind turbine. A large white cloud shape is in the middle, with a road passing through it. The text 'Clean Hydrogen Partnership' is written in yellow and white. In the bottom right, there are houses and a bus. The website 'www.h2v.eu' is visible on a sign. The logo 'Roland Berger' is in the bottom right corner.

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