

Sustainability. Financed.



Seminar on Commercial Development of e-Fuels in Aviation

Financing SAF Production Projects

04/24

Who we are



360 Asset Finance GmbH - www.360af.de

Based in Frankfurt, Germany, we serve as strategic and financial advisors to corporations and sponsors focusing on innovative and sustainable technology initiatives.

Our services:

- Strategic and financial project management (*in the field of SAF production and procurement*)
- Structuring and procuring equity and debt financing (*for SAF projects*)
- Organizing and conducting specialty analytical work
- Regulatory framework support

Our clients:

- Producer, Service Provider and Innovator
- Project Developer
- Offtaker
- Financial Institutions
- Financial Sponsors and Investors
- Governments and Regulators

Our network:

- Deep access to the international financial services sector and investment industry
- Comprehensive aviation sector specific network (Airlines, Lessors, Banks)
- Founding member of IMPACT on sustainable aviation e.V.
- Member of the working group “climate-neutral aviation” of the German government and the RLCF Initiative of the EU

Our DNA:

Making things happen!

We are former investment bankers and lawyers and have decades of experience in successfully structuring and financing complex projects for corporates, private equity funds or institutional investors.

SAF supply – A quick back-of-the-envelope calculation -1-



1

Applying the 70% EU blending mandate to global jet fuel demand in **2050**, about **350bn liters** or **280mn tons** of SAF will be needed.

280,000,000 tons

2

Assuming an average SAF output of 100,000t/a per facility, **2,800 production facilities** would have to be in operation in **2050**.

2,800 facilities

3

Average CAPEX across production pathways and locations per 100,000t/a SAF output can be roughly set at EUR 1bn. **Total** required **CAPEX** to build 2,800 facilities would therefore equate to **EUR 2.8tn**.

EUR 2,800,000,000,000

4

Incorporating a planning and construction phase of approx. 5 years, **21 years remain** (2029 to 2050) to commission the necessary SAF supply. **Annually**, that would mean about **134 new plants** with an investment volume of approx. **EUR134bn**.

EUR 134,000,000,000 p.a.

134 new plants p.a.

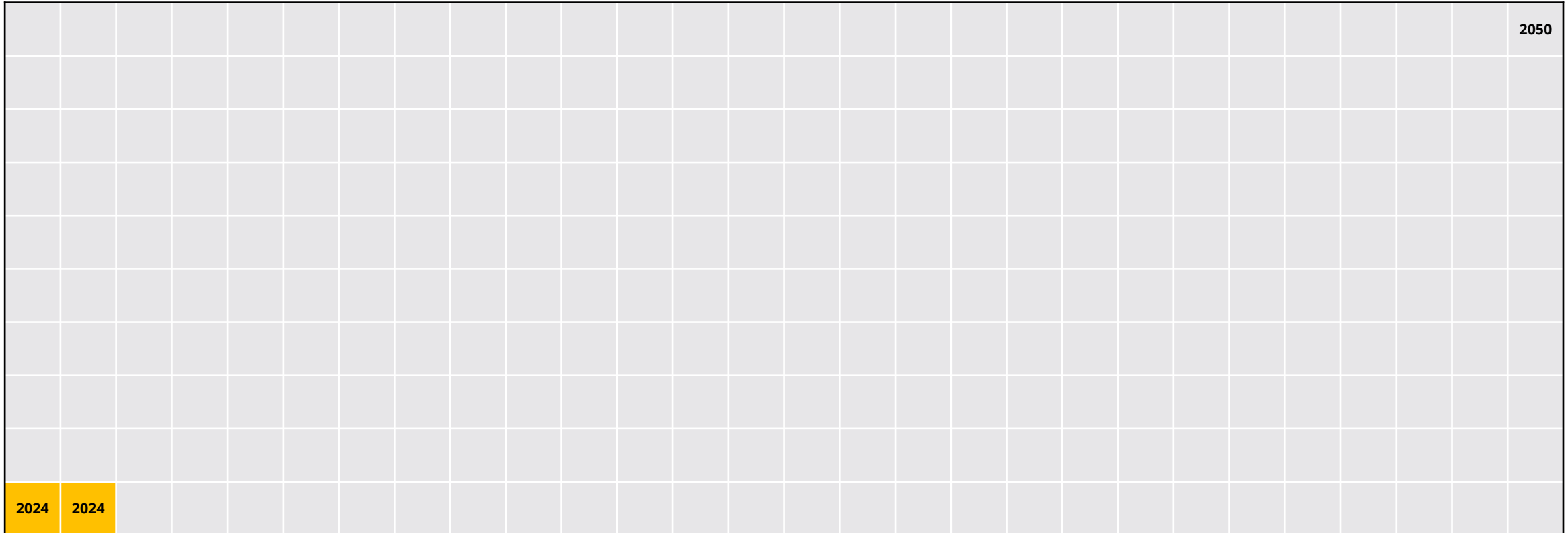
Engineering and supplier capacity to start building such SAF supply at the required pace is far from available today.

Same holds true for the availability of financing.

SAF supply – A quick back-of-the-envelope calculation -2-



Simple illustration of the task and challenge



Each field represents 1mn tons of SAF.

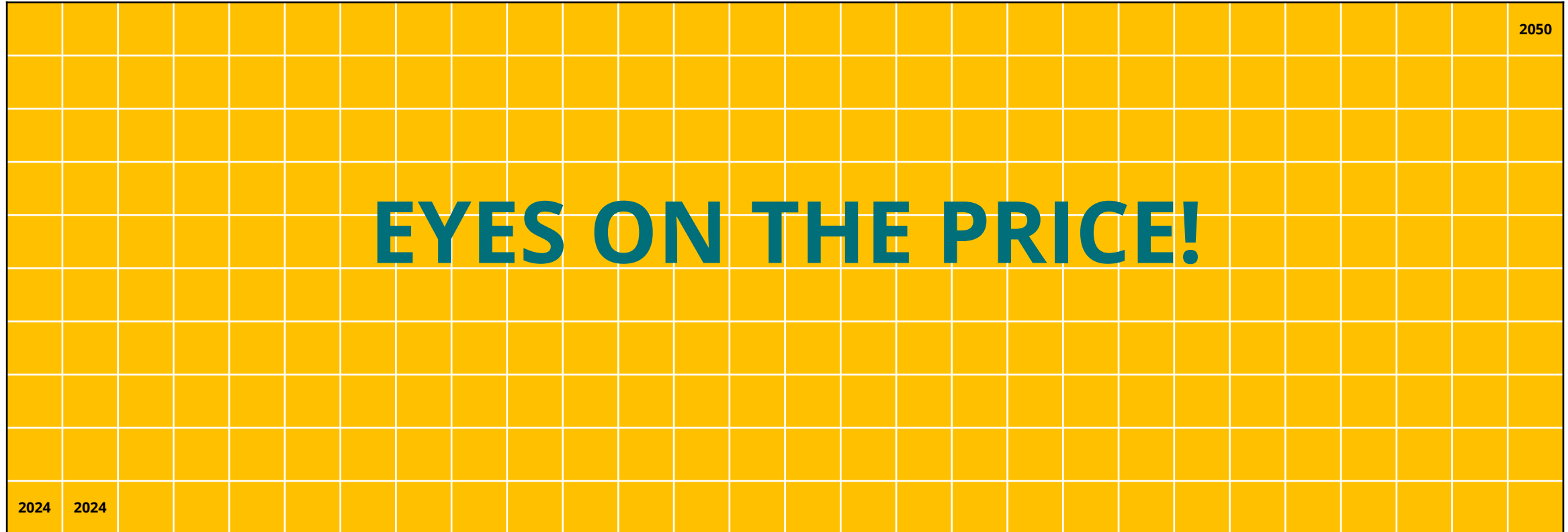
280 fields in total (estimated required global SAF supply in 2050).

Orange fields represent the expected SAF availability in 2024 (approx. 2mn tons).

SAF supply – A quick back-of-the-envelope calculation -3-



Simple illustration of the task and challenge

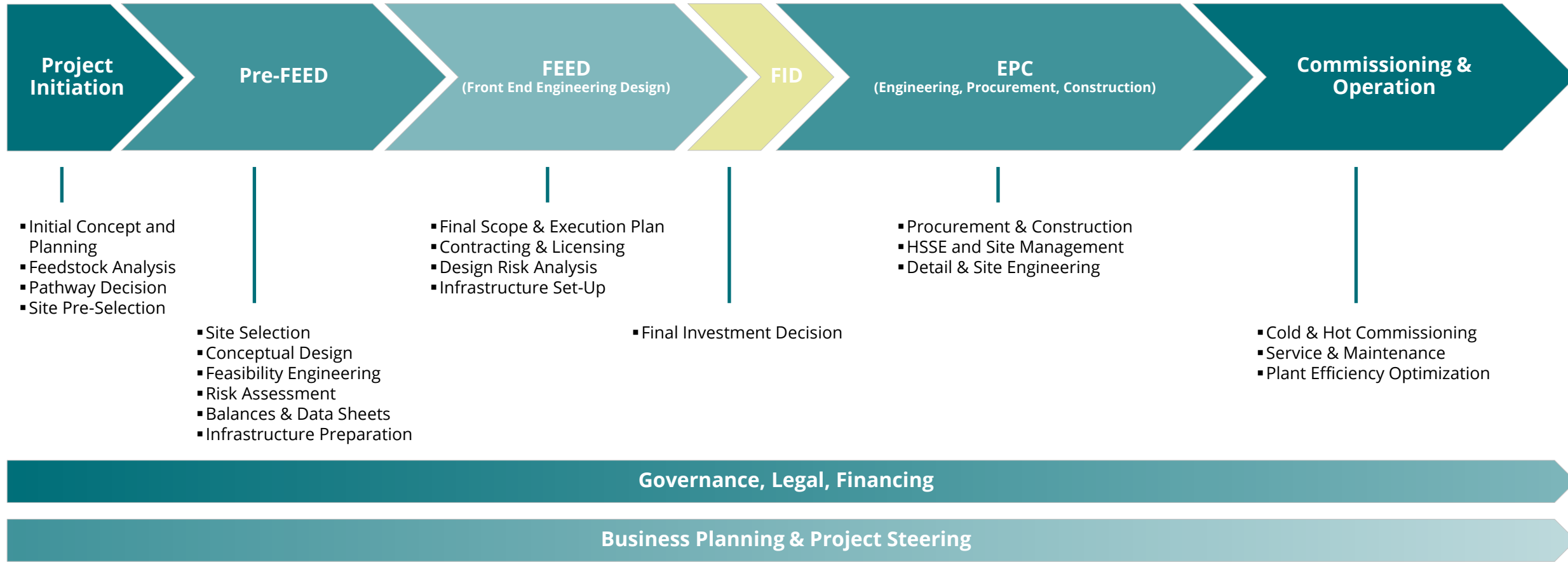


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Orange fields represent the expected SAF availability in 2050 (approx. 280mn tons).

SAF Production Project – From Planning to Operation



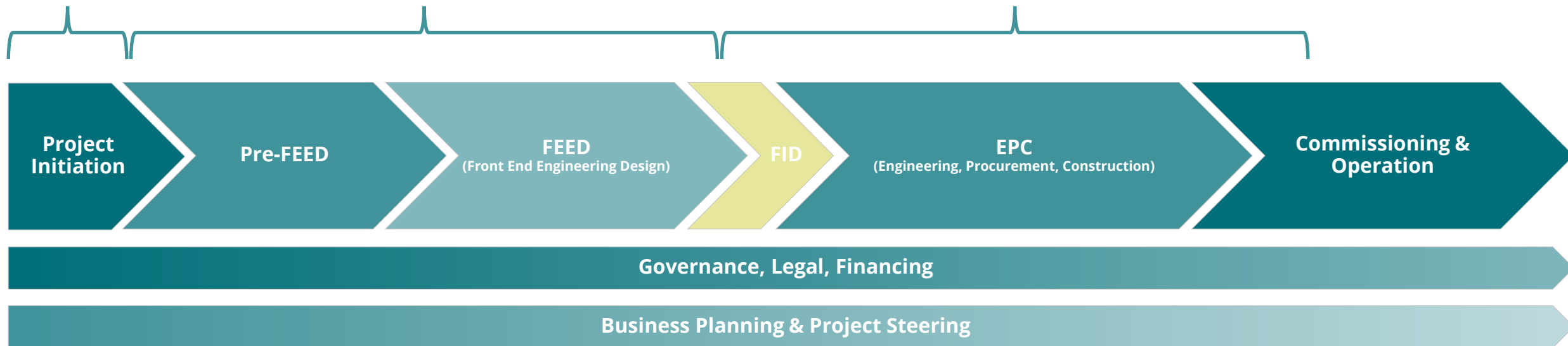
SAF Project Financing – Three High-Level Phases



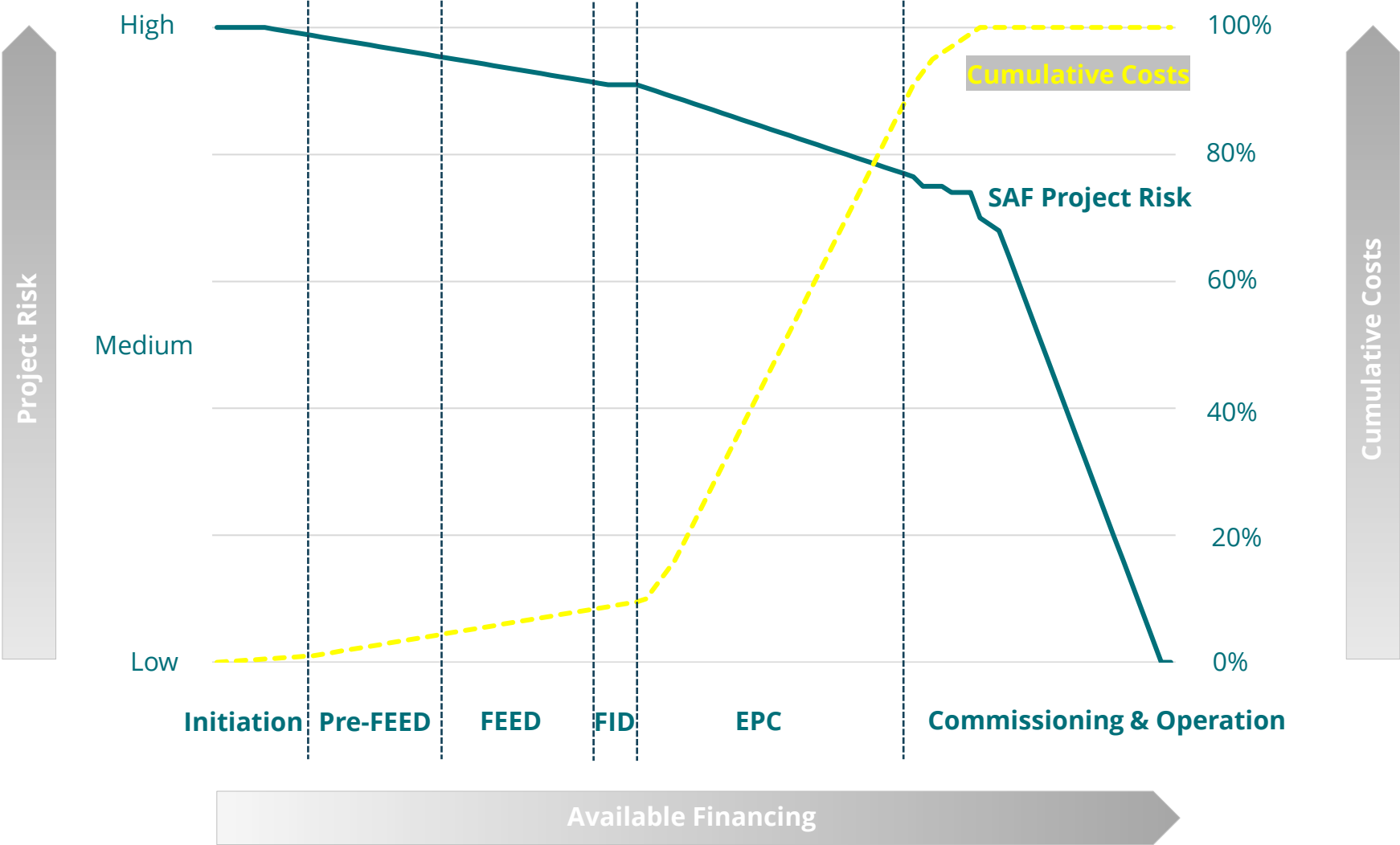
Initiation

DEVEX Phase

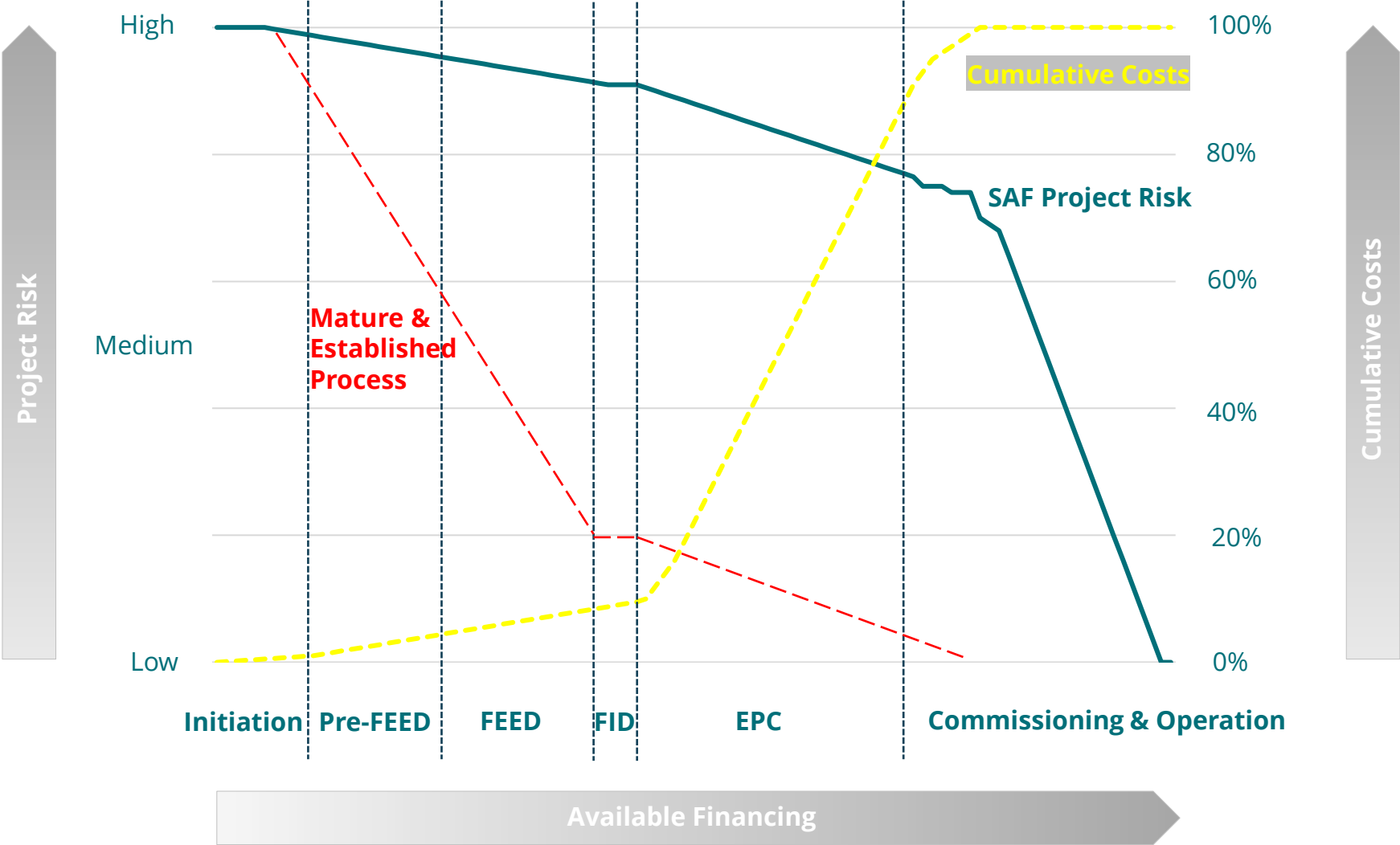
CAPEX Phase



First-of-its-kind SAF Production Project Risk and Costs



First-of-its-kind SAF Production Project Risk and Costs



SAF Project Financing – Phase 1: Initiation



Portion of overall project costs: 1-2%

Sources of Financing: Equity, Cash Flow, Debt (General Corporate Purposes), (*Grants / Subsidies*)

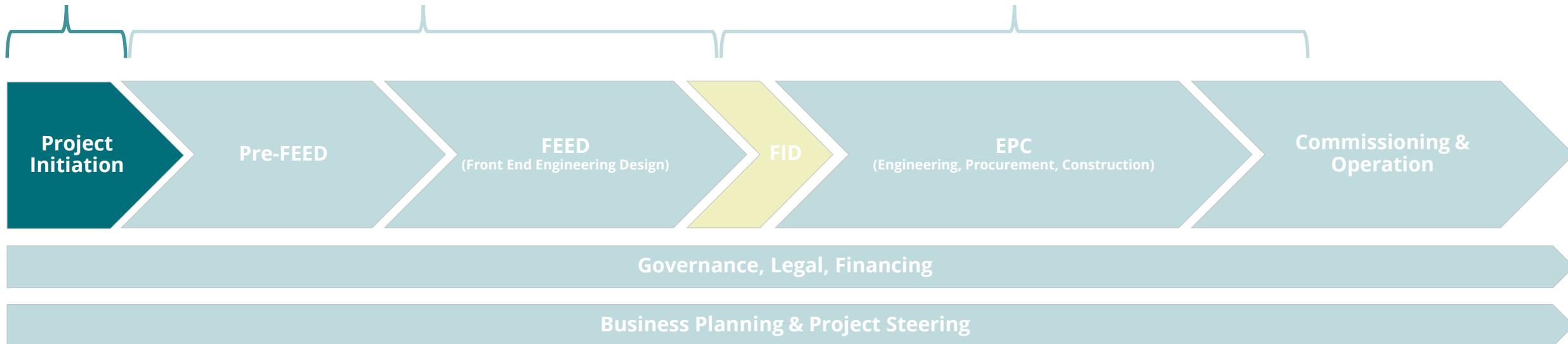
Provider of Financing: Internal, Friends & Family, Semi-Professionals, Angels, Philanthropic, (*Public Schemes*)

Key considerations: Keep the Cap Table short, look for investors who are experienced and might be able to continue to support in the DEVEX phase, engage with strategics early, look and apply for grants and subsidies, develop and maintain a high level of financial modelling, prepare for the next phases

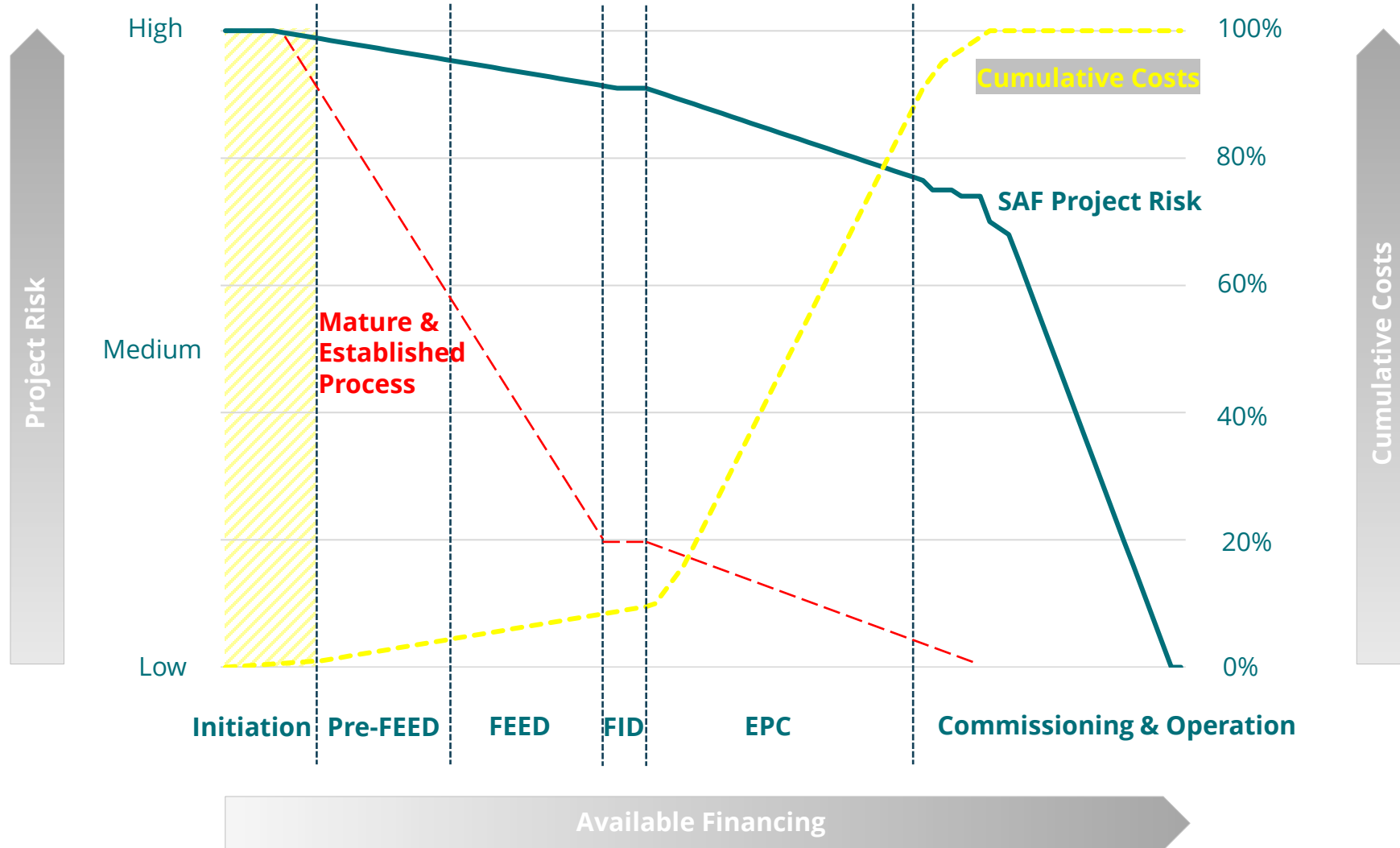
Initiation

DEVEX Phase

CAPEX Phase



F-o-i-k SAF Project Risk and Costs, Phase 1: Initiation



SAF Project Financing – Phase 2: DEVEX

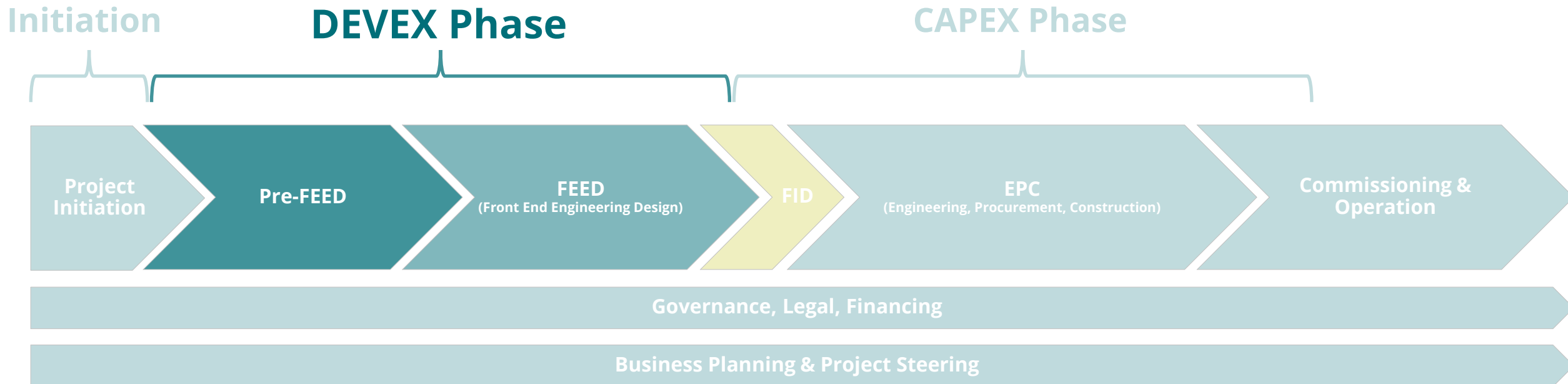


Portion of overall project costs: 5-10%

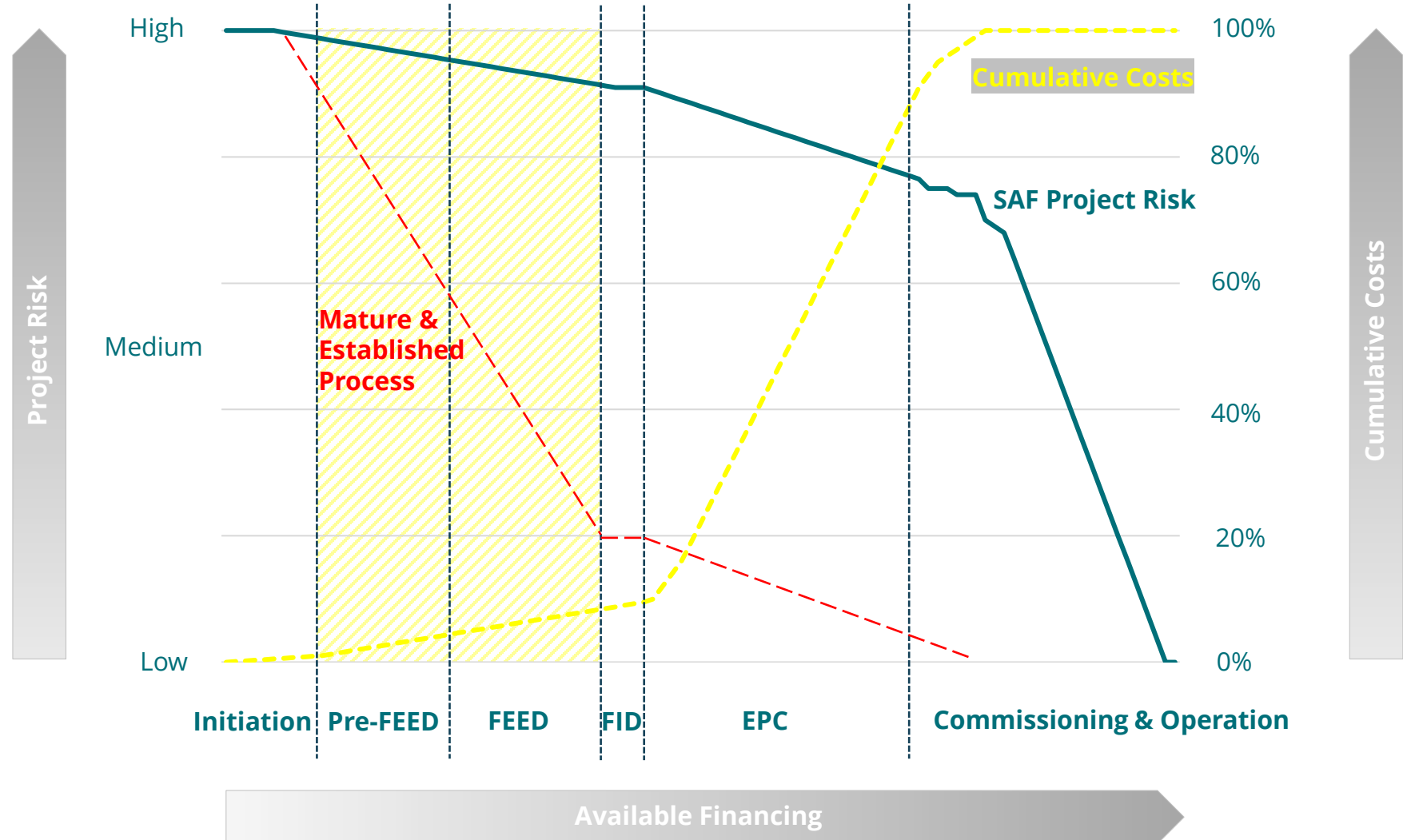
Sources of Financing: Equity, Cash Flow, Debt (GCP), Grants /Subsidies, (*Hybrid / Mezzanine*)

Provider of Financing: Internal, Strategic Partner, Venture Capital, Philanthropic, Public Schemes

Key considerations: Build a comprehensive and compelling business strategy and story, develop a deep understanding of the financing landscape, engage with strategics and experienced professional investors, develop a state-of-the-art financial model, apply for grants and subsidies, start the dialog with banks, prepare for the next phase



F-o-i-k SAF Project Risk and Costs, Phase 2: DEVEX



SAF Project Financing – Phase 3: CAPEX

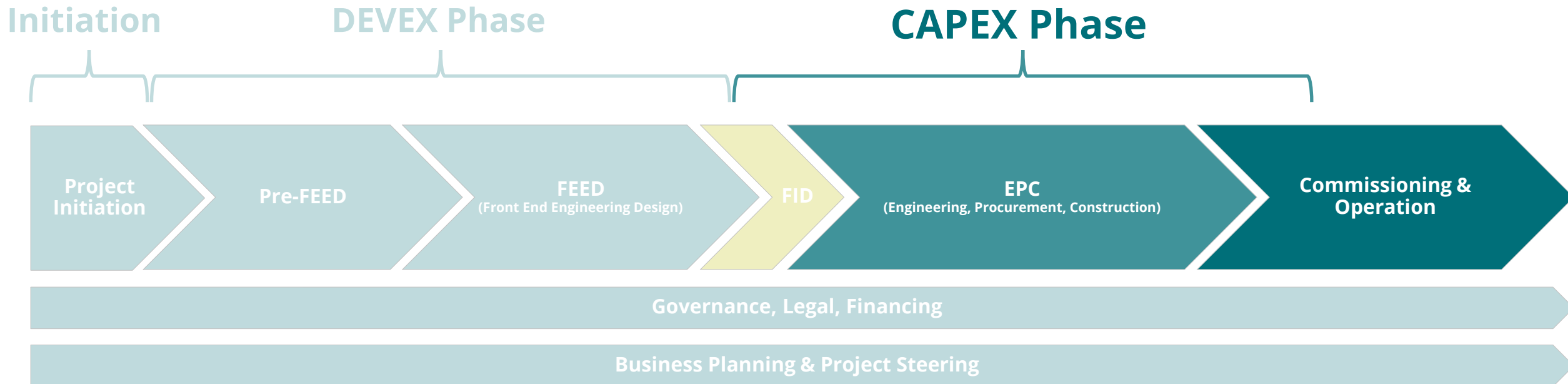


Portion of overall project costs: 88-94%

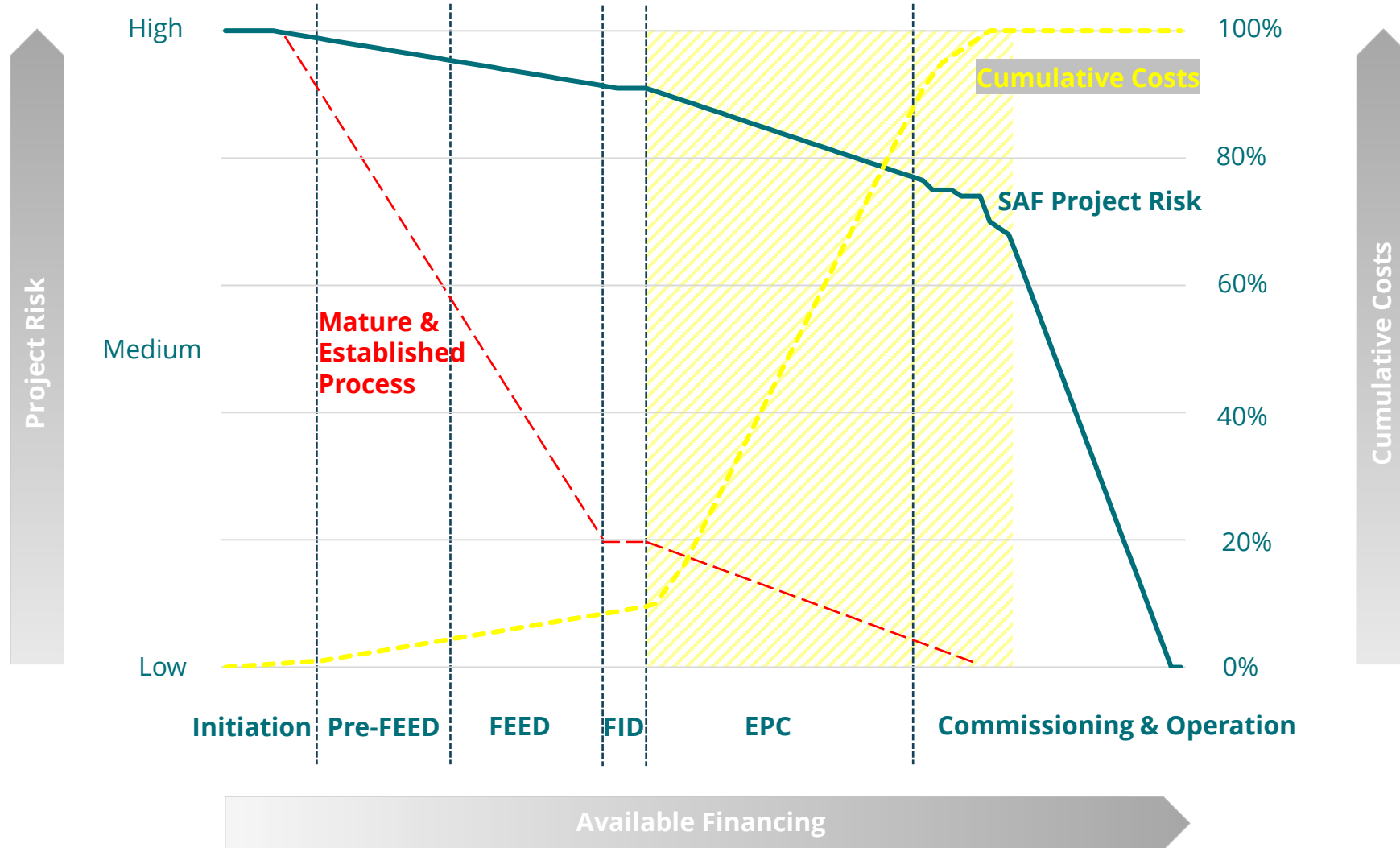
Sources of Financing: Equity, Debt (Project Finance), Cash Flow, Hybrid / Mezzanine, Grants / Subsidies

Provider of Financing: Internal, Banks, Strategic / Industry Partner, Specialised Investment Funds, Public Schemes

Key considerations: Have bankable Offtake Agreements in place, have long-term Supply Agreements in place, be comprehensively aware of the technological and financial risks and mitigating factors, have deep pockets or a potent strategic or industry partner, the business case has to work at lower than full capacity, show state-of-the-art financial planning



F-o-i-k SAF Project Risk and Costs, Phase 3: CAPEX





THANK YOU!



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