

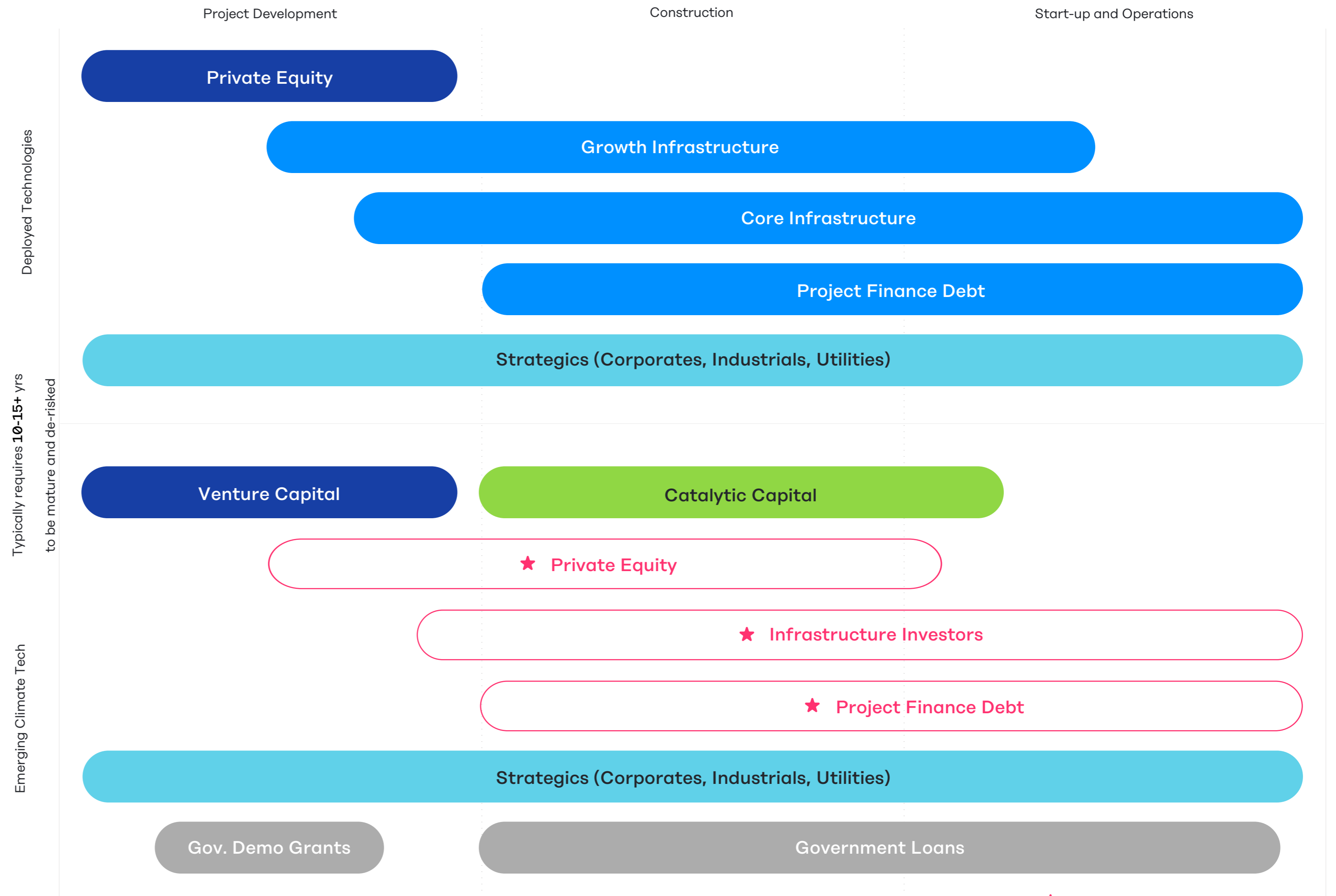
12 Keys to **Scaling-Up**

Unlocking Cheap(er) Capital

There Is A Funding Gap For ECTs...

Emerging Climate Technologies (“ECTs”) are constrained in the sources of capital they can attract in contrast to developed technologies due to insufficient de-risking – creating a large funding gap for scaling-up these technologies

Illustrative: Capital Availability by Project Stage

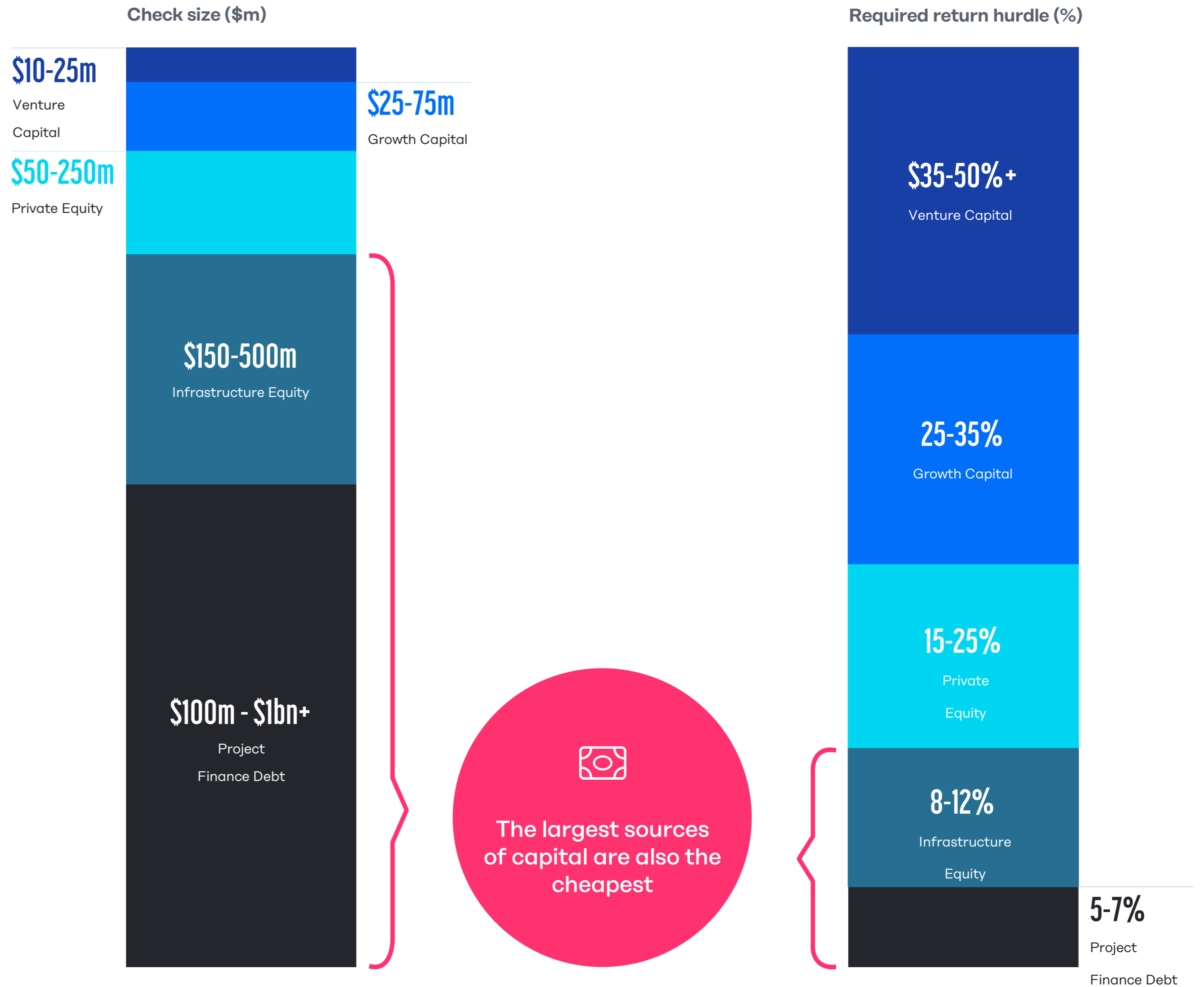


★ Not readily available today

The Funding Sources That Can Fill The Gap Are Cheap(er)...

These more traditional funding sources, have large funds, can write big checks and offer cheaper costs of capital

Capital Allocation By Investor Type



But Also Have Very Rigid Criteria...

Infrastructure equity, and project finance lenders focus on de-risked technologies and projects that are well structured and can “check all the boxes”

Infrastructure Investor Criteria for Capital Deployment



Widely deployed and millions of operating hours for the fully integrated system



EPC plan: **high price-certainty, fixed date, and adequate performance guarantees**



Contracted, stable, cashflow underpinning downside return



End-to-end risk management (e.g., feedstocks, utilities, offtake)



Long-term performance track-record with visibility on Opex



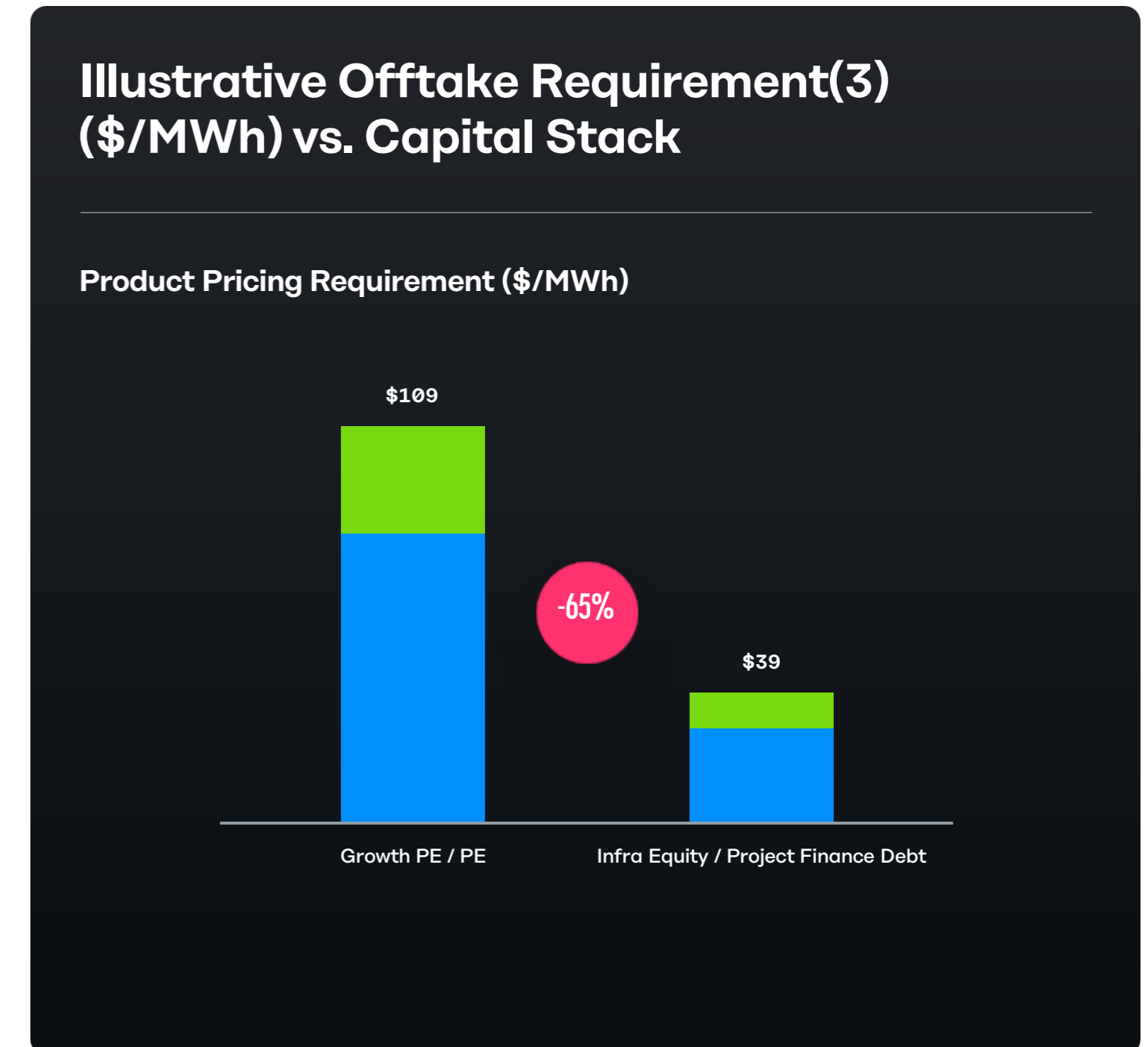
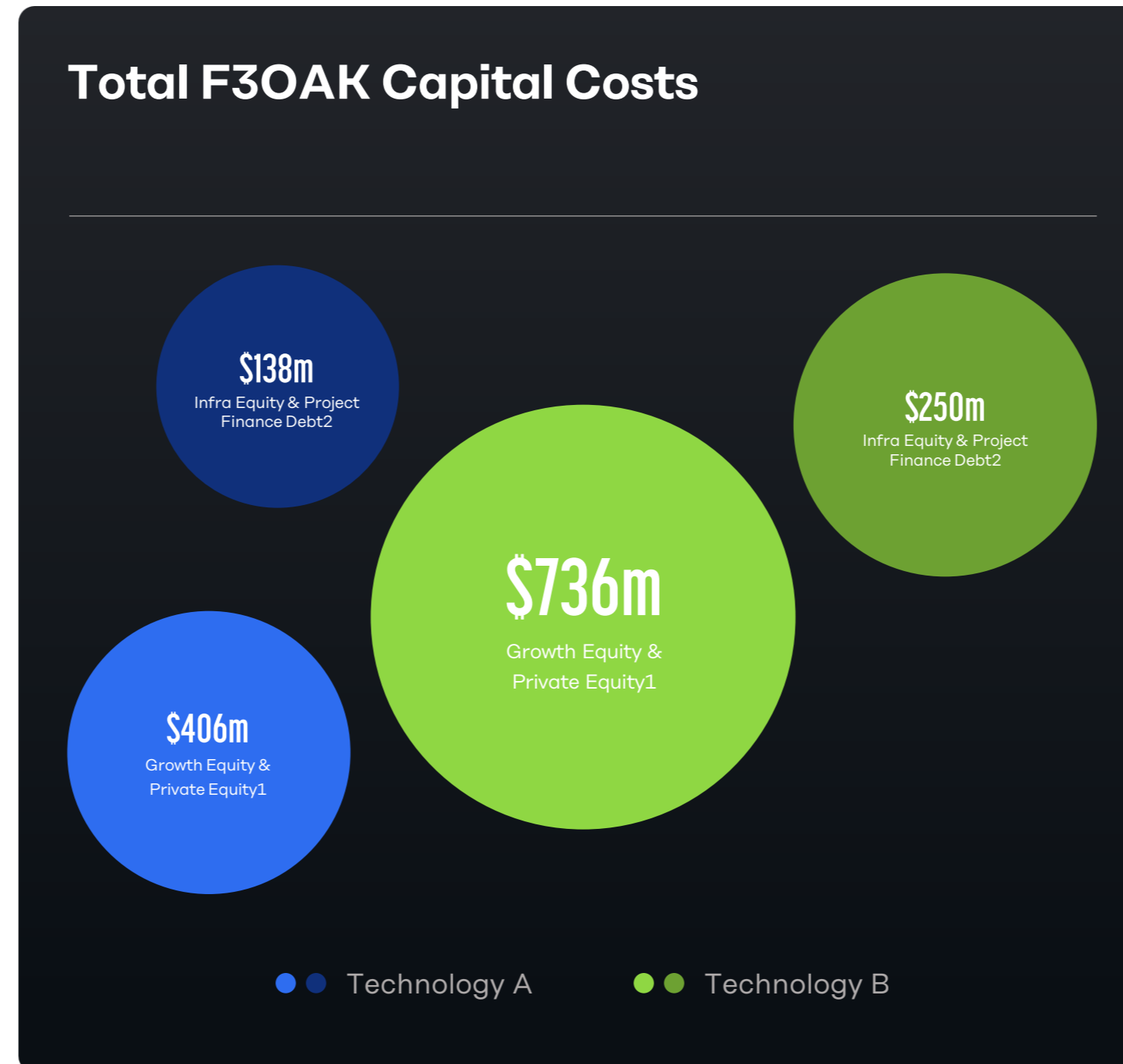
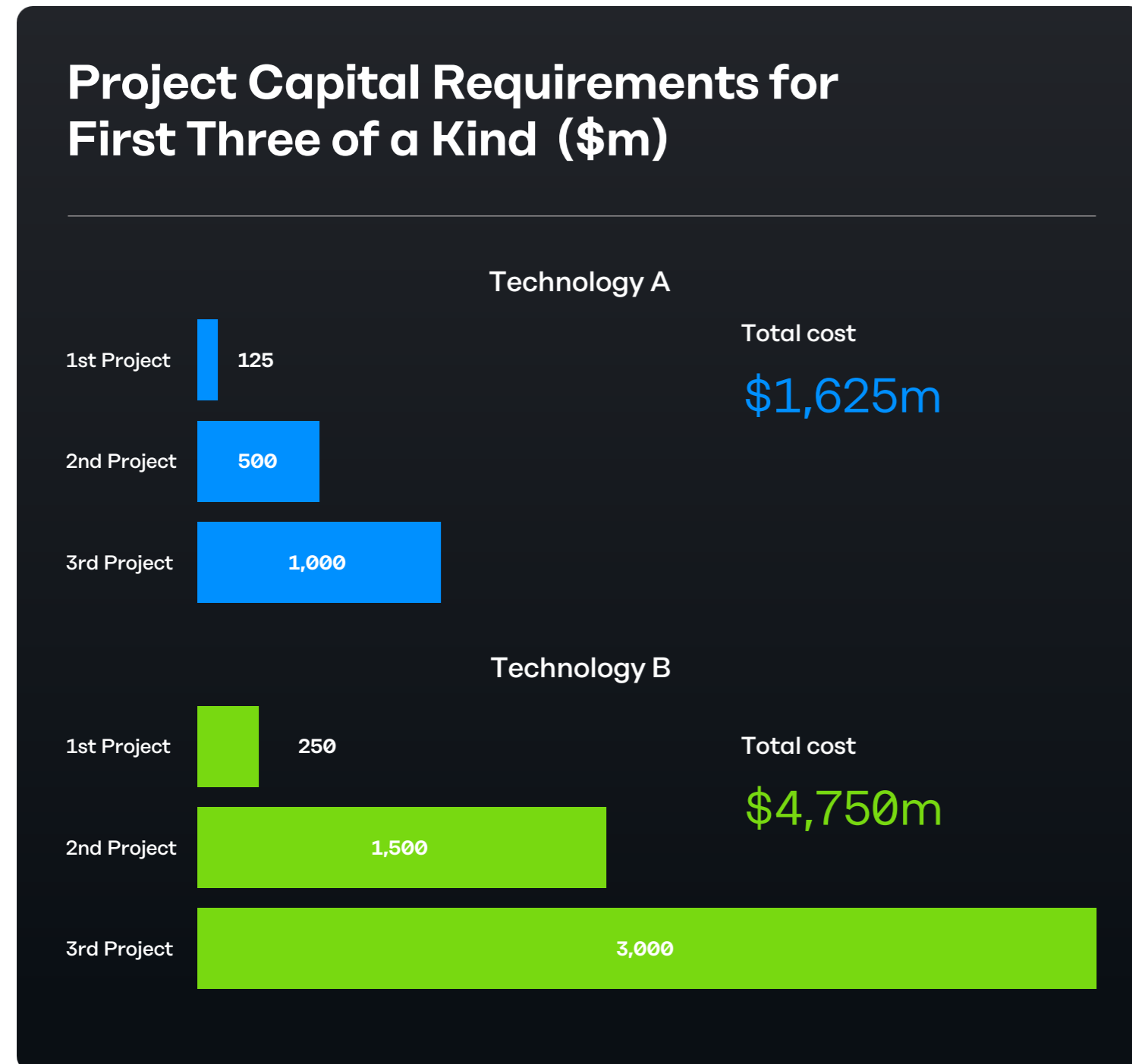
Large capital deployment opportunity (project & growth platform)



Positive Project IRR to compensate with the risk taken

WHY IS IT EXISTENTIAL?

Commit To A FOAK Project



Note(s): (1) 50:50 blend of the average return hurdle for Growth Equity and Private Equity (25%), (2) 70:30 blend of the average return hurdle for Infra Equity and Project Finance Debt (8.5%)

(3) Hypothetical Renewable Asset Assumptions – 100MW plant, 98% availability, 35% capacity factor, EBITDA margin of 75%, \$100m construction cost, 30-year plant life, assumes 30% ITC (direct pay), 100% equity funding.

Unlocking Cheap(er) Capital

Unlocking these sources of funding takes a very intentional process by ECT start-ups in order to access these types of capital



Key #1: Committing to the FOAK projection

A FOAK Project is existential – your technology will not be considered de-risked without it...Urgently map a path from Pilot → Demo → FOAK

Key #2: Prove Before Licensing

Nobody else wants to build something that hasn't been built or proven at scale before. Prove product first then business model

Key #3: Lock-Up Project Design

Once the tech is stable (post-pilot), lock up the design, and leverage it to start engineering and build the Demo

Key #4: Design for Modularity

Number-up instead of scale-up. It is less risky to build twenty \$50m de-risked modules than a \$1bn FOAK project

Key #5: Build a Demo

Build an end-to-end (continuously operating)
Demo ASAP! Learn from it

Key #6: Sharpen Cost Down Strategy

Stress-test how you are estimating cost down path.
Have 3rd parties verify and challenge assumptions

Key #7: Build-Out Project Execution Team

Hire Project Developer/Construction teams before building out a large Business Development team

Key #8: Structure & Price Offtakes Flexibly

Target investable long-term offtakes with flexible pricing. Construction costs always go up and it is very difficult to later ask customers for higher pricing

Key #9: Control Your Own Destiny

Develop the project so you can control where and how you deliver it – the most motivated party to deliver project is YOU! Avoid project-on-project risk, and “marrying” too early

Key #10: Accelerate Project Development

Start Pre-FEED, site scouting/selection AND development on FOAK ASAP!

Focus on permitting, stakeholder engagement and regulatory compliance

Key #11: Finalize The Puzzle Pieces

Focus on structuring and finalizing key contracts,
ensuring the pieces fit together

Key #12: Raise the Capital

Start conversations with FOAK Project capital sources and start next Series fundraising

12 KEYS TO SCALING-UP

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Raise The Capital

Line up the FOAK Project capital sources and start next Series fundraising



LEARN MORE

BreakthroughEnergy.org/Catalyst