

## The Physics of Capital Velocity

By SKGP, SKGP Strategic Partners Pre Yield Asset Series ©

2025 SKGP Strategic Partners

This paper is part of the public Pre Yield Asset framework developed by SKGP Strategic Partners.

### Executive

Capital velocity is not a financial ratio. It is a physical behavior inside real asset systems. In the SKGP Capital Physics framework capital velocity describes the rate at which derisked value reenters formation and the speed at which a structured system recycles outcomes into new probability states.

Understanding capital velocity is essential because it determines how a resource system compounds value long before yield and how Pre Yield Assets become allocable exposures rather than linear development projects. Velocity is the energy of the system. It governs how fast progression becomes investment grade.

### Why Capital Has Velocity in Real Asset Systems

Real asset systems are not static. They move through time as information improves, governance strengthens, and uncertainty collapses. Each structural improvement creates a movement in valuation and a new entry point for capital. This movement is predictable because early stage systems progress through recognizable gates. When a gate is crossed, the system changes state and capital naturally accelerates.

Velocity emerges because the asset is no longer in the same risk universe.

Capital velocity is the interaction of.

- Information clarity
- Gate progression
- Jurisdictional stability
- Corridor integration
- Commercial alignment
- Sovereign participation

These structural forces create a repeating cycle of capital entry and exit.

### Velocity as a Structural Outcome, Not a Market Behavior

In most financial contexts velocity is driven by sentiment or liquidity conditions. In Pre Yield Assets velocity is a structural phenomenon created by the physics of the asset itself. It does not depend on market enthusiasm. It depends on how the asset changes form. When a system transitions from unknown to verified, from fragmented to governable, or from isolated to corridor aligned, capital does not choose to accelerate. It is pulled into the system because the probability surface has changed. Velocity therefore becomes an expression of structural improvement.

### Gate Architecture Produces Velocity

Each gate in the SKGP architecture represents a reduction in uncertainty and an increase in information quality. These gates include technical, environmental, jurisdictional, and sovereign alignment checkpoints. Velocity increases as more gates are crossed because.

- More uncertainty is eliminated

- Probability weighting improves
- NAV uplift becomes visible
- Institutions gain confidence
- Exit pathways diversify
- Sovereign recognition is established
- Verification
- Industrial alignment
- Corridor formation
- Strategic offtake
- Sovereign recognition

The asset becomes more real at every stage. As the asset becomes more real, the system moves faster. Velocity is the compounding output of gate sequencing.

Each recycled movement increases the effective AUM through time because capital does not leave the system entirely. It moves through new states.

### Velocity and the NAV Uplift Curve

NAV uplift is the measurable expression of early stage progression. When uplift increases capital has a structural exit point. When capital exits, it reenters formation at a higher probability state. This cycle creates.

- Reinvestment at better risk levels
- Faster capital recycling
- More predictable compounding
- Higher system stability

Velocity is therefore tied directly to the uplift curve. Each uplift event creates the next cycle of formation.

### Velocity and Jurisdictional Physics

Jurisdictional clarity accelerates velocity. Unclear jurisdictions slow it. When a sovereign establishes stable governance, concession integrity, and commercial compatibility with multi lateral partners, the asset moves faster through gates. Velocity rises in jurisdictions that provide.

- Durable legal frameworks
- Cross border predictability
- Regulatory transparency
- Institutional compatibility
- Sovereign alignment with industrial goals

These factors accelerate probability transitions. Faster transitions produce faster velocity.

### Recycle Ratio as the Visible Output of Velocity

In the public Capital Physics materials recycle ratio represents how many times capital reenters formation relative to its initial deployment. Recycle ratio expands when velocity increases because outcomes create new starting points. A system with strong velocity can recycle capital across.

- Exploration

### Corridor Alignment as a Velocity Multiplier

Real asset systems accelerate when they are placed inside corridors. Corridors include processing networks, storage hubs, cross border routes, and integrated industrial baselines. When a mineral, agricultural, or

energy system attaches to a corridor.

- Commercial risk collapses
- Processing demand becomes predictable
- Transport patterns stabilize
- Cross border consistency improves
- A corridor provides direction.
- Direction increases momentum.
- Momentum increases velocity.

Velocity is anchored by stable yield. In PYA velocity forms long before yield. Only Pre Yield Assets generate velocity before operations.

### Why Velocity Makes PYA Allocable

Institutions need predictability, governability, and measurable progression. Velocity provides all three. Velocity shows that.

- The system is not speculative
- Progression is measurable
- Derisking is quantifiable
- Recycling is predictable
- Capital can compound in defined intervals
- Sovereign and industrial alignment is visible

Capital velocity is the reason early stage assets can behave like infrastructure exposures rather than high variance equity positions.

## Velocity in Pre Yield Assets vs Traditional Asset Classes

### Private equity

- Velocity is constrained by operational cycles.
- In PYA velocity is driven by structural derisking, not revenue cycles.

### Venture

- Velocity depends on product adoption.
- In PYA velocity depends on probabilistic gates already embedded in physical systems.

### Credit

- Velocity is limited by repayment schedules.
- In PYA velocity arises from structural uplifts independent of cashflow.

### Infrastructure

### Velocity as the Flywheel of the SKGP Architecture

Velocity is the compounding engine of the SKGP system. As gates progress, capital exits, reenters, and scales into new nodes. This creates a structural flywheel.

The flywheel accelerates when.

- Probability surfaces improve
- Jurisdictional scores strengthen
- Corridor logic activates
- Sovereigns align
- Industrial nodes form
- NAV uplift becomes consistent

## SKGP STRATEGIC PARTNERS | SSP | Pre-Yield Assets(PYA) Series

The system gains momentum because each cycle reinforces the next.

### Conclusion

The physics of capital velocity define how Pre Yield Assets transform from isolated opportunities into structured, compounding systems. Velocity is not speculation. It is the structural motion of capital driven by information clarity, gate progression, jurisdictional legibility, corridor alignment, and sovereign integration.

SKGP Strategic Partners developed the Capital Physics framework to map this motion and to show institutions, sovereigns, and operators how early stage assets compound value long before yield.

Capital velocity is the force that makes Pre Yield Assets an identifiable, repeatable, and allocable category across jurisdictions and real asset pillars.