

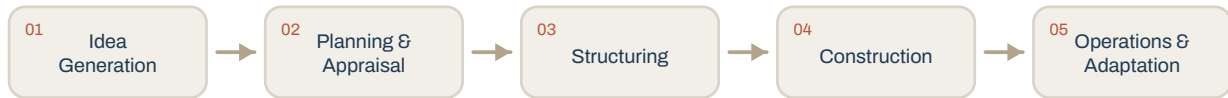


Systems Architecture

Infrastructure projects evolve through time as pressures interact, accumulate, and reshape risk.

1 · LIFECYCLE LAYER

Project stages as political-institutional phases



Each stage changes what actors can do, what risks are visible, and how decisions shape future options.

2 · PRESSURE LAYER

Dynamic forces acting on the project



3 · FEEDBACK LOOP LAYER

Recursive dynamics and risk migration

CANONICAL LOOP FAMILIES



4 · TEMPORAL ACCUMULATION LAYER

Commitments accumulate. Lock-ins deepen. Reversibility declines over time.



5 · OUTPUT LAYER

The model's output: evolving risk structure over time



*The model captures how political-institutional systems generate evolving risk structures.
It supports governance, adaptation, and better decision-making under uncertainty.*