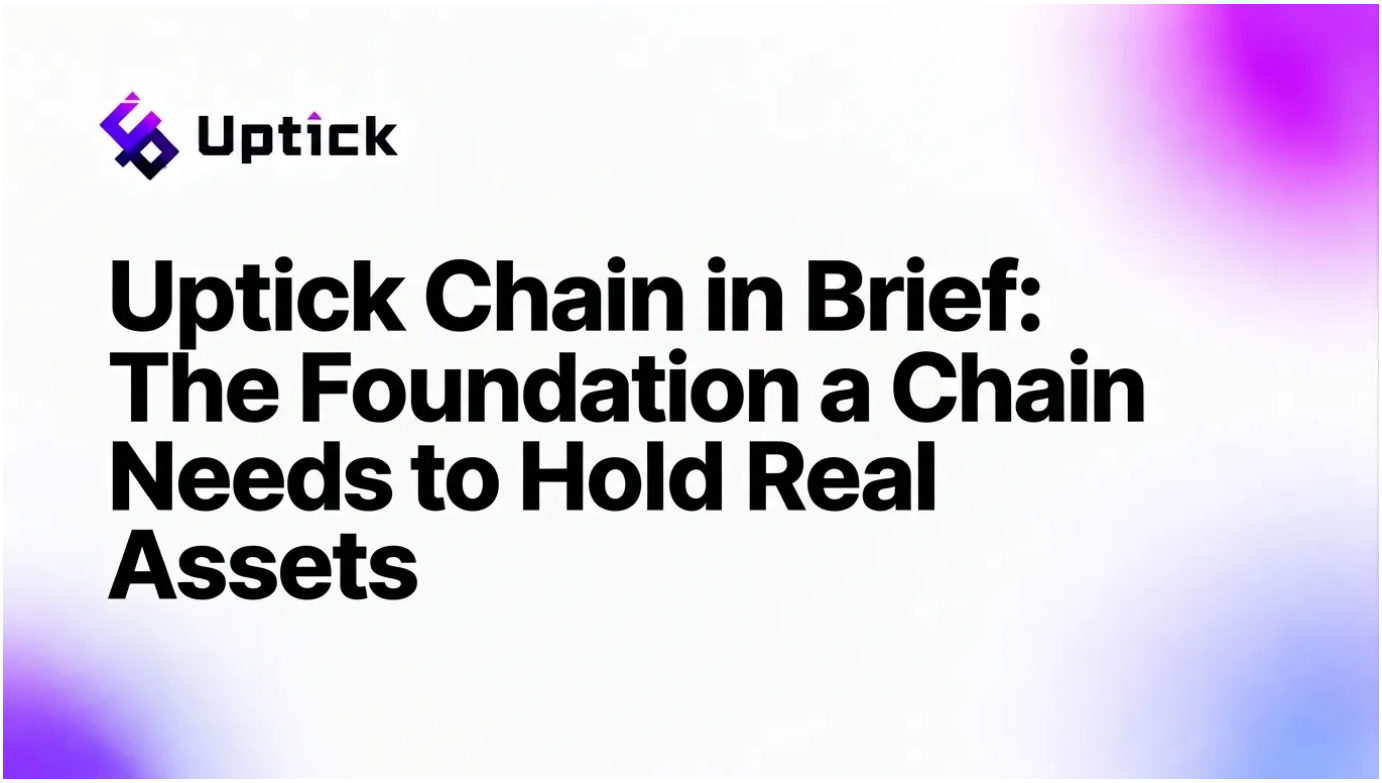


The Foundation a Chain Needs to Hold Real Assets

- Every public chain competes on the same scoreboard — TPS, ecosystem size, gas fees. But put a solar farm, a batch of receivables or an institution's membership on-chain, and the exam changes: finality, accountability, settlement dependency. Uptick Chain's three-stack architecture, account abstraction, compliant identity and four-track stablecoins are the foundation built around those three questions.

Because real assets don't care how many transactions you can process per second. They care about three other things:

3. Is my asset's throat being held by somebody else's pipe?

1. A Different Exam: What Real Assets Care About

For years the public-chain narrative has been stuck on the same scoreboard: who has the higher TPS, the bigger ecosystem, the cheaper gas.

Those metrics suit a chain built for trading coins and playing with NFTs. But change one premise — you want to put a solar plant, a batch of receivables, or an institution's membership system on-chain — and they stop being enough almost immediately.

1. Could this title of ownership be rolled back?
2. When something goes wrong, who is accountable, and how do we trace it?

Those three questions are the real exam for infrastructure. Most of Uptick Chain's design choices trace back to them.

Start with the first: finality.

Most EVM chains offer probabilistic confirmation — you see twelve blocks and finally breathe out. But when you're settling an asset on-chain, "it probably won't be rolled back" is not acceptable. For an auditor, "settled, but the ledger was reorged" is a catastrophe, because it means the books no longer match the asset itself — and reconciliation is exactly where RWA cannot afford to be wrong.

The second question is accountability. Real assets have people behind them: issuers, custodians, auditors, regulators in a specific jurisdiction. If a chain offers nothing but "transfers between anonymous addresses," every one of those roles disappears on-chain, and compliance becomes a conversation you can't even start.

2. Three Stacks in Parallel: Why Not Pure EVM, Why Not Pure Cosmos

Press enter or click to view image in full size

Wouldn't a single stack be simpler? Yes — and it would also lose things.

But dual-VM has a well-known trap: it tends to slowly collapse back into a single VM. Developers all write on the EVM side, activity on the WASM side decays, and the whole thing becomes a marketing line. This isn't speculation — there's precedent. In 2025, Sei passed SIP-3 and deprecated CosmWasm in favor of pure EVM.

Uptick's approach is to prevent collapse with mechanism rather than promise, and it put two architectural covenants in writing:

That's carefully worded. Translated: keep the shared part thin, the separate parts thick. Identity, incentives, attribution become native modules callable from both sides, while application logic is off-limits to everyone else. This is harder than saying "we support both VMs" — but what it prevents is the hollowing-out that shows up three years later.

Uptick Chain uses CometBFT's BFT proof-of-stake consensus: single-block instant finality, no reorgs. In the project's own words, this is "the most RWA-audit-friendly property there is." Block time is 6–8 seconds, and that cadence is deliberate: metering data for energy and compute assets already updates on a minute-level rhythm. Being ten times faster buys nothing, while being slower than a minute distorts the data.

The third is settlement dependency. This one gets ignored the most, and it bites the hardest: if your stablecoin arrives over some bridge, and that bridge has a bad day, your asset settlement is left hanging in the air with it.

Peace of mind about an asset depends on whether you control its settlement dependency. That sentence is where this entire infrastructure design starts.

Uptick Chain's architectural choice is unusual in the Cosmos world: three stacks running side by side on the same state machine.

A pure EVM chain can't get IBC's native interoperability; cross-chain work has to go through bridges. A pure CosmWasm chain can't absorb the existing contracts, tooling and developers of the Solidity world. For a chain meant to carry real assets, neither can be abandoned: EVM faces the outside world, CosmWasm handles cross-chain movement and asset primitives, and native modules tie the two together.

- Chain-level capabilities reusable across VMs must be pushed down into VM-agnostic protocol modules — attribution, incentives, identity, reputation, budgets, critical credentials. Business state always stays autonomous inside its own VM.Over-normalization = castrating multi-VM flexibility into a centralized ledger. We only normalize the minimum credential set.

3. Treating Technical Debt as an Asset

Inside v0.4.0 (August 2026) there was a change that makes terrible marketing copy but matters enormously to asset holders: the EVM engine was migrated from legacy Ethermint to cosmos/evm, maintained officially by the Interchain Foundation.

The official material puts it better than any marketing could:

For a chain carrying real assets, “does anyone maintain this” is not an engineering detail. It’s part of asset safety. Hard forks are kept in sync with Ethereum mainnet at the same time — Shanghai, Cancun, Prague, aligned one by one — rather than frozen at some historic version of a legacy fork.

1. Account abstraction: no one has to buy gas first

The significance of this is badly underrated. Today, an enterprise user’s first step onto a chain is “buy some native token for gas” — and that single step is where the overwhelming majority of non-crypto-native users drop out, and where every AI agent is stopped cold. With account abstraction enabled, enterprise users and agents can initiate transactions without holding the native token at all; the Paymaster covers gas.

Three native modules — x/erc20, x/erc721, x/cw721 — plus ICS-721 cross-chain transfer, accomplish one critical thing: ERC-721 and CW-721 convert in both directions, and ownership credentials cross chains.

3. Compliant identity: KYC bound to the address

Stack	Implementation	What it buys
EVM	`cosmos/evm` + geth v1.16	The breadth and liquidity of the Solidity ecosystem
CosmWasm	wasmd v0.61	IBC-native by birth, Rust's memory safety
Native SDK modules	Cosmos SDK v0.53	Carrying the cross-VM normalization layer

Why does that deserve its own section? Because Ethermint is a fork the community has been quietly forgetting. A chain can absolutely keep running on it — but its code path depends on a maintainer pool that keeps shrinking.

- This step gave up short-term convenience in exchange for retiring the technical debt of “depending on a fork the community has forgotten”… the code path your assets depend on will still have someone maintaining it.

4. Three Invisible Capabilities That Decide Whether This Works

Architecture diagrams are for engineers. What actually decides “can I use this” tends to be three layers that don’t photograph well.

Uptick natively supports EIP-7702 + ERC-4337, with Paymaster and Bundler.

Once “buy gas before you can use the chain” — the biggest drop-off point — is removed, a chain can start being treated as infrastructure instead of an investment vehicle.

2. Asset primitives: ownership credentials have to travel both ways

For an ordinary user this is abstract. For an asset issuer it’s concrete: a property-right certificate minted on the EVM side has to be recognized and usable by financial contracts on the CosmWasm side. Otherwise “dual VM” is just two unrelated chains wearing the same name.

ERC-3643 + Uptick DID (zero-knowledge proofs built on PolygonID) makes institutional-grade KYC/AML identity verifiable and bindable to a specific address.

The calibration here is worth noticing: zero-knowledge instead of uploading an ID card to a chain — what gets verified is “this address passed review,” not “who this person is.” Compliance and privacy are not an either/or in this design.

Alignment with external regulatory frameworks is explicit: Hong Kong SFC, Singapore MAS, Dubai VARA. Phase 1 of the roadmap goes further: push compliance semantics down into native Cosmos SDK modules, so that cross-chain paths and NFT paths are constrained the same way. Compliance stops being a gate at issuance and becomes a property of the chain itself.

Press enter or click to view image in full size



5. The Settlement Layer: Four Stablecoin Tracks, Because One Bridge Is Not Enough

This is the least photogenic part of the whole stack, and the one that shows the most craft.

Uptick built four stablecoin tracks, with the principles stated plainly: native over wrapped, redundancy over a single hub, dual-VM dual entry, liquidity depth first.

Track	Path	Role
Tier 0	Temporary connection to Injective native USDC (IBC)	Transitional, to get off a single hub first
Tier 1	**IBC Eureka direct to Ethereum mainnet native USDC / USDT**, ZK light client, no wrapping	Near-term mainstay
Tier 2	Applying to become a **Circle CCTP V2 supported domain**, v2 contracts deployed on the EVM side	Strategic mainstay
Tier 3	USDT dual anchor: Eureka bringing in Ethereum native USDT + pushing for native Tether issuance	Two paths in parallel
Tier 4	LayerZero / Stargate / Wormhole and similar	Breadth only, **never the settlement backbone**

Two design details deserve to be pulled out.First, Tier 4 is explicitly demoted. Almost every chain turns “how many bridges do you support” into a selling point; here bridges are explicitly written down as “not the settlement backbone” — because it has seen too many cases where a bridge went down and the assets went down with it.Second, the dual-VM division of labor is deliberate: the IBC / CosmWasm side receives native EVM stablecoins delivered by Eureka, the EVM side receives CCTP and bridged assets, and both tracks eventually feed the same RWA settlement layer. Not two parallel ledgers — two intake pipes into one reservoir.And it sets a success criterion anyone outside can verify independently: mainnet simultaneously carrying ≥2 independent native stablecoin tracks (USDC + USDT), with inflows through the old channel at zero.The weight of that sentence is this — it doesn’t say “we have achieved diversification.” It hands you a test you can run yourself.6. Economic Discipline: No Tax on ApplicationsThe easiest mistake for infrastructure is to turn itself into a toll booth.Uptick laid down four disciplines for its native token UPTICK , two of which are hard lines:No tax on applications. “Every chain that lived off extraction after FTF proved the same thing: extraction drives the ecosystem to another chain.”Payments settle in stablecoins; bare UPTICK is not a checkout option. Many find this confusing, but separating unit of account from medium of payment is precisely what spares asset issuers from carrying token price volatility.There is also the four-step UGE (chain-level gas rebate) loop: declaration → attribution → settlement → reinvestment.The attitude lives in the details: attribution includes on-chain verification plus a challenge window, and a successful challenge permanently blocks automatic settlement; the incentive source is real business that has already happened, not principal from new entrants; the final settlement entry point is deliberately not exposed as any command-line interface; key parameters are all governed and hardcoding is forbidden; upgrades go through governance proposals plus timelock, and modules can be snapshot-rolled-back themselves.The core of this design: make “can someone tamper with it” structurally impossible, instead of promising nobody will.7. Six Layers: From Governance to Asset Scale-OutStack those capabilities up and Uptick draws its full form in six



hello@uptickproject.com

@Uptickproject

@Uptickproject

Uptick Network

Uptick Network