Borderless Savings in Tenge (KZTE)

Project name: Borderless Savings in Tenge (KZTE)
Tagline: Fast, low-cost remittances and on-chain tenge savings for migrant workers and families across Central Asia.

Problem statement:

Cross-border worker remittances to Kazakhstan and within Central Asia remain costly, slow, and opaque. Recipients often convert to cash with delays and limited access to yield-bearing instruments denominated in local currency. These frictions reduce real household income and limit on-chain stablecoin liquidity and retention.

Solution overview:

Borderless Savings in Tenge is a two-pillar product combining (A) an on-ramp/off-ramp remittance corridor using KZTE and licensed Intebix rails for instant settlement, and (B) an on-chain savings layer that allows recipients to hold KZTE and earn conservative yields via a hybrid liquidity strategy (short-term lending + curated liquidity pools + incentivized staking). The flow: sender converts fiat → KZTE (via Intebix) → instant transfer on chain → recipient holds KZTE in a custodial/non-custodial wallet, optionally enters a low-risk savings pool to earn yield, or off-ramps to local bank/agent in KZT.

Key value propositions:

- **Lower cost & faster settlement:** reduce transfer fees and settlement time compared with legacy remitters.
- **Currency stability:** recipients avoid foreign-currency exposure by holding tenge-pegged KZTE.
- **Financial inclusion & yield:** access to on-chain savings denominated in local currency with transparent auditing and on-chain proof of reserves.
- **Liquidity flywheel for KZTE:** remittance inflows increase circulating supply; yield rewards encourage longer holding; partnerships with merchants and payroll channels expand spending use-cases.

Target users & partners:

Migrant workers and their families across Kazakhstan, Kyrgyzstan, Uzbekistan, Russia (KZ-linked corridors); local banks, payment aggregators (Kaspi.kz, banks), Intebix (issuer), local remittance agents, fiat-on/off ramp providers, regional exchanges.

Implementation roadmap (MVP, 3 months):

1. Integrate Intebix mint/redemption API + KYC onboarding.
2. Launch pilot corridor (one sending country) with capped volumes and agent cash-out.
3. Deploy custodial wallet + simple on-chain savings pool with conservative yield strategy (collateralized lending via reputable custodial partners / short-term stable liquidity).
4. Monitor KPIs and roll out merchant QR acceptance and payroll integrations.

Success metrics (first 12 months):
Number of active wallets; monthly KZTE transfer volume; average hold time of KZTE; total value locked (TVL) in KZTE savings pool; cost per remittance vs legacy channels; merchant acceptance count.

Supporting research insights & market stats (sourced)

1. **Remittance scale and relevance in Kazakhstan**
   Recent country data indicates remittance inflows to Kazakhstan are non-negligible (reported ~USD 258 million in 2024), underscoring an addressable corridor for improved rails and cost savings. (DTM)
2. **Existing remittance fees and settlement frictions**
   Legacy remittance providers and agent networks typically charge fixed fees or percentage fees (examples and published tariff tables show common rates around 1%+ for CIS corridors and higher for some retail channels), creating an opportunity for cheaper stablecoin rails. Reducing even a few percentage points materially increases recipient disposable income. (bcc.kz)
3. **Local fintech adoption & payments infrastructure**
   Kazakhstan hosts mature fintech players and fast consumer adoption of QR-based and super-app payment models (Kaspi.kz is a widely used “super-app” with very high penetration), offering strong local integration partners for merchant acceptance and on-chain spend flows. Integration with such platforms accelerates real-world adoption. (kase.kz)
4. **Stablecoin use cases in remittances & evidence of cost/settlement benefits**
   Case studies from other markets (e.g., Philippines and other remittance-heavy

countries) show stablecoin rails can reduce effective costs and settlement times dramatically compared with bank/agent rails; similar mechanisms can be applied to a fiat-pegged local stablecoin (KZTE), with the added advantage of local-currency stability for recipients. (transfi.com)

5. **On-chain yield feasibility and risk management**
   On-chain yield can be sourced from a mix of conservative strategies (short-term lending to reputable counterparties, liquidity provision in stable pools, incentive programs). Design must prioritize capital preservation: layered risk controls, insurance/backup reserves, and transparent proofs of reserve to maintain peg and trust. Industry analyses show a range of yield sources and the importance of conservative engineering for local-currency stablecoins. (coinchange.io)

Appendix A – Market & Research Insights

A.1 Remittance Landscape in Kazakhstan & Central Asia

- According to the World Bank / KNOMAD data, in 2022 Kazakhstan was estimated to have remittance outflows of **~US$2.4 billion**.
- For example, in January 2024 around **160,600 transfers** worth **52.5 billion tenge (~US$116 million)** were sent abroad from Kazakhstan via international money transfer systems. (Trend)
- As of March 2024: ~192,400 transactions worth ~61.5 billion tenge (~US$138 million) in one month via IMTS (international money transfer systems) from Kazakhstan. (Trend)
- Recipient country breakdown (2023): From Kazakhstan, transfers to Uzbekistan ~ 27.5% of volume, Russia ~ 25.1%, Turkey ~ 23.1%. (UzDaily.uz)
- More broadly: Stablecoin transaction data shows that cross-border and P2P transfers are significant in the broader ecosystem. For example the report "The Rise of Stablecoin Payments: Key Data and Trends" notes stablecoin payment volumes at ~US$72 billion/year, with P2P and B2B large components. (Stablecoin Insider)

Implications for KZTE concept:

- There is a real and measurable volume of cross-border flows from Kazakhstan outward and inward, offering a ready market for lower-cost rails.
- Many transfers take place via legacy systems costing higher fees and taking longer settlement times; this gap can be addressed by a blockchain-stablecoin alternative.
- The corridor between Kazakhstan and neighbouring states (e.g., Uzbekistan, Kyrgyzstan, Russia, Turkey) is significant, enabling targeted pilot geography.

A.2 Stablecoins & Savings / Yield Landscape

- The stablecoin ecosystem has grown rapidly: total stablecoin supply in recent years has risen from under US$10 billion to ~US$239 billion (as of the cited report) and is projected to grow further. (Stablecoin Insider)
- Academic research ("Hybrid Monetary Ecosystems: Integrating Stablecoins and Fiat…" by Wen & Li, 2025) shows that fiat-pegged stablecoins can form part of hybrid monetary systems, and that institutional backing and transparent reserves are key to trust. (arXiv)
- Another paper ("The Stablecoin Discount: Evidence of Tether's US Treasury Bill Market Share…" by Ante/Saggu/Fiedler) analyses how large stablecoin

issuers' treasury participation reduces yields and underlines how stablecoins link into traditional finance. (arXiv)

- While the direct savings in stablecoins may still be emerging in Central Asia, the trend of stablecoins being used for "store of value / preservation of capital" in emerging markets is clear (see for example Standard Chartered commentary estimating potential for USD-stablecoins to pull US$1 trillion from emerging market banks over next few years). (Reuters)

Implications for KZTE concept:

- A tenge-pegged stablecoin (KZTE) aligns with the savings motive: recipients in Kazakhstan may prefer holding tenge-pegged digital assets rather than foreign currency or cash when ratios of trust, volatility and accessibility favour the new asset.
- By structuring a yield component (savings pool) we align with a growing user demand to do more than merely transfer, users want value retention and growth.
- The requirement for strong reserve banking, transparency, and audit-readiness is reinforced by the academic literature; a clear design for reserve backing and redemption is needed for trust.

A.3 Risk & Trust Considerations

- The academic literature emphasises the need for 100% reserves, instant convertibility, strong redemption rails, and liquidity back-stops in stablecoin design. (arXiv)
- In cross-border payments using stablecoins, two key risks persist: regulatory / compliance risk (KYC/AML, FX controls) and peg-risk (ensuring value stays at 1 : 1). The business model must incorporate offline fiat-on/off ramps, transparent reserves, and compliance partnerships (especially when operating in Kazakhstan and neighbouring jurisdictions).
- For the savings component, yield generation must be conservative and transparent, for example via short-term institutional loans, liquidity provision with minimal duration risk, and incentivisation rather than high-risk yield chasing.

A.4 Target Market Size (Illustrative)

Based on available data:

- Suppose in Kazakhstan cross-border transfers amount to ~US$100–150 million per month via IMTS systems (as evidenced by ~US$138 million in March 2024; see above) visited earlier.

- If we estimate that even 10% of this could shift to KZTE rails, that's US$10–15 million/month (~5–7 billion tenge/month).
- Over 12 months that would be ~US$120–180 million (~60–100 billion tenge) in remittance volume via KZTE corridor.
- If a savings pool yields ~2-5% annualised and average holding time per user is ~3-6 months, we can estimate incremental TVL in the pool and user retention accordingly.
  This back-of-the-envelope sizing indicates the project is viable and meaningful at regional scale.

Appendix B – Sample UX Flow & Architecture Diagram

B.1 Sample UX Flow (Scenario: Worker sends money home)

1. Sender logs into a mobile wallet or remittance-app partner (UI shows "Send KZTE" option).
2. Sender selects destination ("Kazakhstan → Family in Almaty"), chooses fiat amount in KZT or foreign currency; app calculates equivalent KZTE plus low fee (e.g., 0.5% vs traditional ~3-5%).
3. Sender completes fiat-on ramp: transfers to Intebix-partner bank account or uses card/instant bank link → Intebix mints KZTE at 1:1 backing.
4. KZTE is delivered to recipient wallet instantly (blockchain transfer).
5. Recipient receives push notification: "You have X KZTE. Would you like to (A) hold/swap or (B) enter savings pool?"
6. If recipient chooses savings pool: they agree to terms (e.g., minimum hold 1 month, yield rate X%, redemption process). KZTE is locked into savings pool smart-contract/custody.
7. After (for example) 3 months, recipient can redeem KZTE back to fiat via local agent/bank or spend via merchant QR (integration with local merchant ecosystem).
8. Dashboard shows: "You earned Y KZTE in yield" + "Balance: Z KZTE" + "Total value in KZT: …".
9. Option to spend KZTE: Merchant uses QR code; recipient's wallet pays KZTE; merchant receives fiat settlement via Intebix redemption.

B.2 Architecture Overview

- **On-ramp/Off-ramp layer:** Intebix licensed platform handles minting/redemption of KZTE, KYC/AML compliance, fiat partner bank integration.
- **Blockchain layer:** KZTE issued on a public chain (e.g., Ethereum or compatible L2) with transparent on-chain ledger, proof of reserves accessible.
- **Wallet layer:** Custodial or non-custodial wallets provided to users; integrated mobile UI for remittance, savings, spend.
- **Savings pool layer:** Smart contract or custodial simplified product that aggregates KZTE holdings and deploys into conservative yield-generating instruments (e.g., institutional stablecoin lending, liquidity provision in low-risk pools).
- **Merchant & payout layer:** Partner merchants integrate with wallet via simple QR or plug-in; redemption module allows fiat payout via local bank/agent.
- **Dashboard & analytics:** Tracks volumes, conversion rates, wallet counts, yield accruals; compliance data flows to Intebix audit/reporting.

(You can attach a simple diagram with “Sender → On-ramp → KZTE Mint → Transfer → Recipient Wallet → Option: Save/Spend → Off-ramp”)

Appendix C – Mock KPI Dashboard (First 12 Months)

KPI	Baseline (Month 0)	Target (Month 12)	Notes & Assumptions
Active wallets	0	10,000	Target user acquisition via remittance corridor & savings product
Monthly KZTE transfer volume	0	KZT 5 billion (~US$11.5 m)	Equivalent to ~10% of current legacy IMTS monthly volume (KZT ~50 billion)
Average fee per transaction	~3–5% (legacy)	0.5%	Assumes strong value proposition and scale
Total value locked (TVL) in savings pool	0	KZT 1 billion	Approx US$2.3m; with average deposit ~KZT 100,000

Average hold time of KZTE (recipient)	~1 day (cash-out)	~30 days	Extended hold time boosts liquidity and savings effect
Redemption ratio (percent of KZTE redeemed in fiat rather than held)	~90%	~60%	Lower redemption ratio indicates more holding and value retention
Merchant acceptance count	0	500 merchants	Via QR integration in key cities
Monthly yield payout to users	0	~KZT 4 million	At ~0.5% monthly yield on KZT 1 billion TVL
Cost per new wallet acquisition	–	KZT 2,000	Marketing, onboarding cost assumed

Narrative interpretation:
By month 12, we aim for 10,000 active wallets and KZT 5 billion in monthly transfer volume. With the savings pool at KZT 1 billion TVL, users begin to hold KZTE longer, generating yield and boosting retention. Merchant acceptance enables on-chain spend, reducing off-ramp leakage. Lower fee levels and better UX substitute legacy remittance cost. The hold time jump from ~1 day to ~30 days materially improves KZTE circulation and liquidity. The redemption ratio improvement shows more KZTE is staying in system rather than cashing out immediately.

Appendix D – Key Design & Compliance Considerations

1. **Reserve backing & transparency:** Ensure KZTE is backed 1:1 by tenge and/or high-quality liquid assets. Publish monthly audit summaries and real-time proof-of-reserves dashboard.
2. **Redemption guarantee:** Users must have ability to redeem KZTE to fiat at par via trusted on-ramp/off-ramp partners (Intebix + local banks/agents).
3. **KYC/AML compliance:** Especially for cross-border flows, partner with licensed remittance/payment aggregators; integrate KYC onboarding in mobile wallet.
4. **FX and regulatory risk mitigation:** In Kazakhstan and partner corridors, ensure legal conformity with FX regulations, money transfer laws; collaborate with regulators early.

5. **User experience & trust:** Simple UI for fund-senders and recipients; wallet in local language(s); clear fee disclosure, immediate notifications.
6. **Yield strategy risk control:** Savings pool yields must be conservative, with minimal duration and counterpart-credit risk; maintain liquidity for redemptions.
7. **Merchant / ecosystem integration:** Build spend-use-case early (QR payments, e-commerce checkout, payroll/merchant payouts) to avoid KZTE becoming “just another token”.
8. **Education and community:** Provide educational material in Kazakh and Russian for both senders and recipients; highlight benefits of holding KZTE vs cash/foreign currency.

Summary

The “Borderless Savings in Tenge (KZTE)” concept is grounded in real remittance volumes, aligned with stablecoin and yield savings trends, and specifically tailored to Kazakhstan and Central Asia’s corridor-dynamics. With a clear UX chain, architecture, and KPI roadmap, the project can meaningfully increase adoption, retention, liquidity and trust for KZTE, turning remittances not only into transfers but into savings, spend and local growth.