

T420 White Paper v3

Scaling Sustainable Mobility Through Decentralised Ownership

1 Vision

Tesla is set to unleash a global network of autonomous Cybercabs. **T420's vision is to ensure that everyday people—not just mega-funds—own, operate, and benefit from that revolution.** We provide the capital coordination, operational tooling, and token-driven incentives that let communities stand shoulder-to-shoulder with Tesla's mission *"to accelerate the world's transition to sustainable energy."* In short: **T420 is the flea that helps the bull run faster.**

2 Core Innovations

Dimension	What Tesla Delivers	What T420 Adds
Business Model	Hardware, FSD software, ride-hail rails	Asset-backed network token that fractionalises fleet ownership and funnels net ride & service fee back to the DAO.
Org Structure	Centralised OEM	DAO-of-DAOs —Realms governance for policy, Squads multisig for treasury, autonomous Shepherd micro-franchises for operations.
Technology	Industry-leading EV + FSD stack	NFT-escrow unlocks + Fee Router on Solana; Streamflow price-gated vesting; KPI-linked slashing; AI agents for predictive maintenance.
Societal Impact	Lower transport cost & CO ₂	Democratise robotaxi equity; fund local green jobs (cleaning, charging); build on-chain credit rails in under-banked regions.

3 Problem

Today's mobility platforms concentrate ownership: OEMs sell the cars, gig apps harvest the margin, hedge funds absorb the upside. Capital-poor communities are relegated to labour-only roles with no path to wealth. Without *aligned capital*, Tesla's FSD network could repeat that pattern.

4 Solution Overview

T420 turns the traditional stack on its head:

1. **Tokenize the Asset** – 10 B fixed-supply T420 minted on Solana.
2. **Escrow-backed NFTs** – 25 000 T420 → Fleet NFT; 500 T420 → Robotaxi NFT. Tokens stay staked, conferring governance power while acting as collateral.
3. **Marketplace Flywheel** – All service spend (tyres, cleaning, charging) clears in T420 via a 5 % Fee Router, recycling value to the DAO treasury.
4. **Profit Share** – Ride net fees split 42 %/42 %/16 % between token holders, Shepherds, and BTC reserve, charging continual fleet growth.
5. **Governance & Compliance** – Realms token voting, Squads multisig treasury, Streamflow-audited vesting; Wyoming DAO LLC wrapper.

5 Tokenomic Highlights

- **Classification** – Real-World-Asset-Backed • Network • Governance.
- **Marketplace Take-Rate** – 5 % (tunable on-chain). Competitive with Web3 marketplaces but enough to double fleet-level DAO Members Fees by year 5.
- **Treasury Policy** – Auto-swap fee inflows to 70 % BTC, 30 % stables to buffer crypto cycles.
- **Price-Gated Unlocks** – Release curve accelerates only when token price and utilisation hit KPIs—protecting buyers and maintaining scarcity.

6 Technology Stack

- **Solana SPL v0** – Ultra-low-fee, high-throughput L1; immediate wallet and CEX support.

- **NFT Escrow Programme** – Anchor-written contract; audited; supports slashing, delegation, resale.
- **Fee Router** – Minimal PDA that splits marketplace payments 95 / 5; upgradeable via DAO.
- **Streamflow Vesting** – Price-based release of 60 % fleet allocation; team & investor cliffs handled in-app.
- **Realms Governance** – Proposal quorum, weighted voting, timelock execution.
- **Squads Multisig** – 3-of-5 signer model for treasury ops; hardware wallet support.
- **AI Agents** – Predictive tyre wear, battery health scoring, and dynamic routing published to an open oracle for community apps.

7 Ecosystem & Stakeholders

Stakeholder	Incentive	Tooling Provided
Shepherds	42 % net rideshare + NFT resale upside	Fleet dashboard, KPI rewards, auto-pay disbursements.
Service Suppliers	Stable B2B demand, 95 % immediate payout	API-first order flow, reputation scores, staking for priority.
Token Holders	Yield + governance	Realms voting, Streamflow rewards, quarterly disclosures.
Tesla	Expanded service capacity, richer operational data	API feedback loop, community-funded infrastructure in new markets.

8 Impact on Web3 & Society

- **Mass-Market Token Utility** – Every tyre change, car wash, and kWh paid in T420 drives mainstream transactional usage beyond DeFi.
- **Inclusive Capital Formation** – Price-gated unlocks let small holders join at any phase without venture-fund front-running.
- **On-Chain Labour Rights** – Shepherds own their revenue stream collateral; slashing rules published in immutable code.

- **Climate Co-benefit** – Treasury’s BTC reserve is earmarked for renewable-powered custodians; DAO votes carbon-offset spends every quarter.
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9 Roadmap (Excerpt)

Quarter	Milestone	Key Metrics
2026 Q1	MVP launch, 500 cabs .	55 % utilisation > 30 days
2026 Q3	Marketplace v1 (tyres & cleaning)	\$5 m GMV, <7 s settlement
2027 Q2	25 k cabs, EU DAO node	40 m rides, 99.9 % uptime
2028 Q4	Fee Router AI rebate model	2 % fee returned to top-rated suppliers
2030 Q1	250 k fleet, \$5 token target	DAO treasury > \$1 bn

10 Risk & Mitigation

- **Regulatory Drift** – Continuous legal review; DAO LLC wrapper; optional KYC hooks via TransferHook extension.
 - **Smart-Contract Exploits** – Triple-audit path, Immunefi bug bounty.
 - **Market Volatility** – BTC/stable diversification + dynamic release curve.
 - **Tesla API Changes** – Maintain dev liaison channel; fallback modules abstract API endpoints.
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11 Conclusion

T420 fuses Tesla’s hardware-software edge with Web3’s community capital toolkit, creating a flywheel where **every mile driven grows both the fleet and the holders’ stake in a cleaner, cheaper transport future**. By operating as a nimble “flea,” we scale the bull faster—channeling billions in local service spend, unlocking global crypto adoption, and giving society a tangible stake in the autonomous era.

Join the grid. Own the ride. Govern the future.
