



ATOMYX

From waste to value.

A Proof-of-Recycling network for the United States and Europe, launched as a protected Uniswap v4 market on Programmable · Whitepaper v2.0 · October 2026

Token: \$ATMX Chain: Ethereum X: @ATOMYXAI Telegram: t.me/ATOMYXAI

What changed since v1.0. \$ATMX no longer has team, partner, operations or community allocations, vesting or a trading tax inside the token. It launches through Programmable's Custom Launch on Ethereum, inside Programmable's mandatory launch-protection hook for Uniswap v4: **100% of the supply goes into the pool and stays there**, fees are fixed in the hook for ever, and every creator fee flows into one public contract, the **Reclaim Vault**. Half of it can only be paid out against waste batches recorded in the vault's on-chain **Recycling Ledger**.

This document describes the planned direction of ATOMYX. Capacity, collection points and timelines are targets, not results already achieved. It is not an offer of securities or investment advice.

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1. Executive summary

ATOMYX is a waste collection and recycling network for the United States and Europe. It uses AI to sort waste and an on-chain ledger to record every batch that is verified as recycled. ATOMYX does not invent new recycling technology. It connects proven commercial tools: IoT scales at drop-off points, AI cameras and robot pickers in sorting stations, and mechanical and chemical recycling at partner plants, all tied together by one data trail.

\$ATMX is the network's token. It launches as a fair, protected market on Programmable: the whole supply sits in a locked Uniswap v4 pool, and the only income it creates is a fixed 2.5% creator fee, in ETH, on every trade. That fee flows into the **Reclaim Vault**, which pays it out in fixed shares: **80% to the project treasury** (team, development, operations and marketing) and **20% recycling rewards** (only against batches recorded in the Recycling Ledger, after a public review period and within a cap per kilogram).

Slogan: From waste to value.

2. The problem: waste grows faster than we can recycle it

The United States produced about 292.4 million tons of municipal solid waste in 2018 and recycled only about 9% of its plastics (US EPA). The European Union recycled 41% of its plastic packaging waste in 2022, which means most of it was still burned, landfilled or exported; each EU resident generated 36.1 kg of plastic packaging waste that year (Eurostat).

- **Poor sorting at the source:** mixed waste loses its value and makes manual sorting expensive.
- **Collectors go unrewarded:** independent collectors, small haulers and scrap yards do much of the work, earn little and leave no data.
- **No transparency:** brands and municipalities cannot prove how much plastic was really collected and recycled.
- **Doubtful credits:** paper-based inputs are hard to verify independently, just as EU and US rules start asking for proof.

ATOMYX focuses on three things: getting more waste sorted correctly, paying the people who collect it, and producing data that can be checked for every batch.

3. Technology and operations

ATOMYX links technology that is already in commercial use into one closed loop, and every step produces data that can be checked. **These operations are planned and not yet running;** nothing in the launch contracts depends on them.

Component	Technology	Role
ATOMYX Point	Drop-off point with IoT scales, cameras and QR check-in	Residents and collectors drop off sorted waste; the weight is recorded, photographed and logged
ATOMYX Collect	Mobile app for collectors with GPS tracking	Logs each collection trip, its weight and the waste's origin
ATOMYX Sort	Sorting station with AI cameras, near-infrared (NIR) sensors and robot pickers	Sorts by plastic type (PET, HDPE, PP...), metal and paper

Component	Technology	Role
ATOMYX Process	Partner recycling plants: mechanical recycling, plastic pyrolysis, e-waste metal recovery	Turns sorted waste into recycled resin, fuel and recovered metals
Recycling Ledger	Part of the Reclaim Vault contract, on Ethereum	Records each batch: material, weight in grams and the hash of its evidence; gates recycling rewards

Flow: collect → weigh and photograph at the Point → move to the sorting station → AI sort and reweigh → partner recycler confirms receipt → the attester records the batch in the Recycling Ledger.

Measurement, reporting and verification (MRV): each batch gets a unique ID. Its weight is matched at three points: the drop-off Point, the sorting station and the recycler's receipt. If the figures differ by more than 5%, the batch is held for review and is not recorded, or is voided if it already was. The evidence file for each batch is published, and its hash is the `evidenceHash` stored on-chain. ATOMYX aims to meet the Verra Plastic Program standard so it can later issue collection and recycling credits.

4. Proof-of-Recycling on-chain: the Recycling Ledger

Version 1.0 promised to pay token rewards from a pre-allocated pool. A fair launch has no such pool, so v2.0 pays recycling rewards **in ETH**, from the Reclaim Vault's Recycling Rewards pool, which is filled by trading fees. The Recycling Ledger decides when that money may move:

1. **Record.** The attester records a verified batch: `recordBatch(batchId, material, grams, evidenceHash)`. Materials are PET, HDPE, PP, other plastic, metal, paper, glass and e-waste. A batch id can be used only once.
2. **Review.** For 24 hours the batch cannot be paid. Anyone can compare the published evidence with its hash. The guardian can void a batch that fails review, but only before anything was paid for it.
3. **Reward.** After review, the guardian pays the collector or Point operator with `payReward(batchId, to, amount)`. The total for one batch can never exceed its weight times the reward cap, and never the pool balance.

Rule	Value	Enforced by
Review period before any payout	24 hours	ReclaimVault.REVIEW_PERIOD
Reward cap at launch	0.0002 ETH per kg (0.2 ETH per tonne)	maxWeiPerKg, changeable only after a 48-hour timelock
Hard ceiling of the cap	0.001 ETH per kg	ReclaimVault.HARD_MAX_WEI_PER_KG, cannot change
Voided batches	Never paid	payReward reverts
Other ways out of the rewards pool	None	Only payReward moves pool ETH

Honest limit. The ledger records the attester's claims and publishes them for review. It does not by itself prove that waste was physically recycled. Trust rests on the attester, the public evidence, the 24-hour review and later independent audits.

5. The \$ATMX token

\$ATMX has a fixed supply of 1,000,000,000 tokens with 18 decimals. Nothing can mint more, and there is no owner, tax or pause inside the token.

Use	How	Status
Trading and price discovery	Uniswap v4 pool on Programmable, ETH/\$ATMX	At launch
Funding the network	Every trade pays a 2.5% creator fee in ETH to the Reclaim Vault	At launch
Project treasury	80% of creator fees go to the project treasury wallet, which funds the team, development, operations and marketing	At launch
Paying for services	Door-to-door pickup and weight reports for businesses	Planned
Operator staking	Point operators stake \$ATMX as a bond and lose part of it for false weights	Planned, separate contract
Governance	Voting on reward rates and new cities	Planned, separate contract

5.1 Supply and allocation

Allocation	Share	\$ATMX	Notes
Uniswap v4 pool (ETH/\$ATMX)	100%	1,000,000,000	Placed in the launch transaction as one position, locked forever
Team, operations, partners, community, airdrop	0%	0	None exist; there is no vesting. The team buys from the same pool as everyone else.

The only \$ATMX outside the pool at launch is the launch wallet's single opening buy, made inside the launch transaction at the pool price and capped at 2% of supply by the launch-protection rules. Version 1.0's 2% token tax (1% burn, 1% environment fund) is replaced by the creator fee below.

6. Launch on Programmable

ATOMYX launches as a **Programmable Custom Launch on Ethereum**. Programmable requires every new native-ETH launch to use its sealed launch-protection package (v1). ATOMYX uses that package unchanged and adds one contract of its own, the Reclaim Vault, which is the hook's immutable creator-fee recipient.

Target	Contract	Role
initializer	ProtectedNativeInitializerV1 (Programmable)	Checks the opening valuation on the Chainlink ETH/USD feed, places 100% of supply as one locked position, makes the capped opening buy
token	ProtectedLaunchTokenV1 (Programmable)	\$ATMX, 1,000,000,000 fixed supply, 18 decimals; 2% receive cap per wallet for the first 300 seconds
hook	ProtectedNative30HookV1 (Programmable)	Takes the platform and creator fees on the ETH leg of every swap; enforces the opening protection

Target	Contract	Role
vault	ReclaimVault (ATOMYX)	Receives every creator fee; splits it 80/20; holds the Recycling Ledger

6.1 Fees, fixed for ever

Fee	Rate	Paid to
Programmable platform fee	0.30% on buys and sells	Programmable treasury
ATOMYX creator fee	2.5% on buys and on sells, fixed at deployment	Reclaim Vault
All-in after the first 30 seconds	2.8%, in ETH, rounded up per trade	

6.2 Born protected

- **Opening valuation:** at least USD 15,000 on the Chainlink ETH/USD feed, or the launch reverts.
- **Opening buy fee:** the total buy fee starts at 99% and its extra part falls linearly to zero over 30 seconds, paid to the Programmable treasury. The launch wallet is exempt from that extra part only.
- **Caps:** for 300 seconds every wallet, the launch wallet included, can buy at most 2% and receive at most 2% of supply. Selling never refills the budget. After 300 seconds nothing limits transfers.

7. The Reclaim Vault

Anyone can call the hook fee vault's `claimCreator()` to push accrued creator fees (ETH) into the Reclaim Vault, and anyone can call `distribute()`. Every distribution splits the vault's new ETH in fixed shares that cannot change:

Share	Goes to	Purpose
80%	Project treasury wallet	Free for the team to use: development, operations, pilot Points, marketing and audits
20%	Recycling Rewards pool, kept in the vault	Paid to collectors and Point operators only through the Recycling Ledger

7.1 Powers and limits

Actor	Can	Cannot
Anyone	Claim creator fees into the vault; call <code>distribute()</code>	Move any vault ETH elsewhere
Attester	Record batches in the Recycling Ledger	Pay rewards; record the same batch id twice
Guardian	Void a batch before it is paid; pay rewards within the review and cap rules; change the treasury wallet, the attester, the reward cap or itself only after a 48-hour public timelock	Change the 80/20 shares; raise the cap above 0.001 ETH/kg; take rewards-pool ETH without a reviewed batch; change any fee, the pool or its liquidity; mint; pause trading

There is **no immediate exception**: every change of the vault's roles or settings waits 48 hours and is visible on-chain first. Who holds each role at launch, and whether it is an ordinary wallet or a multisig, is stated in the Programmable launch request and on the ATOMYX website.

8. Ecosystem and participants

Group	What they do	What they get
Residents	Sort at home and drop off at an ATOMYX Point	ETH recycling rewards for recorded batches, with history in the app (once Points operate)
Independent collectors & scrap yards	Register in ATOMYX Collect and deliver to sorting stations	Material price plus ETH rewards per recorded batch, with income on record
Businesses & brands	Buy collection services and weight reports	Verifiable data for ESG/CSRD reports and packaging EPR obligations
Operating partners	Run a Point	Operating fees and a share of material revenue
\$ATMX holders	Trade on the pool	A fixed supply with no team, presale or airdrop allocation; planned governance

Public data: anyone can read the Recycling Ledger on-chain: batches, grams by material, rewards paid and voided batches. The website will add a dashboard on top of it.

9. Roadmap

Timelines are targets and depend on funding, permits and partners.

Phase	Timing	Deliverables
0 · Launch	Launch	Protected fair launch on Programmable; Reclaim Vault and Recycling Ledger live; ATOMYX Collect beta
1 · Foundation	Months 0 to 6	Legal setup in the US and EU; ATOMYX Collect v1; agreements with 1 or 2 US recycling partners; 3 to 5 pilot Points in one US city; first batches recorded
2 · Pilot	Months 6 to 12	First sorting station with AI cameras, 5 to 10 tonnes a day; first independent data audit; recycling rewards paid where legally permitted
3 · Scale	Months 12 to 24	50+ Points across 2 or 3 cities in the US and the EU; Verra Plastic Program filing; reporting service for EPR and CSRD
4 · Expansion	Month 24+	Franchised Points across the US and Europe; operator staking and governance contracts; e-waste recovery under EU WEEE rules and US state programs

To be announced as each phase starts: the pilot city, the names of recycling partners, team information and the legal entities.

10. Brand identity and community

- **Logo:** an atom whose nucleus is a small cube of waste breaking up into glowing particles.

- **Colors:** charcoal, electric violet and neon green on a dark background.
- **Mascot:** "Atom", a small sorting robot, the face of the ATOMYX Sort stations.
- **Community:** The Reclaimers, the people taking the planet back. Hashtag #AtomizeTheWaste.
- **Activities:** monthly clean-up challenges and meme contests featuring Atom, funded from the project treasury and announced publicly. There are no token airdrops: no \$ATMX exists outside the pool to give away.

11. Security model and honest limits

- **Launch contracts:** Programmable's sealed launch-protection package and the Reclaim Vault, with exact source published and tested on an Ethereum mainnet fork, including all twelve protection scenarios.
- **Attester trust:** the ledger records claims; public evidence, the 24-hour review, the cap per kilogram and voiding limit the damage of a wrong record, but do not remove the need to trust the attester.
- **Role holders:** the guardian and attester are named in the launch request. If one ordinary wallet holds them, a lost or stolen key affects every role; any change still waits 48 hours.
- **Manual steps:** treasury spending is decided by the team, and recycling rewards are paid by the guardian within the vault rules; no contract trades at a market price by itself.

12. Risks and legal notice

- **Legal:** token rules differ in the US and in each EU member state. ATOMYX will obtain legal advice on US federal and state rules and on the EU Markets in Crypto-Assets Regulation (MiCA), and may restrict access in some jurisdictions.
- **Operations:** the project depends on recycling partners, permits and recycled material prices, which change with the market.
- **Data:** false weights at drop-off points are a risk. Three-point matching, the review period, voiding and independent audits reduce it.
- **Certification:** a Verra Plastic Program filing is not guaranteed to be approved.
- **Platform and trading:** the launch depends on Programmable's review, router and indexing. Buys in the first 30 seconds pay up to 99% in fees.
- **Fees:** vault income depends entirely on trading volume and is never guaranteed.
- **Market:** the price of \$ATMX may be volatile and holders may lose part or all of its value.

This document describes planned technology. It is not an offer to sell or a solicitation to buy any security, and nothing in it is investment, legal or tax advice. All figures and timelines are subject to change.

Sources

- US EPA: National Overview: Facts and Figures on Materials, Wastes and Recycling
- Eurostat: 41% of plastic packaging waste recycled in 2022
- Verra: Plastic Waste Reduction Program

Appendix A. Launch parameters

Parameter	Value
Chain	Ethereum mainnet (chain id 1)
Launch route	Programmable Custom Launch API, profile 3.6.0, launch-protection v1, CLI 4.1.7
Pool	Uniswap v4, native ETH / \$ATMX, LP fee 0, tick spacing 60
Supply	1,000,000,000 \$ATMX, 18 decimals, fixed
Creator fee	250 bps buy / 250 bps sell, fixed in the hook, recipient: Reclaim Vault
Platform fee	30 bps, Programmable treasury 0xD88539d3c4C460136a733A3Fd60cf6BF269079da
Opening protection	99% → normal over 30 s; 2% buyer and receiver caps for 300 s; ≥ USD 15,000 opening valuation
Opening buy	About 0.05 ETH by the launch wallet inside the launch transaction (at most 2% of supply)
Vault split	80% project treasury · 20% Recycling Rewards pool
Recycling rewards	24-hour review; cap 0.0002 ETH per kg at launch, hard ceiling 0.001 ETH per kg; voided batches never paid
Timelock	48 hours on treasury, attester, reward-cap and guardian changes; no immediate exception
Role holders	Launch wallet, guardian, attester and project treasury wallet: stated in the launch request