

THE Currencies

Trade Dollars, Hour Dollars, Energy Dollars — three units, three floors, no exchange

\$T — market floor

\$H — biological floor

\$E — thermodynamic floor

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Supersedes: THE Currencies Whitepaper v1.0 (March 2026), whose control parameters were keyed to a membership ladder that was never built

Status: No unit is issued. No token exists. No coin exists. No sale, pre-sale, allocation or waiting list exists. This is not an offer of any kind and no securities counsel has been obtained.

Classification: Design paper — strategic and architectural framing, not financial, tax or legal advice

Three units that cannot be cashed out, cannot be exchanged for one another, and have no internal market. Those three constraints are the design, not limitations on it.

0. What this version changes, and why

Version 1.0 of this paper (March 2026) described the three units correctly and then attached them to a subscription structure that does not exist. Every anti-inflation control in that version — earn caps, maximum balances, decay rates, staking multipliers, referral limits — was keyed to a six-step ladder (Observer, Pioneer at \$29, Builder at \$79, Sovereign at \$199, Empire at \$499, One-Person Unicorn at \$999) that was never built and never priced that way. The live membership structure is four steps: Personal at \$42 per month, Business at \$420, Company at \$4,200, and Global Impact. Because the controls were keyed to the wrong ladder, they were unusable. They are rebuilt here against the real one.

Four further corrections have been made.

The definition of the third unit has been reconciled. Version 1.0 described Energy Dollars as the platform gamification currency. Subsequent work described it as the metering unit for machine work. Both were partially right and the two definitions were never joined. Section 5 resolves it as one unit running on two rails, with the rule that keeps the earning rail honest stated explicitly.

A fourth rail has been named. Three internal units cannot pay anyone's rent, and pretending they can is how these systems fail. Section 6 describes the external payout rail as a separate, conditional, ordinary-money mechanism rather than leaving it implied.

The single most relevant real-world case study has been added. Section 8 documents what happened when the largest consumer platform to attempt a contribution currency abandoned it, because the two reasons it gave are the two reasons the three hard rules in this paper exist.

Militarised terminology has been removed. The word battalion appeared in version 1.0 as a unit of agent organisation. It has been retired along with the rest of that vocabulary and replaced by the SCALE taxonomy. No agent grouping in this document carries a military name.

1. Executive summary

Society OS proposes three units of account, not one. They are not interchangeable, they cannot be exchanged for national currency, and there is no internal market between them. Those three constraints are the design, not limitations on it.

Trade Dollars, \$T — the unit for commerce. Goods, services, spare capacity, a portion of staff payments, loyalty and referral rewards. The seller sets the price at market rates. Its floor is whatever the market says, which is to say it has no floor.

Hour Dollars, \$H — the unit for human time. One hour equals one unit regardless of whose hour it is. Earned only by humans giving time to other humans, and never earnable by an agent. Its floor is biological: there are twenty-four hours in a day and no quantity of compute adds a twenty-fifth.

Energy Dollars, \$E — the unit for machine work and for participation, denominated in energy. Machine work spends it; participation earns it. Its floor is thermodynamic: inference costs joules, joules are metered, and no efficiency gain drives the cost of computation to zero.

The letters are not decorative. Trade, Hour, Energy — T, H, E — is the protocol.

None of the three is issued. None is live. This is a design paper, not an instrument, and section 11 states the gap between the two without softening it.

2. The three hard rules

These rules are prior to every parameter in this document. Any implementation that breaks one of them is not an implementation of this model.

They are not interchangeable. There is no conversion between \$T, \$H and \$E. An hour of mentoring does not become compute, and compute does not become a discount on a supplier's invoice. Convertibility is what turns three purpose-built units into one badly designed one.

They cannot be cashed out. No unit converts to national currency, and no unit is redeemable for money at any rate. This is the rule most often mistaken for a weakness. It is the immune system. A unit that never acquires a market price cannot suffer a collapse in one, and cannot be sold as an investment by anybody, including us.

There is no internal exchange. No order book, no automated market maker, no rate board, no informal secondary market that the platform tolerates. The moment a rate exists, the units are priced against each other and the entire purpose of separating them is lost.

The three rules together have a consequence worth stating plainly: nobody can get rich holding these units. That is intentional. Every contribution-currency failure on record began with someone being able to.

3. Trade Dollars — \$T

What it is for

\$T settles commerce between members. A member with spare capacity — unsold inventory, unbooked hours, idle equipment, warehouse space — prices it in \$T and sells it to another member who needs it. The seller sets the price. There is no central price list, because a central price list is a planning authority and this is not a planned economy.

Permitted uses are commerce, a bounded portion of staff compensation where local law allows it, and loyalty or referral rewards. Not permitted: acquiring \$T other than by supplying something real. There is no purchase path, because a purchase path makes it a token.

Where it comes from

Organised reciprocal trade is a forty-year-old industry with statutory recognition, and \$T is a member-scale implementation of it rather than an invention.

Fact	Detail
Industry body	International Reciprocal Trade Association, founded 1979
Estimated volume	US\$12–14 billion in annual barter transactions
Participating businesses	Approximately 400,000
Composition	Roughly 50% countertrade, 30% corporate, 20% retail
US tax treatment	Tax Equity and Fiscal Responsibility Act 1982 — barter exchanges are third-party record keepers; a trade dollar is treated as equal to one US dollar for reporting
Longest-running example	Swiss WIR Bank, a mutual credit franc operating since 1934, roughly 60,000 businesses, around CHF 1.5 billion annual turnover
Largest commercial operator	Bartercard — approximately 55,000 businesses across nine countries
Others	ITEX (~24,000 businesses), IMS, BerkShares, Chiemgauer, Eusko
Clearing infrastructure	IRTA's Universal Clearinghouse, established 1997, connecting 100-plus exchanges

The TEFRA point matters more than the volume figures. It means a jurisdiction has already decided how to treat a trade dollar for tax purposes, which removes the single largest source of uncertainty that kills these systems. It also means the reporting obligations are real and cannot be treated as optional.

The honest weakness

\$T is the unit most exposed to machine capability, for reasons set out in section 7. Balance caps and decay control how much anyone can hold. They do nothing whatsoever about the price of a thing collapsing.

4. Hour Dollars — \$H

What it is for

One hour equals one unit. A surgeon's hour of mentoring and a student's hour of community service are recorded identically, and the equality is the entire point rather than an unfortunate simplification. \$H is earned only by a human giving time to another human. Agents cannot earn it, and no delegation, tooling or assistance arrangement changes that.

\$H also carries weighted governance participation, on the principle that the people who have given time to the community are the people whose judgment about it should count.

The design rule that cannot be relaxed

\$H must never reward output. It rewards time given, and only time given. The qualifying activities are mentoring, care, witness and judgment — not production. The moment \$H starts paying for how much was produced in the hour, humans are placed in a race against machines that they lose permanently and immediately. Presence is the one thing that cannot be out-produced, because it is not production.

Where it comes from

Fact	Detail
First modern time bank	Teruko Mizushima, Japan, 1973 — Volunteer Labour Network, 3,800-plus members, 262 branches
Term coined	Edgar S. Cahn, "Time Dollars", 1980
Founding idea	The core economy — raising children, caring for elders, holding a community together — as work the money economy does not price
Five core values	Assets, Redefining Work, Reciprocity, Social Networks, Respect
US organisation	TimeBanks USA, 1995 — 500-plus banks, approximately 37,000 members; became TimeBanks.Org in 2020
UK organisation	Timebanking UK, 2002 — around 300 banks, approximately 32,000 members
Elder-care variant	Fureai Kippu, Japan, 1995
Municipal variant	Stiftung Zeitvorsorge, St. Gallen, Switzerland, 2011
Related systems	LETS since 1983; Community Exchange System, 2003, active in 99 countries; Ithaca Hours, 1991
Historical root	Robert Owen's National Equitable Labour Exchange, nineteenth century

Two cautions that must be stated

The tax position is not settled anywhere. Unlike trade dollars, no statute anywhere establishes the treatment of time credits. Favourable private rulings exist but bind only the party that received them, and the US Internal Revenue Service has denied exempt status to at least one time-banking network. \$H must never be described as tax-exempt or tax-free. It must be described as unsettled, because it is.

The recorded failure mode is irrelevance, not devaluation. Fifty years of timebanking has produced a consistent pattern: schemes stay small, depend on grant funding, and lose members who cannot articulate how participation differs from ordinary volunteering. That is the real risk to \$H. It is not solved by better software and this paper does not claim to solve it.

5. Energy Dollars — \$E

One unit, two rails

Earlier versions of this paper and subsequent internal work gave two different definitions of \$E. Both were partly correct. The reconciliation is that \$E is a single unit of account with two distinct issuance rails, and the two must never be recorded as the same accounting entry.

The debit rail: machine work spends \$E. Inference, verification, attestation, document analysis, seal issuance and registry operations all consume compute, and compute is metered. Spending is measured against actual usage rather than a posted price list. This is the rail that gives the unit its physical anchor.

The credit rail: participation earns \$E. Contribution, review, referral, onboarding, publication and community work mint \$E against a budget. The budget decays, balances decay with inactivity, and overflow burns.

Holding both rails in the same unit is deliberate. It makes the two directly comparable: an organisation can see what its people earned and what its agents consumed in one denomination, and can see the ratio move.

The rule that keeps the earning rail honest

The participation mint budget is bounded by metered machine-work capacity. No more \$E may be minted for participation in a period than there is compute available to redeem it against.

This single constraint is what separates \$E from every points scheme that has failed. Unbacked points are issued because issuing them changes behaviour, and their quantity is limited only by the issuer's appetite for issuing them. A capacity-bounded credit is different in kind: it is a claim on compute that demonstrably exists. Earning \$E is therefore closer to pre-purchasing metered capacity than to receiving a reward, and the liability is one the issuer can actually honour.

Two consequences follow. First, generosity has a hard ceiling, and the ceiling is physical rather than political. Second, the interesting internal metric is not the balance in circulation but the ratio of minted credits to metered capacity. If that ratio approaches one, issuance must slow. Nothing about that is discretionary.

This is a design rule. It is not an implemented control, and no audited ledger enforces it today. Section 11 repeats that.

Proposed participation credits and consumption prices

The values below are proposed illustrative parameters carried forward from version 1.0 for continuity. They are not live, and every one of them is subject to the capacity bound above.

Earning event	Proposed credit
Daily sign-in	25
Agent conversation	11
First conversation with a new agent	50
Reaching a THRIVE level	42
Document ingestion	20
Course completion	115
Sharing published work	105
Anchoring a record to a public ledger	25
Defensive publication	80
Omnibus contribution	150

Consumption event	Proposed debit
Deep research run	50
Document analysis	25
Whitepaper generation	150
Assisted patent drafting	200
Innovation-tier processing	500
Priority processing	20
Public-ledger anchoring	10
Additional team seat, monthly	200

Standing progression: Initiate, Citizen, Guardian, Elder, Sovereign, Archon, Prime. Progression affects weighting and access. It does not create a claim on anything, and it is not tradable.

Where it comes from

\$E is the unit most often described as new. It is the oldest idea in the paper.

Fact	Detail
First proposal	Henry Ford, 1921 — reported by the New York Times on 6 December 1921 under the headline "Mr. Ford's Energy Dollar"; a unit defined as a fixed quantity of energy over a fixed period, intended to displace gold
Engineered version	The Technocracy movement of the 1930s (Howard Scott, M. King Hubbert) designed Energy Certificates: total energy production divided among adults, non-transferable, expiring at period end, with purchases recorded to balance production in real time
Modern sector	Tokenised energy is a live commercial field — Powerledger, WePower, Energy Web, Toucan, KlimaDAO, Zoniqx — typically one token to one kilowatt hour or megawatt hour, minted from meter data and burned on consumption
Adjacent industry	Read as a participation currency, the nearest relative is the loyalty and points industry, worth well over US\$280 billion
Recorded criticisms	Energy prices vary by source and location; centralised metering invites coercion; retail usability is poor; regulation is fragmented; and there is no interoperability standard
The limit	No jurisdiction has ever adopted energy as legal tender

The Technocracy design is worth noting for one reason beyond history: its certificates were non-transferable and expired at the end of each period. That is the same anti-hoarding logic proposed here, arrived at independently ninety years earlier, which is either reassuring or a warning depending on temperament.

What is genuinely new here is narrow, and should be claimed narrowly: using an energy-denominated unit to settle verified governance work, and bounding participation issuance by metered capacity. The unit is not new. The absence of an interoperability standard is the actual gap, and that is a standards problem rather than a currency problem.

6. The fourth rail

Three internal units do not cover everything. At some point a contributor needs money that pays rent, and no internal unit can become that without breaking the second hard rule. The honest architecture therefore has a fourth rail, and it is ordinary money.

It sits outside the three units by design. It is denominated in national currency, it moves through a regulated payment processor, and it carries eligibility conditions rather than a balance: verified identity, a supported jurisdiction, an account in good standing, a minimum accrual before anything is paid, and exclusion of content that breaches policy. It is not elegant. It is the only arrangement that has survived contact with real platforms at real scale, as section 8 shows.

Keeping it separate is the whole point. The moment an internal unit becomes convertible it acquires a market price; a market price invites speculation, then expectation, then a collapse the issuer is blamed for. A payout rail that is visibly a payout rail creates no such expectation. Contributors then know precisely what they hold: units that buy things inside the system, and a separate conditional path to cash that is described as conditional in its first sentence.

None of this rail is built. It is named here because leaving it unnamed is how a unit of account quietly becomes a promise nobody agreed to make.

7. What happens when agents get fast

The standing objection to any currency denominated in human contribution is that machines are faster than people and getting faster. If an agent can do a week of skilled work in a minute, what is an hour of a human worth. The answer differs for each unit, and the one that looks most exposed is not the one actually at risk.

\$H is the hardest of the three to devalue. Its supply is fixed by biology rather than policy, and agents are barred from earning it, so the issuance base cannot expand. What machine speed destroys is the market price of skill, and \$H is not denominated in skill. It is denominated in presence. That distinction has to be enforced rather than assumed, which is why the rule in section 4 is absolute.

\$T is the genuinely exposed one. It is priced by sellers at market rates for goods and services, and services delivered by software are precisely what agents deflate toward zero. \$T holds value only where it represents something a model cannot supply: physical goods, physical presence, licensed acts, custody of an asset, capacity with a real constraint behind it. Every category whose deliverable is text, code or analysis should be expected to deflate, and the design should say so rather than implying that caps address it. They do not.

\$E is the counterweight. Machine work has a physical floor. Inference costs joules, joules are metered, and no efficiency gain drives the cost of computation to zero because thermodynamics does not permit it. That makes \$E the only one of the three anchored to something an agent cannot argue with, and it is the reason the unit is denominated in energy rather than in points.

The ratio between \$H and \$E is the real control surface. It is the exchange rate between human presence and machine throughput, expressed as a price rather than legislated as a quota. Nobody has to decree how much of the work in a society should be done by people. The relative cost of the two units decides it, in public, where it can be observed and argued with. Note that observing a ratio is not the same as converting between the units; the first hard rule still holds.

8. The one large platform that tried this, and quit

The nearest thing to a real-world test of a contribution currency at consumer scale is Reddit, and the honest use of that case is as a warning rather than a borrowed credential.

Reddit launched Community Points in 2020: blockchain tokens earned by contributing to a subreddit, most visibly MOON in its cryptocurrency community and BRICK in its Fortnite community. They ran on Ethereum, migrated to the Arbitrum Nova layer-two network in 2022 to reduce fees, and were held in an in-app vault using meta-transactions so that most users never had to interact with a blockchain directly. By any measure of resourcing and distribution, it was the best-positioned attempt anyone has made.

Reddit shut it down. The wind-down was announced in October 2023 and completed on 8 November 2023. Two reasons were given. The first was scalability: the company concluded there was no path to scaling the system across the platform even after the layer-two migration, and that the resourcing required could not be justified. The second was the evolving regulatory environment.

The consequences are the instructive part. Token prices fell immediately and sharply — the largest by roughly eighty to ninety per cent, the second by roughly forty to sixty. A substantial part of the community described it as a rug pull. Reddit did not destroy the contracts; it relinquished control of them and walked away from something its users had begun treating as money.

What replaced it is more instructive still. The Contributor Program, introduced in September 2023, pays contributors in ordinary money through a regulated payment processor, at a rate that steps up with standing, with a minimum accrual before payout and eligibility conditions on age, region and account conduct. The legacy awards system was retired at the same time. The mechanism that survived was not a token. It was a cash rail with conditions attached.

Three conclusions are taken from this and they are load-bearing for the whole model.

The two reasons Reddit gave are the two reasons the hard rules exist. Scalability and regulatory exposure are both consequences of putting a contribution unit on a public market. Units that are non-interchangeable, non-cashable and unpriced against each other do not incur either. Non-cashability is not a limitation of this design; it is the part that prevents this failure.

If money must reach contributors, that is a separate rail. Reddit's surviving mechanism is the fourth rail described in section 6, and its survival is the strongest available evidence that a conditional fiat payout works where a token did not.

Nobody has solved this. No major platform and no jurisdiction has sustained a contribution currency at scale. One useful detail from the replacement scheme, however, is that its payout rate steps up with accumulated standing — a live example of standing-weighted issuance operating at consumer scale, which is structurally what reputation-weighted minting would be here.

9. Anti-inflation controls, rebuilt against the real membership structure

Version 1.0's control tables were keyed to a six-step ladder that does not exist. The live structure has four steps. The parameters below are proposed, not implemented, and they are illustrative of the mechanism rather than a schedule anyone is entitled to rely on.

Tier	Price	Agent allocation
Personal	\$42 per month	42
Business	\$420 per month	420
Company	\$4,200 per month	4,200
Global Impact	By arrangement	42,000

Proposed issuance and holding limits

Tier	Monthly participation credit cap	Maximum \$E balance	Inactivity decay	Referral credit cap
Personal	4,200	12,600	5% per month after 60 days idle	10 per month
Business	42,000	126,000	5% per month after 60 days idle	100 per month
Company	420,000	1,260,000	5% per month after 90 days idle	1,000 per month
Global Impact	By arrangement	By arrangement	By arrangement	By arrangement

Three mechanisms sit behind the numbers.

Caps limit issuance, not price. A cap prevents any single member accumulating an unmanageable claim. It does nothing about the value of the unit, and no cap should be described as if it did.

Decay is the primary control. Balances that sit idle shrink. This is the Technocracy expiry mechanism in a softer form, and it is what stops the stock of outstanding claims growing without bound while the system's capacity does not.

Overflow burns. Credits that would exceed a maximum balance are not deferred, banked or carried forward. They are never minted.

Above all of it sits the capacity bound from section 5, which caps the aggregate rather than the individual. Where the two conflict, the capacity bound wins.

Governance weighting

\$H carries weighted governance participation. \$E does not, and should not: allowing the unit that measures machine work to weight human decisions is precisely the failure mode the governance model exists to prevent. Standing progression affects weighting and access, never voting arithmetic in isolation.

10. Who is meant to operate this

Custody of the model is not proposed to sit with the company that builds it. The intended arrangement is that the standard and the governance vocabulary are stewarded by a service organisation — a Swiss foundation whose declared purpose is stewardship of the agent ecosystem, accountable to a supervisory authority rather than to shareholders — while the company remains the builder of the platform.

The reason is structural rather than reputational. A steward that can revoke the rules holds a veto, and a veto cannot be a fiduciary. The same logic applies to a currency model: an issuer that can rewrite the issuance rules in its own favour is not operating a unit of account, it is operating a discretionary instrument and calling it one.

The foundation does not exist yet. Section 11 says so.

11. What is not true yet

This section is not a disclaimer. It is the part of the document that determines whether the rest can be trusted.

There is **no token and no coin**. None of \$T, \$H or \$E is issued, live, allocated or reserved. There is no sale, no pre-sale, no allocation, no waiting list and no offer of any kind. Nothing in this document is an offer or an inducement to acquire anything.

No securities counsel has been obtained in any jurisdiction. Any move toward issuance would require it in every jurisdiction involved, and that work has not been done. Until it is, all parameters in this paper are design proposals.

The capacity bound in section 5 is a design rule on paper. It is not an implemented control and no audited ledger enforces it today.

The foundation described in section 10 does not exist. It has not been incorporated, endowed or registered, and no assets have been transferred to it. Intent is to be announced on 5 September 2026.

The intellectual property position is one unexamined provisional application. Australian provisional 2026900773, filed 2 February 2026, containing 504 claims. It is unexamined, confers no enforceable rights, and lapses on 2 February 2027 unless converted. The core claims relating to the standard are irrevocably pledged royalty-free for any use.

The \$H tax position is unsettled in every jurisdiction, as set out in section 4.

No outcome has been independently measured. No third party has audited, certified or verified any part of this model.

This list is intended to be edited as items change, not quietly dropped.

12. Terminology retired

The following terms appeared in earlier drafts and are withdrawn. They are recorded here so that anyone holding an old copy knows what replaced them.

Retired term	Replacement
Battalion, and all military unit language	The SCALE agent taxonomy
Observer / Pioneer / Builder / Sovereign / Empire / One-Person Unicorn tiers	Personal, Business, Company, Global Impact
Sovereign Tokens as a fourth currency	Withdrawn from the currency model; standing and governance weight are not currencies
Energy Dollars as "the gamification currency"	Energy Dollars as one unit on two rails, section 5

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