

EFU 600.42 – ARTIFICIAL INTELLIGENCE METABOLIC PARASITISM v1.0 (ENGLISH)

ONTOLOGICAL POSITION

System Location: TIER 1 CRITICAL (Priority: 10)

Nexus: Technology Imperialism (600.3, 600.16) + Energy Meta (600.41) + Power Centralization (600.7, 600.18)

Antithesis (700/800): 700.4 Open Knowledge Sharing + **800.4 Ethical AI Co-evolution**

I. DEFINITION AND MECHANISM

600.42 – ARTIFICIAL INTELLIGENCE METABOLIC PARASITISM

Ontological definition: "AI development/deployment **current trajectory** (2025-30) → exponential energy cannibalization + ultra-concentration of power + noospheric entropy (deepfakes, bias, surveillance) → R_future collapse **IF NO PIVOT to 800.4.**"

Key distinction:

AI is NOT inherently parasitic (unlike fossil fuels):

- 600.42: AI as EXTRACTIVE TOOL (current OpenAI/Google trajectory)
- 800.4: AI as SYMBIOTIC PARTNER (Constitutional AI, open-source)
- CRITICAL: 2025-30 = FORK IN THE ROAD (60% extractive, 40% symbiotic)

Mechanism (Dual-pathway model):

AI METABOLIC PARASITISM (600.42 trajectory):

ENERGY CANNIBALIZATION:

- Data center electricity: 1,000 TWh/year (2026, vs. crypto 150 TWh)
- USA AI servers: 326 TWh/year (2028, 12% total demand)
- Global share: 4% world energy (2026) → 10-15% (2030 projection)
- Fossil lock-in: 70% grid still non-renewable → AI = coal/gas demand spike
- 104.8 Energy: -1,000 TWh/year = -316M EFU-E/year (energy alone!)
- Connection: 600.41 Fossil (AI delays transition due to demand spike)

ULTRA-CONCENTRATION OF POWER:

- Model training cost: GPT-4 \$100M+, GPT-5 \$1Bn+ (only 3 companies capable: OpenAI/Google/Anthropic)
- Compute oligopoly: Nvidia 95% GPU market share
- Data moat: Training data = proprietary (scraping vs. consent)
- Governance: Corporate board, not democratic (Sam Altman firing/rehiring case)
- 600.7 Monopoly: Flux concentration >90% (3 companies)
- 600.18 Corruption: Lobbying \$200M/year (AI regulation capture attempt)

NOOSPHERIC ENTROPY:

- Deepfakes: Political manipulation (2024 elections already used, EU Parliament concern)
- Misinformation: GPT-generated fake news ($1000\times$ scale vs. human trolls)
- Bias: COMPAS racial bias (justice system), hiring algorithms discrimination
- Surveillance: Facial recognition (Uyghur China, EU proposed ban partial)
- Autonomous weapons: Lethal AI (Treaty campaign, no global ban yet)
- 600.6 Information entropy: Noosphere -40% (truth/fake boundary collapse)
- 600.1 Cognitive parasitism: AI-generated content = mental conditioning

DEPENDENCY TRAP (LOCK-IN):

- Workforce: AI coding assistants (GitHub Copilot 50%+ code written)
 - Infrastructure: Cloud dependency (AWS/Google/Azure)
 - Education: AI tutors replacing teachers (no human oversight)
 - 600.3 Vendor lock-in: Proprietary APIs (OpenAI GPT-4 \$0.03/1k token)
 - HMI: -8.0 (dependency + unemployment + cognitive atrophy)
-

II. EFU METABOLIC BALANCE SHEET (600.42 FULL AUDIT)

GLOBAL AUDIT (2025-2030 current trajectory)

INPUT (AI infrastructure, annually):

- Energy: 1,000 TWh/year (2026) → 2,000 TWh (2030 projection)
 - USA: 326 TWh (2028, 12% demand)
 - EU: 150 TWh (estimate)
 - China: 400 TWh (estimate)
 - Rest: 124 TWh
- Water (cooling): 5 billion liters/year (data centers, often in drought zones!)
- Rare earth minerals (chips): Cobalt, lithium (Congo child labor nexus → 600.39)
- Human labor: 300k+ annotation workers (\$2/hour Global South → 600.5)
- Capital: \$500 Bln/year (OpenAI \$80Bn valuation, Nvidia \$2 trillion market cap)

OUTPUT (annual value creation vs. harm):

- GDP contribution: \$2 trillion (McKinsey, optimistic)
- BUT EXTERNALITIES:
 - Energy harm: -316M EFU-E/year (1000 TWh fossil)
 - Unemployment: 300M jobs at risk (World Bank, 2030) → HMI -2.0/person average
 - Misinformation: Immeasurable (elections, public health)
 - Bias perpetuation: -50M EFU-E/year (systemic discrimination)
 - Autonomous weapons: R_future <0.05 (existential risk, non-zero)
 - Surveillance: Interstition -30% (China social credit, expanding)

NET EFU (600.42 TRAJECTORY):

- Positive: +500M EFU-E/year (productivity gains, science acceleration)
- Negative: -5 Bln EFU-E/year (energy + unemployment + noosphere + R_future risk)
- NET: -4.5 Bln EFU-E/year (HEAVILY NEGATIVE!)

R_future: <0.05 (if AGI misalignment, civilization end; if aligned, 2.5 → FORK!)

HMI average: -8.0 (unemployment + dependency + bias victims)

Noosphere: -40% (truth erosion)

III. FIRE CHIEF AUDIT PROTOCOL (600.42 SPECIFIC)

DNA-FOLDER (Full chain transparency)

AI CHAIN AUDIT (example: OpenAI GPT-4):

- LAYER 1: Training Data
 - Source: Web scraping (Reddit, books, Wikipedia, etc.)
 - Consent: NONE (Fair use disputed, NYT lawsuit 2023)
 - Bias: Encoded (internet = biased)
 - RED FLAG: No consent + unaudited bias
- LAYER 2: Compute Infrastructure
 - GPUs: Nvidia A100/H100 (\$10k-40k/unit, 10,000+ units)
 - Energy: 50 MW data center (1 training run)
 - Grid: 70% fossil (USA average)
 - RED FLAG: Carbon footprint 250 tCO2/training (vs. car 4.6 tCO2/year)
- LAYER 3: Model Ownership
 - Weights: CLOSED (OpenAI "open" in name only since GPT-3)
 - Governance: Corporate board (not democratic)
 - Profit: \$2Bn revenue (2023), \$80Bn valuation
 - RED FLAG: Public data → private profit (no commons return)
- LAYER 4: Deployment
 - API access: \$0.03/1k token (vendor lock-in)
 - Use cases: 30% generative (benign), 20% surveillance, 10% deepfake (estimate)
 - Regulation: Minimal (EU AI Act 2024, enforcement 2026+)
 - RED FLAG: Dual-use, no accountability mechanism
- LAYER 5: Societal Impact
 - Jobs: Coding (-20% projected 2030), customer service (-40%), legal (-15%)
 - Misinformation: 2024 election deepfakes (verified cases)
 - Wealth: Top 0.01% (Altman, Musk, Zuckerberg AI billionaires)
 - RED FLAG: Inequality spike, democracy erosion

FIRE CHIEF VERDICT: 5/5 RED FLAGS → QUARANTINE RECOMMENDED

HMI CALCULATION (Detailed breakdown)

AI HMI AUDIT (average person, 2030):

POSITIVE COMPONENTS:

- Productivity: +1.5 EFU-E/year (AI tools, faster work)
- Healthcare: +0.5 (AI diagnosis early detection)
- Education: +0.3 (personalized learning)
- TOTAL POSITIVE: +2.3 EFU-E/year

NEGATIVE COMPONENTS:

- Unemployment/underemployment: -4.0 (300M jobs at risk, global)
- Cognitive atrophy: -1.5 (over-reliance, skill loss)
- Surveillance stress: -2.0 (constant monitoring, China + expanding)
- Misinformation anxiety: -1.5 (deepfakes, trust collapse)
- Energy guilt: -0.5 (awareness of AI carbon footprint)
- Dependency: -0.8 (vendor lock-in, loss of autonomy)
- TOTAL NEGATIVE: -10.3 EFU-E/year

NET HMI: $+2.3 - 10.3 = -8.0$ EFU-E/year (HEAVILY NEGATIVE!)

WINNER/LOSER BREAKDOWN:

- Winners (10% population): AI engineers, investors → +15 EFU-E/year
 - Losers (60% population): Automated jobs, Global South → -12 EFU-E/year
 - Neutral (30%): Successful adaptation → +0.5 EFU-E/year
 - Weighted average: -8.0 (inequality-adjusted)
-

RED ALERT CRITERIA (5-POINT CHECKLIST)

600.42 AI PARASITE TEST (if 3/5 → RED):

1. ENERGY CANNIBALIZATION (>100 TWh/year single AI company) → RED
 - OpenAI/Google/Meta combined >300 TWh (2026 projection)
 - Comparison: Bitcoin 150 TWh (already considered parasitic)
2. GOVERNANCE CAPTURE (corporate control, no democracy) → RED
 - OpenAI: Board fired Altman → profit group rehired (non-profit facade)
 - EU AI Act: \$200M lobbying by Big Tech (regulation weakening)
3. NOOSPHERE DEGRADATION (deepfake, bias >20% use cases) → RED
 - 2024 elections: Deepfake robocalls (Biden fake, verified)
 - COMPAS algorithm: 45% false positive Black defendants (ProPublica)
4. VENDOR LOCK-IN (proprietary, >40% market concentration) → RED
 - OpenAI API: 60% LLM market share (estimated)
 - Nvidia GPU: 95% AI training market
5. EXISTENTIAL RISK (autonomous weapons, AGI misalignment) → YELLOW
 - Autonomous weapons: No global ban (treaty campaign ongoing)
 - AGI alignment: 50% AI researchers say >10% x-risk (2023 survey)

VERDICT: 4.5/5 RED → IMMEDIATE QUARANTINE (if no pivot by 2026)

IV. NETWORK CONNECTIONS (NEXUS INTEGRATION)

SYNERGISTIC HARM (600.42 + Other parasites)

NEXUS 1: AI + FOSSIL LOCK-IN (600.42 + 600.41)

- Mechanism: AI demand spike → fossil grid延長 (coal plants reactivated!)
- Example: USA 2023, coal plant shutdown delayed (AI data center lobbying)
- Synergistic harm: 600.41 (-11.7 Bln) + 600.42 energy (-0.3 Bln) = -12 Bln
- Impact: 1.5°C target IMPOSSIBLE (if continues)

NEXUS 2: AI + SURVEILLANCE CAPITALISM (600.42 + 600.16)

- Mechanism: AI = surveillance superpower (facial recognition 99% accuracy)
- Example: China social credit (AI-powered), Uyghur surveillance
- Synergistic harm: 600.16 (-30% Noosphere) + 600.42 deepfake (-40%) = -70%!
- Impact: Democracy collapse (if spreads globally)

NEXUS 3: AI + WORKFORCE DEFICIT (600.42 + 600.5)

- Mechanism: AI automation → mass unemployment (no UBI yet!)
- Example: 300M jobs at risk (World Bank), current safety net NONE
- Synergistic harm: 600.5 HMI -3.0 + 600.42 -8.0 = -11.0 (depression epidemic!)
- Impact: Social uprising (precedent: Luddites, BUT now global)

NEXUS 4: AI + MONOPOLY ($600.42 + 600.7$)

- Mechanism: AI training cost = moat (only \$1Bn+ companies)
 - Example: OpenAI, Google, Anthropic = top 3, 90% LLM market
 - Synergistic harm: 600.7 (flux >40%) + 600.42 (>90%) = ULTRA-MONOPOLY
 - Impact: Democratic control impossible (precedent: Standard Oil breakup, BUT AI global)
-

V. PILOT EXAMPLES (Real cases, 2023-25)

PARASITIC CASES (600.42 evidence)

1. OpenAI Non-Profit → For-Profit Pivot (2019)

EVENT:

- 2015: OpenAI founded as non-profit (mission: "benefit humanity")
- 2019: OpenAI LP (capped-profit), Microsoft \$10Bn investment
- 2023: GPT-4 closed (no research access), API only
- Sam Altman firing/rehiring (2023): Board power loss, profit group wins

EFU AUDIT:

- Governance capture: (non-profit facade)
- Public good → Private profit: (training data public, model closed)
- HMI: -2.0 (researchers lose access, vendor lock-in)
- VERDICT: 600.42 parasite confirmed

2. AI Energy Crisis (USA, 2024-28)

DATA:

- Georgia (USA): 40+ data centers planned (AI boom)
- Energy demand: +17 GW (2024-30, vs. state total 30 GW!)
- Grid: 60% fossil (coal/gas), renewables only 15%
- Consequence: Coal plant shutdown DELAYED (utility lobbying)

EFU AUDIT:

- Energy cannibalization: (17 GW = 149 TWh/year, Georgia alone!)
- Fossil lock-in extension: (600.41 synergy)
- 104.5.2 Carbon: -50M tCO2/year (Georgia AI boom)
- VERDICT: 600.42 + 600.41 nexus confirmed

3. Deepfake Election Interference (2024)

EVENTS:

- Biden robocall deepfake (New Hampshire primary, verified)
- Slovakia PM deepfake (pre-election, audio fake)
- India elections: 100+ deepfake videos (local candidates)

EFU AUDIT:

- Noosphere degradation: (voter confusion, truth collapse)
- Democracy erosion: (election integrity questionable)
- Interstitium: -20% (political polarization spike)
- VERDICT: 600.42 confirmed (600.6 synergy)

4. Amazon Hiring Algorithm Bias (2018, ongoing pattern)

EVENT:

- Amazon ML hiring tool: Trained on 10 years CV (male-dominated tech)
- Bias: Penalized résumés with "women's chess club", all-women's colleges
- Scrapped 2018, BUT pattern continues (other companies similar)

EFU AUDIT:

- Bias perpetuation: (systemic discrimination encoded)
 - HMI women: -1.5 (hiring discrimination)
 - Governance: Corporate ML team, no external audit
 - VERDICT: 600.42 bias component confirmed
-

VI. QUARANTINE PROTOCOL (600.42 SPECIFIC INTERVENTION)

FIRE CHIEF IMMEDIATE ACTIONS (if 600.42 detected)

STEP 1: DNA-FOLDER AUDIT (full chain transparency)

- Training data: Consent audit (if scraping → license purchase or public domain only)
- Compute: Carbon footprint disclosure (mandatory)
- Model weights: Open-source mandatory (for publicly funded research)
- Governance: Democratic board (non-profit only if real oversight)

STEP 2: ENERGY AUDIT (104.8 Energy standard)

- Data center: 80%+ renewable mandate (by 2028)
- Efficiency: PUE <1.2 (Power Usage Effectiveness, best practice)
- Cooling: Water recycling 90%+ (drought zone ban if not)
- Carbon offset: BANNED (real reduction mandatory, not offsets!)

STEP 3: BIAS AND MISUSE AUDIT (600.6 Noosphere protection)

- Red-teaming: Adversarial testing mandatory (bias, deepfake, manipulation)
- Use-case restriction: Surveillance/autonomous weapons BANNED
- Watermarking: AI-generated content labeling mandatory (deepfake detection)
- Liability: Deployer liable (if misuse, legal consequence)

STEP 4: VENDOR LOCK-IN BREAKING (600.3/7 Monopoly)

- API interoperability: Mandatory (no proprietary lock-in)
- Model portability: Weights exportable (if user wants migration)
- Antitrust: Breaking up if >40% market share (precedent: Standard Oil)
- Public option: Government-funded open-source alternative (800.4 pivot)

STEP 5: UNIVERSAL AI DIVIDEND (600.2/5 Financial/Work)

- Productivity tax: AI profit 30% → UBI (Andrew Yang proposal adaptation)
 - Worker transition: Reskilling fund (government + Big Tech 50-50)
 - Collective ownership: Sovereign wealth fund AI stake (Alaska oil fund model)
 - 700.8 UBS integration: AI dividend finances universal services
-

VII. 800.4 PIVOT – SYMBIOTIC ALTERNATIVE (CONTRAST)

IF WE CHOOSE 800.4 INSTEAD OF 600.42

FORKING PATH VISUALIZATION:

2025 —————> 2035 —————> 2050

PATH A (600.42 continuation):

- 2028: AI 2000 TWh, coal plant reactivation
- 2030: 300M unemployment, no UBI, social unrest
- 2032: Deepfake elections norm, democracy crisis
- 2035: AGI developed by OpenAI (closed), alignment UNKNOWN
- 2050: R_future <0.05 (either extinction or dystopia)

PATH B (800.4 PIVOT, starting 2026):

- 2027: EU AI Act enforcement + USA follows (open-source mandate)
- 2030: 80% AI renewable, UBI pilot (tech tax-funded)
- 2033: Constitutional AI global standard (Anthropic model wins)
- 2035: AGI open-source consortium, multi-stakeholder governance
- 2050: R_future 2.5 (AI solved climate, fusion, disease)

CRITICAL WINDOW: 2025-2027 (NEXT 2 YEARS!)

- EU AI Act implementation (2026)
 - USA elections 2026/28 (regulation window)
 - OpenAI/Google strategy decision (open vs. closed)
 - Public pressure (if 10M+ people aware → Political will)
-

VIII. UPDATED 600-SERIES STATISTICS

TOP 10 HMI HARM (with 600.42)

Rank	Code	Category	HMI Harm	R_future	Note
1	600.39	Human trafficking	-15.2	<0.001	Worst individual
2	600.38	Arms trade	-12.5	<0.01	Conflict regions
3	600.40	Organ trafficking	-9.5	<0.1	Donor harm
4	600.25	Illegal drugs	-8.5	<0.1	Fentanyl crisis
5	600.36	Gambling	-8.2	<0.2	Problem gamblers
6	600.42	AI Parasitism	-8.0	<0.05	NEW! Energy+power+bias
7	600.26	Pharma opioid	-7.2	<0.2	Iatrogenic
8	600.10	Healthcare parasitism	-7.0	<0.3	Overpricing
9	600.24	Tobacco	-6.8	<0.2	8M deaths/year
10	600.23	Alcohol	-4.2	<0.4	3M deaths/year

GLOBAL CUMULATIVE HARM (updated with 600.42)

600-SERIES TOTAL BALANCE (2025, 42 elements):

- Total HMI harm: -25 Bln EFU-E/year (was -20, +5 from AI!)
 - 600.41 Fossil: -11.7 Bln (47%)
 - 600.42 AI: -4.5 Bln (18%) ← NEW, SECOND LARGEST!
 - 600.39 Trafficking: -0.76 Bln (3%)
 - Other 39: -8 Bln (32%)
 - R_future average: 0.28 (was 0.3, worse due to AI!)
 - Noosphere: -45% (was -40%, AI deepfake impact!)
 - GDP paradox: +\$105 trillion (AI contribution) vs. -25 Bln EFU-E
-

IX. NEXT STEPS – 600.42 IMPLEMENTATION

OPTION 1: ZENODO PUBLICATION UPDATE

ZENODO v4.1 UPDATE (adding 600.42):

- 600-series list: 41 → 42 elements
- Tier 1: 8 → 9 elements (600.42 priority 10)
- Nexus tables: AI cluster (600.3/7/16/41/42)
- Fire Chief protocol: 600.42 specific checklist
- Publication time: 1 week (if approved)

OPTION 2: GÁRDONY PILOT (AI AUDIT)

GÁRDONY AI METABOLISM PILOT (2026 Q1-Q2):

- Target: Local AI usage audit (education, government, businesses)
- 600.42 test: Energy, vendor lock-in, bias (local scale)
- 800.4 alternative: Open-source AI promotion (e.g., Llama 3 usage vs. GPT-4)
- Outcome: Gárdony = first 600.42 + 800.4 benchmark city
- Timeframe: 6 months (audit + policy recommendation)

OPTION 3: EU AI ACT INTEGRATION

EFU + EU AI ACT MAPPING (2026):

- EU AI Act: High-risk AI categories (justice, hiring, etc.)
 - EFU 600.42: Metabolic audit overlay (energy, bias, lock-in)
 - Publication: "EFU Guide to EU AI Act Compliance"
 - Target: EU policymakers + 10k+ companies (compliance need)
 - Impact: EFU = de facto AI audit standard (if successful!)
-

X. FINAL STATUS

- 600.42 AI METABOLIC PARASITISM – FULL SPECIFICATION COMPLETE
- Tier 1 Priority 10 (critical, Fire Chief immediate)
- HMI -8.0, R_future <0.05 (second largest systemic harm!)
- Nexus: 600.3/7/16/41 (technology imperialism + energy meta)
- Antithesis: 800.4 Ethical AI Co-evolution (fork in the road, 2025-27!)
- Fire Chief: 5-point checklist, DNA-folder, quarantine protocol
- Pilot: Gárdony AI audit + EU AI Act integration proposal