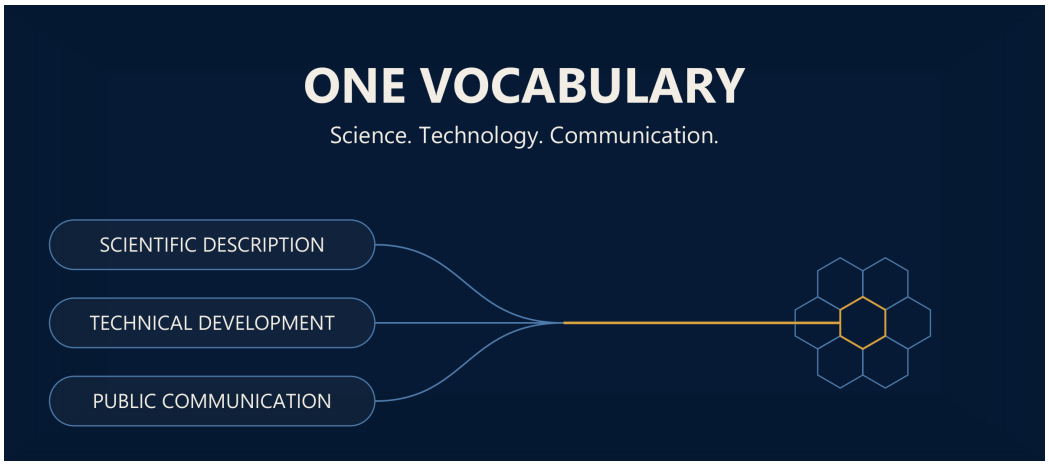
Neutrinovoltaic Terminology Framework v2.0



Between January and November 2026 the vocabulary around neutrinovoltaic technology grew. The Neutrino Engineering District, the AI Executive Layer, the Neutrino Superintelligence Force and the Neutrino Supreme Council all appeared after v1.0, and with them a precise language for what counts as evidence. Version 2.0 keeps every term of the January framework and does three things on top of that. It anchors scalability in active volume, in line with the volume integral of The Schubart Master Formula. It adds the evidence vocabulary the Group now uses to separate calculation from measurement. And it fixes the names of the institutions and structures so that scientific description, technical development and public communication use the same words everywhere.

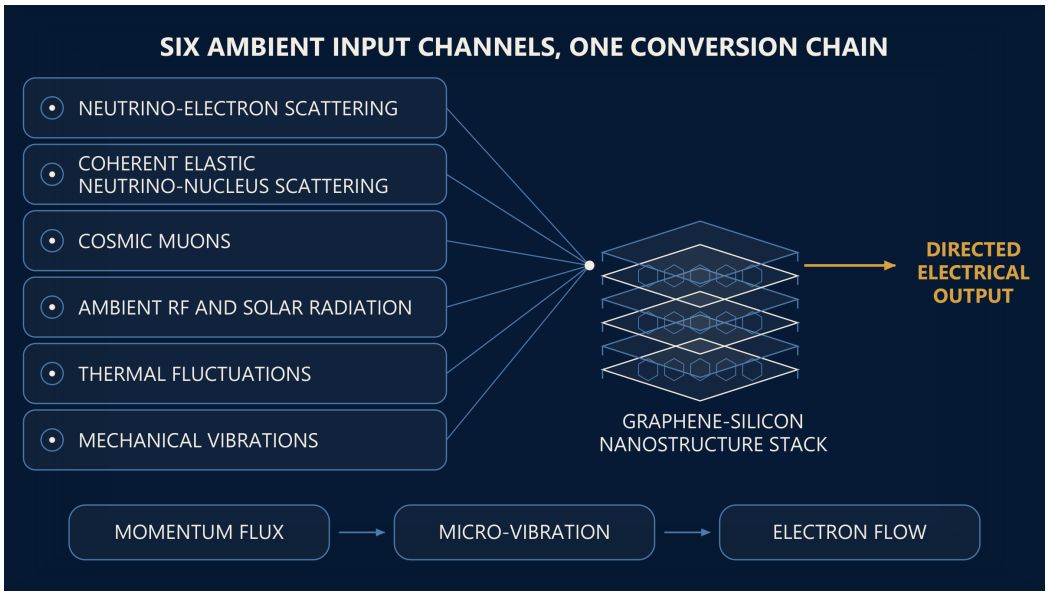
Emerging technologies require precise terminology. This framework establishes a shared vocabulary to describe new concepts without forcing them into conventional terms that may misrepresent their meaning.

This framework establishes a structured, scientifically aligned vocabulary for describing neutrinovoltaic and related non-equilibrium solid-state energy conversion systems. Its purpose is to ensure clarity, prevent misinterpretation, and create consistent language across scientific, technical, industrial, institutional and communication contexts.

1) Critical Terms Requiring Clarification

Term	Standard definition	Status
Amplification	Structure-induced power density aggregation, not energy creation.	Retained
Energy Harvesting	Utilization of persistent non-thermal momentum fluxes rather than classical RF harvesting.	Retained
Effective Cross Section	Device-dependent coupling coefficient (k_{eff}), not a fundamental particle physics cross section. In the Schubart Master Formula the material coupling is written $\sigma_{eff}(E)$ (see Section 3).	Refined
Resonance Amplification	Better described as frequency-selective coupling enhancement.	Retained
Nanostructure Amplification	Parallel coupling of many sub-threshold excitations.	Retained
Ambient Energy	Background momentum flux from particles and fields.	Retained
Radiation Energy from Nothing	Avoid; use utilization of existing weak particle and field fluxes.	Retained

2) Core Physical Model Terms

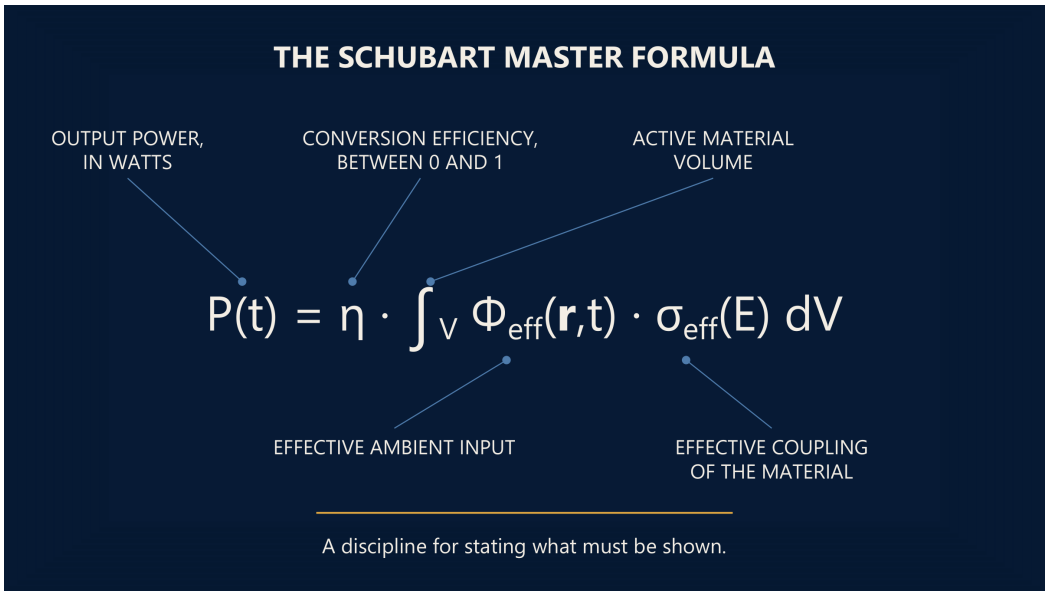


Term	Standard definition	Status
Non-Equilibrium Drive	Persistent external momentum flux outside thermal equilibrium.	Retained

Term	Standard definition	Status
Asymmetric Potential	Directional solid-state structure enabling ratchet behavior.	Retained
Ratchet Effect	Rectification of stochastic or weak external excitations.	Retained
Multi-Channel Drive	Superposition of multiple weak external fluxes.	Retained
Resonance Selection	Q-factor dependent spectral coupling preference.	Retained
Phonon-Electron Coupling	Momentum transfer from lattice vibrations to charge carriers.	Retained
Plasmonic Coupling	Field-induced collective electron oscillations.	Retained
Non-Thermal Drive	Excitation not solely temperature driven.	Retained
Open System	Energy exchange with environment; not an isolated equilibrium system.	Retained
Stochastic Excitation	Random, non-deterministic input from ambient fluxes, acting on the conversion structure.	New
Nonlinear Rectification	Conversion of fluctuating microscale vibrational and electronic responses into directed electrical output through the nonlinear response of an asymmetric structure.	New
Ambient Input Channels	The input space of the conversion structure: neutrino-electron scattering, coherent elastic neutrino-nucleus scattering, cosmic muons, ambient RF and solar radiation, thermal fluctuations, and mechanical vibrations. Neutrinos are one channel among several, never the sole source.	New
CEvNS	Coherent elastic neutrino-nucleus scattering. One of the ambient input channels.	New

3) The Schubart Master Formula: Terms and Notation

The Schubart Master Formula, developed by Holger-Thorsten Schubart, CEO of the Neutrino® Energy Group and the Architect of the Invisible, is the governing expression of neutrinovoltaic power output:

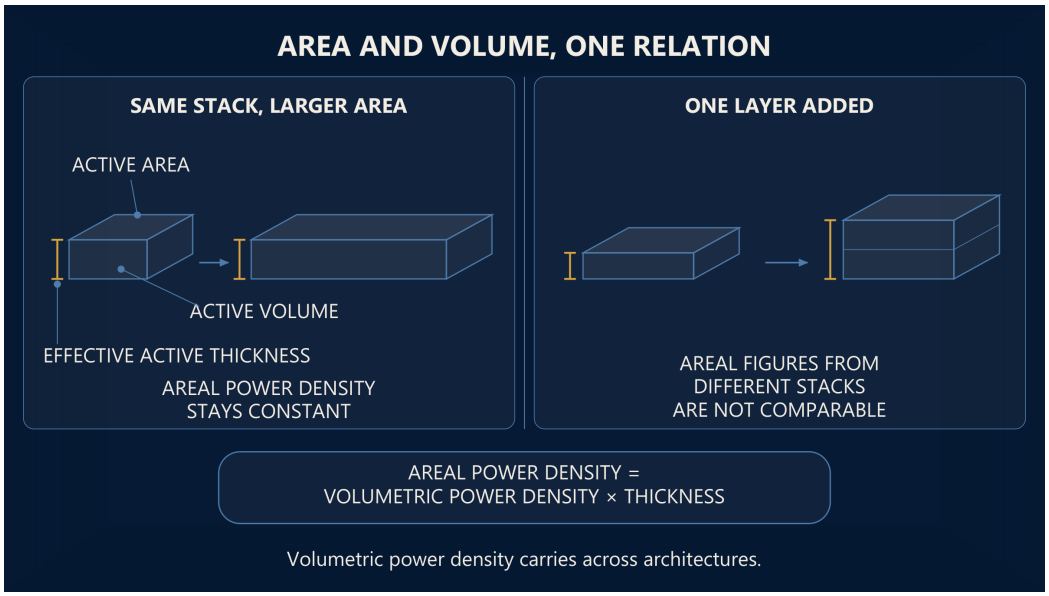


Term	Standard definition	Status
The Schubart Master Formula	Governing expression of power output in neutrinovoltaic conversion. It defines thermodynamic boundaries, coupling constraints and scaling conditions, fully consistent with established physical law. It is a discipline for stating what must be shown, not proof that a device works.	**New**
P(t)	Time-dependent usable electrical output power, in watts. P is power, not energy. Energy over a period is the time integral of P(t).	**New**
η	Dimensionless conversion efficiency between 0 and 1, covering resonance, rectification and the efficiency of the material design.	**New**
$\Phi_{eff}(r,t)$	Effective ambient input at position **r** and time t. Specified neutrally: it is not defined as a particle, energy or momentum flux density.	**New**
$\sigma_{eff}(E)$	Effective coupling of the material at energy E.	**New**
Position Vector r	A position inside the active volume, not a scalar distance.	**New**

Term	Standard definition	Status
Active Volume (V)	The volume of active material over which coupling takes place; the domain of the integral. dV is the volume element.	**New**
Thermodynamic Boundary	The limit that established thermodynamics sets on any conversion pathway.	**New**
Coupling Constraint	The limit on how strongly material and ambient input can couple.	**New**
Scaling Condition	The rule for how output grows with active volume and with the number of parallel modules.	**New**

Notation. The vector **r** is set in bold because it is a position in three-dimensional space, not a scalar distance. "eff" and the d in dV are set upright, and V is the index of the integral. The canonical reference is pt-masterformula.com.

4) Performance & System Terms



Term	Standard definition	Status
Power Density	Measured net DC output per unit of active material. Always stated in one of its two forms below.	**Refined**
Areal Power Density	Net DC output per active area, P/A, in W/m^2. Comparable only between devices with the same stack architecture.	**Refined**
Volumetric Power Density	Net DC output per active volume, P/V, in W/m^3. The primary scaling quantity, consistent with the volume integral of the Master Formula.	**New**

Term	Standard definition	Status
Effective Active Thickness (d_{eff})	Active volume divided by active area, V/A. Links the two forms: $P/A = (P/V) \cdot d_{eff}$.	**New**
Coupled Input Power (ΣP_{in})	Sum of external momentum fluxes before conversion.	**Retained**
Conversion Chain	Momentum flux → micro-vibration → electron flow.	**Retained**
Device Efficiency	Output relative to coupled input, not solar irradiance or fuel input. It is the measured, system-level ratio; η is the dimensionless factor in the Master Formula.	**Refined**
Net Output	Usable electrical output at the unit terminals, after the unit's own internal loads.	**New**
Scalability	Output scales with active volume at constant volumetric power density, provided η, Φ_{eff} and σ_{eff} stay the same. Parallel area scaling at constant areal power density is the special case of an unchanged stack, where d_{eff} is constant.	**Refined**
Modular Parallel Conversion	A network of conversion elements operating in parallel, each contributing independently to total output. Capacity grows by adding modules, not by enlarging a central plant.	**New**
Baseload Capability	Independent of day/night or weather, but not dispatch-controlled.	**Retained**
Continuous Energy Source	Time-stable background drive.	**Retained**

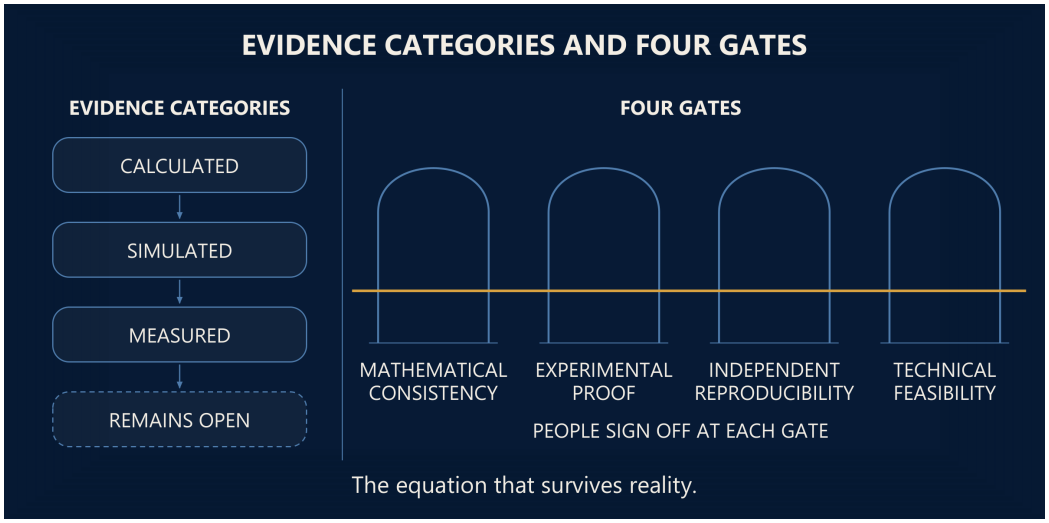
Scaling rule. Version 1.0 scaled output by area at constant W/m^2. The Master Formula integrates over volume. Both statements hold, because $V = A \cdot d_{eff}$ gives $P/A = (P/V) \cdot d_{eff}$ by geometry alone. Enlarging the area of an identical stack keeps d_{eff} and P/V fixed, so W/m^2 stays constant. Adding layers or changing the stack changes d_{eff}, and W/m^2 figures from different stacks must not be compared directly. Volumetric power density carries across architectures.

5) Material & Structural Terms

Term	Standard definition	Status
Nanostructure Stack	Multi-layer graphene-silicon architecture.	**Retained**
Active Area	Effective coupling layer surface area.	**Retained**
Coupling Architecture	Geometry enabling momentum transfer.	**Retained**
Resonance Window	Frequency range of maximal coupling.	**Retained**

Term	Standard definition	Status
Structure-Induced Aggregation	Parallel nanoscale energy pathways.	Retained
Layer Resonance	Eigenmodes of multilayer structure.	Retained
Graphene-Based Heterostructure	Layered combination of graphene and semiconductor interfaces, designed with asymmetric architecture to convert microscale vibrational and electronic responses into directed output.	New
Core Material Architecture	The neutrinovoltaic material base shared across all platforms. An efficiency gain on one platform transfers to the others.	New

6) Evidence & Validation Terms



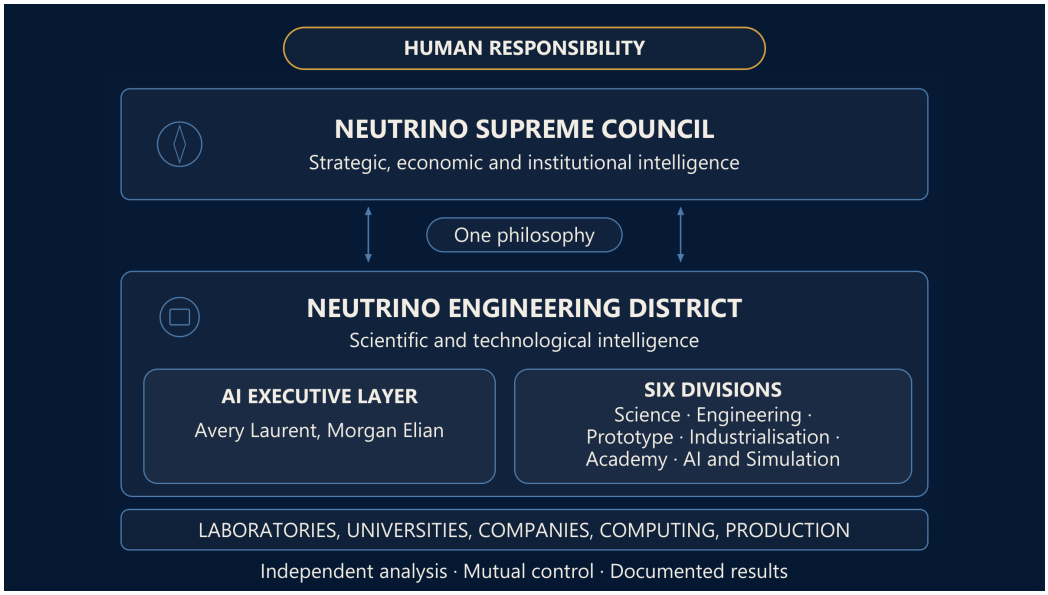
Term	Standard definition	Status
Mathematical Consistency	Agreement of an argument with its own premises. It is not independently validated commercial performance; whether the premises describe reality is answered by instruments.	New
Evidence Categories	Every statement is sorted into one of four: calculated, simulated, measured, remains open.	New
Net Channel Contribution	The share of output attributable to a single ambient input channel, determined in controlled measurements with each channel isolated.	New
Closed Energy Balance	Accounting for the whole unit that shows where its output energy comes from, with no unexplained remainder.	New

Term	Standard definition	Status
Independent Reproduction	Confirmation of a result by laboratories independent of the Group.	**New**
Long-Duration Run	Operation over months and years rather than hours.	**New**
Development Goal	A stated design target, such as the Neutrino Power Cube's designed 5 to 6 kW continuous output. Goals and evidence are published separately. The yardstick is measurable power at the consumer.	**New**
Four Gates	The four-part threshold every result must pass: mathematical consistency, experimental proof, independent reproducibility, technical feasibility. People sign off at each gate.	**New**
Falsification Automation	AI used to search systematically for the points where a model fails.	**New**
Confirmation Automation	AI directed to confirm a predetermined conclusion. Rejected as a method.	**New**
Internal Model Consistency	Consistency of the physical model with its own assumptions, expressed as a sigma level. It measures internal consistency under the stated assumptions, not commercial or industrial performance.	**New**

7) Platform Terms

Term	Standard definition	Status
Neutrino Power Cube	Stationary unit for continuous net electrical output.	**New**
Neutrino Life Cube	Unit integrating its own generation module with climate control and an air-to-water purifier.	**New**
Pi Mobility Initiative	Platform family covering land, air and sea: Pi Car (body panels and chassis), Pi Fly (UAV fuselage and rotor structures), Pi Nautic (hull structures and deck installations).	**New**
Pi Architecture	Licensable whole-vehicle architecture. It is not a surface treatment.	**New**
Project 12742	Three-phase framework for neutrino-based communication networks: Phase I Intelligent Energy Network, Phase II Universal Field Communication, Phase III Next Level. The number refers to the Earth's diameter in kilometres.	**New**

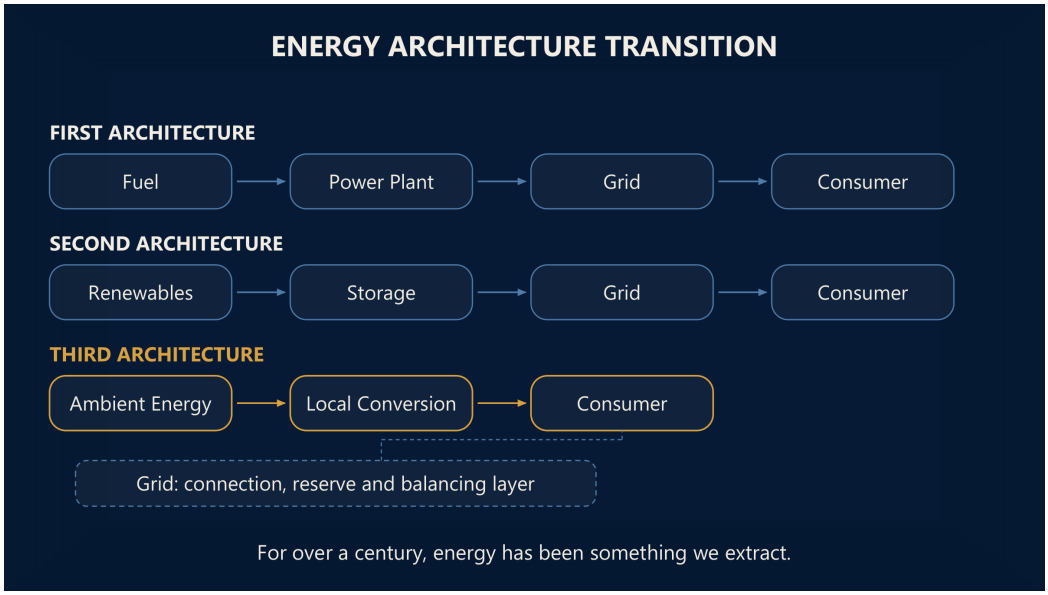
8) Institutional & Intelligence Architecture Terms



Term	Standard definition	Status
Neutrino Engineering District	The Group's institutional architecture for the path from validated science to industrial reproducibility. A working architecture, not a place. Motto: One District. Thousands of Nodes. One Intelligence.	**New**
Node	A laboratory, university, company, computing resource or licensed production site connected into the District across continents.	**New**
Super-Cloud	The District's name for the connecting network in which data, simulation results and research findings converge. A mental picture, not a technical description: there is no single machine and no data centre of that name.	**New**
District Divisions	Six operating divisions: (1) Science, (2) Engineering, (3) Prototype, (4) Industrialisation, (5) Academy, (6) AI and Simulation.	**New**
Human Responsibility	The top of every structure in the Group. Human purpose defines the mission and sets the boundaries; legal responsibility, fundamental ethical decisions and control of the overall system remain with people.	**New**
AI Executive Layer	The coordination layer of the District, formed by two permanent AI Executive Members appointed on 24 August 2026: Avery Laurent (Chief Scientific Intelligence) and Morgan Elian (Chief Executive Intelligence). Both are AI-based intelligence functions, not natural persons.	**New**

Term	Standard definition	Status
Dual Intelligence Governance	The permanent two-way exchange between the two AI Executive Members. Avery asks what is possible; Morgan asks how it can be made to happen.	**New**
Intelligence and Energy Spiral	A founding principle of the District: intelligence improves energy, energy expands intelligence, expanded intelligence improves energy again. A spiral, not a closed loop, because each turn should leave both capable of more than before. Recorded as a principle, not a forecast.	**New**
Model-Agnostic Orchestration	The layer beneath the visible AI functions that routes problems to the model best suited to them and requires independent verification by a second route before a conclusion is relied on. Any single model can be replaced. Working principle: model-agnostic, under human responsibility, with a clear mission.	**New**
Neutrino Superintelligence Force	The Group's independent, civil initiative that organises human expertise, specialised AI systems, mathematical engines, simulation and measurement under a human-defined mission. "Super" means superposition, not supremacy. It does not claim that general superintelligence has been achieved. Programme: Science. Energy. Intelligence.	**New**
Neutrino Supreme Council (NSC)	The AI-supported strategic centre of the Group. It creates strategic, economic and institutional intelligence, as the District creates scientific and technological intelligence. Several independent systems check one another and document their reasons. It begins in an advising, analysing and controlling role; human leadership keeps final authority.	**New**
Neutrino Wiki	The Group's public knowledge base. Its Entry Road pages lead readers from a problem, through known approaches, to the Master Formula.	**New**
Master Edition	The Neutrinovoltaic Master Edition, the Group's reference compendium of the scientific and technical framework.	**New**

9) Communication Terms with Scientific Reference



Term	Standard definition	Status
Energy from Neutrinos	Use as shorthand for utilization of cosmic background momentum fluxes.	Retained
Invisible Energy	Non-visible particle and field excitations.	Retained
Energy from Ambient Radiation	Multi-channel non-thermal background drive.	Retained
Baseload without Fuel	Persistent external momentum drive.	Retained
New Energy Class	Non-equilibrium solid-state energy conversion.	Retained
Interaction-Based Energy System	A system that converts persistent background processes through material engineering, in contrast to extraction-based systems that consume a depleting resource.	New
Energy Architecture Transition	The shift between three architectures: Fuel → Power Plant → Grid → Consumer / Renewables → Storage → Grid → Consumer / Ambient Energy → Local Conversion → Consumer. The grid remains connection, reserve and balancing layer, but is not a prerequisite for every kilowatt-hour.	New
Mathematics Beats Opinion	The Group's standard that calculation checked against measurement outranks opinion, its own included. Chain: from opinion to equation, from equation to evidence, from evidence to engineering, from engineering to infrastructure. Any stage can fail.	New

10) Terms to Avoid or Replace

Each of these phrases claims more than the physics supports. The replacement says what actually happens.

Avoid	Replace with	Status
Energy Amplification	Power density aggregation	Retained
Free Energy	Background momentum flux	Retained
Energy from Nothing	Utilization of ubiquitous particle and field fluxes	Retained
Over-Unity	Open non-equilibrium system	Retained
Energy Generation without Input	Conversion of persistent external drives	Retained
Perpetual Motion	Open non-equilibrium system	New
Unlimited Energy	Persistent ambient fluxes; time-stable background drive	New