



CONCEPTS IN NEWS

January 2025



Keyword	Official Definition	Easy Explanation
Circular Economy	An economic model focused on minimizing waste and promoting the reuse of resources.	An economy designed to reuse and recycle materials to reduce waste.
Carbon Sequestration	The long-term storage of carbon dioxide or other forms of carbon to mitigate climate change.	Capturing carbon from the atmosphere to combat global warming.
Stratospheric Aerosol Injection	The deliberate introduction of particles into the stratosphere to reflect sunlight and cool the Earth.	Injecting particles high up in the atmosphere to help cool the planet.
Algal Bloom	A rapid increase in the population of algae in water systems, often due to excessive nutrients.	Rapid growth of algae in water, usually caused by too much pollution.
Plastic Pyrolysis Technology	A method of converting plastic waste into usable products like fuel through thermal decomposition.	Turning plastic waste into fuel or other products by heating it.
Green Cover Accounting	The evaluation of the financial and ecological value of vegetative land cover.	Calculating the value of green spaces like forests and parks.



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Multi-Decadal Oscillations	Long-term cycles of climatic changes affecting temperature and weather patterns over decades.	Long-term natural climate changes that occur over several decades.
Greenwashing	Practices that convey a false impression or provide misleading information about how a company's products are more environmentally sound.	Companies pretending to be environmentally friendly when they are not.
Ecological Knowledge Systems	The integrated and localized knowledge about ecosystems and their components, typically passed down through generations among indigenous peoples.	The wisdom and understanding of natural systems, often held by native cultures.
Decarbonization Litigation	Legal actions initiated to force companies or governments to reduce their carbon dioxide emissions.	Suing entities to make them cut down on their carbon emissions.
Climate Litigation	Legal cases focusing on issues related to climate change, including its causes and impacts.	Lawsuits related to the effects and responsibilities regarding climate change.
State of Charge (SOC) Regulations	Standards that dictate the optimal charge levels for batteries to ensure safety and efficiency.	Rules defining how much batteries can be charged to maximize safety and lifespan.
Polar Vortex Disruption	Events where the usual wind patterns in the polar regions are disturbed, potentially leading to extreme weather in mid-latitude regions.	Disruptions in the polar wind patterns causing unusual weather elsewhere.
Algal Bloom Proliferation	Rapid increase in algae in water systems, often due to excessive nutrients, leading to environmental concerns.	Quick growth of algae in water bodies, typically caused by too many nutrients.
Phthalate Biodegradation	The breakdown of phthalates (chemical additives in plastics) through natural biological processes.	Natural decomposition of chemicals used to make plastics more flexible.
Flood Risk Amplification	The increase in the frequency and severity of flood events, often linked to climate change.	Rising chances and impacts of flooding, typically due to climate changes.
Seismic Microzonation	The subdivision of a region into smaller zones which differ in the potential hazards associated with earthquakes.	Mapping areas based on varying earthquake risks within a region.
Permafrost Thawing	The process of frozen soil and rock in polar regions becoming unfrozen.	When the permanently frozen ground in cold places melts.
Environmental Flow	The water regime provided within a river, wetland or coastal zone to maintain ecosystems and their benefits.	Allocating water in nature to keep ecosystems healthy.





Science and Technology

Keyword	Official Definition	Easy Explanation
Cryo-Desiccation	A preservation method that involves freezing and then slowly removing water under vacuum.	Preserving materials by freezing and drying them out.
Lipase Inhibitors	Compounds that prevent the function of lipases, enzymes that break down fats.	Substances that stop enzymes from breaking down fats.
Hypersonic Weapons	Weapons capable of traveling at speeds greater than five times the speed of sound.	Extremely fast weapons that travel much faster than sound.
Sarcopenic Obesity	The coexistence of sarcopenia (loss of muscle mass) and obesity in an individual.	Having both significant muscle loss and obesity.
Quantum Supremacy	The point where quantum computers can perform tasks that are impractical for classical computers.	When quantum computers can solve problems that traditional computers cannot handle.
Blockchain Electoral Integrity	The application of blockchain technology to enhance the transparency and security of electoral processes.	Using blockchain to make voting more secure and transparent.
Seismic Microzonation	The division of a region based on varying responses to earthquakes.	Dividing an area based on how differently parts might react during earthquakes.
MicroRNA Gene Regulation	The process by which microRNAs control the expression of genes at the post-transcriptional level, impacting various biological functions.	How small RNA molecules regulate gene activity after transcription.
Bursal Involution	The regression or shrinkage of the bursa, a lymphoid organ in birds, typically due to aging or stress, affecting immune responses.	The shrinking of a specific immune organ in birds often caused by stress or age.
Cryo-Desiccation	A preservation technique that involves freezing a substance and then removing the moisture under vacuum, commonly used in food preservation and pharmaceuticals.	Freezing and then drying a substance for long-term storage.
Lithium-Ion Battery Fire Kinetics	The dynamics of how fires start and spread in lithium-ion batteries, which can be critical for safety assessments and design improvements.	Understanding how fires can occur and spread within lithium-ion batteries.
Retinal Cell Therapy	A form of treatment aiming to replace or repair damaged retinal cells using various forms of stem cells or cell derivatives, which can potentially restore vision.	Treatment techniques to repair or replace damaged cells in the retina to improve sight.





Gene Expression Silencing	The process of inhibiting gene expression to prevent the synthesis of proteins that may be harmful or unnecessary, used in genetic research and therapy.	Methods to stop specific genes from making proteins.
Gene Cloning	The process of creating copies of certain genes or DNA segments to study genetic elements, produce proteins, or for other research purposes.	Making exact copies of specific genes for research or therapeutic use.
Molecular Bioremediation	The use of engineered or naturally occurring microbes to break down pollutants and contaminants in the environment.	Using microbes to clean up environmental pollutants.
Bioinformatics	The field that combines biology, computer science, and information technology to analyze and interpret biological data, especially large datasets.	Using computers to understand and analyze biological data.
Plastic Pyrolysis Technology	The process of decomposing plastic waste into smaller, usable hydrocarbon products like fuel, using high temperatures in the absence of oxygen.	Turning plastic waste into fuel or other chemicals through high-temperature processing.
Cryogenic Engines	Engines that use extremely cold substances to produce rocket thrust.	Engines that run on very cold fuel, used in rockets.
Hyperspectral Satellites	Satellites equipped with imaging systems that capture data across multiple wavelengths.	Satellites that take detailed images of Earth using many colors beyond visible light.
Orbital Rendezvous	The maneuver of one spacecraft meeting another in orbit.	When one spacecraft meets another in space.
Green Propulsion Tests	Testing of environmentally friendly fuel technologies in spacecraft.	Trying out less harmful fuels in space vehicles.
Plasma Confinement	Techniques used to maintain control over plasma for sustained nuclear fusion reactions.	Keeping super-hot plasma stable for energy production.
Cryogenic Propulsion	Space propulsion technologies that involve super-cooled fuels.	Using very cold fuels to power spacecraft.
Deuterium & Tritium Fuel	Heavy isotopes of hydrogen used in nuclear fusion processes.	Special types of hydrogen used for powerful nuclear energy.
Lunisolar System	A calendar system that combines both lunar and solar cycles.	A calendar based on the moon's phases and the sun's position.



Economy

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Economic Nationalism	Advocacy of protectionist measures to improve domestic economic interests.	Favoring the country's economy by protecting local industries and jobs.
Carbon-Border Taxes	Taxes imposed on imported goods based on their carbon emissions associated with production.	Taxes on imports from countries with less strict environmental controls.
Elasticity of Substitution	The rate at which one factor of production can be substituted for another while maintaining the same level of output.	How easily one resource can be replaced with another in production without affecting output.
Forex Volatility	The measure of how frequently and by what magnitude currency exchange rates change.	How often and how much currency values change in foreign exchange markets.
Unhedged External Borrowings	Foreign loans taken without any financial safeguards against currency exchange fluctuations.	Borrowing money from foreign sources without protection against currency changes.
Inflation Pass-Through Effects	The degree to which rising costs are transmitted to final product prices.	How increases in costs lead to higher prices for consumers.
Debt Monetisation	The financing of government debt through the creation of new money, typically by a central bank.	When the government prints new money to pay off its debts.
Non-Tariff Barriers	Trade restrictions that do not involve tariffs but may include quotas, embargoes, or other regulatory restrictions.	Restrictions on trade that use means other than tariffs, like quotas or regulations.
Greenfield vs. Brownfield Investments	Decisions between investing in new developments (greenfield) or upgrading existing ones (brownfield).	Choosing to build new facilities from scratch or improve old ones.
Neo-Keynesian Fiscal Policies	Economic theories that advocate for government intervention to manage economic activity and prevent business cycles from becoming too extreme.	Policies using government spending and taxation to stabilize the economy.
Economic Multiplier Effects of Capex	The increase in economic output arising from an increase in capital expenditures.	How spending on physical assets like buildings and machinery boosts the economy.
Lines of Credit (LoCs)	Financial commitments by a bank to lend a specific amount to a borrower within a set period.	A promise by a bank to lend money when needed, up to a limit.
Debt Restructuring	A process by which a debtor and creditor agree on a reduced balance that will be regarded as payment in full.	Changing the terms of a loan to make it easier to pay back.
Debt-to-GDP Ratio	A measure of a country's debt compared to its economic output, expressed as a percentage.	How much a country owes compared to how much it earns.





Fiscal Health Index	A metric to assess the overall financial health of a government by examining its financial stability and sustainability.	A score showing how financially stable a government is.
Primary Deficit	The fiscal deficit of a government excluding interest payments on old debt.	The amount by which government spending exceeds income, not counting interest payments.
Revenue Deficit	The shortfall in government revenue compared to total expenditure excluding capital spending.	When a government spends more on running itself than it earns.
Trade Deficit	The amount by which a country's imports exceed its exports.	When a country buys more from other countries than it sells to them.
Tariff Stabilization	The use of tariff measures to stabilize a national economy.	Adjusting taxes on imports and exports to help the economy.
Multiplier Effect	The proportional amount of increase, or decrease, in final income that results from an injection, or withdrawal, of spending.	How spending more or less money affects the overall economy.
Structural Reforms	Policies implemented to increase the efficiency of an economy.	Changes made to improve how an economy works.
Disinflation	A reduction in the rate of inflation.	When prices increase at a slower rate than before.
Sticky Inflation	Inflation that remains in the high range despite economic measures to control it.	When high prices don't come down easily even with efforts to reduce them.
Core Inflation	A measure of the long-term trend in prices that excludes items with volatile movements.	Tracking price changes without counting food and energy, which can swing widely.
Fiscal Conservatism	A political-economic philosophy regarding fiscal policy and fiscal responsibility advocating for low spending and reduced government debt.	Belief in reducing government spending and debt.
Retrospective Taxation	Tax laws that are applied to transactions that took place before the law was passed.	Applying new tax laws to old actions.
Worker Population Ratio (WPR)	The ratio of employed individuals to the total working-age population.	The percentage of people who are working compared to those who can work.



International Relations

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Multipolar Diplomacy	International relations characterized by multiple countries exerting influence, without a single dominant global power.	World politics where several countries have significant influence.
Hybrid Warfare	A conflict strategy that blends conventional warfare with irregular tactics and cyber warfare.	Warfare that combines traditional fighting with non-traditional methods like cyber attacks.
Asymmetric Warfare	Warfare between belligerents of drastically unequal military capabilities and strategies.	Conflict where the fighting forces are unequal in size, strength, or tactics.
Geo-Economic Fragmentation	The division of global economic interactions due to political, economic, or strategic conflicts.	Breaking up of global economic relationships due to conflicts or competition.
Structural Geopolitical Shifts	Detailed explanation of how the concept functions and its relevance in its specific field.	Simplified description suitable for general understanding without prior knowledge.
Indus Script Dravidian Hypothesis	Detailed explanation of how the concept functions and its relevance in its specific field.	Simplified description suitable for general understanding without prior knowledge.
Torrijos-Carter Treaties	Detailed explanation of how the concept functions and its relevance in its specific field.	Simplified description suitable for general understanding without prior knowledge.
Strategic Autonomy	The ability of a state to pursue its national interests and policies independently from other world powers.	When a country makes decisions without outside influence.
Rapprochement	The reestablishment of harmonious relations, particularly between countries.	Countries fixing their relationships and getting along again.
Track 2 Diplomacy	Informal diplomacy through exchanges and activities by non-governmental actors to help resolve conflicts.	Non-official talks and meetings to solve international problems.



Polity

Keyword	Official Definition	Easy Explanation
Hydrocracy	A form of governance where control over water resources is a primary source of power.	A political system where water resource control dictates power.
Hybrid Warfare	A military strategy that blends conventional warfare, irregular tactics, and cyber warfare.	Using a combination of traditional and non-traditional warfare methods.





Asymmetric Warfare	Warfare between belligerents whose relative military power differs significantly.	Conflicts where the opposing forces have unequal military capabilities.
Universal Accessibility Norms	Standards ensuring that buildings and services are accessible to all people, including those with disabilities	Rules that make facilities usable by everyone, including those with disabilities.
Inter-Service Siloing	The lack of communication and cooperation between different branches of the military or government.	When different government or military groups do not share information or work together.
Birthright Citizenship	Automatic granting of citizenship to individuals born in a country.	Becoming a citizen of the country where you are born.
Jus Soli (Right of Soil)	Citizenship principle where a person's nationality or citizenship is determined by place of birth.	Getting citizenship based on where you are born.
Jus Sanguinis (Right of Blood)	Citizenship principle where a person's nationality or citizenship is determined by their parents' citizenship.	Getting citizenship based on your parents' nationality.
Temporary Restraining Order (TRO)	A short-term court order issued to prohibit an individual from carrying out a particular action, especially in domestic cases or disputes.	A court order to temporarily stop someone from doing something.
Executive Overreach	Actions taken by government officials that exceed their powers.	When government leaders do more than what their job allows.
Supra-National Institutions	Entities formed by two or more central governments that operate above the state level and have authority to make decisions that are binding on all that are members.	Organizations that go beyond national borders with the power to make decisions affecting multiple countries.

