



Earth Money

A Monetary & Finance System
for Earth & Humanity

Sandy Hinden & Timothy Gieseke

Earth Money

A Monetary & Finance System for Earth & Humanity



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Introduction Invitation

Earth Money

A Monetary & Finance System for Earth & Humanity



Dear Friend of Earth & Humanity,

In 2012, I proposed *Sacred Earth Economics* for an economy that cared about Earth as our sacred home.

In 2014, I proposed the *Commonwealth for Earth & Humanity* for global demilitarization through reducing military expenditures annually by 10% to help fund human, social, and Earth needs.

In 2024, I developed [*Whole Earth Economics*](#) to report on 10 functions of economics that could change the world.

Now, I am seeking to explore what *Earth Money* could be to help create a sustainable, just, peaceful, thriving planet for Earth and humanity.


This document is the journey of *Earth Money*. It explores the concept of *just money* and *digital currencies* for Earth and humanity.

See the [*Waterworks of Money videos*](#) for a fascinating presentation of how money flows.

Timothy Gieseke proposes an [*Earth Money*](#) based on a *Natural Capital Unit* as a digital currency. Meanwhile, 130 governments are exploring creating their own *CBDC* – *Central Bank Digital Currency*.

Please join us as we learn more about the complex, often hidden world of money.
May the conversations begin...

Sandy Hinden



**"The economic system
isn't actively destroying the biosphere,
but is passively destroying it due to the positive and negative
externalities that aren't in the economic system.**

**If these externalities were internalized,
then the economic system would be actively
restoring the biosphere.**

**The economy is
the only tool available
to enable the planet to repair itself."**

Timothy Gieseke

Earth Money

A Monetary & Finance System for Earth & Humanity

- About 2700 years ago, money was created to facilitate the exchange of different things of value.
- The world's oldest known coin minting site was in China, which began striking spade coins around 640 BCE.
- Since then, money has been used for trade-exchange, payments, rent, salaries, and investments.
- The world has since invented banknotes and moved into digital forms of payment, including virtual currencies.
- Since its creation, money has hypnotized people into being a thing to amass, which led to a power to control others through money.
- Today, there is an ever-expanding wealth gap between the richest 1% and the rest of humanity.
- The top 11% own 85% of world wealth.
- There is also the possibility of the destruction of the environment due to unsustainable economic processes, to the point of human extinction.
- Earth is the highest value. Without a healthy Earth system, everything else deteriorates.
- As of now, cryptocurrencies are primarily being used for investment purposes to become wealthy, and for money laundering, and not care about the health of the planet, due to crypto mining using massive energy.
- Many of these same users of cryptocurrencies are anti-government, denying the need for the Rule of Law & Justice on Earth, and taxes to pay for health, education, social, and Earth's needs.
- Without justice, peace is not sustainable.
- We are gathering thoughtful people to discuss creating a new [System of Earth Money](#) that helps sustain Earth.



Friday, June 14, 2 PM, ET

[Register Here](#)

Why

Maturation of A Global Civilization

CHILDHOOD

Birth of Civilization

Creation of Agriculture

Pre-Industrialization

Nature in Balance

Earth Wisdom

Living in
Balance with Nature

ADOLESCENCE

Growth of Industry

Use the Planet's Carbon Resources
to Fuel Industrialization

Climate Change
Denial of Climate Change

Climate Destruction

Autonomous Killing Machines
Nuclear Weapons Proliferation

Destroy Democracy & Civilization

Economics of Growth,
Die-off, Extinction

MATURITY

Conscious & Mature

Developing
Greater Character,
Compassion,
Wisdom & Ethics

Developing a
Sustainable Civilization

Wisocracy

Wellbeing
Economy

Global
Peace
Keeping

Global
Climate
Mitigation

"Crime has
internationalized faster
than law enforcement and
world governance..."

Antonio Maria Costa
Former Executive Director
United Nations Office on Drugs and Crime (UNODC)

The Globalization of Crime:
A Transnational Organized Crime Threat Assessment

Global
Sustainable
Development

Global
Migration
Amelioration

Gangs to Transnational Organized Crime to War



1	Neighborhood-based gangs
2	Prison gangs, white nationalist gangs, outlaw motorcycle gangs, national-level street gangs
3	Transnational gangs
4	Organized crime, cartels-consortiums
5	Global hackers, ransomware, money laundering, traffickers in drugs, weapons, guns, sex, data
6	Militias, mercenaries, terrorists
7	The ongoing expansion of military and espionage spending, creating greater distrust, conflict, and war, while at the same time lack of funding for human, social, and Earth needs cause deterioration.

How

MUTUALLY ASSURED SURVIVAL (M.A.S.) PROCESS

Trust Building & Peace Building

Gradual Global Disarmament
through
Annual 10% Military Expenditure Reduction

End Fossil Fuel Subsidies
by making corporations pay costs
of health and environmental damage



Investments in
Human & Social Needs
Water, Food, Energy
Health, Housing, Education
Income & work
Political voice
Networks
Peace & Justice
Gender equality
Social equity



Investments in
Earth's Needs
remediation of
Climate change
Ocean acidification
Chemical pollution
Nitrogen & phosphorus loading
Freshwater withdrawals
Land conversion, Biodiversity loss
Air pollution, Ozone layer depletion

Governance Literacy

Social Modes of Interaction beget Governance Styles beget the Emerged Social Sector.
All exist simultaneously, with different degrees of prominence.

Year	Social Modes of Interaction →	Governance Style →	Emerged Social Sector
6000 BP	Authoritarianism	Hierarchy	Government
1600	Individualism	Market	Corporate
1820s	Egalitarianism	Network	Unions Nonprofits NGOs Civil Society
1990s	Collective	Shared	Creative Commons Capital Commons
2050+ Wisocracy grows	Conscious	Creative Collaboration	Common Ground Wisdom Wellness



How Wisocracy Works

The 10 Methods of Wisocracy

[See
More
Here](#)

1	QUALITY EDUCATION VALUING WISDOM & WELLNESS	<ul style="list-style-type: none">Quality education systems for all with values of wisdom and wellness for all and nature, and helping people have meaningful, purposeful lives.
2	FUNDING WISDOM & WELLNESS NEEDS	<ul style="list-style-type: none">Global demilitarization to fund human, social, and Earth's needs for wisdom & wellness.
3	GOOD GOVERNANCE	<ul style="list-style-type: none">Good governance processes including accountability, transparency, and efficacy (right goals).
4	CIVIC DELIBERATION	<ul style="list-style-type: none">Deliberative democracy through respectful civic participation in public assemblies.
5	BUILDING TRUST & COLLABORATION	<ul style="list-style-type: none">In a polarized world, Wisocracy focuses on building trust and collaboration in the family, the community, the country, and in the world.
6	COMPASSIONATE COMMUNICATION	<ul style="list-style-type: none">Understanding the fears, concerns, and needs of each of the various groups of political voices that the other side ignores. Addressing the real needs of boys and men, and girls and women, driving the political and social conflict.
7	SOLUTION SEEKING	<ul style="list-style-type: none">Creative solution-seeking to society's problems.
8	MEANINGFUL MEDIA	<ul style="list-style-type: none">Support for journalism and culture that serves the public interest, not profit motives.
9	WISE LEADERSHIP	<ul style="list-style-type: none">Developing thoughtful, wise leaders for the good of all and nature with honest communication.
10	WISE ECONOMY	<ul style="list-style-type: none">Developing Whole Earth Economics to sustain people, society, and nature.

Just Money

What is the concept of just Money?

The concept of Just Money focuses on creating a monetary system that promotes fairness, stability, and sustainability. It argues that the current financial system can be inequitable and lead to problems like wealth concentration and economic instability.

Here are some key aspects of Just Money:

- **Fairness:** Just Money aims to ensure everyone has equal access and opportunity within the financial system. This could involve reducing the influence of wealth on economic outcomes and promoting financial inclusion for all.
- **Stability:** Just Money seeks a financial system that is less prone to crises and boom-and-bust cycles. This could involve controlling inflation and ensuring the smooth functioning of markets.
- **Sustainability:** Just Money considers the environmental and social impact of financial activities. It promotes investments and practices that align with long-term sustainability goals.

What is the concept of just Money?

There's no single definition of Just Money. It generally involves reforming the design and operation of the financial system. Here are some resources to learn more:

- **Just Money Organization:** This non-profit group advocates for a legal framework that promotes a just monetary system <https://justmoney.org/>.
- **The Book "Just Money" by Katrin Kaufer and Lillian Steponaitis:** This book explores how finance can be used to build a more equitable and sustainable society <https://mitpress.mit.edu/9780262542227/just-money/>.

Here are some potential ways to achieve Just Money:

- **Monetary Policy Reform:** How money is created and distributed could be changed to promote wider economic participation.
- **Regulation of Financial Institutions:** Just Money might involve stricter regulations on banks and other financial institutions to ensure responsible lending practices and prevent excessive risk-taking.
- **Financial Inclusion Initiatives:** Measures could be taken to ensure everyone has access to essential financial services like bank accounts and credit.

The concept of Just Money is evolving. There are ongoing discussions about how to achieve it. It's a complex topic, but one that raises important questions about the role of money in our society.

What are Monetary Reform proposals for Just Money globally?

The concept of "Just Money" in a global context suggests a monetary system that promotes fairness, stability, and sustainability.

Here are some reform proposals that aim to achieve this:

- **Strengthening Special Drawing Rights (SDRs):** SDRs are an international reserve asset created by the International Monetary Fund (IMF). Proposals advocate for a bigger role for SDRs, reducing reliance on individual national currencies like the US dollar. This could create a more stable and predictable global monetary system.
- **Tobin Tax:** This proposal, from economist James Tobin, suggests a small tax on foreign exchange transactions. This could discourage speculative currency trading and generate revenue that could be used for development purposes.
- **Sovereign Money Systems:** This approach advocates for governments, not private banks, to create new money. This could give governments more control over money supply and potentially lead to more equitable distribution.
- **Global Central Bank:** This is a more radical proposal for a single, world-central bank that issues a global currency. This could eliminate exchange rate fluctuations and potentially lead to more coordinated global economic policies. However, it also raises concerns about loss of national economic control.
- **Focus on Real Assets:** Some proposals suggest pegging currencies to a basket of real assets, like commodities, to reduce volatility and inflation caused by purely fiat currencies.

It's important to note that these are all complex issues with ongoing debate.

Each proposal has its own advantages and disadvantages.

Implementing any large-scale reform would require international cooperation.

Central Banks & Digital Currency

In what countries are central banks privately owned?

There are very few central banks around the world that have any private ownership.

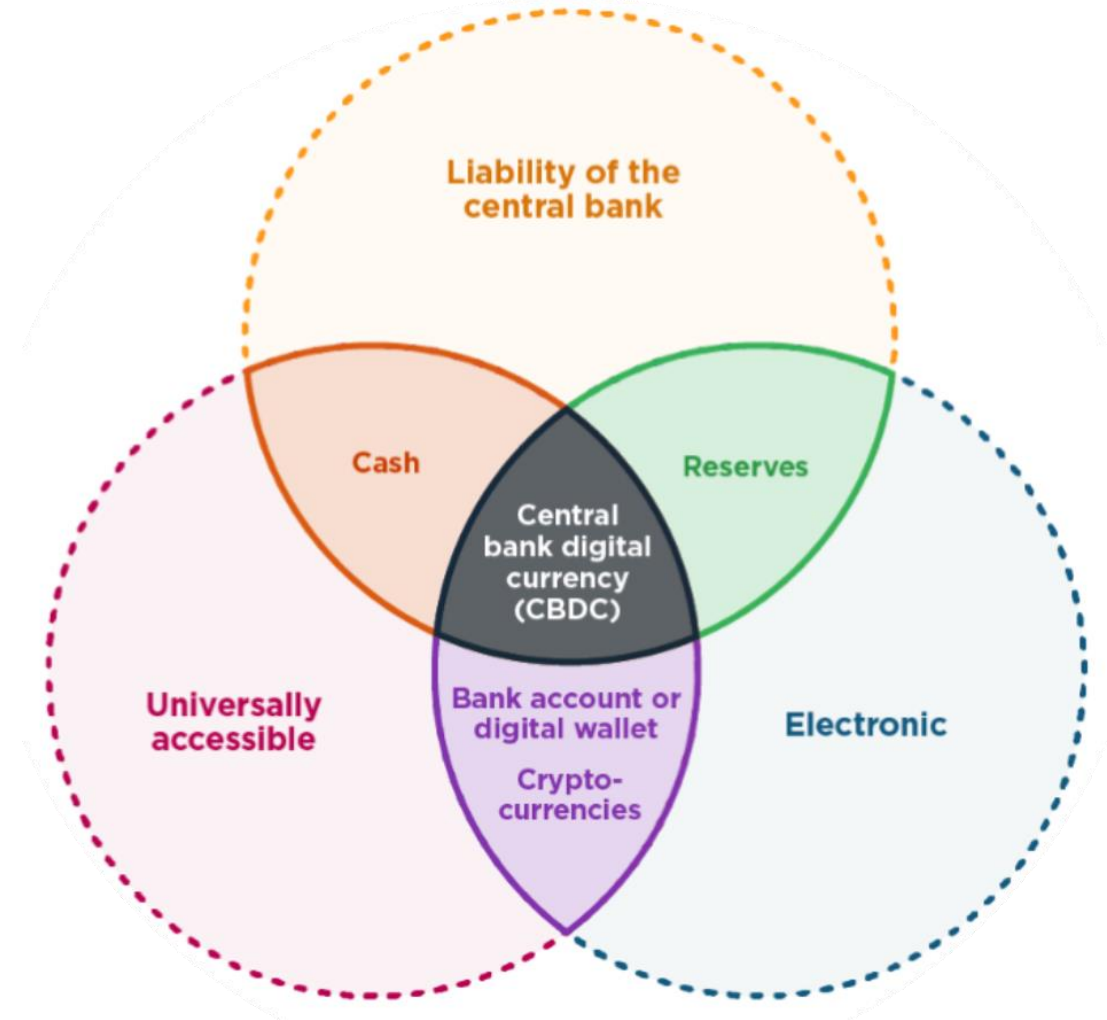
The vast majority are public institutions owned by the government.

Here are some countries with central banks that have some private shareholders:

- **Belgium**
- **Greece**
- **Italy (only commercial banks can be shareholders)**
- **Japan**
- **South Africa**
- **Switzerland**
- **Turkey**
- **United States**
 - **The Federal Reserve Banks are regional banks with private shareholders.**
 - **The Federal Reserve System itself is ultimately overseen by the government.**

Central Bank Digital Currencies

- As of March 2024, more than 130 countries were exploring the development and implementation of central bank digital currencies (CBDCs), which are centralized digital forms of fiat currency that aim to modernize payment systems. Some countries that are leading the exploration include:
- BRICS: The founding members of BRICS, Brazil, Russia, India, and China, are in the pilot phase of CBDC exploration.
- New members Saudi Arabia, Iran, and the UAE are also exploring cross-border wholesale CBDCs.
- European Central Bank: The ECB is on track to begin its digital euro pilot ahead of a possible launch in 2028.
- Other countries: Other countries that are exploring CBDCs include Australia, Eastern Caribbean, Ecuador, France, Ghana, Indonesia, Myanmar, New Zealand, Norway, Singapore, and Sweden.
- In the United States, though, progress on a digital dollar is only "moving forward" for a wholesale (bank-to-bank) version, the Atlantic Council's research said, whereas work on a retail version for use by the wider population has "stalled".



China's crackdown on cryptocurrency stemmed from several concerns:

- **Financial Risks:** They view cryptocurrencies as highly speculative and volatile, posing a threat to financial stability.

This volatility could lead to financial losses for citizens, potentially causing social unrest.
- **Money Laundering and Crime:** Cryptocurrencies can be used anonymously for illegal activities, making them attractive to criminals.

China wants to maintain control over financial transactions and prevent illegal capital flow.

- **Capital Flight:** China has capital controls that limit the amount of money that can be moved out of the country. Cryptocurrencies could bypass these controls, hindering China's economic management.
- **Central Bank Control:** China is developing its central bank digital currency (CBDC). They likely see private cryptocurrencies as a threat to their control over the monetary system.

China hasn't completely banned cryptocurrency ownership.

They have restricted trading and mining activities.

This way, they can limit the risks associated with cryptocurrencies

What will China's Central Bank Digital Currency (CBDC) be valued on?

- China's central bank digital currency (CBDC), also known as the e-CNY, won't have a separate valuation.
- It will be pegged to the value of the traditional Chinese yuan (RMB).
- Think of it as a digital version of cash.
- Cash (bills and coins) has the same value as its physical counterpart.
- Similarly, the e-CNY will be directly exchangeable for the physical yuan at a 1:1 rate.

Critique of Cryptocurrency & Blockchain

Here are some of the common critiques of Cryptocurrencies and Blockchain technology:

1. **Volatility and Uncertainty:** Unlike established currencies, cryptocurrencies can experience wild price swings, making them risky investments. Critics argue they aren't stable enough to be a reliable form of currency.
2. **Lack of Regulation:** The crypto world is largely unregulated, which makes it vulnerable to fraud, scams, and illegal activity. This lack of oversight also discourages some institutional investors from entering the market.
3. **Environmental Impact:** Mining some cryptocurrencies, like Bitcoin, requires vast amounts of energy, raising concerns about their environmental footprint.
4. **Security Risks:** Cryptocurrency exchanges and wallets can be hacked, leading to theft of funds. Unlike traditional banks, there's often no recourse for getting stolen crypto back.
5. **Centralization Concerns:** While proponents tout crypto's decentralization, critics argue that some aspects, like certain exchanges or proof-of-stake validation methods, concentrate power in the hands of a few.
6. **Limited Adoption:** Despite the hype, cryptocurrency is still not widely accepted as a form of payment for everyday transactions.

Critique of Cryptocurrency & Blockchain

7. **Scalability:** Blockchains, the technology underlying most cryptocurrencies, can struggle to handle large volumes of transactions. This can lead to slow processing times and high fees, hindering their ability to be widely adopted.
8. **Sustainability of Business Models:** Many crypto projects rely on creating new coins or tokens to fund themselves. Critics argue this model isn't sustainable in the long run and can lead to inflation within the cryptocurrency itself.
9. **Lack of Intrinsic Value:** Unlike traditional currencies backed by governments or assets like gold, some critics argue cryptocurrency doesn't have inherent value. Its worth is based purely on speculation and user confidence.
10. **Potential for Use in Criminal Activity:** The pseudonymous nature of some cryptocurrencies can make them attractive for illegal activities like money laundering or buying goods on the dark web. Regulators are concerned about this potential misuse.
11. **Social and Economic Inequality:** The rapid rise in value of some cryptocurrencies has created new wealth for early adopters. Critics argue this could exacerbate social and economic inequality.

What will happen to cryptocurrencies if most countries have Central Bank Digital Currency?

The rise of Central Bank Digital Currencies (CBDCs) could hurt cryptocurrencies in a few ways:

- **Reduced need for crypto as a medium of exchange:** If CBDCs are widely adopted and offer similar functionalities to cryptocurrencies, such as fast and cheap cross-border payments, then the need for cryptocurrencies as a medium of exchange could be reduced.
- **Increased government control:** CBDCs are issued and controlled by central banks, which gives governments more control over the money supply and transactions. This could be less appealing to people who value the decentralized nature of cryptocurrencies.
- However, cryptocurrencies may still hold some advantages even in a world with CBDCs:
- **Alternative to fiat currencies:** Cryptocurrencies may remain attractive to people who are looking for an alternative to traditional fiat currencies, especially in countries with unstable economies or high inflation.
- **Privacy and bypassing financial institutions:** Cryptocurrencies can still offer some degree of anonymity for transactions, and they allow people to bypass traditional financial institutions. This could be appealing to people who value their privacy or who are unbanked.

Overall, the impact of CBDCs on cryptocurrencies is uncertain. It will likely depend on the specific features and functionalities of CBDCs, as well as how widely they are adopted. Cryptocurrencies may see their use as a medium of exchange decline, but they could still hold value as an alternative asset class or for specific use cases.

Theories Organizations

Alliance for Just Money – United States

**Require Congress
to be the sole creator
of all U.S. money.**

**End the privilege of
commercial banks to
create U.S. money.**

**Transfer control of the
U.S. money supply
from the banks to
the U.S. government.**

Article 1, Section 8, Clause 5 of the U.S. Constitution reads, **“The Congress shall have Power... To coin Money and regulate the Value thereof.”** This is the money creation power vested in Congress by the Constitution.

“If the American people ever allow private banks to control the issue of their currency, the banks... will deprive the people of all property until their children wake-up homeless on the continent their fathers conquered... The issuing power should be taken from the banks and restored to the people, to whom it properly belongs.” - **Thomas Jefferson**

“The Government should create, issue, and circulate all the currency and credits needed to satisfy the spending power of the Government and the buying power of consumers. By the adoption of these principles, the taxpayers will be saved immense sums of interest. Money will cease to be the master and become the servant of humanity.” - **Abraham Lincoln**

The Alliance For Just Money has been working to accomplish what Jefferson and Lincoln recommended – remove the money creation power from the private banking industry and return it to Congress where it constitutionally belongs.

<https://www.monetaryalliance.org/allies-neighbors/>

Positive Money - UK

Over the years, Positive Money has broadened its agenda towards somewhat more short-term proposals such as:

Fiscal-monetary cooperation: the organisation proposes various ways to channel money created by central banks towards public spending and investment.

Reforming the governance and accountability frameworks of the Bank of England and of the European Central Bank.

Greening monetary policy: Aligning monetary policy with climate change objectives through reforms of central bank's collateral framework or forms of credit guidance such as green TLTROs.

Digital currency: the organisation propose implementing a central bank digital currency in the UK and supports the introduction of a digital euro by the ECB.

The International Movement for Monetary Reform

The International Movement for Monetary Reform is a worldwide umbrella organization for monetary reform organizations with member organizations in 27 countries, founded in 2013 at the initiative of the British organization Positive Money.

- Their political goal is to replace the creation of money by bank lending with a system that creates money free of debt
- IMMR affiliated organizations developed sovereign money reform varieties, some country specific.
- The IMMR works with countries to promote a steady-state economy, without "too big to fail" banks.

The International Movement for Monetary Reform

ABOUT THE IMMR & OUR MANIFESTO

- The IMMR is an international coalition of nonprofit organisations from across the world, campaigning for a monetary system that serves society.
- We maintain a very clear and specific aim, namely to change the way money is created and allocated, but we are not dogmatic about the way our proposal is implemented as the details will vary from country to country.
- To serve this goal, the IMMR supports and connects various national member organisations to share ideas, discuss research and exchange best practices.
- United in a global movement for monetary reform we look forward to the day when money systems are pillars of a just society in service of sustainability, stability and prosperity.

The International Movement for Monetary Reform

THE PROBLEM

- Over the last decades, the global monetary and financial systems changed considerably due to new technology, changing regulation, and globalisation.
- Currently, what we use as money is created by private banks whenever they extend credit.
- Only a small fraction of the money supply (notes and coins) is issued by states and central banks.

The International Movement for Monetary Reform

The result is a system which does not work in the public interest and causes the following problems:

- **Inequality and the concentration of wealth:** Money creation by banks grows the value of financial assets and debt much more than GDP. The result is an unequal distribution of income and wealth in favour of the wealthy and that financial income grows at the expense of earned income.
- **Financial instability:** Money creation by banks is pro-cyclical – too much in a boom and too little in a recession, enhancing pronounced boom-bust cycles. Also, the banking system is inherently unstable due to the problem of bank runs and requires extensive bailouts and guarantees in a crises to prevent a general meltdown of the economy.
- **High levels of debt:** Because most money is issued as bank credit, the money supply burdens society with debt.
- **Unsustainability:** The bank money system hinders sustainable development and exploits society and the planet.
- **Unfairness and privileged banks:** The power to create money gives banks an unfair advantage over all other institutions and/or actors in the economy. How much money is created and where new money is allocated is primarily determined by private banks on the basis of maximizing their own profits rather than the needs of the economy.

The International Movement for Monetary Reform

OUR PROPOSAL

We propose a transition towards a sovereign money system in which:

- **All official money** – be it cash, money-on-account or new forms of digital currency – is created by a monetary state authority, according to the needs of the economy in a transparent and accountable process.
- **Money is created free of debt**, and is directly spent into the economy via the state by way of government expenditure or directly distributed to the citizens as an equal dividend.
- **Private banks can not create official money as credit.** They only act as payment service providers and/or financial intermediaries by lending and investing existing official money, which they obtain from savers and investors.

While this is our long-term vision, we are supportive of ideas, strategies and monetary proposals to move towards this goal.

The International Movement for Monetary Reform

We are proud member of Finance Watch

- We believe that this system contributes to environmental degradation, overtaxation, needless poverty, regional and global conflicts, and many other issues that have a direct impact on people's lives.
- We believe that our current system has created many straw-man arguments because of the false scarcity of money that our current system promotes.
- Our goal at the Alliance is to increase public awareness of these issues and create the political will to achieve a sovereign debt-free money system for the benefit of not just the United States but for the benefit of our global community.
- The Alliance stands proudly with IMMR and looks forward to working with all involved to push for global monetary reform.

CONTACT

Website: <https://www.monetaryalliance.org/>

Finance Watch

Our mission

- Finance Watch's mission is to strengthen the voice of society in the reform of financial regulation by conducting advocacy and presenting public interest arguments to lawmakers and the public.
- Finance Watch advocates for reforms to stabilise and democratise markets, redirect capital toward public goods, and protect against systemic risks.
- The expertise of our team, partly composed of ex-finance professionals, combined with that of our members across Europe, give us the strength and legitimacy to counterbalance arguments in favour of maintaining the status-quo too often presented by the financial lobby.

<https://www.finance-watch.org/>

Finance Watch

Our vision

1. The fundamental reform of the financial system that was promised after the 2007-2008 crisis has not been delivered.
2. New rules introduced have already been heavily watered down thanks to the powerful influence of the financial lobby.
3. More importantly, though, these rules have not clarified that the purpose of finance should be to serve the real economy and society, nor addressed the financial system's size and reach.
4. Financial firms therefore continue to privatise gains for activities that have no social benefit, whilst socialising losses.
5. The new rules have not resolved the first issue they set out to tackle: the stability of the financial system.
6. This unstable financial system is propping up an unfair, unequal society and an unsustainable economy.

Finance Watch

Our vision

7. The warning signs are clear: Business as usual will not work.
8. The rising gap between the wealthiest and poorest parts of society is made worse by a lot of the rent-seeking activities of the financial sector.
9. It is also contributing to the increasingly present and worsening effects of climate change on the environment by supporting the fossil fuel economy, as fossil fuel projects are more profitable.
10. This will not change whilst fossil fuel subsidies and a very low carbon price continue to exist.
11. We are sleepwalking into future financial crises and environmental collapse.
12. The financial firms that operate the system have not been held to account for the last crisis and are not being held to account for the current issues in the system.
13. This has to change immediately if the system is going to change.

The Waterworks of Money



<https://www.waterworksofmoney.com/>

<https://www.youtube.com/@carlijnkingma>

Earth Money

Timothy Gieseke

Earth Money – Timothy Geiseke



The term "ecosystem" is derived from the Greek word "Oikos" which means a "house", a dwelling place with the inhabitants living together and interacting with each other in some definite ways.

1. Earth Money is a concept I've given thought to from the perspective of natural capital and how it functions as the nexus of ecological and economic values.
2. My first book, "EcoCommerce 101: Adding an ecological dimension to the economy"(2011), explored this "Oikos" connection.
3. To tether a currency to natural capital, I devised a NCU (natural capital unit), an arbitrary and standardized "data container" to account for the ecological and economic outputs.
4. To fully account for outputs and valuation, I adopted a natural resource classification system devised by Longva (1981) and then applied to the NCUs.
5. The NCU has the capacity to account for the entirety of global natural capital and the full suite of provisional, regulating, supporting, and cultural ecosystem services.
6. This feature is critical for an Earth Money.
7. This model enables a shared governance currency model directed, in part, by landscape practitioners and ecosystem service demanders.

Earth Money - Timothy



8. This allows the monetary units to grow as practitioners populate their NCUs and demanders seek the currency to procure the data they need to meet their sustainability claims and objectives.
9. This creates a self-organized supply model.
10. In the haste of creating cryptocurrencies of the last decade, they failed lack to develop a foundation of value.
11. Money was not backed by gold until a critical mass was mined, refined, and stored.
12. A NCU crypto also needs a critical mass of NCU data to be incorporated, refined, and stored.
13. This enables a critical feature that has been lacking since a gold-backed USD - an inherent range-bound currency.
14. Fiats require significant manipulation and Bitcoin has no means for range-boundness.

Earth Money - Timothy



15. Because each unique NCU has an ecological limit of production and those outputs have a finite economic value, the collective and average value of NCUs is inherently range-bound.
16. The value of the currency trends to the higher end as natural capital capacity increases and trends lower as natural capital capacity decreases.
17. This critical feature becomes an internally derived governance to limit consumption or degradation of natural capital.
18. What this model reveals is the “force” of the source of a currency is not a moot point.
19. The source becomes the driver of the economy and this force influence can be described for each and every currency developed (multiple versions of USD sources, Bitcoin, cryptos, etc.)

Earth Money - Timothy



20. Regardless of the source, the economic participants are motivated to create more of it.
21. But in the long term, the force of the source of a currency eventually runs its course - and that is why the USD shifts its source every 50 years or so.
22. I have devised a starting point and a path forward to begin the NCU accounting system and how it can support ecosystem service markets to begin populating the NCU to get to a critical mass - and then enable a critical money unit mass to emerge.

About

Timothy Gieseke



- Timothy Gieseke proposes the *Capital Commons*, the fourth social sector, began emerging in the 1990s in response to the increasingly complex social and economic issues – particularly the *expansion of economic externalities* that are causing much of the social and planetary harm.
- In his analysis, it was revealed that *Government, Corporate, and NGO* sectors emerged centuries apart and centuries ago in response to the socio-economic issues of their time.
- In the 1990s, the *internet created a new mode of social interaction* that manifested into a new governance style, manifesting into a new social sector.
- This social mode-governance-sector manifestation is also responsible for the emergence of the other sectors.
- This social governance theory emerged from his previous work on EcoCommerce. In 2011 he published *EcoCommerce 101*, to describe the role natural capital and ecosystem services have in macro- and micro-economics.
- In 2016, he wrote, *Shared Governance for Sustainable Working Landscapes* to introduce a *Natural Capital Unit (NCU)*; a multi-functional platform unit that enables accounting, transacting, and shared governance of *EcoCommerce* values.
- In 2019, he wrote, *Collaborative Environmental Governance Frameworks: A Practical Guide* to present a novel governance assessment model that can describe the nearly infinite number of variations of network governance that are applied in the *EcoCommerce/NCU Platform* framework.
- Timothy Gieseke appreciates the *path to our planetary solutions* is via *governance literacy* that can provide the vision needed to resolve our increasingly complex issues.



Sanford Hinden

Educator, Organizer, Author



- Sandy provides programs for libraries and organizations in person and on Zoom in personal development, communications and relationships, and social and global development for peace and sustainability.
- He worked locally, nationally, and globally developing organizations, projects, and programs for peace, the environment, health, human services, education, and the arts.
- He helps seniors, adults, teens, and children reach their full potential and enjoy life more.
- Sandy was director of *Community Partners for Coordinated Services* for *Suffolk Community Council*, and executive director of the *Dix Hills Performing Arts Center*.
- In 2009, he wrote and published *7 Keys to Love – Opening Love's Door to Joy & Wellbeing*.
- In 2014, he created the *Commonwealth for Earth & Humanity* to provide global disarmament through annual 10% military reductions to fund human, social, and Earth needs.
- In 2024, he cocreated the *Rule of Law on Earth Project* and the *Earth Money Project*.
- Sandy works on *Wisocracy* for wise democracy, wisdom, wellness, and peace.
- Sandy provides coaching in collaboration, communication, habit change, and recovery.



References

"Sandy's whole-systems thinking is empowering and enlightening. I would recommend any educational materials he creates as of superior value."

Meg Rivers

Senior Production Specialist at HBO / HBO Max

Sandy Hinden is a very exceptional human being entirely devoted to a better, ideal world. I have known him for more than 30 years. He constantly inspired me for my work and efforts at the United Nations. He had ceaseless great ideas. He encouraged me to not give up. I would be so happy to see him in charge of a major newspaper section on good news and happiness for the people. He would be very precious for a major philanthropic organization, especially one dealing internationally. I would support his candidacy with the highest terms.

Dr. Robert Muller (1923-2010)

Former UN Assistant Secretary General

Cofounder, UN University for Peace, Costa Rica

"Sandy is an inspirational actionist! He is not afraid to ask the tough questions and explore heartfelt responses to them. The ones that have to do with how we got into this mess as humanity, and what it's going to take for us to get out of it. His wealth of experience and human kindness, combined with political savvy and collaborative working style, make learning with and from him an enriching experience, and always a joy."

Alexander Laszlo

Global Systems Educator

"Sanford Hinden is one of the most humane, compassionate, loving human beings I have ever met. He speaks and acts from deep wisdom about what people need – and what the world needs now. I trust him and have learned immensely from him."

Ronald Gross

Founder/Director, Conversations New York

Co-chair, University Seminar on Innovation,

Columbia University



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