

A portrait of Gurminder Singh, a man with a long, grey beard and a white turban, wearing a blue short-sleeved button-down shirt. He is looking directly at the camera against a plain white background.

Gurminder Singh  
CEO Earth Dollar

**INDVSTRVS**



## Gurminder Singh - The Green Guru

**Singapore-based Earth Dollar CEO Gurminder Singh, says the word 'currency' means current energy. According to Singh, Fiat currency is an old energy that is no longer suited to the temper of our age. We spent an afternoon with a delightfully eccentric, yet brilliant Singh, who says their gargantuan journey to codify ethics into crypto-currency for the common good is an imperative for survival.**

By Joanne Leila Smith | May 2018

**W**hen Gurminder Singh was 19 years old, he was enlisted into National Service in Singapore and soon after was deployed to Borneo, home to some of the oldest living rainforests in the world and the largest island in Asia. This experience, says Singh, had a profound and lasting impact on how he perceived himself and his role in the world.

"I came back home crying and all I knew was that something had changed in me. My mum asked me 'why?' and I explained that I had walked through this beautiful valley, full of flowers and trees and the lively sounds of the jungle and three weeks later, when I returned to the same place, it was desolate.

Everything had been cut down as far as my eyes could see. There was just silence. I felt as if some part of me had been chopped off. I had no idea about environmentalism as a young man, but it sparked a deep desire to do something for this planet," says Singh.

According to Singh, now 60, that desire was not fulfilled in a strategic way, but rather, a combination of events, perhaps synchronicity, led one thing to another, to where Singh is today.

Singh's late uncle, famously known as Yogi Bhajan, changed his name legally to Harbhajan Singh Khalsa Yogiji when he became a United States Citizen in 1976. According to Singh, his uncle was his major

mentor and confidante until his passing in 2004.

"My uncle introduced me to Greenpeace in 1976. I was always trying to do something for the environment, but at the time, Singapore was still developing. My family wanted me to be a doctor or engineer, and I wanted to do IT. So I completed a Diploma in Computer Studies in Singapore.

My uncle introduced Kundalini yoga to the West in 1969. The early westerners who became Sikhs and yoga teachers were his students originally. When he came to Singapore in 1983, he invited me to go to the US to live with him, so I moved to Los Angeles in 1987," says Singh.

After three decades of living abroad, Singh has developed a network of 'green-conscious' movers and shakers including celebrities Leonardo De Caprio, the late Michael Jackson, Arnold Schwarzenegger, to Charles, Prince of Wales in the UK.

"I didn't get up one morning and say I'm going to create a green carpet event or found the Green Institute. It just came about. One thing led to another, and I ended up going into private equity to help fund renewable energy projects. I didn't plan my career, or how it mapped out! I went to UCLA once, and all these students wanted my autograph, and I asked 'why?' They said, 'Because you're the Green Guru'. I thought, that's a good name. I didn't even pick that nickname for myself! laughs Singh. "The thing is, there is a lot of green washing, which is a big reason for why I do what I do. I try my best to change that".

Early in his career, Singh was the Chief Architect in developing the Self-Adaptive Intelligent Network Technologies framework in 1998, which was used for distributed datacentre operations and is now modified for multi-dimensional blockchain integration, QoS and protocol management. In 2007, Gurminder co-founded Transformative Capital Inc., a strategic technology and financial advisory firm providing capital formation services.

Singh is also the Founder and Chairman of the International Green Technology Institute since 2003. It has launched various programs such as the Roundtable

of Green Thought Leaders, Green Awards, Green Technology Leadership Lecture Series, the Green Technology Entrepreneurial Forum, and the Green Technology Global Expo.

"I launched the first Global Green's Annual Pre-Oscar Party in 2005. I was terrified and thought, nobody is going to show up...That evening, almost everyone in Hollywood was there. I guess the timing was right," says Singh.

Over the past decade, Singh has been an adviser in renewable energy, blockchain and digital currencies to New Generation Power in Chicago and StealthGrid. He is an Executive Director of GreenEdge Global, and adviser to CyberNorth Ventures, a Canadian Fund Manager and their Cayman Islands-based Crypto Development Fund since 2016.

For Singh, who identifies as a practising Sikh, true success is not measured by wealth, but legacy.

"Why do we have a connection to the natural world? I was 30-years-old when I understood it for the first time. I was educated about my religion through doctrine, but I never really understood that at the heart of my religiosity meant just to connect. I realised in a deep way, that every little thing is created by our Creator. We humans have only created opinions, which we then dispute over. Man-made stupidity. Once I realised this, I thought a lot about my role in the world. When we think about the aspiration, 'being successful' well what kind of success are we talking about when the planet is being destroyed?

***What's the point in owning a Lamborghini if you can't drive it more than five miles an hour in the city? There is a collective madness here... One billion or more people may lose their homes because of climate change in this century and we waste our time arguing about semantics," says Singh.***

After 25 years of living in the West, Singh believes all his experience has now lead him to unifying point, the Earth Dollar project.

To say that the Earth Dollar proposition is a grand, unprecedented and ambitious idea, is an understatement.

The Earth Dollar claims to be the world's first cryptocurrency with an "intrinsic value", backed by Natural Capital Assets. Singh says Earth Dollar is being developed in alignment with the United Nations 17 Global Sustainable Development Goals (SDG) 2030. These goals cover a broad range of social and economic development issues, which include poverty, hunger, health, education, climate change, water, sanitation, energy, environment and social justice.

Earth Dollar is an asset-based community currency that proposes to power a new economic system, called the Living Economic System built on the blockchain. Earth Dollar proposes to combine the Natural Capital Accounting System (NCAS) with blockchain technology, which is a series of inter-linked and

***“When leaders emerge, they are put there by us, because we have an affinity to their ideas. When a leader shows his true colours, they reveal our true colours,” says Singh.***



interconnected blockchains to track the revitalization of the Natural Capital Assets. According to Singh, NCAS takes a more wholistic look at a country's wealth beyond GDP. GDP is effectively a measure of income and output, whereas natural accounting takes into the context of where the resources come from and whether the extraction and processing of resources is sustainable.

To use a banking metaphor, the bank would not give a million-dollar mortgage to someone who is five years off retirement. So, the NCAS looks at a country's ability to produce an income and GDP sustainably – i.e. the economic value includes the long-term ability to sustain the current GDP output and valuations of natural reserves. This is especially relevant in timber production, water, farming, energy production etc.

For those interested in determining how natural capital assets are valued, you may like to review an independent study undertaken by Earth Economics in the State of Washington. This study spans the US east coast of New York to Connecticut called the Long Island Sound Basin, which is the basis of Earth Dollar's upcoming independent study of 18 million hectares owned by the 5 Canadian First Nations.

In summary, if the natural capital that generates this annual benefit were treated as a short-lived economic asset, the asset value of the Long Island Sound Basin would be between USD 690 billion and USD 1.3 trillion (4% discount rate over 100 years):

"Open space, forests, wetlands and estuaries are not short-lived, and do not depreciate or fall apart like vehicles, bridges, power plants, and other short-lived economic assets. Strategic and diversified investment in natural capital is a sound risk management strategy against climatic, social, and economic volatility. Additionally, this figure still omits many valuable natural asset benefits not included in this study or in current natural capital appreciation models.

Understanding the scale of value of natural capital provides a vital perspective to decision-makers and the public. It helps inform the scale of dollar investment necessary for maintaining and improving the quality of natural assets. Wise investment in natural assets secures more resilient and sustainable returns in property values, food security, water quality, ecological and economic resilience, and other natural goods and services".

***The area of valuation for the Natural Capital Assets backing the Earth Dollar represents 18 million hectares of indigenous lands as part of the Mother Earth Trust. Earth Dollar has estimated that the initial asset value held in World Heritage Sanctuaries is 6.91 trillion euros, using the Natural Capital Accounting System.***

Earth Dollar Tokens will act as digital fuel for the functioning and development of their blockchain-based Living Economic System.

After careful review of the draft Earth Dollar whitepaper, more detail is needed to explain how the Earth Dollar token is secured by the natural capital asset, as from a consumer standpoint, the first question invariably is how an investor would liquidate the security if the market bottomed out.

In addition, if the currency is underpinned by these assets which Earth Dollar has valued at 6.9 trillion euros using the NCAS rating, more detail is needed to explain in what way would the underlying assets be at risk. For people to buy into this concept, they may require a solid understanding of financial instruments, complex exchanges and a lot of good faith; which is not insurmountable, but it will be a task for those charged with elucidating the Earth Dollar proposition to the marketplace.

We asked Singh how would Earth Dollar stop hostile interests buying up a significant amount of Earth Dollar tokens with the intent to have an ownership over indigenous lands; specifically, what controls would be in place to stop this happening; how would Earth Dollar prevent an oligopoly scenario? Is the pledge legally enforceable and if so, by which jurisdiction?

Singh posits that the Earth Dollar has many confidential agreements with selected indigenous nations to use the fruits of the land in a sustainable and non-exploitive method. These natural capital assets initially backed by carbon credits will be insured and reinsured through Earth Dollar's insurance tokens. Singh says the land will not be at risk as insurance, reinsurance,

with a minimum 10 percent formula of the overall land value will be put forward on the blockchain. Singh says their proprietary anti-inflation algorithms will have an anti-inflationary mechanism but with a caveat of 'best possible capabilities' to manage market forces. As far as carbon credits are concerned, Singh says Earth Dollar is selling the carbon credits to allocate funds for the restoration of boreal forests.

As far as the platform is concerned, Earth Dollar has enlisted Stealth Grid, a Gibraltar-based cyber-security firm (Singh is on the advisory board) to build the Earth Dollar Exchange. You may like to review their whitepaper for further detail.

"When David Kam came to me with his vision for Earth Dollar, he was trying to figure out the tech component. I was recommended to him as I understood the crypto space. I also felt like I connected with the enormity of his vision – which began with David's 140-page manifesto. My job is to take his vision and translate it into a language people can understand," says Singh.

Singh says sincere global responsibility means that that no one should be left behind anymore. To this end, currency must change.

"If we don't do this now, in the next hundred years, many lives will be lost. This is not about making money. Money I can make. But we can inspire the next generation to do the right thing; to know that we now have the tech to implement this vision," says Singh.

Kam approached Singh in April 2017 after being introduced through a mutual friend in California.

***"My initial conversation was that it was a huge undertaking. Crypto and blockchain is maturing. There are many legislative and regulatory issues still to overcome, but the technology is here. Because the tech is so good it must usurp traditional banking. Logically speaking it's a no brainer when the bank knows they can evolve. The cost of traditional banking worldwide is USD82 billion. This makes the banking industry very inefficient. We have gotten so used to living in the current paradigm, but if this is a paradigm we created, why not change it? We have a man-made disparity in the global economy. We can make it whatever we want it to be. Yes, visionaries are stuck between the vision and ego, both are subtracting, but the tension must be there. This friction evolves an idea, and many struggle with it. At the heart of the Earth Dollar vision is to seize this opportunity that technology affords us, to build ethics into our currency. Ethics can be coded," says Singh.***

We asked Singh if what he is suggesting is a kind of social engineering through everyday transactions.

"Capitalism. Communism. These are not constructs of the people. Governments have been doing social engineering for a long time. Governments always spread propaganda. It's been going on for thousands of years. With the recent Facebook debacle, Government condemnation of Mark Zuckerberg for spreading propaganda is absurd. He just woke up and found out his own network is a beast. That is all. Cryptocurrency is evolving. When Governments claim digital currency has no value, of course the digital community can say the same thing in reverse. With crypto however, we can incentivize people to do good. That their daily choices can make a positive impact beyond monetary value. I'm not here to change everything. I'm here to build a platform that others can build on," says Singh. Why can't we create a platform that if you are consuming it, the ripple effect is for good? Currency as a word is a combination of two words – current energy. Our system doesn't reflect the current energy. It is an old energy that is no longer suited to our time".

Interestingly, investors are increasingly looking to 'sustainable investing' but have been found left wanting. According to a report by CNBC in April 2018, UBS Wealth Management Chief Investment Officer Simon Smiles, super wealthy individuals want their portfolios to reflect what they believe in.

“That means building a whole portfolio with investments that best represent their views on the world, he added. For example, investors who want a part in driving global development could choose bonds issued by institutions such as the World Bank and the Asian Development Bank, and those passionate about green efforts could invest in debt instruments that use proceeds to finance activities benefiting the environment,” says Smiles.

According to the report, the mismatch between what’s available in the market and what super-rich individuals want is one reason why sustainable investment makes up a smaller proportion in their portfolios. The latest biennial report by the Global Sustainable Investment Alliance published in 2017 found that globally, the strategy grew 25 percent between 2014 and 2016 to USD22.89 trillion.

We asked Singh why Earth Dollar did not choose to go down the road of a public ICO.

“We decided to do a private fundraise first due to the changing regulatory environment, which is still confusing. I think Governments are trying to put the genie back in the bottle, but the genie is out. That is how G9 came about. Stephen Fern is a close friend of mine, and his position is that a lot of the Family Offices worldwide want to put money into impact investing, sustainability, and crypto, but could not find any crypto that made sense. G9 wants to do good, and Earth Dollar made sense to them,” says Singh.

According to their March 2018 press release, Earth Dollar and G9 will collaborate to monetize, tokenize and implement investment programs across a broad range of United Nations Sustainable Development Goal projects, including a multi-billion dollar Geothermal energy project introducing new, patented drilling technologies that unlocks the untapped potential of the global Geothermal market and sustainable rainforest acquisition programs.

“Although the first phase of crypto has created global awareness of the concept, it has been a minor distraction to the genuinely disruptive potential for second generation asset backed crypto currencies to revolutionize the financing of capital projects. We are delighted to be working with this world class team to facilitate the substantial deployment of capital into resolving many of the world’s biggest challenges,” says Chairman of G9, Stephen Fern.

According to Singh, the Living Economic System is a serious contender to help solve some of the world’s economic, environmental and social woes. While some detractors may argue that Earth Dollar is proposing to become a centralizing force, Singh is quick to argue otherwise.

“The tech and expertise are there for self-regulation of the Living Economic System. Even giving too much power to self-regulation is going to become a problem, just like it is now, and we understand that. However, this idea that we are proposing one global currency is false. I think we can give the world

a currency, but, it can be made to fit the needs of your area. Earth Dollar, at a local level, would meet the needs of the local people – I have never viewed it as a global currency,” says Singh.

As far as the structure of Earth Dollar, Singh says it is a B-Corporation that will be the primary entity to carry out Token Sales. Singh says that the goals of Earth Dollar will be focused on people, planet, prosperity, purpose and philanthropy. We asked Singh why profit did not factor into their five Ps -

“Profit was deliberately left out. When leaders emerge, they are put there by us, because we have an affinity to their ideas. When a leader shows his true colours, they reveal our true colours. We have created our own contradictory dichotomy of life and we get lost in it. If people want to look past short-term profit and save the planet, they need to know that we now have the capability. So, let’s do it. We have everything we need – we just need to implement it. We must give the next generation new tools. Give ethics in a format they can understand. Find collaborations. There is no competition. Just collaborate and make it happen. We are imperfect, but we can seek excellence and perfection that allows all people to strive for this, rather than the current madness we choose to live with,” says Singh.

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